



Norwegian University of
Science and Technology

Social Entrepreneurship

Framework for feasibility analysis of social business concepts

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FRAMEWORK FOR FEASIBILITY ANALYSIS OF SOCIAL BUSINESS CONCEPTS

In this master thesis an existing framework for feasibility analysis of business concepts is evaluated in a social entrepreneurship context. Weaknesses and lacks in the framework with regard to this application are revealed through theory and research.

A proposed framework for feasibility analysis of social business concepts is then developed and presented as a tool for future analysis.

**FEASIBILITY ANALYSIS OF TECHNOLOGY-BASED
SOCIAL BUSINESS IDEAS**

- TOOL DEVELOPMENT -

MASTER THESIS

NTNU SCHOOL OF ENTREPRENEURSHIP

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ABSTRACT

PURPOSE

With the increased interest in social entrepreneurship demonstrated within business schools and academic environments, the adaption of existing academic entrepreneurial constructs for social entrepreneurship applications becomes relevant. The purpose of this thesis is to develop additional tools to the traditional feasibility analysis. The tools will be specifically directed at technology-based concepts, due to the increased employment of technology-based products to solve social problems, in combination with the authors' engineering background, and the lack of academic contributions in this area.

APPROACH

A grounded theory approach is employed, in which unstructured interviews are used to collect data on the topic of social entrepreneurship from practitioners and academics. New theory is then developed through a discussion divided into three distinct parts, on the basis of empirical findings and existing literature, before new data is collected through a review of the proposed tools.

CONCLUSIONS

A total of seven analysis tools are introduced, where some are new constructs, while others are based on existing ideas, or even existing models introduced into a new context. A main characteristic of the tools is that they are not concerned with previously established and distinct sections of feasibility analysis, but rather address the interception between the established analysis components. This is the result of the discovery that the success of social business ideas seem to depend on the ability of the entrepreneur to maintain an overarching market and customer focus, which is infused in every aspect of the proposed venture, thus erasing the division between the Market and Industry section and other established sections of analysis.

IMPLICATIONS

The main implication for analysts is the opportunity to discover fundamental opportunities and challenges in the process of solving a social problem by bringing a new product to market through the establishment of a new organization.

FURTHER RESEARCH

Further research should include testing of the new tools in actual analysis of new ideas, as well as implementation in a complete analysis framework

TRONDHEIM, MAY 29TH 2011

PREFACE

The title and problem description of this thesis were adjusted after original registration, to revolve around the development of new tools that would supplement, not replace, existing analysis tools. In accordance with this, there is also less focus on the detailed lacks in the existing framework than originally suggested. In addition, focus has been narrowed to address technology-based social business ideas in particular. This choice is elaborated on in the introduction.

The main subject of the thesis has, however, always remained the development of feasibility analysis tools for social business ideas.

Throughout the process of writing this thesis, we have experienced an overwhelming amount of goodwill and interest from our surroundings. There are more people deserving of thanks than we will be able to mention here, but we will attempt to address the most significant contributors.

We wish to thank our supervisor, Associate Professor Lars Øystein Widding, who enabled us to travel to India to experience amazing acts of entrepreneurship, and who also provided us with honest and brutal critique in the writing process, enabling us to steer clear of several academic quagmires along the way.

We wish to thank Prof. Lars Groth at the University of Oslo for his advice and input on structure, method and language during the final laps of our work. Thank you Dad.

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1. INTRODUCTION

1.1. BACKGROUND

Feasibility analysis can be viewed as a basis for a go/no-go –decision on the realization of new business concepts. It is a central tool in the academic approach to entrepreneurship which has evolved in business schools (Wyckham and Wedley, 1990), and there are a number of tools available for this purpose, such as Porter’s five forces, a well-known tool for industry assessment.

When conducting a feasibility analysis, the analyst must collect a significant amount of information about the proposed market, about similar ventures, about the industry and competition, etc. (Mcgrath and Macmillan, 1995). The purpose of the analysis tools is to point to information needs, and help the analyst structure, and make sense of, collected information. From this, the analyst must estimate the tangible, intangible and financial resources needed to realize the proposed concept. The object of the analysis is to reveal the concept’s viability and potential prior to any extensive resource commitment is made (Barringer and Ireland, 2008). A feasibility analysis can be seen in a stage-gate perspective, where an early stage feasibility analysis can be employed as step one, with a subsequent gate decision (Cooper et al., 2002). It is equally possible to divide the analysis into separate stages, requiring that the market potential for the solution to a given problem is confirmed, before devoting time and effort to analyzing the feasibility of a proposed solution (Barringer and Ireland, 2008).

The outcome of the analysis is not necessarily a *yes* or a *no*, it may also be a *rethink the concept*, followed by repeated analysis after changes have been made. The question is then whether realizing the proposed business concept it is worth the risk and uncertainty. For most analysts this will be a question of financial returns, and a go/no-go decision will be based on whether the venture will be competitive in the market, and whether it can gain a necessary market share at an acceptable profit margin, thus creating financial value for entrepreneurs and investors.

In the last decade, however, the interest in socially motivated business concepts has increased within academia (Vurro, 2006). This can easily be verified by the social entrepreneurship classes springing up in MBA programs, and social entrepreneurship fellowships established, in renowned institutions like Babson College, Boston University, and Harvard Business School. The need for such dedicated classes suggests that there are considerable differences between “traditional” entrepreneurship and so called social entrepreneurship, and that these differences must be addressed explicitly.

This is complicated, however, by the debate on the meaning of the term *social* when used in an entrepreneurial or business context, and also by the lack of agreement on the term *entrepreneurship* itself (Seelos and Mair, 2004, Austin et al., 2006, Gartner, 1985, Weerawardena and Mort, 2006). *Social Entrepreneurship* is a widely used, and some say widely abused, term, applied to both for-profit and non-profit ventures, offering a wide range of solutions affecting end users and other stakeholders in a variety of ways. Between the extremes of traditional for-profit ventures, and non-profit NGO’s, an array of organizations are emerging (Vurro, 2006, Perrini, 2006, Weerawardena and Mort, 2006), which employ a great variety of funding structures to create value along social and financial dimensions at various ratios (Davis, 1997, Dees, 1998).

1.2. PURPOSE

As the focus on social aspects within business makes its way into the business school environment, where feasibility analysis is an established step in business development, the subject of feasibility analysis which includes social aspects becomes relevant.

The objective of this thesis is to provide analytical tools for students of entrepreneurship, who, while conducting a feasibility analysis, seek to explore both economic and social aspects of a business idea.

The fundamental premise of this thesis is as follows:

1. There are significant differences between NGO's and traditional ventures, however, an array of hybrid concepts are emerging, hence, an entire spectrum exists between the two. Such expressions as social entrepreneurship/ventures/business/enterprise address this realm, although there is little agreement on the boundaries of these constructs (Martin and Osberg, 2007).
2. The increased interest in social ventures among students of entrepreneurship and business calls for adaptation of established approaches to suit such ventures (Peredo and McLean, 2006).
3. The perceived differences between traditional and social entrepreneurship imply that feasibility analysis for social entrepreneurship demands the inclusion of new or altered information needs (Dees et al., 2001).
4. This implies a need to develop feasibility analysis to address the characteristic features of social business concepts (Peredo and McLean, 2006). This analysis must not be based on a strict definition of *social*, but rather address proposed business concepts aimed at social value creation in some form.

Due to the lack of an established definition of *social*, no space in this thesis will be devoted to the discussion of boundaries, neither of social entrepreneurship nor CSR. The owners of a company may choose to spend their profits on whichever social or even antisocial projects they like. If those projects are not intended to create any other value for the firm than a potential image improvement, and if they are conducted independently of the firm's value creating and support activities, then they have no place in a feasibility analysis, simply because they are in no way required to be strategically aligned with company activities, and do not affect the feasibility of the firm. It is as relevant to the firm's feasibility as whether or not the entrepreneur spends the first million earned on a sailboat or simply donates the entire sum to doctors without borders. The latter is a noble deed, but not really interesting in this context.

Instead, for the purpose of this thesis, we will employ a very wide definition of *social*, which does not exclude any of the new organization forms in the above mentioned spectrum. In this thesis, *social* is defined as employed in the following definition of *Social Enterprise*:

“Competitive firms that are owned and traded for a social purpose”

This definition is employed for research purposes by Smallbone et al. (2011), who's research domain includes both for profit and not for profit organizations. This implies that the definition can also include hybrids of the two. The term *social purpose* is not elaborated on in this definition. The term will, for the purpose of this thesis, be employed as referring to an intent to create social value through core activities, such as the distribution of a unique product, or through support activities and organizational policies, such as Human Resource Management.

Upon conclusion of the analysis, it is up to the individual entrepreneur to officially label the proposed business concept as “social” or not, according to which ever definition he or she chooses.

The theory development in this thesis will focus around the social venture sub-segment of technology based social ventures. The background of this focus is an increased employment of technology products to solve social problems (Desa and Kotha, 2005) in combination with the lack of theory development in the field. The authors' background in engineering and technology based entrepreneurship studies also makes this a relevant field of research for a master thesis. In addition, these ventures are characterized by particular activities, such as production, physical distribution, product development, etc., which are interesting in a social perspective.

1.3. RESEARCH QUESTION

The research question established for this thesis is as follows:

How can academic feasibility analysis of early stage business ideas address technology based business ideas aimed at social value creation through key activities or support activities and organizational policies?

We choose to answer this research question through the development of analysis tools addressing the common and characteristic challenges of such ventures with regards to information needs. We propose to do so through three steps:

1. Identification of common characteristic challenges with regards to information need for early stage technology-based social ventures
2. Identification and collection of relevant input for the development of tools to address these needs.
3. The development of a set of distinct analysis tools, which address the challenges most characteristic of technology based business ideas aimed at social value creation.

It must be underscored that the tools developed in this thesis will not constitute a complete framework for feasibility analysis of early stage business ideas, but rather be introduced as additions to existing tools. This is due to the fact that many general information needs, such as estimated market size and estimated capital need, are shared by all new ventures, and already included in existing tools. Hence, new tools are primarily needed to address the specific challenges of social business concepts.

1.4. DEFINITIONS AND CLARIFICATIONS

In order to avoid misunderstanding, some clarification regarding the term *analysis* is required. *Feasibility analysis* and *feasibility study* are two terms being used interchangeably within the field of business development. In the Oxford dictionary, however, the word *analysis* is defined as “detailed examination of the elements or structure of something” (Oxford, 2010a) whereas the term *study* is defined as: “the devotion of time and attention to acquiring knowledge on an academic subject, especially by means of books” (Oxford, 2010b). This implies that the conducting of an analysis may be an integral part of a study. For the purpose of this thesis, the term *feasibility analysis* is employed.

In accordance with this, the term *analyst* will be employed to refer to the individual conducting the analysis. This is also in accordance with the intended application of the proposed tools, which is in academic environments. The term *entrepreneur* will, however, be employed to refer to the role of the entrepreneur when discussing entrepreneurial challenges and activities.

After having conducted a theory search, on both *feasibility analysis* and *feasibility study* in databases including Bibsys, Google Scholar and ProQuest, few acknowledged references were identified that specifically described the process of either. Barringer and Ireland’s feasibility analysis, as presented in the textbook *Entrepreneurship: Successfully launching new ventures*, proved the most detailed and updated source. Their framework is based on the articles *How to Write a Winning Business Plan* and *The Origin and Evolution of New Businesses*, authored by Sahlman (1992) and Bhide (2000) respectively. Thus, Barringer and Ireland (2008) provide the point of departure for the theoretical discussion.

The tools developed here will, however, differ from those in the framework proposed by Barringer and Ireland (2008) in three ways:

1. By inclusion of social value creation
2. By focusing on early stage concepts, implying that they are pre-business plan, but that the entrepreneur has an idea about what problem he or she wishes to solve, who is experiencing the problem, and what the solution might be. This implies an element of opportunity discovery and

exploration, as opposed to pure evaluation, in the analysis, which in turn can enable the entrepreneur to further develop the identified opportunity (Ardichvili et al., 2003).

3. By focusing on technology based ventures.

The division employed by Barringer and Ireland (2008) has four central pillars of analysis; The Product or Service; The Industry and Market; The organization; and Finance. This structure is similar to the structure employed by Schneider (1998) as the outline of a sound business plan; Market analysis and marketing plan, Production plan, Organization and Management plans, and Financial analysis. This is also similar to the model introduced by Mcgrath and Macmillan (1995) to identify where the venture will have to match existing industry standard and where it has to excel. The structure is also found as a basic premise of the concept of entrepreneurial knowledge reservoirs, where necessary business knowledge is divided into Market, Product, Organization and Finance (Widding, 2005). Schneider (1998) proposes to include a summary and concept description as a separated section proceeding the other parts of the business plan. Barringer and Ireland (2008) suggest the same inclusion, but places the concept description under the Product or Service feasibility. For the purpose of this thesis, the following structure will be employed:

1. Product feasibility
2. Market and Industry feasibility
3. Organizational feasibility
4. Financial Projections

The aim of the proposed analysis tools will be *to point to information needs, and to facilitate the structuring of information, so that the insight gained from performing the analysis may serve as a valuable basis for strategic decisions*. The task of the analyst employing the tools is defined as: *to search for and collect relevant information from the sources available to him or her at the time of analysis*. The analyst must decide how thoroughly he or she wishes to conduct the analysis, based on the current stage of business concept development. In what manner the information is gathered will also be up to the analyst to decide.

1.5. THESIS STRUCTURE

The structure of this thesis is as follows: First, the employed research method is described, followed by a review of the most significant empirical findings in each of the above mentioned analysis pillars, and the identified challenges to be addressed. Next, a table overview provides a presentation of the theoretical subjects which relate to identified challenges, and the literature used in the discussions. The traditional theory review has in this thesis been infused in the discussions and thus the development of the respective tools. This is due the significant thematic variation between discussions. The subsequent discussion is divided into three chapters for the same reason. Each discussion chapter comprises of one or more tool development discussions, and also includes responses from a review of the proposed tools, followed by final changes. Last, a general conclusion and implications are presented.

2. METHOD

2.1. INTRODUCTION

The object of this thesis is the development of analysis tools for feasibility analysis of technology-based social ventures. These tools are to serve as facilitating constructs to help the analyst recognize information needs, and also to help the analyst structure the information, so it can serve as a basis for subsequent strategic decisions.

The establishment of these tools is based on three steps:

1. Identification of common characteristic challenges with regards to information need for early stage technology-based social ventures
2. Identification and collection of relevant input for the development of tools to address these needs.
3. The development of a set of distinct analysis tools, which address the challenges most characteristic of technology-based business ideas aimed at social value creation.

This chapter describes the employed research approach in detail, and includes comments on the weaknesses and reliability of the approach.

2.2. RESEARCH DESIGN

Social entrepreneurship in general, and technology-based social entrepreneurship in particular, are relatively new research fields. Hence, the research approach employed had to encompass this newness, and compensate for the lack of established theoretical frameworks.

The amount of literature in the field of social entrepreneurship is increasing, but there is still no consensus on the boundaries of the construct, and the literature is still fragmented (Weerawardena and Mort, 2006). The sub-category of technology-based social entrepreneurship, however, suffers from a great lack of academic attention, in addition to the uncertainty of the definition of *social* itself (Desa and Kotha, 2005). To further complicate matters, while the field of social entrepreneurship is developing in academia, it is also in rapid development in practice (Weerawardena and Mort, 2006, Dees, 1998), causing the relevance of academic works to decline within a short period of their publication.

In order to gain insight into what the common information challenges of entrepreneurs with a social intent actually are, it was appropriate to employ an inductive approach, starting with a thorough submersion into the real world phenomenon of solving social problems with an entrepreneurial approach. An inductive approach is often recommended for the investigation of uncharted territory (Glaser and Strauss, 1967).

The research design employed in this thesis is highly inductive, and started in a real world setting, where current experiences and opinions were gathered from people on the ground. As no complete theoretical framework exists on which interview questions could be based, data gathering was conducted in the form of unstructured interviews. The aim of this first step was to understand what is really going on in social entrepreneurship, and what the common challenges of such ventures really are.

Findings from these interviews were then coded and analyzed, and lifted to a more abstract level when discussed in relation with existing theory. The applied theory was collected from the field of social entrepreneurship, but also from other research fields with relevance to each identified challenge respectively, as no complete body of theory exists on the subject of technology-based social entrepreneurship.

The discussions of findings and existing theory resulted in the development of new theory, namely the proposed analysis tools. In order to ensure the relevance and usability of the tools, the proposed tools were then reinserted into a more practical setting, through a review, where they were evaluated by investors, academics, business students, and also one user of socially intended technological products. The responses from this review then formed the basis of final theory development, where adjustments were made to the proposed tools. This approach can be described in six steps, corresponding to the three steps described above:

Identification of common and characteristic challenges of stage technology-based social ventures in general and challenges relating to information need in particular:

1. Data gathering through unstructured interviews with experts and practitioners
2. Analysis of findings from the interviews

Identification and collection of relevant input for the development of tools to address these needs.

3. Theory search in the field of social entrepreneurship and other fields of relevance

The development of a set of distinct analysis tools, which address the challenges most characteristic of technology-based business ideas aimed at social value creation.

4. New theory development on the basis of existing theory and empirical findings
5. Review of the proposed new theory
6. Final theory development on the basis of review response

As described by Widding (2006), the process of data gathering and the development of theoretical understanding were overlapping, and parallel, for a period, an approach described as theoretical sampling (Widding, 2006, Eisenhardt and Graebner, 2007).

2.2.1. UNSTRUCTURED INTERVIEWS

The unstructured interview format was chosen in order to maintain open mindedness when approaching the loosely defined subject of social entrepreneurship. As the object of the data gathering was the identification of common information challenges for entrepreneurs with a social intent, the aim of the interviews was to get interviewees to talk about the subject of social entrepreneurship in general, and challenges related to information needs for early stage technology-based social ventures in particular. This was not to enable the researchers to conclude on which challenges were faced by all such entrepreneurs, but rather on which challenges were considered relevant for such ventures in general.

SELECTION

The need for some degree of generalization required interviewees to represent different perspectives and experiences with social entrepreneurship, to provide breadth in the data. As student researchers, limited in terms of funds and range, aspects of practicality posed a challenge in this area, however, the opportunity to gather data in India presented itself through a larger university project. As India is a society of great social differences and tremendous social challenges, and known to be at the forefront of what is generally referred to as social entrepreneurship, this was a great opportunity. Thus, large parts of the data gathering were conducted across several Indian cities and villages over a period of 17 days in January/February 2011.

In order to counteract a "cultural perspective" bias, data was later gathered in Scandinavia, as well as through e-mail and Skype in the US, to triangulate results.

Interviewees were chosen through several methods. In India, academics were mostly identified on the basis of prior connections with other members of the project delegation, while entrepreneurs and

investors to a large extent were identified through a snow-balling technique, following introductions at a social entrepreneurship conference at XLRI in Jamshedpur late January 2011. Interviewees in Scandinavia and the US were identified through prior knowledge and media search.

For subsequent analysis of the gathered data, interviewees were divided into groups depending on the nature of their involvement in social entrepreneurship;

1. Investors
2. Academics
3. Entrepreneurs
4. Users/Customers
5. Facilitating organizations

Investors are a particularly interesting group with regards to feasibility analysis, as they spend much of their time conducting due diligence on business concepts which they consider funding. This implies that investors generally have opinions and experiences relating to all aspects of the analysis, and also a more practical view of the relevant issues than do most academics. Investors also generally have experience from a wide range of business cases, while entrepreneurs usually have experience from one, or in the case of serial entrepreneurs, a small number of ventures.

The 21 interviewees comprised of:

TABLE 1: OVERVIEW OF INTERVIEWEES

Numbers	Status and experience	Nationality	Group
5	<i>Social or impact</i> investors	Two Indian, two Scandinavian and one India based American	I
4	Academics working with social entrepreneurship and social entrepreneurs	Indian	A
1	Academic working with environmental challenges and corresponding social issues	Indian	A
4	Social entrepreneurs	Two Indian, One American, One Scandinavian	E
6	Users/customers	Two Indian, Four American	U
1	Representative for a facilitating organization for social entrepreneurship in India	Indian	O

QUESTIONS

Interviews were conducted over a period of three months, during which the focus of the research and the maturity of the researchers developed considerably. As these interviews were unstructured, there was no prescribed interview guide with standardized questions. The questions asked were part questions prepared prior to the interviews, depending on the actor in question as well at the stage of research, and part spontaneous questions concerning things that were brought up during interviews, which generally took the form of quite natural conversations.

DOCUMENTATION

The methods of documentation used were also influenced by the aspect of practicality. While sound recording and video were widely used to capture interviews, external conditions sometimes prevented the use of such technology. The most pressing problem were encountered in India, in the form of noise from the surroundings, usually present in the form of traffic and ventilation. This resulted in the use of handwritten notes as documentation for a small number of interviews, however, the presence of a minimum of two interviewers at every meeting to some degree countered flaws in the documentation.

Most interviews were transcribed verbatim. The exception was the small number of manually documented interviews conducted in India, which were documented as summaries, including main points and selected relevant quotes.

2.2.2. ANALYSIS

After transcribing the interviews, the transcripts and the few written responses were de-constructed into quotes regarding a great variety of subjects. These were then analyzed in three steps, based on the abstraction stages described by Widding (2006). This method of analysis was employed to ensure that no topics were lost in analysis. The basic principle is to code data twice; Once based on topics identified in the data pool itself, implying that new categories are generated until every finding has been placed in a category, either by itself, or with others; and once based on a theoretical framework, in this case the analysis framework presented by Barringer and Ireland (2008), as well as some categories generated from social entrepreneurship literature, addressing the trade-off between ROI and social value creation. This implies that a finite number of categories were generated, into which all findings were attempted sorted. Not all findings could be placed in a category, and not all categories had data placed in them. These two sorting steps then formed the basis of a final sorting. Below, the process is described in more detail for each of the three steps:

Step 1: All quotes were sorted into categories derived from the quotes themselves. These categories were denoted A-categories, and a total of 39 such categories were created to include all quotes. Although the categories were derived from unique themes revealed in the data, several quotes were placed in more than one A-category. Each category did, however, have a unique composition of quotes, and no one category was fully included in another. Each category was given a number. In addition, each quote was given an identification code to denote whether it came from an investor (I), and entrepreneur (E), and academic (A), a facilitating organization (O), or an end user (U), along with a two-letter code identifying the individual interviewee. Finally, each quote received a number denoting its place in the sequence of quotes from the same source within one category. The code was then on the format of the following example: A12IPD2, where the letter I denotes that the interviewee is an investor, and the letter A implies that this is a code generated in the A-round.

Step 2: New categories were established, this time with basis in the pillars of feasibility analysis employed by Barringer and Ireland (2008), as well as key challenges outlined in social entrepreneurship literature, mainly concerning trade-offs between ROI and social value creation. These 36 new categories were denoted B. While keeping their A-codes, all quotes were collected from their A-categories and mixed. They were then pulled in random order, and placed into the B-category most suitable. Several quotes were placed in more than one B-category. There were some quotes for which no B-categories were applicable. These were discarded as irrelevant for this round. There were also B-categories to which no quotes were ascribed. These were also discarded.

Step 3: Finally, 21 C -categories were generated. These were based on a thorough evaluation of the B and A-categories, and include most B-categories, as well as some A-categories, were the data generated A-categories were considered as ;

- a. Having revealed a relevant subject that had not been suggested by theory
- b. Having revealed a more practical division or structure of a subject, than had the corresponding B-categories.

The purpose of this method is to tie the empirical findings to the theoretical framework, so as to relate to the themes from the theory discussion, without missing any relevant new themes that could be derived from the findings themselves. Each C-category contains one or a number of A or B-categories, however, each C-category has a unique composition of quotes, and no one category is in its entirety included in another. A complete overview of the code categories, as well as the complete C-codes, can be found in Appendix 1.

2.2.3. THEORY SEARCH AND SELECTION

Currently there is no framework available which offers relevant underpinnings for a debate on the subject of technology based social entrepreneurship in general (Desa and Kotha, 2005), making a full scale literature review of the field infeasible. However, several of the topics for tool development, which were revealed in the empirical findings, relate to substantial bodies of literature in such fields as strategy, stakeholder theory, product development methodology and even philosophy. As students working in a relatively new research area, we are required to seek relevant theory from other areas, even those of peripheral interest (Bruce, 2001).

The theory search followed the data collection, with a period of overlap, as theory was chosen on the basis of challenges identified in the empirical findings. Some literature was even chosen on the grounds that it served as a basic introduction to topics suggested by interviewees themselves. After the review of the proposed tools, a limited need for additional literature became apparent.

Based on the feedback, additional literature was identified within the same theory subjects, to answer to suggested shortcomings. A complete table of theory and sources can be found in chapter 4, Applied Theory.

2.2.4. THEORY DEVELOPMENT

Theory development was conducted through the discussion of empirical findings in relation to literature from related fields. The discussion is divided into three distinct parts, due to the spread of the identified challenges. One tool is developed in the first discussion, while the subsequent discussions result in the introduction of two and four proposed tools, respectively.

The ratio of empirical versus theoretical grounding vary between the proposed tools, depending on the degree to which solutions were suggested in the findings, as well as the relevance of existing literature. The variation in the foundation between the different tools, both with regards to findings versus theory, but also with regards to the field from which the respective theory is drawn, has also resulted in significant variation in the format of the proposed tools.

2.2.5. REVIEW

The review of the proposed tools was conducted between May 13th and 20th 2011. Reviewers were e-mailed slides with proposed tools, which included theoretical backing and practical relevance of each tool. An introductory letter explaining the goal of the thesis was included in the e-mails. This letter and the accompanying slides can be found in Appendix 2.

The exception to the distribution by e-mail was the review conducted by two graduate students of technology-based entrepreneurship, and one academic (No. 3). This exception was made for practical reasons as these

actors were situated on the authors' university campus, and could be reached in person. Their responses were documented through the respondents' own notes, and the notes of the authors, which were subsequently approved by the respective reviewers.

For the purpose of the review of the tools, it was appropriate to mainly include actors who had extensive experience conducting feasibility analysis of business concepts. The experience with social entrepreneurship per se therefore varied among the participants.

A total of seven individuals participated in the review:

TABLE 2: OVERVIEW OF REVIEWERS

Numbers	Status and experience	Background, basis for sense making	Nationality	Interviewed during initial data gathering?
1	Social or impact investor	Background from industrial economics studies, and a previous career in management consulting.	Scandinavian	Yes
1	User of a social technology product	7th Grade IRR Teacher, Language Arts & Social Studies, facilitates the use of study aids for students with disabilities. Familiar with the challenges of technological aids from a user perspective.	American	Yes
3	Academics working with, and/or teaching, entrepreneurship and business development.	<p>Nr 1: Harvard MBA, Executive-in-Residence, Entrepreneurship and Strategy, and Director of Entrepreneurship Programs for the Institute of Technology Entrepreneurship & Commercialization at a US University. Previously the CEO of a technology company, and current board and advisory board member for a number of commercial and non-profit organizations.</p> <p>Nr 2: Harvard MBA, Lecturer/Executive-in-Residence, Strategy and Innovation at a US university. Previous experience from management consulting, strategy and marketing, and as founder of two companies.</p> <p>Nr 3: American BSc in Chemistry and MBA, currently Post-doc in the Globalization Program, Global Production and Communications of NTNU. Previous experience as a two time entrepreneur within technology-based start-ups.</p>	All American, one currently Norwegian based.	No
2	Graduate students of technology-based entrepreneurship and engineering.	Both graduate students in industrial economics and technology-based entrepreneurship at NTNU, with previous MBAs from a US university. Experienced in conducting feasibility analysis for technology-based and non-technology-based business concepts in both Norway and the US.	Scandinavian	No

2.2.6. FINAL THEORY DEVELOPMENT

Based on response from the reviews, final changes were made to the proposed analysis tools. Due to continuous exposure to literature, researchers and the real world phenomenon of social entrepreneurship, the maturity of the authors also progressed, resulting in some additional changes not directly related to the review responses, but rather to increased maturity and widened perspective.

2.3. WEAKNESSES AND RELIABILITY

2.3.1. WEAKNESSES

The weaknesses of the employed approach are mainly concerned with the process of data gathering, and the most dominant obstacles for data gathering were, not surprisingly, encountered in India. Language, as well as cultural factors such as codes of conduct and symbolic meaning of expressions and objects, presented great difficulty when conducting interviews. This was particularly pressing when interviewing entrepreneurs and end users, who did not necessarily have the English skills and business vocabulary shared by most actors in the three remaining subject groups. The need to use translators presented additional problems, which were enhanced by the fact that translation was performed by the most skilled or eager individual present at any given point in time. While the language skills of the translators themselves varied, so did the pre-existing relationship between the translator and the subjects, which undoubtedly must have influenced the responses in some cases.

Another possible weakness in the research is the background and grounding of the authors, both graduate students of mechanical engineering and technology-based entrepreneurship at the Norwegian University of Science and Technology, and subjected to a limited regime with regards to feasibility analysis. Both authors have, however, also attended one semester of entrepreneurship courses at the School of Management at an American university, which implies at least some degree of alternative inspiration.

2.3.2. RELIABILITY

The object of this research is not the development of analysis tools addressing challenges faced by all entrepreneurs with a social intent, but rather the development of tools which address common challenges, which for many are relevant to consider in the earliest stage of development. We do not state that the challenges identified in our data gathering are the only relevant challenges. As such, the limited number of interviewees does not present a problem, and we believe that if the employed approach is replicated, findings will not resemble our findings exactly, but are likely to overlap to a large degree, as many of the subjects discussed can be considered quite general and fundamental.

In order to ensure a basis for some degree of generalization, results have been sought triangulated, through three steps:

1. Triangulation in terms of representation from five distinct groups of interviewees, based on the nature of their involvement with entrepreneurship.
2. Triangulation in terms of selection of interviewees from three continents.
3. Triangulation in terms of the subjection of constructs to additional empirical input after initial theory development has been conducted.

As a result of these efforts, we are certain that the proposed tools hold some relevance to the early stage exploration and planning for many technology-based ventures addressing social issues.

3. EMPIRICAL FINDINGS

3.1. INTRODUCTION

In this chapter, the main features of the empirical findings from interviews are presented. These findings serve as the basis of identification of main challenges relating to information needs, which again serve as basis for theory selection. A complete table overview of applied theory is presented in the next chapter, linking theoretic fields to the respective challenges identified in the conclusion of this chapter.

Interviewees in general, and investors in particular, stated that all aspects that were important to start-ups in general were also important in social start-ups, but that the concept described had to be based on a fundamental knowledge about the target market. In general, the findings suggest that practitioners and academics working with social entrepreneurship are generally very attentive to the critical importance of including stakeholder and customer perspectives in every aspect of a proposed venture. This was confirmed when findings were summarized for each pillar of analysis respectively:

3.2. MARKET AND INDUSTRY

Reoccurring subjects related to the market and industry can be summed up the following categories:

1. Trends
2. Environmental and Socio-political Factors
3. Market Entry

3.2.1. TRENDS

Both academics and investors stated that there was a clear trend in business in general to think more in terms of social value creation. A Norwegian investor also argued that it was among newly-hired employees and students currently attending universities that the interest was most evident. One investor in India argued that competitive advantage could not be an entrepreneurs only motivation for wanting to create social value, and that if this was the venture's only concern it was not going to be successful in the long run.

3.2.2. ENVIRONMENTAL AND SOCIO-POLITICAL FACTORS

The academics interviewed mentioned issues related to environmental and socio-political factors in the target markets. One academic, who specifically worked with large scale environmental problems and related social issues, explicitly addressed the government's role in proving that there is potential for profit within a market. He also stated that the government had to establish the rules of the game as well as invest in major infrastructure, before other actors were willing to enter. The same interviewee also addressed the trade-off between development and environment in developing countries, especially in areas where people are still living of the fruits of the forest on a hand to mouth basis. He also stated that this was further complicated by environmental conservation, which posed another conflict with local people's need to extract resources from nature, as well as with industry.

3.2.3. MARKET ENTRY

One Norwegian investor stated that his company evaluated industries and investment prospects based on how easy it was to identify relevant measurable social impact parameters. The same investor also mentioned that instead of collaborating with Norwegian aid organizations, they found it easier to go to markets where local organizations were already established. Measurement and in-depth knowledge of target markets and communities were generally mentioned by investors as key to the success of social ventures, and to the attractiveness of an investment prospect.

3.3. PRODUCT

Findings regarding Product Feasibility can be sorted under three themes:

1. Understanding users and market conditions
2. Interaction with customers
3. Intellectual Property Rights (IPR)

3.3.1. UNDERSTANDING USERS AND MARKET CONDITIONS

Investors interviewed stressed the need for the entrepreneur and/or product developer to gain real insight into the needs and lives of users, and that there are too many examples of far away innovators who believe they can solve problems in developing countries without firsthand experience with those markets. Investors generally wished to invest in entrepreneurs with actual firsthand experience from the target market, and one investor also pointed explicitly to the various unexpected factors that may determine a product's success when put to use, underscoring the need to know that environment thoroughly. Understanding of the user situation was emphasized, but understanding of the technological infrastructure available in the market was also addressed specifically by the academic working with environmental issues.

One academic also pointed to the difference between treating a problem and treating the consequences, which is an important aspect of understanding user needs. One academic with significant experience with grass root innovators in India also stated that the poor and un-educated people often viewed as users only, must also be regarded as a resource, and a source of knowledge and innovativeness. For this reason, he also explained, there is tremendous potential in creating solutions which each user can tailor to his or her own needs. The risk of underestimating customers was also addressed by one investor.

3.3.2. INTERACTION WITH CUSTOMERS

Entrepreneurs emphasized the importance of involving customers in development of solutions, and getting feedback during the development cycle, while users expressed the need to be taken seriously by company service staff.

3.3.3. INTELLECTUAL PROPERTY RIGHTS (IPR)

Statements regarding IPR show that several actors regard protection of products or concepts as something that can be undesirable for ventures with a social mission, as it places limitations on the diffusion of impact creating solutions. The overall view of trademarks, however, was that the customer should be able to rely on the origin and quality of a product, making trademarks a good thing.

3.4. ORGANIZATION

Findings related to the organization can be divided into five main groups:

1. Stakeholders
2. The value chain and business model
3. The entrepreneur, management and team
4. The measurement of social impact
5. Scalability

3.4.1. STAKEHOLDERS

The way in which the venture affects its stakeholders was a great concern for nearly all the interviewees, and both investors and entrepreneurs emphasized the importance of creating a socially focused organizational culture. "The management in a company with a social mission must have the attitude that they are not there just to make a profit, but to make sure that they are serving their customer base responsibly", one Indian based

American investor stated (B30:A28). A culture of transparency with regards to profit motives was also described as vital, particularly in the long run. The entrepreneur must never hide the fact that he or she is starting a for-profit, scalable business. In order to preserve a good reputation, it is important to play with open cards, so that one's intentions will not be questioned when the venture grows.

One Indian academic stated that in order to maximize efficiency, many companies in developing countries cut salaries, cut back on safety, cut back on social welfare and don't pay workers benefits, and that this is an extensive problem.

In general, the focus on affected communities, and positive dialogue and interaction with stakeholders, was central with the individuals interviewed.

3.4.2. THE VALUE CHAIN AND BUSINESS MODEL

Academics and investors in India state that the value chain and business model of the venture must be modeled with inclusion of social impact and stakeholder interaction in all stages. One investor stated that social responsibility should be an integral part of core organization strategy, with assigned responsibilities and accountability at all appropriate levels of the organization. It should be reflected in decision making and considered when implementing new activities.

Representatives from both the investor and the academic groups explicitly addressed the problem of middlemen, which was widely regarded as a bad thing, and should be avoided if possible.

A Scandinavian social entrepreneur stated that having production facilities and local offices in the target markets, and employing local people to conduct R&D, sell and distribute the product, helped them understand the end user's problems, eased the distribution, and also helped them avoid trouble with governments.

3.4.3. THE ENTREPRENEUR, MANAGEMENT AND TEAM

A Norwegian investor argued that a well-known challenge for the technology ventures with a social mission is attracting highly educated employees. He also stated that the entrepreneur must bring along someone with business capabilities on the team to secure that the financial aspects are taken care of.

"It is really thanks to our leader that we are the company we are today. (...)I don't think we would have been as successful if we did not have such a visionary leader and if we did not have someone in the top of the company who was willing to make the personal physical sacrifice to learn about the challenges that the least fortunate people in the world have. Without a doubt the driving force of the company" –Scandinavian Entrepreneur (C15:B08)

Investors interviewed agreed that the entrepreneur's passion was a key criteria when deciding whether or not to invest in a start-up. One Indian investor stated that "Idea is 1%, execute ability and passion is the most important" (C15:B08). Two investors also regarded the entrepreneurial team as the most important aspect to assess, after the quality of the product or service. Another investor argued that a vital factor for deciding whether to fund a start-up, is the entrepreneur's insight, network and knowledge about the local conditions.

None of the interviewees pointed to any explicit differences between a "traditional" entrepreneur and the entrepreneur with a social objective, other than the entrepreneur's personal beliefs and motivation. The qualifications and the characteristics of an entrepreneur with a social mission are no different from the "traditional" entrepreneur's, according to two of the investors. Another investor stated that the only difference lays in what kind of idea the entrepreneurs had come up with.

3.4.4. THE MEASUREMENT OF SOCIAL IMPACT

From the empirical data collected, it is apparent that the measurement of success and social impact has proven to be a difficult and time-consuming process. One investor explained how a thorough impact study would take three to five years, and cost a significant amount of money.

An academic in India argued that the method of measurement depends on what kind of social impact the venture wants to create. A Norwegian investor argued that it must be better to have some data, which you know have some weaknesses, than not having any information about the outcomes at all. The investor continued by saying that the controversies that have occurred in microfinance lately, are a result of the organizations' lack of a continuous evaluation and measurement of end users wellbeing. In most cases, the investor said, the evaluation of impact is conducted by the companies themselves. He also stated that the current ongoing monitoring or observation of activities related to social responsibility is primarily aimed at making sure that activities are proceeding as intended, identifying any crises or out-of-the-ordinary occurrence, and making modifications to the way things are done. They are not, however aimed at measuring or monitoring social impact.

The investor also warned about having too many people on the board who believe that social returns equals high social impact. A growing number of people are interested in the concept of social business, but still not willing to renounce maximization of returns.

3.4.5. SCALABILITY

One investor in India argued that if the venture really wants to be successful it must be scalable, as in "having a business that's scalable in how you operate and how you design your ability to expand, but also being able to attract the capital to be able to expand" (C02:B04). The investor also stated that it is not enough to simply break even, the venture must be able to handle some bumps in the road.

Both academics in India and investors in Norway mentioned that scalability was an important aspect to consider. An Indian academic stated that an idea has to be scalable, otherwise it would be limiting.

3.5. FINANCE

Findings regarding financial feasibility primarily sorted under three themes:

1. Investment prospects and expectations
2. Attracting capital
3. Exit opportunities

3.5.1. INVESTMENT PROSPECTS AND EXPECTATIONS

Several investors talked about the expectations they would have of an investment prospect. All but one investors interviewed were already seeing financial returns on their investments, or were working to do so in the future. Only one had a strict social value only mandate.

Generally, investors viewed sustainability as a minimum pre-requisite. Although some were interested in providing grants to get a new company started, that company had to be self sustained in operation. One investor also pointed explicitly to the need for a buffer, so as to provide some security and attract further capital.

Several investors commented that financial returns signal that a company is sustainable, but warned that one could never say that this implies that it is reaching many people with a positive social impact. One investor lamented, however, that many people primarily occupied with more traditional assets still view this as a valid argument.

Still, it seemed that the general consensus was that nobody places their money in impact investment or development projects because they want to make as much money as possible, but not because they simply wish to donate it either. They want to see something that works on its own, and hopefully see their money again, although perhaps only to reinvest it. The general view was that financial and social objectives must be seen as complimentary.

Scalability was mentioned by investors as one of the most important aspects of a social business concept, and as one investor stated: there is a limit to how far you can scale a concept based on donations.

3.5.2. ATTRACTING CAPITAL

Alignment of goals between entrepreneur and investor was regarded as having great importance when seeking start-up capital. This is important for any start-up, but for one trying to combine social and financial goals there will be a much larger spread in terms of objectives.

Should the entrepreneurs be able to fund the company themselves, however, they will be much freer in terms of choosing less financially rewarding strategies. Organic growth can, however, take a very long time.

Findings also suggested that for technology-based entrepreneurs, there may be some difficulty in attracting capital, as many investors who are traditionally directed towards development are not necessarily tech-savvy, while the tech-savvy investors are often traditional and expect venture capital returns.

3.5.3. EXIT OPPORTUNITIES

The general consensus is that there is little experience and knowledge about exits in social business. Investors are not yet convinced by IPOs in micro finance. In addition, as one investor pointed out, many of these companies are at quite early stages. They are not ready to go public either way.

One investor who has so far structured investments as subsidies, but is working towards more commercial investments, stated that for the current portfolio, the exits will be in the form of withdrawal to let businesses carry themselves. Sale to relevant industry actors was suggested as a possible exit for future investments. One must generally be creative about the way one structures investments and look for exit opportunities. This is also supported by investors' interest in original business models and concepts. There is a general sense of trying to solve old problems in new radical ways, which demands innovation across the board, not only in terms of products or marketing, but also in terms of investment models, sources of capital, and ways to get returns. This also makes it difficult to generalize on the subject.

3.6. CONCLUSION FROM EMPIRICAL FINDINGS

"It's really about redesigning the way in which you think about this, it's sort of the next generation of thinking about how you can create this whole social win – win. Social and financial do not have to be at loggerheads, they can really be working together, and therefore create better outcomes for companies and communities, and this is how we're going to have to think about 21st century business." – Indian Social Investor (C11:A08)

Findings from the interviews revealed significant challenges for technology-based social ventures with regards to the gathering and use of information. This particularly pertained to how the organization interacts with its stakeholders, with high focus on end users and their surrounding community. With regards to customer interaction, challenges concerning the development of functional and practical products were also thoroughly addressed.

In order to maintain focus on the most fundamental characteristics of technology-based social ventures in the development of analysis tools, within the boundaries of a master thesis, it is necessary to narrow the scope of the discussion. This is proposed done by focusing on one or two of the four pillars of feasibility analysis, selected on the basis of the following criteria:

1. The pillar must have been addressed thoroughly by interviewees.
2. The empirical findings must point to explicit challenges with regard to information needs, and applications of information.
3. The empirical findings must point to ideas for potential implementation in new tools.
4. Literature and theory must exist in the area in question, or in related areas, which address potential solutions to the challenges of gathering and using information for the development of business concepts.

These criteria were employed to ensure that this discussion addressed the areas where the empirical findings could form the most valuable basis for discussion and theory development.

The single most significant discovery from the interviews, however, was the apparent underlying consensus that while everything that is important to any other start-up is also critical to a social venture, the focus on the stakeholders and the conditions in the target market must be all-embracing, and infused in every other aspect of the entrepreneurial process. This became evident, when the analysis of data proved challenging during the B-round, in which findings were sorted according to the pillars of Barringer and Ireland (2008). The marketing related findings seemed to sneak their way into every other category, as the interviewees addressed nearly all topics by relating them to the market, end user, and creation of social value for the community in which one operates:

“You need to think very significantly about what is that mission and how do you really infuse the culture of the organization with that mission even as that organization grows, so that not just the founder thinks “hey, I’m not here not just to make some profits, but to make sure I’m serving this customer base responsibly”. That that’s really part of the organization, and you structure the way the organization is set up, how you train and everything around that thought. You’re not fundamentally different but you’re infused with something that may be just a little more complicated than simply “I’m here to grow my business and make profit.” – India Based American Social Investor (C07:B30)

“There are so many of those Gyro Gearlooses sitting around, thinking “Poor people need fertilizer, they have urin, urin can be used to make fertilizer, I’ll make a cool box that makes fertilizer out of urine”, right? And seemingly this is really clever, because it’s entirely correct. They have this, and they need that, right? But in between there are so many things that must be in place to commercialize it. It’s really about emphasizing the commercialization part, given the context in which the product must function.” – Norwegian Impact Investor (C03:B10)

The difficulty of placing findings into distinct categories is particularly visible in the amount of findings labeled Organization or Product, which contain aspects relating to Industry and Market.

Through this discovery, it became apparent that the greatest potential for contributing to feasibility analysis for social ventures lay not within the established analysis pillars, but in the interception between the Market and Industry pillar, and the pillars of the Product, and the Organization respectively. Through careful studying of the data, and application of the above stated selection criteria, three main categories of potential contribution were identified:

1. **Starting Point Assessment**

The need for the entrepreneur to, first of all, assess his or her own starting position relative to the people he or she is proposing to provide a problem solution for, with respect to knowledge about those people and their lives. This insight must be at the very basis of concept development.

2. **Product Employment Feasibility**

The need for a thorough analysis of what it will take, not to design a brilliant problem solution, but to maximize the chance of that solution actually being employed to solve the problem in the target

market. This category addresses the interception between Product, and Market and Industry feasibility.

3. Impact and Stakeholder Assessment

The need for identification of all stakeholders in the realization of a venture, and the way in which they will be affected by its realization. This pertains to social aspects, as well as environmental aspects of bringing a new product to market through the establishment of a new organization. An entrepreneur aiming to create a positive net impact must strive to understand how positive impact can be achieved, and how negative impact can be avoided. This category addresses the interception between the Organization and the Market and Industry.

This division into three main areas of contribution will be continued in the discussion, which is divided into three chapters; Discussion Part I, Discussion Part II and Discussion Part III, addressing each area of contribution identified above respectively.

The identified information challenges belonging to these three areas of contribution also form the basis of theory selection, which is addressed in the next chapter.

4. APPLIED THEORY

4.1. INTRODUCTION

In this chapter, the applied theory is presented, as selected on the basis of information challenges identified in the previous chapter addressing empirical findings from interviews. As previously stated, no complete theoretical framework currently exists which addresses the field of technology-based social entrepreneurship. There is a fragmented literature base within the broader field of social entrepreneurship, but this does not suffice to discuss all the challenges identified. Instead, related fields of theory have been identified for each area of challenges respectively. A table overview of this theory is presented below.

The literature presented here will be used to discuss the information challenges previously identified, over the course of the three next chapters; Discussion Part I, Discussion Part II, and Discussion Part III. Which discussion chapter each respective theory subject is relevant for is clearly marked in the left column of the table.

4.2 OVERVIEW OF APPLIED LITERATURE

TABLE 3: OVERVIEW OF APPLIED LITERATURE

	Topic from findings	Theory subject	Sources
Discussion Part I	The mental distance between entrepreneur and user of product is an obstacle in product and concept development, which implies challenges related to information need.	Knowledge creation	<ul style="list-style-type: none"> • Aristotle • Confucious • (Dretske, 1981) • (Machlup, 1983) • (Chia, 2003)
		Knowledge creation in organizations	<ul style="list-style-type: none"> • (Nonaka, 1994) • (Widding, 2005)
		Product development to meet social needs	<ul style="list-style-type: none"> • (Fruchterman, 2008)
		Innovation success factors	<ul style="list-style-type: none"> • (Drucker, 1985)
Discussion Part II	There is a significant information need with regards to local preconditions of the product functioning as intended. Infrastructure is a factor which demands attention.	Strategy	<ul style="list-style-type: none"> • (Teece, 1986)
		Product development to meet social needs	<ul style="list-style-type: none"> • (Fruchterman, 2008)
	There is often a difficulty of ensuring use and purchase of the product.	Marketing	<ul style="list-style-type: none"> • (Kotler and Keller, 2006) • (Woodruff, 1997) • (Woodruff and Gardial, 1996)
		Marketing products to solve social problems	<ul style="list-style-type: none"> • (Starr, 2010) (Presentation)
		TQM, Lead User Method, User Centered Design	<ul style="list-style-type: none"> • (Abrams et al., 2004) • (Preece et al., 2002) • (Kaulio, 1998) • (Urban and von Hippel, 1988)

		Customer identification and Customer Value Chain analysis	<ul style="list-style-type: none"> • (Donaldson et al., 2006) • (Wilson, 1993) • (Hines et al., 2006)
		Organizational Buying Behavior	<ul style="list-style-type: none"> • (Webster and Wind, 1972)
Discussion Part III	There can be significant environmental challenges related to such activities as production. Environmental issues are closely related to social issues, hence, environmental challenges must be analyzed.	Link between climate change and social issues	<ul style="list-style-type: none"> • (Adger and Kelly, 1999) • (Bohle et al., 1994)
		Organizational change	<ul style="list-style-type: none"> • (Eason 1987)
		Life Cycle Analysis and Life Cycle Design	<ul style="list-style-type: none"> • (Ishii et al., 1994) • (Rebitzer et al., 2004)
	The activities conducted by the business will have different effect on a various number of stakeholders. There are significant information needs related to this.	Stakeholder Theory	<ul style="list-style-type: none"> • Mitchell and Wood (1997) • Donaldson and Preston (1995) • Jones (1995) • Roberts (1992) • Clarkson (1995) • Freeman (1984)
		Stakeholder Theory within in field of Social Entrepreneurship	<ul style="list-style-type: none"> • Russo Perrini (2010) • Munilla and Miles (2005) • Brush (2008) • ISO 26000
		General theory within the field of Corporate Social Responsibility (CSR) and Social Entrepreneurship	<ul style="list-style-type: none"> • Roberts (1992) • Desa and Kotha (2005)
	There are information needs related to the possibility of designing activities to increase the positive social impact of an organization.	Strategy and Value Chain	<ul style="list-style-type: none"> • Porter (1985,1998) • Porter and Kramer (2002,2006,2011) • Porter and Linde (1996) • Vachani and Smith (2004) • Clark et al. (2003) • Walton et al. (1998) • ISO 26000
	There are significant challenges relating to the monitoring and measuring of social impact, which entails important information needs.	Theory within the field of CSR	<ul style="list-style-type: none"> • Roberts (1992) • ISO 26000 • (Clark et al., 2003b)

5. DISCUSSION PART I: STARTING POINT ASSESSMENT

5.1. INTRODUCTION

The issue of mental and geographical distance between the person having a problem and the person trying to solve it, was frequently addressed by interviewees. This distance poses a problem when the differences between the two are so unimaginably vast that it is impossible for the entrepreneur to grasp the preconditions of the user of a proposed product. The need to assess this difference is the topic of Discussion Part I.

The entrepreneur's mental starting point, relative to the customer, is not specifically addressed by any of Barringer and Ireland's (2008) framework pillars, and is perhaps so fundamental that it can be regarded as almost belonging to a pre-analysis stage. It therefore seems appropriate to introduce the tool relating specifically to this subject as the first one.

Literature applied in this discussion relates to knowledge creation, both in a fundamental philosophical sense and in a more practical perspective with regards to knowledge creation in organizations.

5.2. TOOL #1: THE PROXIMITY MATRIX

"...you should focus on the problem, not just treat the consequence. To understand the problem, you have to live with them for a while."

– Indian Business School Professor in charge of a practical social entrepreneurship course for MBA students
(C07:B10)

"...make sure you know your customers, and that you know how to serve them so that they'll come back to you"

– India based American Impact Investor (C02:B04)

"...there is so much of it. Like when the Financial Times set up a panel of experts to vote over which product is the best. They have no idea what it's like out there. It is the wrong approach all together, to have experts sitting in the west, or technologists sitting in the west, and having that as the driver."

- Norwegian Impact Investor (C03:B10)

5.2.1. WHAT IS THE QUESTION, AND WHY IS IT IMPORTANT?

Many of the interviewees address the lack of user understanding that often occurs when western product developers attempt to design products intended for typical bottom of the pyramid (BOP) markets. Unforeseen factors of culture, environment, tradition etc. causes the customers to use the product differently than what the entrepreneur had planned for, or even not at all. For social entrepreneurs addressing marginalized groups, and for those addressing groups across geographical distance in particular, a first step towards success must be realizing what ones starting point is. In such cases, the socio-cultural distances to overcome can be so immense that there is a real danger of the entrepreneur not realizing his or her shortcomings until the product flops in the market place, as exemplified by interviewees (C03:B10). The importance of thoroughly understanding ones customers, however, is not only paramount to social start-ups, it is a make or break issue for the success of any knowledge based innovation (Drucker, 1985), and is particularly important in any case were an analyst wishes to address a group of which he or she is not a part.

In short, the proposed question to be answered is:

How am I positioned in order to understand the realm I wish to enter?

The insight gained from answering this question can tell the analyst a lot about what the next steps must be, in terms of recruiting and organizational development, self education, and also partnering. It is not to be expected that an entrepreneurs him or herself will possess all the necessary knowledge to successfully sustain innovative processes needed to realize new organizations and bring new products successfully to market (Widding, 2005). If the analyst identifies knowledge needs, however, he or she can consciously arrange knowledge holders within and around the organization (Widding, 2005), and also develop the organization to crystallize and amplify the knowledge of its members to create organizational knowledge (Nonaka, 1994). This enables the analyst to plan how the aggregated experience and knowledge of the organization can move towards a deep understanding of the realm in which they intend to operate.

5.2.2. TOOL DEVELOPMENT

The construction of a tool that addresses the entrepreneur's level of relevant insight demands the establishment of two constructs;

1. A set of dimensions of knowledge relevance
2. Levels of achievement along the proposed dimensions

DIMENSIONS OF RELEVANCE

According to Nonaka (1994), the meaning of a piece of information to any given system, depends on what the given system aims to do, its purpose or problem consciousness, and the broader environment in which that system exists, also referred to as context. For the purpose of this discussion, the entrepreneur or entrepreneurial team will constitute this system, a system which aims to create a technological solution to a problem, and then bring that solution to a market. The dimensions of problem and context are easily transferable to the entrepreneurial system addressed in this discussion, which is concerned with a technology-based problem solution, and a market in which it must operate and succeed, and also resembles two of Barringer and Ireland's (2008) pillars of information needed for feasibility analysis itself; product or service, and the market and industry. Thus, Nonaka (1994) provides a set of intuitive and discernable dimensions for the tool. At this point, it must be noted that the term *information* as employed by Nonaka (1994) does not refer to the deep understanding and insight, the need for which is emphasized in the findings from the interviews for this thesis. The relationship between information and knowledge both within and outside the boundaries of an organization is thoroughly discussed in management literature and philosophy, however, and forms a promising basis for the second construct of the tool; the levels of knowledge achievement.

LEVELS OF ACHIEVEMENT

Nonaka (1994) defines knowledge as a *justified true belief*, as coined by Plato himself¹. The concept of knowledge is an ancient philosophical topic for debate, the contributions to which vary between the abstract and the more practical. Recent contributions on the subject, however, seem to agree that information is not knowledge, but that information contributes to the creation of knowledge through cognitive processes of structuring and combination with other information and with previous knowledge (Machlup, 1983, Dretske, 1981, Chia, 2003), and it is reasonable to regard it as a less refined form of the same concept, which can be processed to a higher level. Dretske (1981) argues that information is a commodity capable of yielding knowledge, but that received information is relative to what the receiver already knows. Machlup (1983) states that information is a flow of messages that might add to, restructure or change, knowledge also implying that the information received must interact with existing knowledge in order to result in new knowledge.

Aristotle insisted that the ability to explain, and articulate the cause of things is what distinguishes the knowledgeable person from the experienced one, meaning that the person of mere experience can only base his knowledge on the symptoms of a phenomenon. Implicit in this lays a predilection for the ability to explain rather than the ability to act. Within the realm of practice, as opposed to theory, however, the ability to

¹ Plato; *theTheaetetus*

manipulate phenomena in the desired way, is often more valuable than the ability to name and explain them causally. This bares a strong parallel to the cases of information based and experience based knowledge.

A relevant and interesting division with regards to experience and information is that between levels of experience, as coined by Confucius²; *I hear, I forget. I see, I remember. I do, I understand.* The particular point of interest in Confucius’ statement is the division between receiving secondhand information, witnessing something happen, and experiencing it firsthand. There is something seductively intuitive and functional about this division, hence it will be employed in the development of the tool.

The positioning of the analyst relative to the realm of entry, were the word *realm* is employed to contain both dimensions of relevance, can be exemplified by two extremes. The first example is a European engineering student inventing a device that produces fertilizer from urine, meant for use by farmers in rural Africa. The concept is based on the information that farmers need fertilizer, in combination with the knowledge that humans produce urine. The second example is a woman in rural Africa who invents a simple mechanical fan for driving the smoke from her cooking fire out of the hut, so as not to bother her infant. This concept is based on firsthand experience with the problem at hand, and on knowledge about the cause of the problem and the resources available for solving it.

It is reasonable to claim that the African woman’s product is based on a more fundamental insight into the problem/solution, as well as the context of use, than that of the engineering student. While the engineering student bases his concept on factual information, the woman bases hers on firsthand experience. It may very well be that the engineering student is able to articulate the problem and its cause in a better way, but he is not necessarily better situated to solve the problem.

5.2.3. TOOL CONSTRUCTION

Combining the conclusions from the above discussions on experience, information and knowledge, the following levels of achievement are proposed:

1. Knowledge obtained through firsthand experience; denoted “shared “, as in shared with user.
2. Knowledge based on factual information from credible sources; denote by nothing, as it implies a gap between needed and possessed knowledge, and therefore a lack of something as opposed to a presence of something.

These levels can then be applied to the two dimensions of relevance, to form the following matrix:

Problem Proximity	Shared Problem Innovation An innovation based on experience with the same problem in a different context	Peer Innovation An invention by a user, wishing to offer the solution to other in the vicinity experiencing the same need.
	External Innovation An innovation based on limited or no experience with the relevant problem, nor context (often based solely on technological feasibility).	Shared Context Innovation An innovation based on experience with the relevant context of the user, though not with the problem at hand.
	Contextual Proximity	

FIGURE 1: TOOL #1: THE PROXIMITY MATRIX CONSTRUCTED I

² Confucius 551 BC – 479

PEER INNOVATION

Peer innovation is exemplified by the African woman inventing a simple fan. There is good reason to believe that she can provide value for other women with small children living in her village, by encouraging them to adopt this solution, based on the similarity of living conditions, of available resources etc.

EXTERNAL INNOVATION

Is exemplified by the European engineering student, who does not have any fertilizing experience, and who has never set foot in Africa. He bases his concept development on factual information.

SHARED PROBLEM INNOVATION

Can be exemplified by a European farmer developing a similar fertilizing device. He has extensive firsthand experience with storing, transporting, and spreading fertilizer. He knows about the consequences of using too much or too little, and about storing it separately from animal feed etc. He has firsthand experience with needing fertilizer, and with using fertilizer. However, he shares with the engineering student an acute lack of experience with farming and living in rural Africa, and is badly positioned to foresee all the factors in the target market that will counter the use of the product.

SHARED CONTEXT INNOVATION

Can be exemplified by the rural African boy who invents a fan for drawing the smoke from the fire out of the hut, as the woman next door is constantly complaining that it bothers her child. Living in the same village, he knows very well which resources are available, and what infrastructure and complementing devices are already in place to support his solution. However, he himself is the youngest of his family, and has little experience with having infants in the hut. Also he has no experience with cooking, as his mother performs this task. He therefore misses the target when developing a solution that draws the smoke away, but makes a sound that keeps the child from napping, as well as drawing the heat towards to cook, making the cooking experience excruciating. He simply did not think of these things, as he did not have any experience with the problem.

THE MIDDLE GROUNDS

It is absurd to claim that all individuals can be said to either have firsthand experience or be practically oblivious about a given subject. Surely a boy living in the hut with the woman and her child would know that loud noise keeps the baby from sleeping, even though he was not a parent himself. The possibility of gaining knowledge through observation, as described by Confucius is a useful basis from describing the step between receiving secondhand information about something, and experiencing it yourself. For example, this pertains to a person working at a women's shelter, who has extensive knowledge about the suffering of abused women, but who has not herself been abused. Although Confucius' statement counters the general view of Aristotle, it is interesting to observe that also Aristotle³ regarded seeing as the single sense which, more than all others, provides a reliable basis for knowledge (Chia, 2003). The inclusion of another level of achievement called *experience*, applicable to such cases as that of the women's shelter worker, is therefore proposed, resulting in the following matrix:

The simple exercise of placing him or herself in the matrix is meant to result in an insight about the relevant distance between the analyst and the person who experiences the problem the analyst seeks to solve. Jim Fruchterman (2008) states that a hallmark of the growing movement of people who seek to solve social problems with new approaches is to approach these problems in partnership with the communities one tries to help, benefiting from the inclusion of individuals with knowledge based on

³ Aristotle; *Methaphysics, book Alpha 1*

firsthand experience. Hence, finding one self in the lower left corner does not automatically mean than the analyst should give up, but it implies a significant effort in developing and obtaining the necessary knowledge.

Problem Proximity	Shared Problem Innovation	Shared Problem, Context Experience	Peer Innovation
	Problem Experience	Context and Problem Experience	Shared Context, Problem Experience
	External Innovation	Context Experience	Shared Context Innovation
	Contextual Proximity		

FIGURE 2: TOOL #1: THE PROXIMITY MATRIX CONSTRUCTED II

5.2.4. REVIEW RESPONSE

The responses to this tool from the review are summarized in the table below:

TABLE 4: REVIEW RESPONSE, TOOL#1: PROXIMITY MATRIX

Respondent	Positive	Negative	Suggestions for improvement
Investor	Very important problem to address – it is good that you have created a framework for this.	But can you say anything about what you should do (as an innovator) when you find yourself in the different cells? If not, then the framework is not useful: “I seem to be on the lower left here, but I’ll do my best anyway.....”	This is an interesting area for future research. What share of the innovators starting in the various cells succeed? What did the ones who succeeded, despite starting in the lower left do?
Academic 1	It certainly addresses something important.	I am not sure whether a matrix is the right tool, if we are trying to develop a useful tool, versus describing what is happening. I may not have proximity with the user, but I think that is less important than how much information I now have about the needs of the user.	My point is that there are many ways to get "close to the customer" and it might be more useful to just assess on some scale how well I have done that.
Academic 2	N/A	I am not 100% sure I understand this one. By speaking of the “reality” – a somewhat abstract term – I am assuming you are speaking of the context of the situation – so whether or not the person identifying the solution really understands the nature of the problem to solve? Hard to see the user not understanding their own context or situation. Wonder if this is instead the topic of innovator working with user or not – or user being the innovator or not...?	I think the issue of innovators not really understanding the problem or situation firsthand can be a significant one – but I wonder if this doesn’t fit more naturally in a 2x2 matrix – though I struggled with that construct as well....

Academic 3	The name is OK, I think. The models seem to belong in different stages of the entrepreneurial process. The one addressing proximity in particular is addressing a very fundamental and basic issue. The subject addressed here, whether the entrepreneur is really in a place where she understands the domain she wishes to enter, is very important.	It is confusing that the word <i>innovation</i> is used in some cells, and not in others.	I would think about re-labeling the axis, to something like <i>technology</i> and <i>social aspects</i> . The whole thing made more sense to me when I ignored the word <i>innovation</i> , so I would think about leaving it out.
User	I like the simplicity of the design, and appreciate how it ties together shareholders from both ends of the "transaction."	While I believe it does have some reference and interest for shareholders, I believe there could be some skew in that I think most <i>innovators</i> do not work on problems they don't have some kind of personal connection with, due to a personal experience or relationship that is likely the precipitating factor that produces that work or interest in finding a solution.	N/A
Student 1	Good to be aware of this.	Left with the impression: "So what?" A bit difficult to understand at first sight. Unclear which way the axes are going.	Insert arrows
Student 2	I certainly acknowledge the problem of inventing something "clever" in the west, and the need to declare ones position in the matrix, to understand that "I am clueless". The question is; What are the implications? The model is easy to understand, and these are important things to think about. I think this is the most significant contribution among the proposed tools.	I am not sure which way the axes are pointing.	N/A

The general consensus among respondents is that the issue addressed by this tool is important, and very real. Several respondents expressed that the tool was somewhat confusing, with regard to the axes, and with regard to inconsistency and lack of intuitiveness in the use of terms and expressions.

5.2.5. PROPOSED TOOL

Based on the responses from reviewers, and also on the continuously increasing maturity of the authors in this field, some changes were made to the tool:

1. **The levels of achievement were renamed:**
 - *Shared* referring to the entrepreneur sharing the user's situation.
 - *Insight* referring to the entrepreneur having a significant insight into the user's situation, usually based on observation or even participatory observation.
 - *Information* referring to the entrepreneur basing his or her knowledge on received, factual information.
2. **The word innovation was left out**, and replaced by the word *entrepreneur*, as the tool describes the knowledge held by the entrepreneur, which is the basis of a concept innovation, but which the innovation itself cannot hold.
3. **Arrows were inserted** to denote the increase and decrease of achievement along the two axes.
4. **The shading was removed**, as it did not serve any particular function.

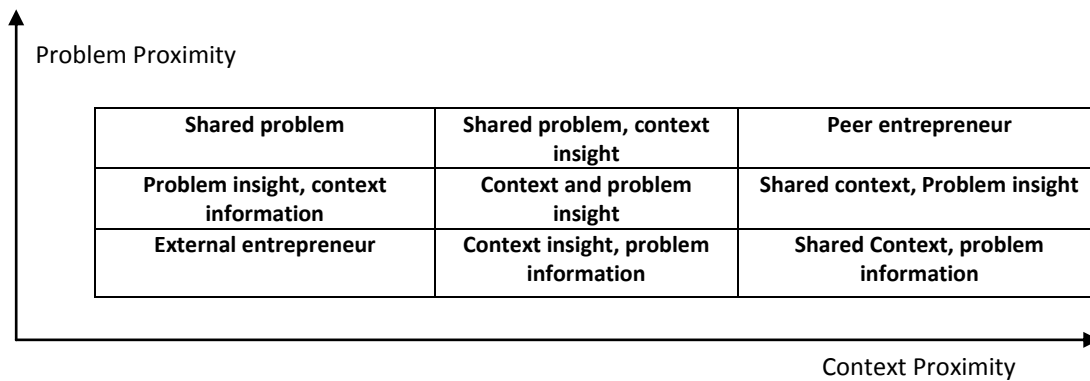


FIGURE 3: TOOL #1: THE PROXIMITY MATRIX REVIEWED

5.3. FINAL COMMENTS

The fundamental importance of the topic addressed by this tool was confirmed by reviewers, implying real relevance for future analysts. This tool is particularly applicable to those business ideas aiming to help people through the core activities of a new organization, primarily through the supply of a product solution, but also with regard to other types of market offerings.

The next chapter, Discussion Part II addresses topics of a higher degree of practicality, namely the interception between the Product and the Market and Industry.

6. DISCUSSION PART II: PRODUCT EMPLOYMENT FEASIBILITY

6.1. INTRODUCTION

Product development and the interaction product/user were thoroughly addressed by interviewees. Findings pointed towards specific information needs, regarding existing infrastructure, customer relevance in product development, and understanding customer's criteria for product use. These challenges are the topics for discussion in Part II.

Barringer and Ireland (2008) address the topic of user understanding and the active involvement of users in the analysis, through both concept testing and usability testing. These methods, however, and usability testing in particular, demand that product design and development must have evolved beyond simply knowing what problem to solve, and entail a number of choices which must have been made in order to obtain meaningful feedback on sketches and prototypes. Also, it demands a physical proximity to the customers that analysts in the very early and conceptual stages of a social concept often will not have. The challenge of overcoming this lack of insight is addressed through the development of two tools:

- Tool #2, which addresses customer criteria for product purchase and use
- Tool #3, which addresses required infrastructure and complementing technology

Theory applied to the discussions in this chapter belongs to strategy and marketing literature, as well as product development methodology.

6.2. TOOL #2: THE PRODUCT TRAJECTORY

“The case is very often that the technology developers have too little understanding of this [user situation], they believe that “when I have made such a fantastic product, it will be sure to sell. I have made a sun driven cooker that is more efficient, and heats faster than any other. Off course it will sell, we’ll just produce it, and ship it to Africa.” And that sounds reasonable; they have sun, they need heat, it’s genius. But then it turns out that people aren’t interested in cooking their dinner under the sun. It’s too hot and tiresome, and they are used to doing it at night, when they have finished all the other tasks that demand sunlight. And also, the smoke from the fire or cook stove they normally use adds a flavor to some of the dishes, which is important, and makes it taste differently. It can be all kinds of things that prevent it from functioning in that context”

– Norwegian Impact Investor (C03:B10)

6.2.1 WHAT IS THE QUESTION, AND WHY IS IT IMPORTANT?

Implicit in understanding the customer and customer needs, lies the need to understand customers' criteria for employing the proposed solution. This was explicitly addressed by interviewees, as something it was difficult for entrepreneurs to gain insight into. Understanding the criteria which must be fulfilled in the market is fundamental to product development, but also to the development of a distribution and service model and marketing strategy. Identifying these criteria also forms a good basis for comparing the proposed solution to competing solutions in the market, and for relative positioning along the dimensions identified. Another implication is the suggestion of which customers should potentially be involved in the various stages of product development, depending on the complexity and explicitness of their criteria. The question to be answered is therefore:

What are the customers' criteria for adopting the proposed solution to the problem?

For the purpose of this discussion it is assumed that the analyst has identified an end user in the market, and that he or she has indentified a problem that the proposed end user needs solved. Understanding the end user is addressed by the first tool, the proximity matrix, which holds implications for the entrepreneur's effort to

truly understand the user. This next tool, however, is concerned with the challenges of winning actual acceptance for a proposed solution. This is complicated by the fact that the event of the product being employed by the end user is usually not dependent on that one actor alone.

6.2.2. TOOL DEVELOPMENT

In order for the acceptance criteria of the customers to be established, two issues must be addressed:

1. Identification of the various customers who's criteria are relevant
2. Establishment of what their respective criteria are

CUSTOMER IDENTIFICATION

In order for the solution to travel from the organization to the end user, it will have to pass through a number of actors. This is exemplified by Hines et al. (2006) who demonstrate how the external customer of a company are not necessarily one individual, but that a series of customers can be identified, through the example of a manufacturer of pet food:

- Intermediary # 1: Buyer for a super market chain
- Intermediary #2: Supermarket Store manager
- Intermediary #3: Super market shelf stacker
- Decision maker: Purchaser of pet food
- Intermediary #4: Person carrying the shopping bag home
- End consumer: The family dog

While a great number of downstream stakeholders can be identified, the relative importance of their needs and expectations vary (Preece et al., 2002). While the intermediaries handle and physically manage the product on its way to functional employment, two of these actors are particularly important when it comes to product acceptance; The buyer, referred to by Hines et al. (2006) as the decision maker, and the end user, referred to as the end consumer. It can be argued that the person conducting the purchase of dog food for the super market chain is also a decision maker, however it may be that the buyer portrayed here is simply making a re-stocking decision, after an initial supply deal has already been made. Another example of customer identification is provided by impact investor Kevin Starr (2010); a group of Stanford design students had identified a problem of mal nourishment among children in Rwanda, and came up with an idea for how to get micro nutrients into flower by using a cement mixer like device. They then modeled the chain of actors that had to buy into this solution in order for the nutrient enhanced bread to get to the child who needed nutrients. They identified a number of actors throughout the chain, such as the parent buying the bread, the baker using the flower etc., all of which had to make the choice to adopt something new. Eventually, the students dropped the project, due to the perceived impossibility of convincing all the necessary actors.

Based on the type of decision the customer has to make, the two customer types identified are:

1. Buyer
2. User

The denotation *customer* is used to address both, as they must both *buy into* the proposed solution in one way or another. The term decision maker is not used to denote any of them, as they are both required to make decisions in order for the product to be employed.

THE ESTABLISHMENT OF CRITERIA

The question of criteria now becomes a question of which criteria must be fulfilled in order for each actor to make the favorable decision of buying or using, respectively. The analyst must keep in mind, however, that individual actors in the chain can encompass both functions.

Use decisions, as exemplified by the solar cooker, are often dependent on factors which are difficult to identify from a distance. This is supported by Barringer and Ireland's (2008) inclusion of the usability test at the prototype stage of development, and by the widespread recommendation to involve users in product development (Urban and von Hippel, 1988, Kaulio, 1998, Abras et al., 2004, Fruchterman, 2008). Purchasing decisions, however, are often described as being particularly concerned with product attributes, such as price, weight, and other easily describable dimensions of a product, along which perceived value can be determined. Customers learn to value certain attributes through use experience, where needs are translated to established corresponding attributes (Woodruff, 1997), such as "need for mobility" translating into the attribute of low weight. However, there are other ways to view the value on which customers base their decisions. Instead of jumping straight to attributes, the analyst can ask the question "What do the customers value?" By employing this question as a basis for criteria identification, the analyst may trigger a broader cognitive process and basis for knowledge seeking.

Woodruff (Woodruff, 1997, Woodruff and Gardial, 1996) divides perceived customer value into three levels:

1. Customers' goals and purposes
2. Desired consequences in use situations
3. Desired product attributes and attribute performance

Goal oriented value is the product's ability to enable the user to reach a specific goal. Level 2, the consequence oriented level, addresses aspects of using the product which enables the user to obtain his or her goals more efficiently, comfortably etc. It can be said to be a level of indirect goal attainment, or of user friendliness. The third level, the attribute level, encompasses explicit, often quantifiable or measurable aspects of the product, such as miles per gallon etc. Such attributes are often the basis of purchasing decisions when a customer has many product solutions to choose from, because they are measurable and enable the use of ranking and elimination methods (Kotler and Keller, 2006). While attributes are strongly linked to purchasing decisions, goal attainment and use are easily transferable to the use decision. The analyst should attempt to think in terms of multiple levels when assessing customer criteria.

6.2.3. TOOL CONSTRUCTION

While each actor must be viewed separately, the way in which they influence each other must also be taken into account. For example, if the parent expects the child to refuse to eat the bread, due to a foul smell or strange color, the parent is not likely to buy the bread, even though the primary criteria of the parent, such as price, availability and wholesomeness of the bread are fulfilled. In other words, the expected outcome of the decision made by the next actor in line affects the current decision maker. This connection implies a need to assess not only the customers, but also the order in which they make their decisions.

In order to capture the actors, their decision criteria, and the order in which decisions are made, a trajectory model is proposed. This tool draws inspiration from the Customer Chain, a visual mapping tool used in Customer Value Chain Analysis (CVCA), employed by product design teams to identify pertinent stakeholders, their relationship to each other, and their role in the products life cycle. This tool helps designers define the product, an exercise whose efficiency holds great implications for product development, and the failure of which can strand entire products (Wilson, 1993).

In the Customer Chain, the various customers and intermediaries are mapped according to the flow of product, money and complaints (Donaldson et al., 2006). This approaches a business model description, and for the case of the proposed analysis tool, only the product flow will be included. While flow of material, money and complaints is the focus of the Customer Chain, Kevin Starr (2010) suggests an exercise based on customer

behavior; as exemplified by the Stanford design students, he recommends to model the chain of actors who are required to behave in a certain way in order for the product to be employed. The analyst must then consider what will be required to make those actors behave in the desired way, for example by serving their child a certain type of bread.

The proposed exercise is meant to be conducted as follows: Model the product trajectory backwards from the intended end user to the point of departure from the organization. Identify users and buyers. Determine their respective main criteria for purchase and use of the product, which determines if the product is likely to be accepted by each actor. The below example describes a technological toy, and both design relevant criteria, such as durability and intuitiveness, and business model relevant criteria, such as stability of supply, have been included. All three levels of Woodruff's (1997) hierarchy are also represented. Insight gained through this exercise must be carried on to the planning and development processes concerning the various aspects of a new venture respectively.

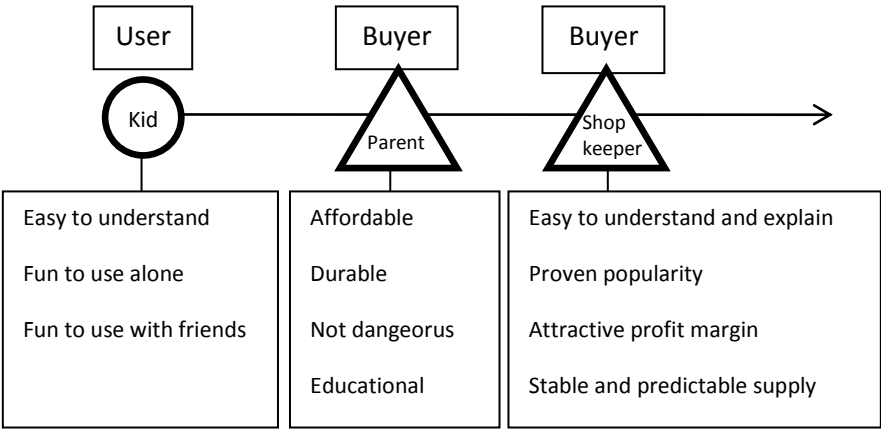


FIGURE 4: TOOL #2: THE PRODUCT TRAJECTORY CONSTRUCTED

While this chain of actors is quite predictable and straight forward, a company striving to distribute its product among a marginalized or socially excluded or isolated group may have to work hard to gain sufficient understanding of the chain through which their product must pass to reach its user. Also, reaching such segments may require the invention of new chains, which demands great amounts of local knowledge, networks and creativity, in order to affect customer behavior.

6.2.4. REVIEW RESPONSE

Reviewers responses to the Product Trajectory are displayed in the table below:

TABLE 5: REVIEW RESPONSE, TOOL #5: THE PRODUCT TRAJECTORY

Respondent	Positive	Negative	Suggestions for improvement
Investor	N/A	N/A	N/A
Academic 1	This figure is critically important. Any business planning process needs to contemplate the entire decision making process and the value proposition of each member of the process and channel. A "mapping" of that can be a very useful tool.	N/A	Don't forget to include any governmental / regulatory players, which are commonly involved in any social venture.
Academic 2	An interesting concept. Does deal with the challenges of channels – getting from company to end user, and the factors that could get in the way, which is a good thing	Not explicit enough	N/A
Academic 3	This name makes sense, I guess.	N/A	But this is all about the marketing. I think the next important question after the last one would be: <i>Do I understand the problem?</i> I think this model could make sense as more of a situation trajectory, where you have a current situation, and a situation that you would like to get to, and then there are some hurdles in between, that you have to overcome. Really, there is so much literature and theory on the marketing, but this could be for definition and problem formulation.
User	I really do like the Product Trajectory model. It is simple and easy to understand, is very poignant to a feasibility analysis. It has a strong visual component that aids in the process visualization	N/A	N/A
Student 1	Easy to understand	Still left with the impression: "so what?"	Change the direction of the arrow.
Student 2	I liked it. A very relevant exercise no matter what one is planning. It doesn't require a social intent. It is important to map all stages, and everybody who are part in affecting the decision of whether the product is purchased or not.	N/A	N/A

Most respondents agree that this tool is addressing an important aspect of understanding what will be demanded of the product, and also the organization, in order to get the product to its intended destination. Several respondents also comment on the visual simplicity of the tool, and that it is easy to understand. One respondent was confused by the direction of the product flow arrow, which, is directed away from the end user to remind the analyst to assess the flow in reverse. One respondent calls for the inclusion of regulatory players, which often play critical roles in the introduction of new solutions to solve social problems.

6.2.5. PROPOSED TOOL

Based on the response from the review, in combination with continuous mental processing from the authors, the following changes were made to the tool:

1. **Inclusion of regulatory players.** While the actors making purchasing and use decisions, are greatly important in the chain, the case for social entrepreneurs is often dependence on the support of some government or municipal authority, who, while perhaps not physically involved with the product must still approve of its distribution. Such actors can be defined as gate keepers, actors who do not make the purchasing decision, but who enables access to those who do (Webster and Wind, 1972). Other gate keepers may for example be control agencies who perform certifications etc., as exemplified by the need for CE – approval for a number of products when launched in the EU and EEA. The focus on product flow, however, poses a problem for the inclusion of gate keepers, who usually do not physically bring the product further along the flow, but rather permits the product to flow. In the tool, they will therefore be placed off the flow line, but with a link to the gate, which will appear on the flow line. Another unique aspect of the gate keeper is that while the buyers and users on the flow line usually represent a greater number of individuals, there may in fact be one single actor or organization who can and must make the gate keeper decision in question. The criteria and behavior of this actor is therefore of critical importance. It must also be noted that in some cases, such as those of a new venture selling a product to an NGO which hands it out to people in need in areas no one else can reach, the buyer can also be a gate keeper. The analyst must then choose between distinguishing between different divisions of the NGO who might handle the different functions, or by simply adding the functions on top of each other, by stacking them vertically.
2. **More emphasis on customer behavior,** by inclusion of an explicit description of required behavior. This also increases the analyst’s focus on the relationship between customers.
3. **The explicit inclusion of the expectation of “next-in-line-acceptance”** as a criterion for making the desired decision, again increasing the focus on relationships.
4. **The arrow was reversed,** as the notion of backwards product flow may seem counter intuitive, and as the analyst would be perfectly able to follow the flow backwards even though the arrow points forward, in the direction the product would actually flow.
5. **The employment of the product is included as a star at the end of the product flow,** to illustrate that the end user receiving the product is only the second last step, and that the user is also required to act in a certain way for the product to be employed. The end user must in fact decide to use it, and do so.
6. **The perceived value levels** from the initial tool development discussion are included too spark the analysts cognitive processes, and to systemize findings. The levels are denoted *Goal*, *Process* and *Attributes*, respectively.

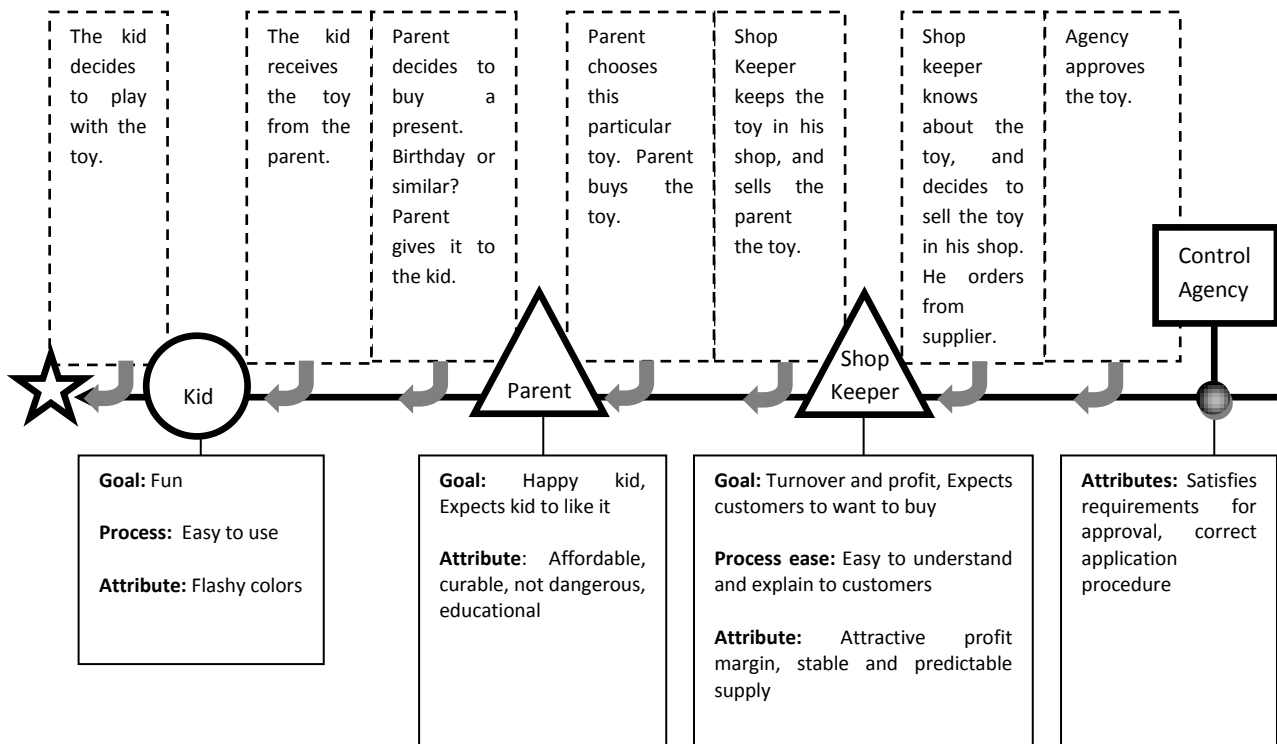


FIGURE 5: TOOL #2: THE PROPOSED PRODUCT TRAJECTORY

6.3. TOOL #3: THE DEPENDENCY MATRIX

“Software in India, to the extent that it is successful, it is true because of huge state investments (.....) facilities were provided, the first internet links were provided.” – Indian Academic (C03:B11)

“We say that our solutions are almost always around adapting existing technology to a new use, with relatively little technical risk. “Building the last social mile,” is a common phrase here. It presumes that we’re often 90 or 99% there: we need to mainly adapt and repackage existing tech to a new socially important use.” –American Social Entrepreneur (C03:B12)

“...I saw last summer in Rajasthan, places who used to get 10 hours of power now got six hours of power. So for agriculture it means the time where you used to run your pump sets, is now time where you cannot run your pump sets.” – Indian Academic (C03:B11)

6.3.1. WHAT IS THE QUESTION AND WHY IS IT IMPORTANT?

Another aspect of assessing the feasibility of the product actually being employed and functioning in the target market, is considering how the proposed product must interact with other products or infrastructure to function in practical use. Several interviewees, including both entrepreneurs, academics and users, demonstrated the relevance of such complementing factors as technological infrastructure, as well as political infrastructure and tax legislation. While tax legislation and politics are topics for other sections of an analysis, the factors which directly relate to the product itself are the topic of this discussion. An example is the extreme unreliability of power grids in parts of India, which was addressed by one interview subject as a major obstacle for productivity and development. Factors with direct relevance to the product include:

1. Physical infrastructure and complementing technology (e.g., rails, internet connectivity, power grid, batteries.)
2. Geographical and environmental factors (e.g., sun, water, wind.)
3. Knowledge requirements (e.g., reading ability, understanding of the need to change batteries.)

These are conditions which an analyst entering that market must take into account. Adapting to conditions in the market place can be viewed as limiting, or it can be viewed as a potential source of competitive advantage. The first question to be answered is as follows:

What factors must be present in the market for the product to work properly?

While all the above mentioned factors are important, physical infrastructure and complementing technology are distinctly different from the two others in one important way; factors of environment and geography are usually not controlled by other organizations or individuals to any significant degree. Hence, these factors are not likely to change as a result of some conscious reaction to a new product introduction. A similar case can be made for knowledge; if the knowledge is not already present in the market, then the organization must provide it or design around it, however, the knowledge is not something that is continuously supplied, or can be taken away by other actors. The factor of physical infrastructure and complementing technology is unique in the way it holds great implications for a new venture, not only on the product design level, but also with regard to other aspects of concept development. The dependency relationship between the proposed product and the surrounding technology on which it depends, is far more complex than that of the two other factors. In order to address the aspect of relative importance of the dependency on the various other solutions, another question must be raised.

What is the dependency relationship between the product and the other solutions on which it depends?

The answer to this question holds implications for product development, were the product may have to be designed around challenges such as the lack or unreliability of other solutions. It also holds implications for business model development and partnering and concept scalability, and can provide valuable insight into where the analyst must later search for competitors, as well as dimensions along which the threat of competitors should be evaluated.

Hence, the tool developed in the following discussion addresses the dependency relationship between the proposed product and factors of technological infrastructure and complementing technology.

6.3.2. TOOL ASSESSMENT

In almost all cases, according to Teece (1986), of the successful commercialization of a technological innovation, the utilization of the knowledge in question in conjunction with other capabilities or assets is required. In some cases a proposed product may be designed as part of a system, in which other important components must also exist. An example of this is provided by Benetech: when Jim Fruchterman worked to develop an information sharing and reporting tool for human rights organizations, he discovered that at the point of information input, namely the grass root groups of the organizations, though internet connectivity was often obtainable, it was spotty and expensive. He therefore developed the system based on the principle of local storage with instant uploading once a connection to the desired servers was obtained, rather than a direct input into central servers at the time of data entry (Fruchterman, 2008).

In this case, the product was developed to function in combination with existing infrastructure in the target market, on which it depended. There will also be situations in which the complementary solution is more dependent on the new product than vice versa. In yet other cases the complementary solution and the product may be equally interdependent, requiring some degree of tailoring from both to fit with each other. In many cases, however, the product is dependent on generic assets, and the need for adaptation to particular solutions

is small or none. Teece (1986) introduces the following model to describe the relationship between a new technology product (an innovation) and its complementary assets.

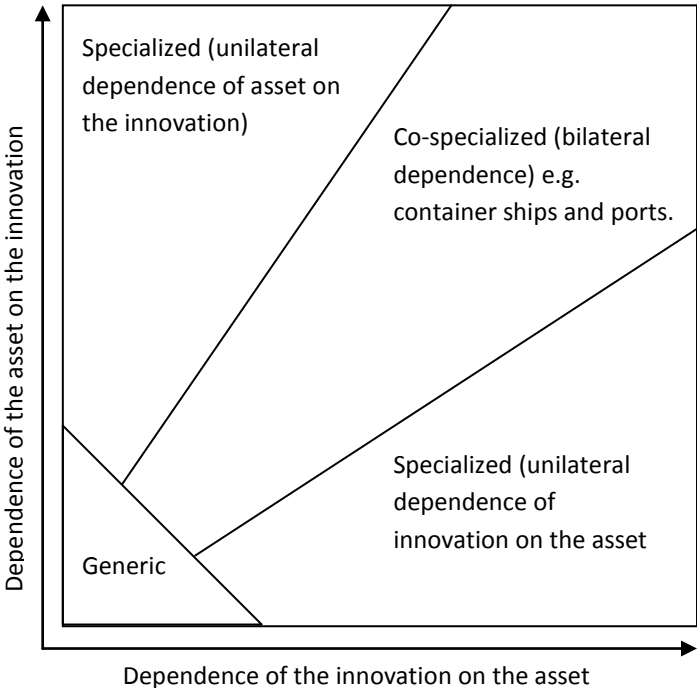


FIGURE 6: TOOL #3: TEECE'S COMPLIMENTARY ASSETS

6.3.3. TOOL CONSTRUCTION

This model provides a good basis for the analyst when attempting to establish the relationship between the product and other solutions and infrastructure in the market place. Such infrastructure could be gasoline stations, internet connectivity, electricity, cell phone coverage etc. He or she must first establish what infrastructure and technology is needed to make the product function. Alternatively, he or she may wish to instead explore which factors are currently present in the market, or expected to be present in the near future, and then shape the product offering to fit these preconditions. In many cases, however, a development process will contain elements of both processes. The tool, a simplified version of the model is presented below.

Dependence of the asset on the innovation	Specialized (unilateral dependence of asset on the innovation)	Co-specialized (bilateral dependence) e.g. container ships and ports.
	Generic	Specialized (unilateral dependence of innovation on the asset)
	Dependence of the innovation on the asset	

FIGURE 7: TOOL #3: THE DEPENDENCY MATRIX CONSTRUCTED

6.3.4. REVIEW RESPONSE

Review responses to the Dependency Matrix inspired by Teece are displayed below:

TABLE 6: REVIEW RESPONSE, TOOL #3: THE DEPENDENCY MATRIX

Respondent	Positive	Negative	Suggestions for improvement
Investor	N/A	N/A	N/A
Academic 1	The concept of this figure is very important	N/A	I think a "mapping" of the dependencies would be more useful than the matrix. These dependencies could be things like infrastructure and power, but could also be things like the need for after sales support & service (a common problem) as well as user training.
Academic 2	N/A	N/A	This matrix would benefit from a good example. If there may be several assets a company has – would this be applied for every asset against every innovation?
Academic 3	This makes sense. I guess the real question being addressed here is <i>Can I go at it alone?</i>	I overall miss something on competition, but I think some competitors could show up here, if they control both competing solutions and infrastructure. That would however, just be coincidental	N/A
User	Teece's Dependency Matrix is fine as a simple "where does my puzzle piece fit" assessment tool in the asset/innovation relationship.	N/A	It could be improved by the inclusion of more real world examples as in the "Co-specialized" sector of the matrix. You may also include definite descriptors of what constitutes an asset, and what constitutes an innovation.
Student 1	N/A	I needed some time to think before I really understand the tool.	N/A
Student 2	Relates strongly to the first model (Proximity Matrix). Useful.	A bit difficult to understand. Had to think a little about the expressions used.	N/A

The expressions used seemed to complicate the matter for respondents, and several of them suggested the use of examples to demonstrate the intended meaning of each cell. One respondent also suggested that perhaps the mapping of complementing solutions in itself was as useful as the dependency assessment.

6.3.5. PROPOSED TOOL

Based on the response from the review, the following changes were made:

1. The lines of the matrix were removed, to allow the analyst to place any number of complementing solutions along the dependency axes, thereby including a complete mapping exercise in the tool. This way, the analyst does not simply evaluate the proposed products dependency on each solution respectively, but also its aggregated dependency on complementing solutions in general.
2. Expressions used were exchanged for more intuitive ones.
3. An example was included to explain the tool.

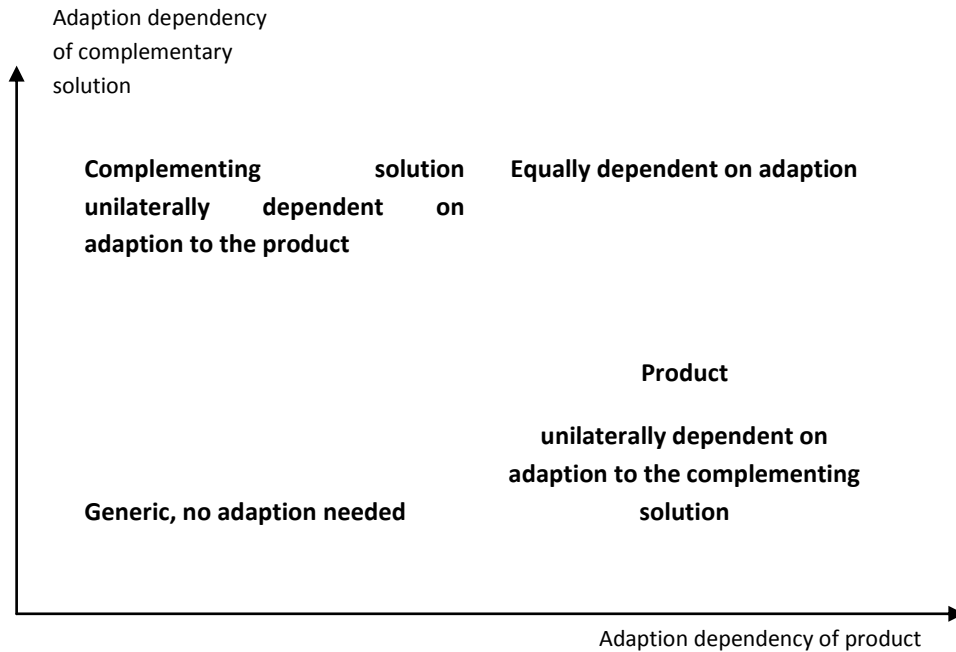


FIGURE 8: TOOL #3: THE PROPOSED DEPENDENCY MATRIX

EXAMPLE

The use of the tool is exemplified by a cinema film projector:

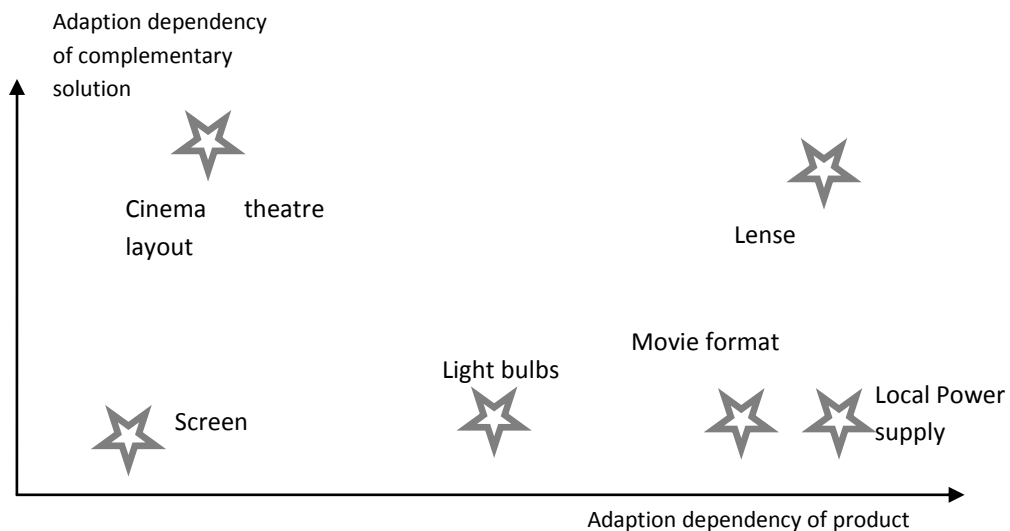


FIGURE 9: TOOL #3: THE EXEMPLIFIED DEPENDENCY MATRIX

6.4. FINAL COMMENTS

The tools introduced in this discussion are to a larger extent than in Discussion Part I, based on existing constructs, either through augmentation or combinations. They also address aspects of higher practicality, than the tool developed in Part I. Like the tool from Discussion Part I, however, they are concerned with value creation through the core activities of an organization, through a product value offering.

The next chapter, Discussion Part III, addresses the interception between the Organization and the Market and Industry including stakeholders, and thereby opportunities of social value creation through organizational policies and support activities. It also addresses the need to minimize negative impact, and to fully integrate a social agenda.

7. DISCUSSION PART III: IMPACT AND STAKEHOLDER ASSESSMENT

7.1. INTRODUCTION

What has become apparent in the empirical data is that the start-up teams must deal with actors ranging from large international commercial and financial actors, government and NGOs, as well as grass root users who may for example be illiterate or otherwise prohibited from receiving or sending information in traditional ways. Due to new and different stakeholders, connections and challenges, the empirical data has also shown that managerial competencies and team experiences are even more important for a venture with a social focus. The analyst must be thorough, especially with regards to the value chain, and how to measure the success of the social impact the venture will have on its stakeholders.

The focus on the value chain is recurrent in the framework presented by Barringer and Ireland (2008), however, this framework lacks inclusions of social value creation. In the analysis of the Market and Industry there is some focus on the different stakeholders, but the stakeholder analysis is conducted in order to segment the market and identify a niche market, and not with intended to provide insight into the venture's potential impact. Hence, there are shortcomings in the existing framework, relating to the evaluation of the potential social impact on the various stakeholders a proposed organization.

To answer to these shortcomings, four tools are suggested;

- Tool #4, which addresses environmental impact
- Tool #5, which deals with the difficulties of measuring social impact
- Tool #6, an existing tool which helps the analyst implement social initiatives in the venture's activities
- Tool #7, which maps the potential impact on the venture's different stakeholders

These tools have a high level of detail, and it must be noted that the employment of these tools does not require that all the addressed choices have already been made. Rather, the tools point to choices that should be made in the future, important aspects to take into account when doing so, and possible alternatives for future development. These first three tools are generally concerned more with social value creation through support activities and organizational policies than the previously introduced tools, while the last tool addresses the need to monitor future social impact. Theory applied in this discussion is collected from the areas of Life Cycle Analysis and Design, the climate change debate, Strategy and Management literature, CSR literature, Social Entrepreneurship literature and Stakeholder Theory.

7.2. TOOL #4: THE LIFE CYCLE DESCRIPTION

"...the other class of problems have to do with the question of poverty being the source of damage to the environment. (...) ... in a developing country, the technology that is deployed, in many cases, but not in all, may not be technology that is at the frontier of technology, the best possible available technology. So there would be considerations of cost, there will be considerations of inability or some pressure to cut back on the initial capital investment."

-Indian Academic working with environmental issues (C12:B35)

7.2.1. WHAT IS THE QUESTION, AND WHY IS IT IMPORTANT?

For any organization, the risk of damage to the environment and communities within which it operates should be sought minimized. For a venture seeking to create a net output of positive additions to the world, however, this should be regarded as even more pertinent. Whether environmental issues and social issues are to be addressed as two distinct but connected subjects, or two sides of the same, is up to the entrepreneur, but the connection between the two is well argued for (Bohle et al., 1994, Adger and Kelly, 1999). For the purpose of tool development, however, social impact of the organization's activities are addressed in Tool 5 and 6, while,

the potential environmental hazards of the product and its related processes are addressed in this discussion. It should be noted that insights gained through the use of tool 4 can be highly relevant when employing tool 5.

Examples of environmental and social issues, such as poor manufacturing technology and conflicts between industry and the environmental conditions of local communities, were mentioned in the findings. The question to be answered in this part of the analysis is:

What are the potentially harmful effects of the product and its related processes?

Using this tool will cause the analyst to think thoroughly through the physical processes necessary to bring the product to market, and what the physical effects of those processes might be. As will be demonstrated below, this assessment is not limited to the processes that are performed within the boundaries of a proposed organization, but rather encompasses all processes related to the proposed product, regardless of outsourcing decisions.

7.2.2. TOOL DEVELOPMENT

The aspects of a new venture that holds potential implications for the environment are many, and vary between ventures. For technology-based ventures, however, and particularly those involving the manufacturing of products, there are a set of generic topics to address, mainly the materials used, the product's manufacturing and assembly process, the distribution of the product, the products life in use (including service), and the retirement of the product (Ishii et al., 1994, Rebitzer et al., 2004).

In order to map the potential impact of a product and its related processes, two constructs must be established:

1. Stages of the product's processing and life, during which it can pose a hazard
2. Types of hazard posed by the product and its related processes

LIFE AND PROCESS STAGES

There are tools readily available for quantification of the environmental impact of all the factors stated above. Every product has a life-span starting with design, resource extraction, going to manufacturing and use, and ending with retirement activities, such as recycling or discarding into landfills. Over a product's life span it will impact the environment in different ways. Life Cycle Assessment is a methodological framework for the assessment of the environmental impacts attributable to the life cycle of a product or service, such as climate change, noise pollution, acidification, water usage etc. An LCA will often also include indirect changes in other life cycles, and can be used to quantify the potential impact of new goods and services (Rebitzer et al., 2004). The conclusion from an LCA is quantified impact which can be summarized for a unit of a given product or service in terms of points. Conducting an LCA, however, is a very time consuming activity, and involves a great amount of information gathering. An array of LCA-databases has been created, which offer impact information on common materials and processes, transport methods etc. There are also a number of dedicated software solutions available for the conducting of LCAs, most of which are delivered with databases by default (Rebitzer et al., 2004).

Conducting a full scale LCA-analysis for a product idea at the proposed stage of realization addressed in this thesis is nonsensical. Still, the same process stages described are useful for an exercise of awareness and exploration.

The issue of material choices for a new product holds environmental consequences, as some materials demand a lot of effort to extract and process. Some materials, such as certain plastics, glass, paper and metals, may be available in recycled form, and one can explore the possibility of utilizing materials that have been used before. The account of materials used in the design demand that such decisions

have already been made. For an early stage idea, however, the analyst may instead use this opportunity to explore the major material alternatives and their associated environmental advantages and disadvantages, and the manufacturing methods commonly used to process them. When exploring manufacturing processes especially, the analyst should pay attention to potential hazards to employees.

The manufacturing and or assembly processes of a product depends on the respective materials chosen, but also on the combination of these materials. Assembly is directly related to retirement options, as disassembly of products must be performed where several types of material, demanding different handling, are combined (Ishii et al., 1994). The ease or difficulty of disassembly may determine if it is economically feasible to recycle or reuse material.

An important element of Life Cycle Design is Design for Product Retirement (DFPR), which involves careful planning for the disposal of materials recovered from the product at the end of its life. Different materials have different options, and for complex products consisting of components made from different materials, disassembly and sorting of components according to their material is key. Processes such as disassembly and reprocessing all have costs associated with them, and there is also uncertainty as to the market demand for re-used components and recycled materials, as well as to the availability of economical separation and reprocessing technologies (Ishii et al., 1994).

The generic options for material from retired products are (Ishii et al., 1994):

1. Re-use: Components are used as-is in another application
2. Remanufacture: Components are re-used in the same or a different application, after minor repairs and overhauls are made.
3. Primary Recycling: Components are reprocessed into material for use in another high-value product.
4. Secondary Recycling: Components are reprocessed into material for use in a low-value product, such as concrete filler or fence posts.
5. Tertiary Recycling: Polymer components are chemically decomposed into their basic elements, and processed into new plastic or other products such as petrol, heating oil or asphalt.
6. Quaternary Recycling: Components are incinerated for the production of heat and/or electricity.
7. Disposal: Components are eliminated without the recovery of any intrinsic value.

(Ishii et al., 1994)

Depending on the degree of recycling a material can undergo, the analyst may consider the possibility of recycling or reusing his/her own products to some extent. This is of course also a matter that relates directly to organizational design and market conditions.

In addition to the environmental aspects of material input, processing and retirement, a technological product may require certain inputs and outputs during its time in use. This may for example be various fuels, and the environmental consequences of this consumption must also be included in an environmental assessment of the product.

TYPES OF HAZARD

When attempting to assess environmental consequences without using LCA-systems, it may be helpful to think in terms of stages, but also in terms of types of effects. However, it is difficult to generalize when the processes involved vary so much between products. A possible way to provide a general division of hazards is to consider the people affected. This implies a division into groups based on the

seriousness of effects inflicted on the people, or possibly by their relative risk of being affected. For the development of this construct, inspiration can be found in Eason's (1987) three types of users of a product:

- Primary users: Those persons who actually use the artifact.
- Secondary users: Those who occasionally use the artifact, or use it through an intermediary.
- Tertiary users: Those persons who will be affected by the use of the artifact, or make decisions about its purchase.

Although Eason (1987) did not primarily intend this division for environmental consequences of technological products, the division itself is quite basic and versatile, and reminds the analyst that, as with smoking, to use an exhausted example, the product does not only affect the user, but also those in the vicinity. In order to apply this perspective to the various stages, however, the term *user* may not always be appropriate, for example when describing factory workers who have firsthand contact with a manufacturing process. The term *user* is therefore exchanged for the term *contact*, which allows the analyst more freedom to adapt the tool to the cycle of his/her product. Another adjustment that needs to be made, is to the expression of *use through intermediary*, which may not necessarily make sense at every stage, or for every product. Also, *purchasing decisions* are not considered to be of relevance to this specific part of the assessment, and the following adjusted division is proposed:

1. Primary Contact
2. Secondary Contact
3. Tertiary Contact

Primary contact denotes first hand contact with materials and processes, while secondary contact denotes immediate proximity to materials and processes, and/or to the individuals who experience primary contact. Tertiary contact denotes the surrounding actors in a wider perspective.

7.2.3. TOOL CONSTRUCTION

These two dimensions of user relation and life cycle stage are well suited for a matrix-model, which illustrates the information required in this stage of the analysis.

Although generic stages are listed in the tool, the analyst is free to design his/her own material and process flow, and fill in the cells accordingly. The exact definition of primary, secondary and tertiary contact will also be case-dependent, and analysts may also wish to have fewer or more tiers of contact.

Stage of the product's life cycle	Material/Process	Primary contact	Secondary contact	Teritary contact
Resource extraction: Account for of the materials utilized in the product design, and their associated environmental risks with regards to extraction and pre-processing.	Example: Material X, Process Y	Example: Worker, with first hand contact with the resource extraction process. Little or no risk.		Example: Everyone. Increased CO ₂ emissions
Manufacturing and assembly process: Account for the intended manufacturing processes, and their associated environmental risks, included health risk of workers.	Example: Materal X, Process W	Example: Worker, with first hand contact with the manufacturing process. Danger of toxic fume inhalation.	Example: Inhabitants of the area where manufacturing takes place. danger of local leaks of poisonous gas.	
	Example: Material X Process P	Example: Worker with firsthand contact with process. Little or no risk.		
Distribution: Account for the planned distribution methods, and potential environmental risks associated with these methods.				
Use: Assess the potential environmental impact the product will have during its life in use.				
Retirement: An assessment of possible retirement options for the product	Example: Material X, incineration	Example: Worker, with first hand contact with the retirement process. Danger of toxic fume inhalation.		Example: Everyone. Increased CO ₂ emissions

FIGURE 10: TOOL #4: THE LIFE CYCLE DESCRIPTION CONSTRUCTED

7.2.4. REVIEW RESPONSE

Review responses regarding the Life Cycle Description are presented below:

TABLE 7: REVIEW RESPONSE, TOOL #4: THE LIFE CYCLE DESCRIPTION

Respondent	Positive	Negative	Suggestions for improvement
Investor	N/A	N/A	N/A
Academic 1	I like the life cycle table, and see it as useful tool	I am not sure it is part of the feasibility decision, though, so much as an important part of the business planning process for a socially conscious venture. It also is typically viewed as a relative thing (meaning the impact compared to the status quo)	N/A
Academic 2	An interesting concept, and an interesting interpretation of the concept.	N/A	It would help to have more examples in the boxes. For distribution, for example, this could be a question of dangerous loads traveling through residential neighborhoods, waste disposal traffic, etc. The Use category could speak to packaging that is discarded or recycled, fumes the product might give off during use, or other elements – that would make this more clear
Academic 3	There is nothing intrinsically wrong with this model. It addresses important things.	It is advanced, and I think it belongs to a later stage. If you spring this on an entrepreneur first thing, he is not likely to conduct the analysis.	N/A
User	The Life Cycle Description is good in that it includes an accurate description of what it is.	N/A	You may need to take into consideration where in the process the end user of the particular product is, as the type of product or service may change whether the end user is primary, secondary, or tertiary in the process. This could be a somewhat separate consideration from the “manufacturing/creation” process itself of a particular social service.
Student 1	Understand the need for this tool.	N/A	Fill it out with more examples? It is only environmental issues, what about social consequences?

Student 2	This is something you typically care more about if you have a social inclination, than if you are more straight forward profit seeking. You HAVE to think about this if you are starting a social venture, and this is a simple and fair way of getting it done. It's basically a checklist covering pretty much everything. It is very important to think about alstages of development, and that you must also consider several tiers of people who are affected.	Is this only environmental? I reacted to the lack of social inclusion.	N/A
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Respondents generally understood the basics of the tool, as well as its purpose, but suggested the increased use of examples to explain it more clearly. One respondent remarked that such an assessment would typically be performed to evaluate a development relative to a status quo. This makes sense, as the assessment proposed here is that between the current non-existence of an organization requiring certain processes and materials, and its realization.

7.2.5. PROPOSED TOOL

The proposed tool is the same as the previous one, but with more extensive exemplification. The example product used here is a matchbook.

Stage of the products life cycle	Material/Process	Primary contact	Secondary contact	Teritary contact
Resource extraction: Account for the materials utilized in the product design, and their associated environmental risks included health risk of workers with regards to extraction and pre-processing.	Example: <u>Recycled paper board</u> Wax Gelatine and silicon (binders) <u>Potassium Chlorite for oxidization</u> <u>Sulfur as fuel</u> <u>Silica and red phosphorous in powder form</u> <u>Glue</u> <u>Non-recycled paper suited for color print</u>	Example: Fully automated processes. Process operator: <u>Danger of fume inhalation</u>	Example: N/A	Example: Everyone. Air pollution

<p>Manufacturing and assembly process: Account for the intended manufacturing processes, and their associated environmental risks, included health risk of workers.</p>	<p>Example:</p> <p>Stamping and cutting</p> <p>Dipping in hot wax</p> <p>Oven drying</p> <p><u>Chemicals mixing with hot water</u></p> <p><u>Dipping in chemicals</u></p> <p>Fan drying</p> <p><u>Mixing of silica, red phosphorous and glue</u></p> <p><u>Printing on matchbook cover</u></p> <p><u>Stroking of glue mix on to paper</u></p> <p>Matchbook paper cutting</p> <p>Packaging</p>	<p>Example:</p> <p>Fully automated processes.</p> <p>Process operator: <u>danger of fume inhalation</u></p>	<p>Example:</p> <p>Local community</p> <p>Danger of poisonous waste emissions polluting air and water</p>	<p>Example:</p> <p>Increased air pollution</p>
<p>Distribution: Account for the planned distribution methods, and potential environmental risks associated with these methods.</p>	<p>Example:</p> <p>By truck</p>	<p>Example:</p> <p>Loading personnel and driver. Low risk</p>	<p>Example:</p> <p>Local communities: Some noise from traffic</p>	<p>Example:</p> <p>Everyone: Increased CO₂ emissions</p>
<p>Use: Assess the potential environmental impact the product will have during its life in use.</p>	<p>Example:</p> <p>Person lighting match</p>	<p>Example:</p> <p>User: Low risk. Negligible fumes.</p>	<p>Example:</p> <p>N/A</p>	<p>Example:</p> <p>N/A</p>
<p>Retirement: An assessment of possible retirement options for the product</p>	<p>Example:</p> <p>Incineration or disposal of burned paper stub</p>	<p>Example:</p> <p>N/A</p>	<p>Example:</p> <p>N/A</p>	<p>Example:</p> <p>Everyone: Increased CO₂ emissions Or increased landfills</p>

FIGURE 11: TOOL #4: THE PROPOSED LIFE CYCLE DESCRIPTION EXEMPLIFIED

7.3. TOOL #5: IMPACTED STAKEHOLDERS

“it is a very very key critical part of social entrepreneurship, understanding that customer, know who you’re serving, and that you are building your relationship to that customer and sensitive about how you serve that customer so that you not only can be successful over time, but your perception of the community never becomes one that you’re taking advantage of a vulnerable customer base.”

–India based American investor (C07:B10)

7.3.1. WHAT IS THE QUESTION AND WHY IS IT IMPORTANT?

“Stakeholders are persons or groups that have claim, ownership, rights, or interests in a corporation and its activities, past present, or future” (Clarkson, 1995). No venture operates on its own, and will require the support and collaboration of others (Russo and Perrini, 2010), and it is widely accepted today that organizations have a relationship with the communities in which they operate (Standard, 2010).

After the publishing of Freeman’s (1984) book, *Strategic Management: a Stakeholder Approach*, the concept of “stakeholders” has become commonplace in management literature and manager’s thinking (Clarkson, 1995, Jones, 1995, Mitchell et al., 1997, Donaldson and Preston, 1995). Looking into this extensive literature, one will notice that the concept “stakeholder” is explained and used by various authors in very different ways (Donaldson and Preston, 1995, Munilla and Miles, 2005). Since the field of Stakeholder Theory is not the focus of this thesis, this will not be elaborated on any further. However, the theory will be used to discuss the empirical data as well as the theory drawn from the field of Social Entrepreneurship.

Social problems are rarely solved independently, and often require collaboration with a variety of stakeholders (Desa and Kotha, 2005). According to Kanter and Summers (2004) the various financial and nonfinancial stakeholders to which a social venture is readily accountable, are also greater in number, and more varied, than what is the case for traditional ventures. This results in greater complexity in managing these relationships (Kanter and Summers, 1994). Managers need to figure out how to deal with this diverse set of constituents, some of whom can sometimes be difficult to understand, predict and work with (Mitchell et al., 1997). And in addition to being responsible for its own decisions and activities, an organization may have the ability to affect the behavior of stakeholders with which it has relationships. This leads to the following question:

Who are the stakeholders and what impact will the organization have on the different actors?

When evaluating opportunities in the social sector, understanding what value is created, for whom and how, is fundamental (Brush et al., 2008). Guclu (2002) argues that for an idea to be promising, the entrepreneur’s values and commitment to addressing a particular social need must be shared by enough key stakeholders to give the proposed venture some initial viability.

As mentioned in the findings, the management is responsible for a culture of social awareness being infused in the venture. According to Jones (1995) the management influences the corporate culture, the examples it sets through its behavior tend to be adopted by the employees at lower levels of the firm (Clinard, 1983). It is therefore the manager’s role to set a culture where all the members are aware of the potential impact that their activities will have on stakeholders (Jones, 1995).

Engaging with the stakeholders will among other things:

- increase the organization’s understanding of both the unintended and intended consequences of its decisions and activities on the different stakeholders (Standard, 2010).
- ensure that the venture does not discriminate against anyone with whom it has contact or on whom it can have an impact (Standard, 2010).

- help determine how to best increase the beneficial impacts of the venture's decisions and activities and how to lessen any adverse impact (Clarkson, 1995).
- help identify conflicting interests and goals among the stakeholders (Jones, 1995, Roberts, 1992).

7.3.2. TOOL DEVELOPMENT

The stakeholders are not only the intended users or clients, but also the third-party payers, donors, workers, middle managers etc., who may have distinct and competing interests (Jones, 1995). An entrepreneur aiming to implement a social focus should have plausible value proposition for each stakeholder group (Standard, 2010, Munilla and Miles, 2005). This is especially important when the stakeholders are dependent on the company, which is the case in many developing countries.

When attempting to map the positive or even negative social impact following the hypothetical realization of the business concept, the analyst should be careful not to only focus on the activities downstream from the focal firm. Social impact will also result from supplier relationships and logistical activities, as well as internal policies of human resource management etc. (Standard, 2010). This tool has been developed to help the analyst assess the potential social impact on:

1. Down-stream stakeholders
2. Up-stream stakeholders
3. The environment and communities in which the various activities if the venture will take place.

The analyst can choose to address more than one community on each side of the organization, if for example the venture will have production sites in different locations.

7.3.3. TOOL CONSTRUCTION

A venture has a significant impact on its surroundings; it can pose as a role model to other actors in the same industry or community; it can improve the living standard for its employees, and it can support local activities (Standard, 2010). However, it can also have a negative influence in all the same areas (Munilla and Miles, 2005). For example, community residents' interests could include the positive impacts of an organization, such as employment, as well as the negative impacts of the same organization, such as pollution. The entrepreneurs should therefore always monitor its impacts on the environment, and obtain deep understanding of the impact made on the different stakeholders (Clarkson, 1995). This tool is inspired by a figure developed by ISO:26000, however this model painted a too narrow picture of the situation. This altered version takes into consideration that the venture might operate in several different communities and environments, and that the activities the venture conduct will have implications both the down- and up-stream value chains. The goal of the tool is also to identify conflicting interests among the stakeholders.

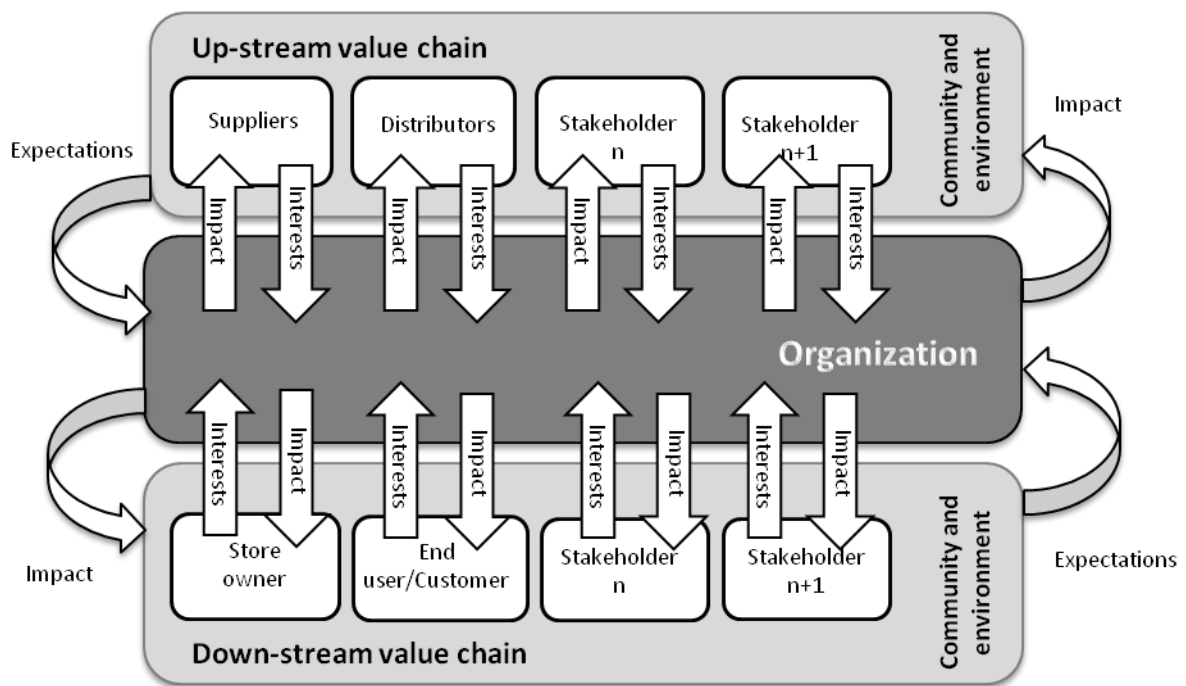


FIGURE 12: TOOL #5: IMPACTED STAKEHOLDERS CONSTRUCTED

7.3.4. REVIEW RESPONSE

Review responses to the Affected Stakeholders tool are presented below:

TABLE 8: REVIEW RESPONSE, TOOL #5: THE IMPACTED STAKEHOLDERS

Participant	Positive	Negative	Suggestions for change
Academic 1	Perhaps the most important take away for a social venture, to the extent that they help the entrepreneur articulate the value proposition more comprehensively and in a more compelling way.	N/A	N/A
Academic 2	Seems relatively straightforward.	N/A	Some examples would be helpful.
Student 1	Rational exercise	Do not know if it provides me with any more information than what is in the explanatory text.	Very generic.
Student 2	Important exercise. Brings forward aspects that are easy to forget. Social part of the LcA-exercise. An analysis of the stakeholders is extremely important to reveal conflicting goals.	N/A	N/A
Investor	N/A	N/A	Comments that it might be a good idea to first conduct a simple analysis of the stakeholders that will be affected the most.
Academic 3	N/A	If you spring these on an entrepreneur first thing, he is not likely to conduct the analysis.	N/A
User	Powerful way to view all of the inter-relationships of the various stakeholders, and how an impact upon one of these might ripple out to impact other areas within the construct. Could be an accurate way to see how an organization can improve its practices to have the most significant effect on both upstream and downstream stakeholders, and thus identify methods to improve their own role as intermediary and increase the effectiveness of their business model.	N/A	N/A

The majority of the reviewers agree that this is a valuable tool and an important take-away for an analyst, both in order to articulate the venture's value proposition towards different stakeholders, and also to identify conflicting interests. However, the review also shows that there is need for exemplification of the tool, to give

the analyst a guide to which of the stakeholders will be affected the most. Clarkson (1995) introduces the terms primary and secondary stakeholder groups.

Primary stakeholders: “Groups without whose continuing participation the corporation cannot survive as a going venture”. Where examples are employees, distributors, producers of complementary goods, customers, and suppliers, the government and communities whose laws and regulations must be obeyed, and who provide the markets infrastructure. There is a high level of interdependence between the venture and its primary stakeholders (Clarkson, 1995).

Secondary stakeholders: “those who influence or affect, or are influenced or affected by the corporation and are not essential for its survival”. Examples are the families of the employees and people living in the communities where the venture operates and the media.

7.3.5. PROPOSED TOOL

As a result of response from the review, the tool has been altered by:

1. Implementing some examples of various stakeholders
2. Inserting examples of how the different stakeholders might be affected by the venture`s activities.

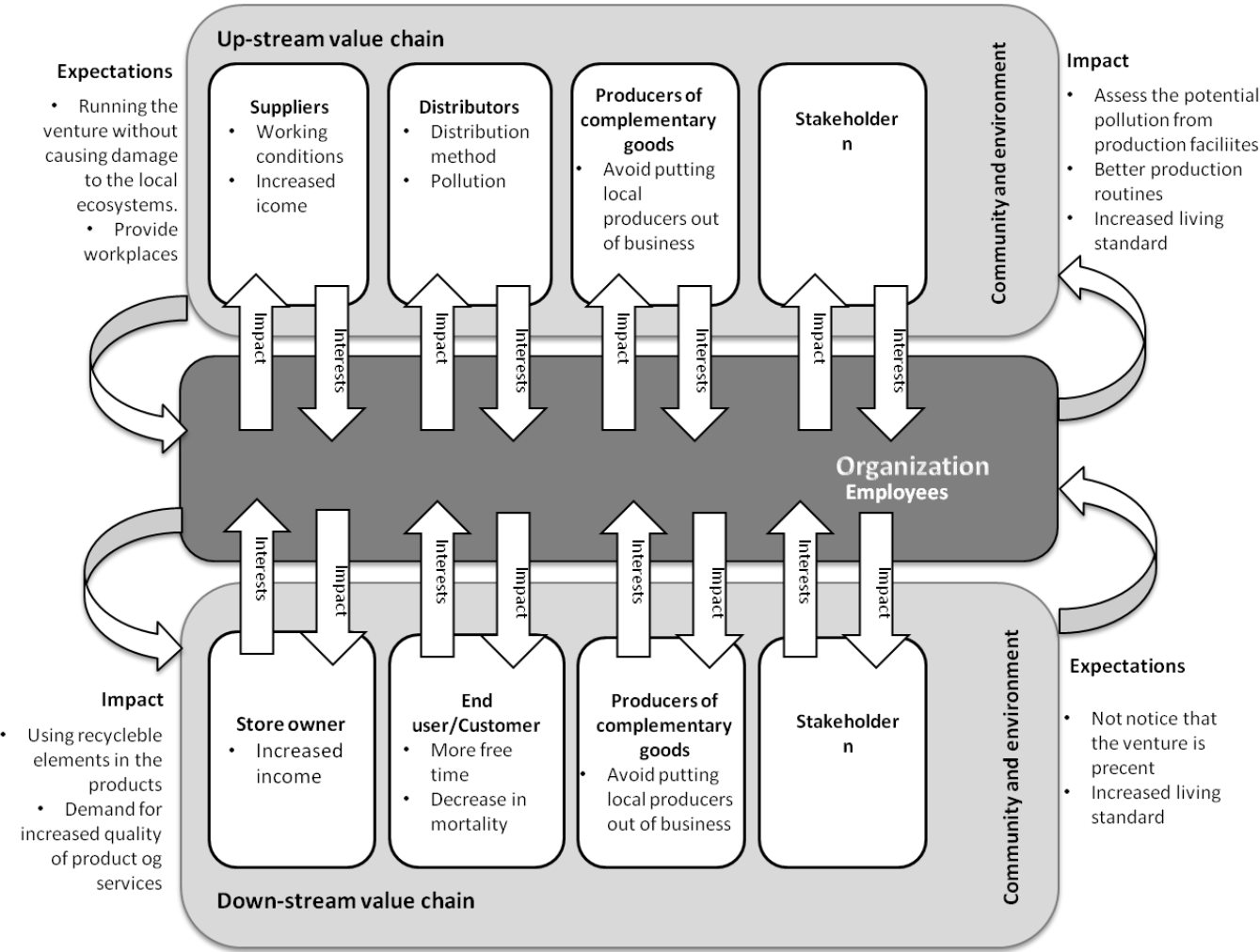


FIGURE 13: TOOL #5: THE PROPOSED IMPACTED STAKEHOLDERS

7.4. TOOL #6: THE SOCIAL VALUE CHAIN

“If you want to fight poverty, the best thing is to keep people involved in value earning activity. You must create a value chain! Then some can work at this level, some at the next level etc.”

- Indian Academic working closely with grass root social entrepreneurship (C09:B20).

7.4.1. WHAT IS THE QUESTION AND WHY IS IT IMPORTANT?

Globalization, greater use of mobility and accessibility, and the growing availability of instant communication mean that individuals and organizations around the world are finding it easier to know about the decisions and activities of organizations in both nearby and distant locations (Standard, 2010). This means that organizations' decisions and activities are subjects to increased scrutiny by a wide variety of groups and individuals. Keeping track of all the activities in a venture is therefore important not only to the start-ups' stakeholders, but also in order create a positive social impact and to maintain a good reputation (Jones, 1995). This brings about the question:

How can the proposed venture increase its positive social impact through its activities and policies?

As this thesis addresses technology-based ventures, many of which have a very typical value chain structure, it is suitable to draw from Porter (1985) when developing this tool. Porter and Kramer have made the value chain concept applicable, as they have already addressed the social issues that may arise in different areas of the value chain, and also how these may be viewed as opportunities for value creation (Porter and Kramer, 2006, Porter and Kramer, 2011). The value chain coordinates and links together value-adding activities, and is a useful tool for defining a venture's core competences (Porter and Kramer, 2006).

Porter and Kramer (2006) argue that some company activities will prove to offer opportunities for social and strategic distinction, and that the venture's margin or profit depends on its effectiveness in performing the activities presented in the value chain. Since the value chain touches virtually every activity in an organization, it can be used as a framework to identify the potential positive and negative social impact of those activities (Porter 2006), ranging from hiring and layoff policies, to greenhouse gas emission.

7.4.2. TOOL ASSESSMENT

Even though Porter's Value Chain is a familiar tool for most academics within strategy and management, the altered version with social objectives is not as widespread. The two main activity groups in the value chain, with their respective sub categories, will be presented in the following, with elaborations, examples from the empirical findings, and contributions from other theories, to justify its admittance among the presented tools in this thesis.

1. Support activities comprising of:

- a. Firm infrastructure
- b. Human Resource management
- c. Technology Development
- d. Procurement

2. Primary activities comprising of:

- a. Inbound Logistic
- b. Operations
- c. Outbound Logistic
- d. Marketing and Sales
- e. After Sales Service

SUPPORT ACTIVITIES

A) FIRM INFRASTRUCTURE:

Included in the firm infrastructure are activities like general management , governmental affairs, accounting, finance, planning and quality management(Porter, 1998), to name a few. Firm infrastructure can be an important segment when implementing social aspects into a start-up, and the examples of this are many. The management can for example facilitate access to, and where it is possible provide support and facilitate for, education and lifelong learning for community members. The management's focus should be to see community goals and company goals as mutually interdependent (Carroll, 1979), and giving customer fair value, full information, and fair guarantee.

By joining efforts with other organizations and governmental institutions, the ventures can support respect for social and cultural rights, and also contribute to the fulfillment of these rights (Castka and Balzarova, 2008). The venture can also decide to adapt goods or services to the purchasing ability of poor people.

One challenge lies in the fact that all the aspects taken into consideration must be done so in the local context (Standard, 2010). And as one could see from the stakeholder tool, there can be multiple contexts to take into consideration.

The following points could be taken into consideration in the Social Value Chain:

- Financial reporting practices
- Transparency
- Government practices
- Use of lobbying (Porter and Kramer, 2006)
- Infuse a culture of social focus in the management

B) HUMAN RESOURCE MANAGEMENT:

As an employer, an organization contributes to one of the most widely accepted objectives of society, namely the improvement of standards of living through full and secure employment and decent work (Standard, 2010).

The employees should also be offered safe working conditions through training and skills development, safety and industrial hygiene, and any policy or practice affecting conditions of work, in particular working time and payment. With regard to safety, the analyst can benefit from bringing any significant discoveries from the Life Cycle Description exercise into this part of analysis.

There are differences in who are regarded as a vulnerable group. One academic interviewed, stated that in the developing world, women and people discriminated against on the bases of race and descent, are especially exposed groups. In countries in the developed world, immigrants, previous drug addicts and people with criminal records are among those being kept outside the working life. By offering these groups work and providing them with favorable working conditions, start-ups can create important social impact.

The following points could be taken into consideration in the Social Value Chain:

- Education & job training
- Safe working conditions (align with Life Cycle Description findings)
- Diversity & discrimination
- Health care & other benefits (Porter and Kramer, 2006)

C) TECHNOLOGY DEVELOPMENT:

According to an academic in India, the entrepreneur could experience that the technology used in developing countries is not at the forefront. This, he argued, often lead to the trade-off between development and environment, where the environment in most cases lost in developing countries. Not only does this affect the stakeholders who live in the environment, it will also have implications for the ventures planning to have production facilities in a developing country.

The following points could be taken into consideration in the Social Value Chain:

- Recycling
- Relationship with universities
- Ethical research practices
- Products safety
- Conservation of raw materials (Porter and Kramer, 2006)
- Assessment of the quality of the available technology

D) PROCUREMENT:

Actors within nearly all the disciplines spoken to argued that “middlemen are bad thing” (C09:B25), and that they in the majority of cases do not share the profit with the community. If an organization is forced to use middlemen it should use only those intermediaries who are legally recognized (Standard, 2010). To make sure that the middlemen are not taking advantage over the situation the organization should, where it is possible, establish contractual obligations with suppliers and subcontractors (Eisenhardt, 1989), make unannounced visits and inspections, and exercise due diligence on the intermediaries (Standard, 2010).

Jones (1995) states that a “firm that has relatively few suppliers will outperform firms that have many suppliers”, and “firms that have long-term relationships with their suppliers will outperform firms with relatively brief relationships with their suppliers”. This, he says, is a result of contracts built on mutual trust. For a venture with a social mission, the goal should therefore not be to practice bargaining power toward their suppliers or buyers, the aim should be a balanced relationship, where no part is being exploited. What should be the case for a social venture is that the suppliers and customers are being viewed as equal partners in the transaction, and that consumers’ rights are liberally interpreted and honored (Carroll, 1991).

The following points could be taken into consideration in the Social Value Chain:

- Procurement & Supply chain practices (e.g., bribery, child labor, goal alignment)
- Uses of particular inputs (e.g., animal fur)

- Utilization of natural resources (Porter and Kramer, 2006)
- Reduce the number of middlemen

PRIMARY ACTIVITIES

A) INBOUND LOGISTICS

Changes in inbound logistics processes can, according to Walten et al. (1998), have a great economic, social and environmental impact and significantly reduce both the generated waste and the product cost. Changes in this activity can imply everything from making the employees aware of environmental implications of packaging and inbound logistics, to training the venture's customer to be sensitive to the importance of issues like disposal and obsolescence, and the mistake of purchasing strictly based on unit price (Walton et al., 1998).

Initiatives to increase the positive social impact could be the reduction of inbound logistics costs (e.g. by combing material delivery with another venture), the reduction of environmental impact (e.g. reduction of pollution generated by inbound logistics through choosing more environmental friendly distribution methods like trains), and minimization dangerous loads travelling through residential neighborhoods.

The following points could be taken into consideration in the Social Value Chain:

- Transportation impacts (e.g., emissions, congestion, logging roads)(Porter and Kramer, 2006)
- Combing material delivery with another venture.
- Difficulties with existing infrastructure

B) OPERATIONS

Below are some examples of aspects that an analyst should consider in regards to a venture's operations:

- Take precautions and implement measures aimed at preventing pollution and waste
- Minimize the use of materials
- Utilize sustainable materials
- Emissions and waste impact assessment
- Biodiversity and ecological impact assessment
- Energy and water usage kept to a minimum.
- Worker safety and labor relations
- Avoid hazardous materials
- Use of environmentally sound technologies and practices.

Minimizing the use of materials will not only enhance the sustainability of operations, but more importantly it can be a driver for cost reduction at the operational level (Porter and Van der Linde, 1996).

Minimizing the damages if an accident should occur could also be an aspect to consider. By entering into collaboration with local actors to develop an accident prevention and preparedness program, the stakeholders will know how to act to minimize the damages.

The following points could be taken into consideration in the Social Value Chain:

- Emissions & Waste
- Biodiversity & ecological impacts
- Energy & water labor relations
- Hazardous materials (Porter and Kramer, 2006).
- Preparedness program

C) OUTBOUND LOGISTIC

Sustainability initiatives affecting outbound logistics can result in improvement similarly to what described for inbound logistic. Examples in this context can be found in the reduction of packaging dimensions, which has a direct impact on both pollution costs.

According to Kevin Starr (2010) the distribution is one of the most challenging parts of the value chain. As mentioned under Technology Development, the existing technologies in developing countries are often not in the forefront. An entrepreneur targeting a market where this is the case, must be aware of that the technology and the infrastructure might be of a poor standard and cause difficulties (Vachani and Smith, 2004). There is for example a chance that there is no existing road connection, no electricity, or there might not be coverage on the mobile phone etc.

In cases where the venture is operating internationally, it could work toward hiring local staff in each target market. This will, among other things, help the venture with the distribution through local enterprises where it is practicable. An entrepreneur explained that they have the major relief organizations and Ministries of Health as their main customers, because this helps them distribute the product to poor people all over the world and also within each country. The same entrepreneur stated that they also had offices in four different countries, and agents and distributors in every country they were active in. As a result of them hiring local people and making their products in the developing world, they had no trust issues neither with the government, nor the end users .

The following points could be taken into consideration in the Social Value Chain:

- Packaging use and disposals
- Transportation impacts (Porter and Kramer, 2006)
- Establishment of local offices.
- Quality of the infrastructure.

D) MARKETING & SALES

A Norwegian investor stated that the developers of technology often have a severe lack of knowledge about the importance of the marketing and sales. The investor argued that entrepreneurs often have the attitude: "I've made a remarkable product, of course it is going to sell". However, once the solution has been installed they realize that they have too little knowledge about the local conditions, and the project becomes a flop.

Recent studies have shown that focusing on social impact sells (Porter and Kramer, 2002), and ventures know how to take advantage of that. Jones (1995) states that the seller of a product has more information about it than the buyer does, and may opportunistically misrepresent its value, for example the quality. Fair marketing provides the customer with factual and

unbiased information about product and services in a manner that can be understood by each segment of the consumers (Jones, 1995). This will allow the consumers to make informed decisions about consumptions and purchases and to compare the characteristics of different products and services (Standard, 2010).

Social responsibility has major implications for pricing decisions in some markets (Vachani and Smith, 2004). They have used the term socially responsible pricing, which they define as: “pricing that attempts to sustain or enhance social welfare”. This might involve higher prices both for the wholesaler, and the consumer, which is the case for Fairtrade products.

Price discrimination across countries, with significantly lower prices in developing countries, could result in increased pressure for price reductions in developed countries where companies are constantly facing demands for lower prices from a range of buyers (Vachani and Smith, 2004). Vachani and Smith (2008) argue that one of the risks of significant price differences between countries, from the ventures established in the developed countries` perspective, is the possibility of low-priced product spreading from developing countries to developed countries. While it may be difficult to eliminate the spreading, greater attention to the problem might help contain the risk.

The following points could be taken into consideration in the Social Value Chain:

- Marketing & advertising (e.g., truthful advertising, advertising to children)
- Price practices (e.g., discrimination among customers, anticompetitive pricing practices, pricing policy to the poor)
- Consumer information
- Privacy (Porter and Kramer, 2006)

E) AFTER SALES SERVICES

After sales services mechanisms include proper installation, warranties and guarantees, technical support regarding use, provisions for return, and repair and maintenance.

The switching costs related to the product may be so large, that the customer is in fact locked-into the product (on which his income may depend) and thus dependent on the venture. Providing service, providing information about use and ways to dispose of obsolete products, and informing the stakeholders about the venture`s situation is therefore crucial.

The following points could be taken into consideration in the Social Value Chain:

- Disposal of obsolete products
- Handling of consumables (e.g., motor oil, printing ink)
- Service and technical support
- Customer privacy (Porter and Kramer, 2006)

7.4.3. Tool Construction

Based on this elaboration, all the points previously mentioned as possibilities for an analyst to take into consideration, are listed in Porter and Kramer`s Value Chain 2006 edition (2006). This provides the following tool:

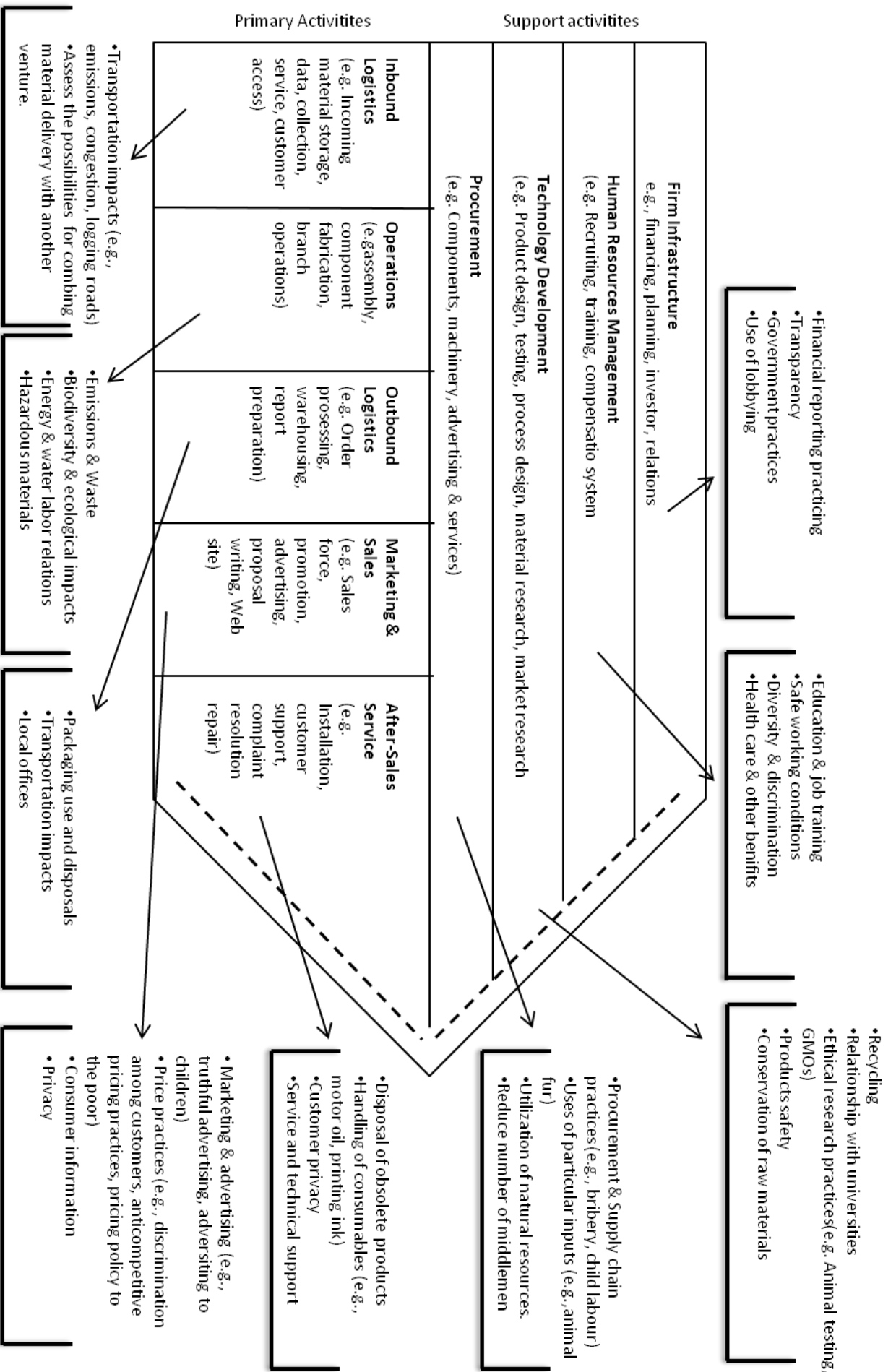


FIGURE 14: TOOL #6: PORTER AND KRAMER'S SOCIAL VALUE CHAIN

7.4.4. REVIEW RESPONSE

Reviewers' responses to the Social Value Chain are displayed below:

TABLE 9: REVIEW RESPONSE, TOOL #6: THE SOCIAL VALUE CHAIN

Participant	Positive comments	Negative comments	Remarks on changes
Academic 1	N/A	N/A	N/A
Academic 2	This page seems pretty self-explanatory and reasonably clear.	N/A	N/A
Student 1	Good tool to make the entrepreneur aware of the opportunities	This one is heavy	Make it more specific, not as generic
Student 2	A framework I am familiar with, so it is easy to use. Reasonable to assess the impact of all the parts of the organization.	N/A	N/A
Investor	N/A	N/A	N/A
Academic 3	Good model, well arranged.	Too comprehensive for an entrepreneur	N/A
User	Valuable tool for feasibility analysis. Comprehensive view, which can be effective in terms of developing corporate image and branding enterprises.	Seems to be more of interest to the "number crunchers" within the corporate entity.	Appears to come prior to the Impact Value Chain tool, and seems more of a tool used to attract investors, regulate efficiency of production and sales, and provide management to keep control over the entire corporate entity's process.

The feedback showed that this was a model most of the recipients were familiar with, and they thought it would be an important contribution to the feasibility analysis. Two of the respondents mentioned that the tool was too comprehensive, and one also commented that there were too few examples. A few alterations on the tool were therefore conducted.

7.4.5. PROPOSED TOOL

Some alterations have been conducted based on the feedback:

1. The tool has been simplified to make it less discouraging
2. More suggestions have been added.

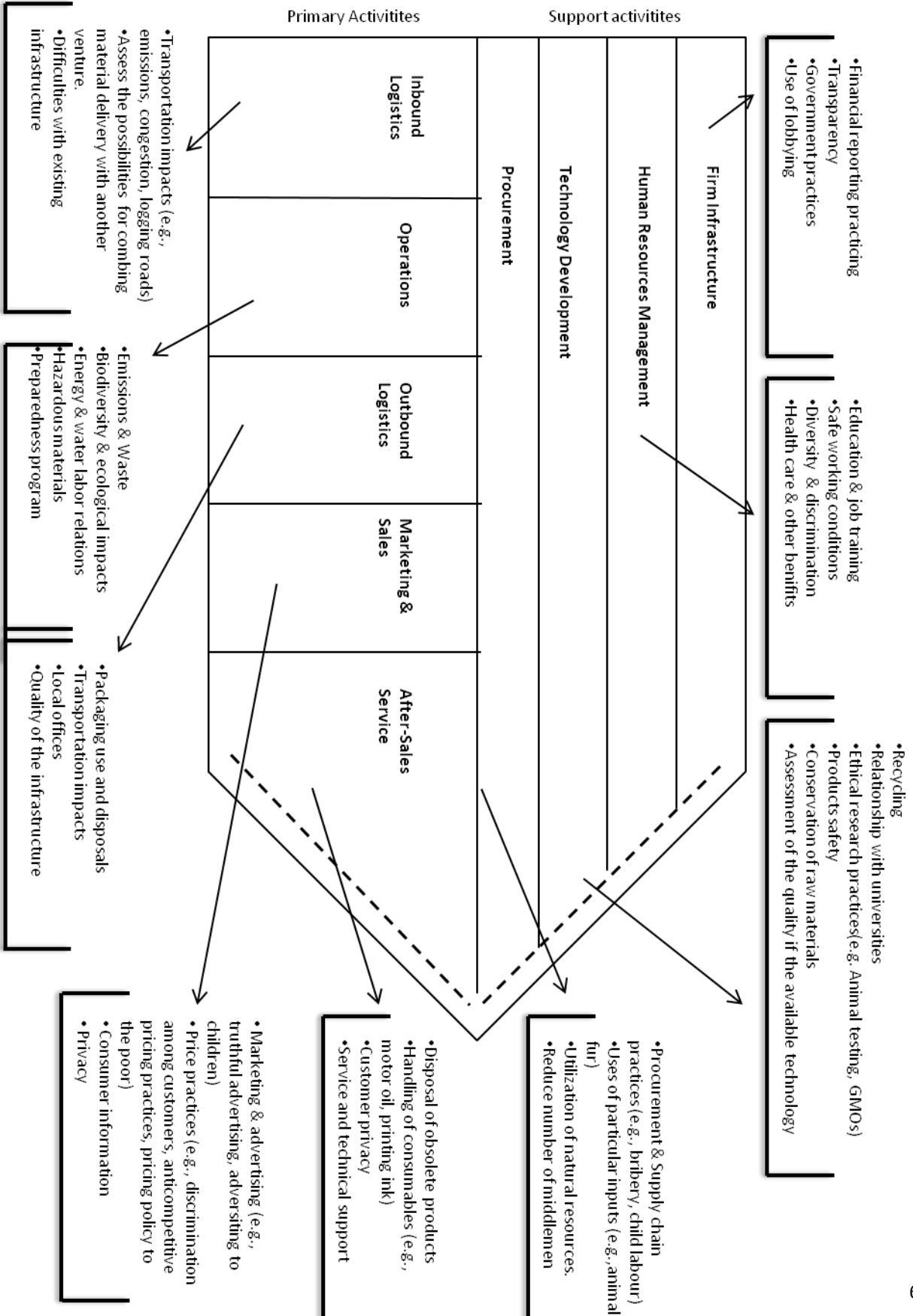


FIGURE 15: TOOL #6: THE PROPOSED SOCIAL VALUE CHAIN

7.5. TOOL #7: THE IMPACT VALUE CHAIN

“...it is incredibly hard to measure impact. The true impact studies take three to five years, they cost a lot of money, much more money than a social enterprise has at the beginning”

–India based American investor (C10:A09)

7.5.1. WHAT IS THE QUESTION AND WHY IS IT IMPORTANT?

Several authors have recognized the problem of impact measurement, and have come up with innumerable solutions (Zappalà and Lyons, 2009), but so far, no standard has been established (Achleitner et al., 2009).

The analyst should take into consideration that the measuring and mapping of a venture’s social impact is a continuous process, and that it can be highly demanding in terms of time and effort. This cost can, however, be minimized through the early assessment of options for measuring methods and parameters. This leads to the question:

How to enable future measuring and monitoring of the proposed venture’s social impact?

The ISO 26000:2010 states that an organization is responsible for the impacts and activities over which it has direct and indirect control. For a venture with a social focus, having control over, and being aware of, what consequences their actions have is a necessity in order to be able to understand and measure the venture’s ripple effects.

7.5.2. TOOL DEVELOPMENT

Depending on the resource base and operational history of a venture, there will be different ways to measure the social impact. The ones focused on in this thesis are:

1. Goal alignment
2. Community inputs
3. Outcome: one indicator

The reason why this thesis introduces these two methods for a start-up, is because they, according to two of the investors, allow measurement on a limited resource base, and therefore are particularly applicable to young organizations.

7.5.3. TOOL CONSTRUCTION

To determine whether or not the potential venture has sufficient resources to move forward by developing the product and creating the intended impact, the analyst must assess all the available resources, both the tangible and intangible. These resources are described as inputs to the venture, and are what Barringer and Ireland (2008) refer to as the venture’s available resources. According to Grant (1991), there are six categories of resources: technological resources, organizational resources, reputation, human resources, physical resources and financial resources. Unique resources and capabilities are among the most critical contributors to a venture’s sustainability (Grant et al., 1991). According to a Scandinavian entrepreneur, finding new and inventive ways to utilize and attract resources could be a critical success factor for a start-up with a social mission.

In the following social impact chain model, three measure methods are implemented:

- Goal alignment.
- Community inputs
- The outcome of the community inputs with the use of one indicator

The goal alignment method might be best suited for companies who have been up and running for a while since it, according to an Indian investor, takes some time before a venture sees the results from their actions. Further, the venture must evaluate the outcome to see whether or not it has reached its goals, and in the end also conduct changes if necessary. Using this procedure is therefore most applicable for established companies who are evaluating whether or not to launch a new product or service, and will therefore not be elaborated further.

The second method to be introduced is the measuring of inputs to the community, a method proposed by two investor interviewees, independent of each other. The third method is the measurement of one single parameter that will indicate the degree of social impact, a method introduced by Kevin Starr (2010) and Clark et al. (2003).

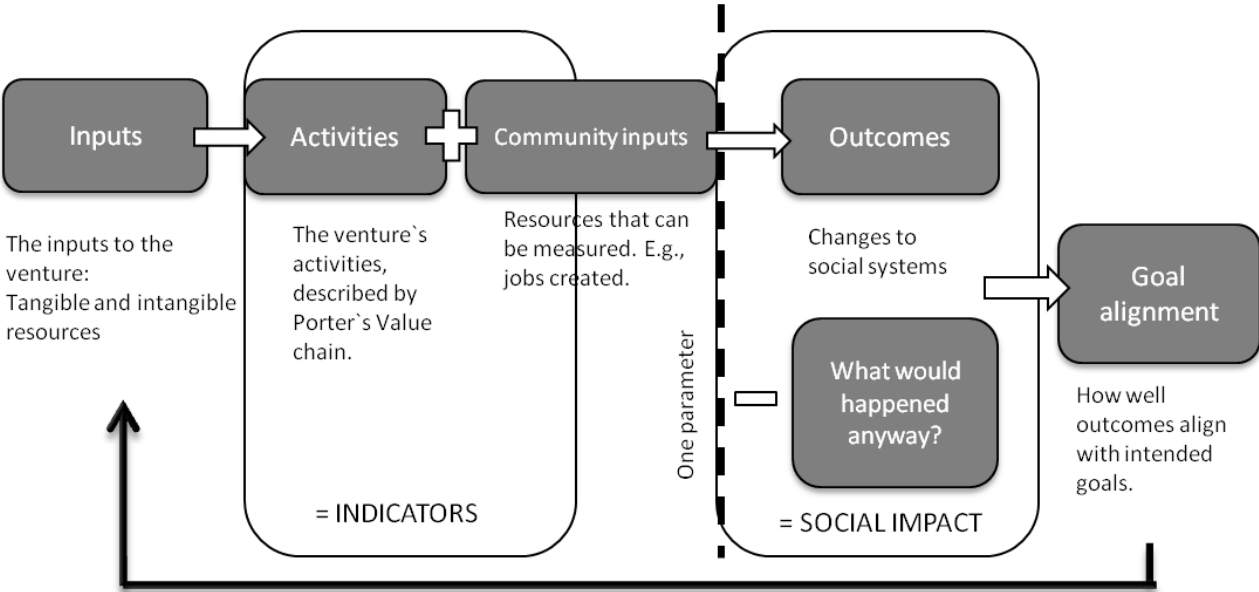


FIGURE 16: TOOL #7: THE SOCIAL IMPACT CHAIN (CLARK ET AL., 2003A)

The box named Activities has already been described in the discussion of tool nr 5; Porter's Social Value Chain.

COMMUNITY INPUTS

When using inputs to the community as a starting point for measuring impact, the quantifiable outputs from the organization, equaling the input into the target community is what indicates the organization's impact. Using this technique requires, according to two of the investors interviewed, that the analyst conducts a thorough assessment of all the inputs to the venture, the venture's activities, and what the quantifiably input to the community will be.

One of the investors exemplified input into a community as follows: "In my social focus I'm going to serve X number of communities which have this type of profile, I'm going to bring electricity to this number of homes. I'm going to make sure that X number of people now has an actual toilet to use in the morning." (C17:A22). The investor stated that this was the type of measurement regarded as the easiest to start out with for a new venture. The analyst should also seek to identify a control group. This will capture the effects of the product, and indicate causality.

Using a control group is one of the more common methods used for monitoring social impacts (Standard, 2010). A control group will help the venture obtain qualitative or quantitative information about results or outcomes associated with the organization that is comparable and demonstrates change over time. This will to some degree help the entrepreneur understand “what would have happened anyway?” This must be conducted to the best of ability, but will never resemble a true scientific experiment, because, as an investor argued: “you can never have a true control group, you can never say: “this community is going to sit over here in a box without micro finance and without any another positive or negative impacts in terms of drought or NGOs or anything else.”” (C10:A09).

OUTCOME: ONE INDICATOR

Starr (2010) argues that measuring one parameter is the most efficient way to assess impact. He states that this way the investors get persuasive numbers that are easy to control. This method for analyzing social impact also requires a control group, to make sure that is was in fact the venture’s activities that caused the change (Starr, 2010).

Starr (2010) lists up three important steps in the measurement in order to get a trustworthy number.

1. The analyst must think ahead, defining at an early stage what parameter he or she wants to measure.
2. The venture must show the ability to sustain the changes over time.
3. Sample size must be big enough to prove that an impact has occurred.

Should the analyst chose this way of measuring the potential venture’s potential social impact, the analyst should in the feasibility analysis describe his or hers line of action.

Starr (2010) argues that the output must answer to the venture’s mission, examples are LivingGood with the mission; “Save kids` lives in Africa” and One Acre Found with the mission “get African families out of extreme poverty”, where the following indicators are; “decrease in child and infantile mortality rate”, and “additional production of harvest as a result of training and information”, respectively. If the entrepreneur sees that the inputs create positive social impact, and the ventures meet its goals, it should according to Starr (2010) continue what it is doing.

7.5.4. REVIEW RESPONSE

TABLE 10: REVIEW RESPONSE, TOOL #7: THE IMPACT VALUE CHAIN

Participant	Positive comments	Negative comments	Remarks on changes
Academic 1	Perhaps the most important take away for a social venture, to the extent that they help the entrepreneur articulate the value proposition more comprehensively and in a more compelling way.	N/A	N/A
Academic 2	The connection (and difference) between outputs, and outcomes is an important one – worth emphasizing.	Somewhat challenging time connecting the text to the image	Should also have “what would have happened anyway?” in the box.
Student 1	Understands cell 2	Do not understand the tool or the explanatory text.	N/A
Student 2	N/A	Confused by the stippled line. Looks difficult to use, and hard to understand.	Is the community input box supposed to be half way outside the “indicator-box”?
Investor	N/A	N/A	Insert something about community input per resource spent. It is difficult, but data on this area will soon be available.
Academic 3	N/A	N/A	N/A
User	Seems to be a valuable feasibility analysis tool. Clean design, allows for multiple parameter inputs to determine what effect each has on the projected outcomes, and has the ability to visually represent the outcome of any particular modification one introduces while in that act of revising a process or product.	Causality is a challenge in this model	The single parameter per chart would allow for comparison of multiple parameter impacts and give analysts the opportunity to find the path to most efficient production through this analytical tool.

The review shows that the tool is valuable for an analyst wanting to assess social implications. However, a few participants stated that they did not understand the explanatory text that followed the tool and some had difficulties understanding all the features of the design and argued that it needs some exemplification.

7.5.5. PROPOSED TOOL

In the final version the following points have been altered:

1. The dotted line, which described the one parameter method, has been removed, since the feedback mentioned that this only made the tool more confusing.
2. The word *have* has been implemented in *what would have happened anyway?*
3. More examples have been introduced.
4. The layout has been altered.

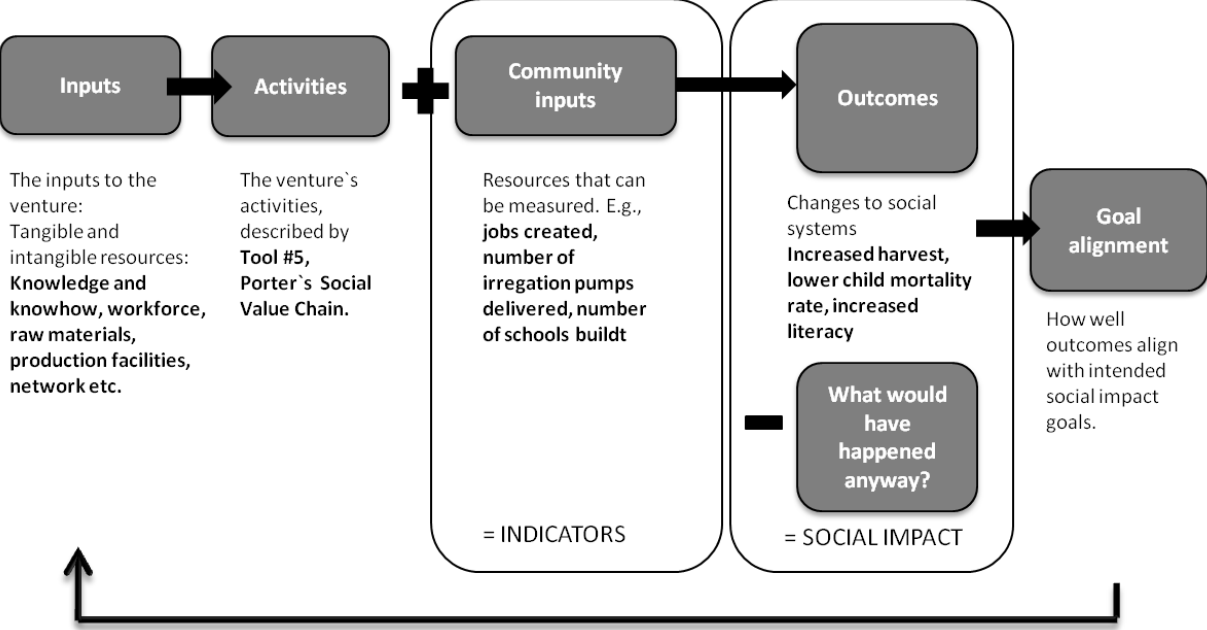


FIGURE 17: TOOL #7: THE PROPOSED IMPACT VALUE CHAIN

7.6. FINAL COMMENTS

Most of the tools developed in this discussion are of a higher degree of complexity than those developed in the two previous discussion chapters. They are detailed, and can be used to facilitate the acquiring of insight which forms the basis of more detailed strategic decisions concerning the value output of a proposed organization. The tools presented point to choices which must be made, as well as possible alternatives to chose from.

In the next chapter, general conclusions aggregated from the three discussions are presented, along with general comments made by review respondents.

8. CONCLUSIONS

In this section, general conclusions from the discussions are presented. First, however, general review responses which did not address specific tools, but the idea in general, are presented and commented on. This response was dominated by two academics, nr. 1 and nr. 3, who both have significant entrepreneurial experience.

8.1. GENERAL REVIEW RESPONSE

Academic 1 commented that “Frankly, my experience with social entrepreneurs is that they will not normally have familiarity with the kinds of models that you talk about here. Only by chance will they have had formal business education.” Academic 3 suggested that if we wished to create tools that could provide more value for entrepreneurs in a non-academic setting, we use only the three first methods, and adapt them more to the major questions an entrepreneur must answer at the earliest stage. The issue of academic application is addressed in the introduction to our thesis, but was perhaps not obvious in the document sent out on review. Our tools are, however, intended for an academic context, as we believe this to be of an increasing relevance. Academic 3 also underscored the need to think about what the entrepreneur would do with the insight gained from employing the tools.

Academic 3 remarked that the proposed tools seemed to belong in different stages of the entrepreneurial process, with the last four belonging to a later stage, perhaps even the business plan stage, as they are very advanced. She stated that “If you spring these on an entrepreneur first thing, he is not likely to conduct the analysis”. This corresponded with Academic 1’s suggestion of a stage gate or step-by-step structure of analysis, where each step in the analysis proceeds another in a given order. This is a relevant concern, which should be included in future implementation of the proposed tools in a complete framework for feasibility analysis. This is further commented on in the implications section.

Finally, Academic 1 stated that the proposed tools were not only applicable to technology-based business concepts with a social focus, but also to other technology-based ventures. This implies a view that all analysts of new business concepts should strive to think in terms of social impact as well as financial returns.

8.2. FINAL CONCLUSIONS

Through the collection of new data and the discussion of existing theory, this thesis has resulted in the introduction of seven tools for feasibility analysis of technology-based, socially focused, business concepts. Each tool directs the attention of the analyst towards a specific challenge of realizing a venture, while raising the analyst’s overall awareness of the overarching importance of the interaction between the activities of a potential organization and the world in which it operates.

One of the most important conclusions from this thesis is the acknowledgement that while the division of a traditional feasibility analysis into four distinct sections is challenging, but possible, such a distinction with regard to analysis of social ventures seems to oppose the very fundamentals of a social venture, as it is described by the individuals interviewed here. The success of an entrepreneur aiming to solve a social problem with a technological solution depends to a large extent on the entrepreneur’s creativity, and ability to develop a deep understanding of the user, and insight into the realm in which he or she operates.

While little research has been done on the feasibility analysis of social ventures in general, and on technology-based social ventures in particular, the contributions from this thesis mark one step in the direction of a complete and well founded analysis framework.

9. IMPLICATIONS

9.1. IMPLICATIONS FOR ANALYSTS

For the analyst and potential entrepreneur, a set of new tools have been provided which help to establish important insights into the fundamentals of a proposed business concept. Hopefully, this will enable the analyst to identify significant opportunities, as well as challenges, and improve his or her chances at succeeding with a new venture.

9.2. IMPLICATIONS FOR FURTHER RESEARCH

The tools introduced here must be employed by the analyst in combination with other tools and questions. Next steps of development towards a complete feasibility analysis framework which includes social value creation, should include testing of the tools introduced in this thesis through use in actual feasibility analysis of new ideas, and also the implementation of these tools in a complete framework, along with already existing tools, additional new constructs, or both.

With regard to the development of additional constructs, we would like to make the following comments regarding interesting areas of research identified during our work:

The case for technology-based ventures, as opposed to other social ventures, is that many are dependent on advances in science during development, before a product can be deployed in a market setting. Transforming such ideas to marketable products require access to specialized technical expertise that most technology social ventures do not possess (Desa and Kotha, 2006). A key challenge for technology ventures with a social mission is therefore the attraction of highly educated employees, who have a tendency to move towards jobs with a higher income (Desa and Kotha, 2005). The challenge of attracting competent personnel is an interesting area for future research and tool development.

Another interesting and important challenge for social entrepreneurs is mapping the competition. This is a complex task, as competitors will often include traditional for-profit companies, NGOs, government organizations etc., many of which are also potential partners in some aspect or other. We believe a good tool for mapping of competitors which took these complicated factors into account would be a valuable addition to social feasibility analysis. Porter's (1985) five forces model might serve as a good basis for such tool development, and the researcher might start by examining the role of goal alignment and profit motives between the various actors.

Various, and significant, challenges related to funding for start-up and capital investments were also discovered during our work. The realm of funding for social ventures is under development, as topics like exit-strategies and expected returns are the subjects of hot debates. While this area is currently characterized by uncertainty and fragmented documentation, the area of social finance should prove interesting to follow over the next decade, and can provide a seemingly endless array of previously unaddressed research subjects.

10. REFERENCES

- ABRAS, C., MALONEY-KRICHMAR, D. & PREECE, J. 2004. User-Centered Design. *Sage Publications*.
- ACHLEITNER, A. K., BASSEN, A. & RODER, B. Year. An integrative framework for reporting in social entrepreneurship. *In*, 2009.
- ADGER, W. N. & KELLY, P. M. 1999. Social Vulnerability to Climate Change and the Architecture of Entitlements. *Mitigation and Adaptation Strategies for Global Change*, 4, 253-266.
- ARDICHVILI, A., CARDOZO, R. & RAY, S. 2003. A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18, 105-123.
- AUSTIN, J., STEVENSON, H. & WEI-SKILLERN, J. 2006. Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice*, 30, 1-22.
- BARRINGER, B. R. & IRELAND, R. D. 2008. *Entrepreneurship : successfully launching new ventures*, Upper Saddle River, NJ, Pearson/Prentice Hall.
- BOHLE, H. G., DOWNING, T. E. & WATTS, M. J. 1994. Climate change and social vulnerability: Toward a sociology and geography of food insecurity. *Global Environmental Change*, 4, 37-48.
- BRUCE, C. 2001. Interpreting the scope of their literature reviews: significant differences in research students' concerns. *New Library World*, 102, 158 - 166.
- BRUSH, C., NECK, H. & ALLEN, E. 2008. The landscape of social entrepreneurship. *Business Horizons*, 52, 13-19.
- CARROLL, A. B. 1979. A Three-Dimensional Conceptual Model of Corporate Performance. *The Academy of Management Review*, 4, 497-505.
- CARROLL, A. B. 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34, 39-48.
- CASTKA, P. & BALZAROVA, M. A. 2008. ISO 26000 and supply chains--On the diffusion of the social responsibility standard. *International Journal of Production Economics*, 111, 274-286.
- CHIA, R. 2003. From knowledge-creation to the perfecting of action: Tao, Basho and pure experience as the ultimate ground of knowing. *Human Relations*, 56, 953-981.
- CLARK, ROSENZWEIG, LONG & FOUNDATION, O. T. R. 2003a. Impact Value Chain. *The Double Bottom Line Methods Catalog*.
- CLARK, ROSENZWEIG, LONG, OLSEN & FOUNDATION, T. R. 2003b. Impact Value Chain. *The Double Bottom Line Methods Catalog*.
- CLARKSON, M. B. E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, 92-117.
- CLINARD, M. B. 1983. *Corporate ethics and crime: The role of middle management*, Sage Publications.
- COOPER, R. G., EDGETT, S. J. & KLEINSCHMIDT, E. J. 2002. Optimizing the Stage-Gate Process: What Best-Practice Companies Do. *Research-Technology Management*, 45, 43-49.
- DAVIS, L. 1997. The NGO Entrepreneur: Nonprofit in purpose, For-Profit in Approach. www.isar.org.
- DEES, J. G. 1998. Enterprising Nonprofits. *Harvard Business Review*, 55-67.
- DEES, J. G., EMERSON, J. & ECONOMY, P. 2001. *Enterprising nonprofits : a toolkit for social entrepreneurs*, New York, Wiley.
- DESA, G. & KOTHA, S. 2005. Ownership, Mission and Environment: An Exploratory Analysis into the Evolution of a Technology Social Venture. *In*: MAIR, J., HOCKERTS, K. & ROBINSON, J. (eds.) *Social Entrepreneurship*.
- DESA, G. & KOTHA, S. 2006. Technology Social Venture and Innovation: Process at Benetech. *In*: PERRINI, F. (ed.) *The*

- new social entrepreneurship: what awaits social entrepreneurial ventures?*: Edward Elgar Publishing.
- DONALDSON, K., ISHII, K. & SHEPPARD, S. 2006. Customer Value Chain Analysis. *Research in Engineering Design*, 16, 174-183.
- DONALDSON, T. & PRESTON, L. E. 1995. The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20, 65-91.
- DRETSKE, F. 1981. *Knowledge and the Flow of Information*, Cambridge, MA, MIT Press.
- DRUCKER, P. F. 1985. The Discipline of Innovation. *Harvard Business Review*.
- EASON, K. 1987. Information technology and organizational change. London: Taylor and Francis.
- EISENHARDT, K. & GRAEBNER, M. 2007. Theory Building From Cases: Opportunities and Challenges. *The Academy of Management Journal ARCHIVE*, 50, 25-32.
- EISENHARDT, K. M. 1989. Agency theory: An assessment and review. *The Academy of Management Review*, 14, 57-74.
- FRUCHTERMAN, J. 2008. Developing Information Technology to Meet Social Needs. *Innovations*. MIT Press.
- GARTNER, W. B. 1985. A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *The Academy of Management Review*, 10, 696-706.
- GLASER, B. G. & STRAUSS, A. I. 1967. *The discovery of grounded theory: Strategies for qualitative research.*, Chicago, IL, Aldine.
- GRANT, R. M., REVIEW, C. M. & BERKELEY, U. O. C. A. 1991. The resource-based theory of competitive advantage: implications for strategy formulation.
- HINES, P., FRANCIS, M. & FOUND, P. 2006. Towards lean product lifecycle management. A framework for new product development. *Journal of Manufacturing Technology Management*, 17, 866-887.
- ISHII, K., EUBANKS, C. F. & DI MARCO, P. 1994. Design for product retirement and material life-cycle. *Materials & Design*, 15, 225-233.
- JONES, T. M. 1995. Instrumental stakeholder theory: A synthesis of ethics and economics. *The Academy of Management Review*, 20, 404-437.
- KANTER, R. & SUMMERS, D. 1994. Doing well while doing good: Dilemmas of performance measurement in nonprofit organizations and the need for a multiple-constituency approach. *Public sector management: theory, critique and practice*, 220-36.
- KAULIO, M. A. 1998. Customer, consumer and user involvement in product development: A framework and a review of selected methods. *Total Quality Management & Business Excellence*, 9, 141.
- KOTLER, P. & KELLER, K. L. 2006. *Marketing Management 12e*, Upper Saddle River, NJ, Pearson, Prentice Hall.
- MACHLUP, F. 1983. Semantic Quirks in Studies of Information. In: MACHLUP, F. & MANSFIELD, U. (eds.) *The Study of Information*. New York: John Wiley.
- MARTIN, R. L. & OSBERG, S. 2007. Social entrepreneurship: the case for definition. *Stanford social innovation review*.
- MCGRATH, R. G. & MACMILLAN, I. C. 1995. Discovery-Driven Planning. *Harvard Business Review*, 73, 44-&.
- MITCHELL, R. K., AGLE, B. R. & WOOD, D. J. 1997. Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *The Academy of Management Review*, 22, 853-886.
- MUNILLA, L. S. & MILES, M. P. 2005. The corporate social responsibility continuum as a component of stakeholder theory. *Business and society review*, 110, 371-387.
- NONAKA, I. 1994. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5, 14-37.
- OXFORD, D. 2010a. *Analysis* [Online]. Oxford: Oxford University Press. Available: http://oxforddictionaries.com/view/entry/m_en_gb0026000 [Accessed 2011].

- OXFORD, D. 2010b. *Definition study* [Online]. Oxford Oxford University Press. Available: http://oxforddictionaries.com/view/entry/m_en_gb0822500 [Accessed].
- PEREDO, A. M. & MCLEAN, M. 2006. Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41, 56-65.
- PERRINI, F. 2006. *The New social entrepreneurship: what awaits social entrepreneurial ventures?*, Cheltenham, Edward Elgar.
- PORTER, M. E. 1985. *Competitive advantage: creating and sustaining superior performance*, New York, Free Press.
- PORTER, M. E. 1998. *Competitive advantage: creating and sustaining superior performance: with a new introduction*, Free Pr.
- PORTER, M. E. & KRAMER, M. R. 2002. The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80, 56-68.
- PORTER, M. E. & KRAMER, M. R. 2006. The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84, 78-92.
- PORTER, M. E. & KRAMER, M. R. 2011. Creating Shared Value. *Harvard Business Review*.
- PORTER, M. E. & VAN DER LINDE, C. 1996. Green and competitive: ending the stalemate. *Business and the environment: a reader*, 61.
- PREECE, J., ROGERS, Y. & SHARP, H. 2002. *Interaction Design: Beyond Human-Computer Interaction*, New York, NY, John Wiley & Sons.
- REBITZER, G., EKVALL, T., FRISCHKNECHT, R., HUNKELER, D., NORRIS, G., RYDBERG, T., SCHMIDT, W. P., SUH, S., WEIDEMA, B. P. & PENNINGTON, D. W. 2004. Life cycle assessment: Part 1: Framework, goal and scope definition, inventory analysis, and applications. *Environment International*, 30, 701-720.
- ROBERTS, R. W. 1992. Determinants of corporate social responsibility disclosure: an application of stakeholder theory. *Accounting, Organizations and Society*, 17, 595-612.
- RUSSO, A. & PERRINI, F. 2010. Investigating stakeholder theory and social capital: CSR in large firms and SMEs. *Journal of Business Ethics*, 91, 207-221.
- SCHNEIDER, T. 1998. Building a business plan. *Journal of Property Management*, 63, 30-32.
- SEELOS, C. & MAIR, J. 2004. Social entrepreneurship: Creating new business models to serve the poor. *Business Horizons*, 48, 241-246.
- SMALLBONE, D., EVANS, M., EKANEM, I. & BUTTERS, S. 2011. Researching Social Enterprise: Final Report to the Small Business Service. London: Centre for Enterprise and Economic Development Research Middlesex University Business School.
- STANDARD, N. 2010. *Guidance on social responsibility*, Lysaker, Standard Norge.
- Design for (Real) Social Impact*, Year. Directed by STARR, K. USA: Mulago Foundation.
- TEECE, D. J. 1986. Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15, 285-305.
- URBAN, G. L. & VON HIPPEL, E. 1988. Lead User Analyses for the Development of New Industrial Products. *Management Science*, 34, 569-582.
- VACHANI, S. & SMITH, N. C. 2004. Socially responsible pricing: lessons from the pricing of AIDS drugs in developing countries. *California Management Review*, 47, 117-144.
- VURRO, F. P. C. 2006. Social Entrepreneurship: Innovation and Social Change Across Theory and Practice. In: JOHANNA MAIR, J. R., KAI HOCKERTS (ed.) *Social Entrepreneurship*.
- WALTON, S. V., HANDFIELD, R. B. & MELNYK, S. A. 1998. The green supply chain: integrating suppliers into environmental management processes. *Journal of Supply Chain Management*, 34, 2-11.
- WEBSTER, F. E., JR. & WIND, Y. 1972. A General Model for Understanding

- Organizational Buying Behavior. *The Journal of Marketing*, 36, 12-19.
- WEERAWARDENA, J. & MORT, G. S. 2006. Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41, 21-35.
- WIDDING, L. Ø. 2005. Building entrepreneurial knowledge reservoirs. *Journal of Small Business and Enterprise Development*, 12, 595-612.
- WIDDING, L. Ø. 2006. Teorigenerering basert på case-intervjuer - analysemetode inspirert av Grounded Theory. Bodø: HHB.
- WILSON, E. 1993. Maximizing Designers' Impact on Market Success through Product Definition. *Design Management Review*, 4.
- WOODRUFF, R. 1997. Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25, 139-153.
- WOODRUFF, R. & GARDIAL, S. 1996. *Know Your Customer: New Approaches to Understanding Customer Value and Satisfaction*, Cambridge, MA, Blackwell Publishers.
- WYCKHAM, R. & WEDLEY, W. 1990. Factors Related to Venture Feasibility Analysis and Business Plan Preparation. *Journal of Small Business Management*, 28, 48-48.
- ZAPPALÀ, G. & LYONS, M. 2009. Recent approaches to measuring social impact in the Third sector: An overview. *Background Paper*.

11. Appendices

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Appendix 1a: Complete Category Table

A: Open search categories, generated from findings	B: Framework search categories, generated from theory	C: Final categories, based on A and B	C category contains
A01. What is Social Entrepreneurship - What is a Social Entrepreneur?	B01. Sources of funding	C01. Trends in Social Entrepreneurship	B24
A02. Why Social Entrepreneurship?	B02. Originality of business model or concept	C02. Attractiveness of Investment Prospects	B04
A03. The Entrepreneur and Team	B03. Scalability	C03. Product	B10, B11, B12, B32
A04. Social impact examples	B04. Attractiveness of Investment Prospects	C04. IPR and Replicability	B06, B07, B15
A05. Social Issues	B05. EXIT Opportunities	C05. Market Entry	B13
A06. Ethics	B06. IPR, Patents and Technology	C06. Industry Attractiveness	B17
A07. ROI	B07. Replicability	C07. Stakeholders	A04, A14, B10, B30, B26
A08. ROI vs. Social Impact	B08. The Entrepreneur and Team	C08. Segmentation	A36
A09. How to measure Social Impact	B09. Product disruptiveness and innovativeness	C09. The Value Chain	B12, B11, B20, B25, B26, B27, B28, B29, B30, B32,
A10. Social Entrepreneurship vs. CSR	B10. Understanding User Need	C10. Social impact measurement	A20, A09
A11. Social Vs Traditional Funding	B11. Infrastructure in target market	C11. ROI vs. Social Impact	A08
A12. Sources of Funding	B12. Product Development	C12. Environmental and socio-political factors in target market	B21, B34, B35
A13. Investments Terms and Follow-up	B13. Market Entry	C13. Scalability	B03
A14. Investment Model	B14. Triple Bottom Line, Measuring Social Impact	C14. The Organization	B19, B30
A15. Investment Criterias	B15. IPR, Trademarks	C15. The Entrepreneur and Team	B08
A16. Deal origination	B16. Stakeholders	C16. Resources	B22
A17. EXIT	B17. Industry Attractiveness	C17. Social Impact Projections	A22
A18. Stuck in the middle of financing	B18. Diamond Framework	C18. Originality of business model or concept	B02
A19. Screening of Investment Prospects	B19. The Organization	C19. Sources of Funding	A12, A14, A18
A20. Importance and Reasons for Social Impact Measurement	B20. The Value Chain in General	C20. ROI	A07
A21. Development in Social Entrepreneurship	B21. Political factors in target market	C21. EXIT Opportunities	B05. EXIT Opportunities
A22. Social Impact Projections	B22. Resources		
A23. Business Model	B23. Market Timeliness		
A24. Value Chain	B24. Trends		
A25. Scalability	B25. Procurement		
A26. Transparency	B26. Sales and Exports		
A27. Organizational Development	B27. Distribution		
A28. Organizational Culture	B28. Marketing		
A29. Industries of interest	B29. Operations		
A30. Role of the Government	B30. Human Resource Management		
A31. Competitive Advantage	B31. Logistics		
A32. Market Entry Strategy	B32. Service		
A33. User Involvement in	B33. Economical factors in target		

Product Development	market		
A34. Understanding User Behavior and Needs	B34. Social factors in target market		
A35. Reliance on Pre-Existing Infrastructure	B35. Environmental factors in target market		
A36. Segmentation	B36. Legal factors in target market		
A37. Distribution			
A38. End user relations			
A39. IPR			

Appendix 1b: Complete C-categories

C01. Trends in Social Entrepreneurship	
B24. Trends	B24 A21IKG1 Har merket en enorm forskjell blant de unge på hvor lett det er å få de med i forhold til de gamle ansatte internt
	B24 A21IKG2 Folk er mer bevisst på problemene og rettferdighet. Dette gir et økt fokus mot SE.
	B24 A21IKG3 Størst interesse blant de unge på universitet osv.
	B24 A01IGS1 You really need to be very very careful about what you call a social venture, as it is one of the most abused words today.
	B24 A03ANM1 Entrepreneurship has always been there in India. But people realized that doing good for yourself alone is not enough. Personal satisfaction!
	B24 A18IPD1 mye av den interessen rundt impact investing kommer jo fra veldig sånn kommersielt tenkende miljøer, pensjonsfond som tenker at "våre kunder har sikkert lyst til å begynne å allokere noe av sin pensjonssparing inn i den typen produkter etter hvert". Men, de skal jo ha høyest mulig avkastning!
	B24 A01IMB2 The answers you get to your questions will depend on what part of the market you are talking to, and what they see as a social venture. Also be clear on your own definition! Social ventures are as diverse as all other ventures
	B24 A01IMB4 The reason they get lumped is because there is a critical shortage for some significant portion of the population, or some failure in delivering the traditional government delivered or private sector delivered *avenues???* that means that there is a critical need that is not being filled, that is just too large for your traditional NGO or charitable sector to handle, or potentially too large even for a government with its limited resources or distribution channels to handle. And that's why it gets lumped into social venture.
	B24 A13IKG1 Vi tilbyr nettverk, kompetanse og økonomisk støtte
C02. Attractiveness of Investment Prospects	
B04. Attractiveness of Investment Prospects	B04 A15IKG 1 Kun prosjekter med mulighet for inntjening. Det offentlige for ta seg av sosiale tiltak, så får vi hjelpe sosiale bedrifter. Eksempler på sos.tiltak er festivaler for barn og unge, arbeidsledighetstiltak, to store sektorer uten mulighet for sustainable business, men som fremdeles vil ha stor sosial impact..
	B04 A15IPD 1 punkt én er uansett at man ser at produktet kan ha en høy impact på mange mennesker. Og hvordan man kan se det kan variere ganske mye fra tilfelle til tilfelle, det kan være at man har surveys allerede, eller at man må tenke litt mer selv i forhold til hva kommer det her til å føre til. Det er nummer en. Og nummer to er at teamet og organisasjonen har det som trengs for kunne levere og skalere. Det er jo sånn sett helt analogt med en venture vurdering, med da en impact-bit på toppen.
	B04 A15IPD 2 Vi ønsker å jobbe med folk som er på bakken og som kjenner forholdene, og som viser at produktet fungerer i markedet
	B04 A15IVS 1 Business needs to be SUSTAINABLE.
	B04 A15IMB 1 So all of the same fundamentals that go into making any type of start-up or business successful are critical. So really the most critical thing is you should make sure you have a successful business, and all the elements of that which you have probably studied, you have to have really a strong founder or team, you have to have a solid business plan, you have to be sure you know whatever the product is, and it's unique in terms of its structure or delivery or some other element of it to make sure that you have a spot in the market, to make sure you know your customers, and that you know how to serve them so that they'll come back to you. You have to understand what others are doing to differentiate yourself. It's all the same element that you've studied in entrepreneurship that makes any entrepreneur successful.
	B04 A25IMB 1 If you really want to be successful you must have a good model, you must know your customer, but you also must be scalable, that means having a business that's scalable in how you operate and how you

	design your ability to expand, but also being able to attract the capital to be able to expand. And so it's an ongoing conversation, and one that gets trickier over time, depending on what business you're in.
	B04 A06IMB1 you would find in good, healthy micro finance businesses that it was not hard to get a good 20 – 25% return. (...) whether that was a fair or healthy return for a business serving such a vulnerable or potentially vulnerable group. So, you know, 10-15 % or even 20 % is something that I've heard in a lot of places as being more reasonable when we start talking about the social enterprise
	B04 A08IPD3 Vi startet med donasjoner, men vi har gradvis vært mer interessert i, og brukt mer tid på å prøve å finne ut hvordan kan vi investere? Men, vi har vært interessert i å gjøre investeringer på en måte vi kaller "impact first", der man setter det å skape høyest mulig impact foran høyest mulig avkastning. Men man må jo selvfølgelig ha en viss avkastning for.. ja.. hvis ikke så fungerer ikke systemet, og hvis ikke så har man sannsynligvis ikke skapt noe levedyktig heller.
	B04 A03IMB1 So it's not enough to have just a dynamic, very socially driven background, you have to have good business model and you have to have a good team, but you also have to think about this and be ready to really think through these challenges as you go along, and see social and financial as being really complementary rather than in competition.
	B04 A29IPD1 Vi endte opp på det initiativet her (agricultural fund) fordi vi så mange interessante forretningsmodeller innenfor det med landbruk, som da når ut til et stort antall småbønder, skalerer fort, og er en effektiv måte, tror vi, til å redusere fattigdom.
	B04 A07IMB1 You would find in good, healthy micro finance businesses that it was not hard to get a good 20 – 25% return.
	B04 A22IMB1 One of the things I would say is that it's hard to make social projections in terms of the impact, it is easier to make social projections around the inputs. "I'm going to make sure that X number of people now have an actual toilet to use in the morning." It's those types of thing that we see are the easiest ones to start out with.
	B04 A14IVS 1 Investment criteria: I utgangspunktet: Any business is good business. Men: Money is for startup help and growth, not running
	B04 A23IMB2 you have to have good business model and you have to have a good team
C03. Product	
B10. Understanding User Need	B10 A34IPD1 One laptop per child. Glimrende idé, ikke sant, og alle sammen bare over seg og så fantastisk den ideen er, og de må jo selvfølgelig få tilgang til det digitale, og da kan de bare hoppe over mange utviklingstrinn og alt mulig sånn. Men å levere en lap top til 200 dollar til en fattig familie...
	B10 A34IPD2 Det er jo veldig ofte sånn at teknologutviklerne har litt for lite forståelse for viktigheten den biten, de tror at "nå når jeg har laget et så fantastisk produkt, selvfølgelig kommer det til å selge. Jeg har laget en solkoker som er mer effektiv og varmer raskere enn noen andre. Selvfølgelig skal det selge, det er bare å få produsert det og sende ned til Afrika, og så kommer det til å selge." Og så høres det jo veldig fornuftig ut, de har sol og så trenger de varme, og det er genialt. Men, så ser man det at folk ikke er interessert i å stå under sola og koke middagen sin. Alt for varmt og slitsomt, og de er vant til å gjøre det på kvelden når de er ferdige med alle andre oppgave som må gjøres i dagslys, ikke sant. Og dessuten, røyken fra bålet eller cook stoven som de bruker gir en smak til noen av rettene som er en viktig bit, og gjør at det smaker helt annerledes, det kan være alle mulige ting som gjør at det ikke fungerer i den konteksten.
	B10 A34IPD3 Det finnes mange sånne Petter Smarter rundt omkring som tenker det at fattige mennesker de trenger gjødsel, de har urin, urin kan brukes til å lage gjødsel, her lager jeg en sånn interessant boks som lager gjødsel av urin, ikke sant? Og så virker det innmari smart. For det er helt riktig det, de har det, og de trenger det, ikke sant? Men mellom der så ligger utrolig mye ting som skal på plass for å få kommersialisert det. Så det er egentlig bare det at man ønsker å legge vekt på kommersialiseringsbiten, gitt den konteksten produktet skal fungere i.
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	<p>B10 A34IMB2</p> <p>So really the most critical thing is you should make sure you have a successful business, and all the elements of that which you have probably studied,(...), to make sure you know your customers, and that you know how to serve them so that they'll come back to you. You have to understand what others are doing to differentiate yourself. It's all the same element that you've studied in entrepreneurship that makes any entrepreneur successful.</p>
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	<p>B10 A05ATJ 4</p> <p>You know people who are into conservation, they want preserve animal life, and they want to preserve wild life etc. Then you fence off the forest, and the moment you start fencing off the forest you create problems for people who's traditional means of sustenance includes the forest as part of the matrix. It is an obvious problem!</p>
	<p>B10 A36IMB 1</p> <p>So we've done a lot of work over the last year and a half really now, to expand from looking at micro finance to see what else it would be reasonable and synergistic for us to do to *really* support that same customer, the micro finance customer, which is not the very bottom of the pyramid, to use bottom of the pyramid phrase, because obviously those folks really need a lot of government services, *but* that next level up, that is working and has some form of livelihood, and therefore can make their way in paying for the services that they need, and they are really missing access to financial services of all kinds, as well as all types of *??* infrastructure</p>
	<p>B10 A38IMB 1</p> <p>other really key critical part of that is fully understanding your customer, now this is something that any business that wants to be successful has to do.</p> <p>But it is a very very key critical part of social entrepreneurship, understanding that customer, know who you're serving, and that you are building your relationship to that customer and sensitive about how you serve that customer so that you not only can be successful over time, but your perception of the community never becomes one that you're taking advantage of a vulnerable customer base.</p>
	<p>B10 A12IMB2</p> <p>If you really want to be successful you must have a good model, you must know your customer, but you also must be scalable, that means having a business that's scalable in how you operate and how you design your ability to expand, but also being able to attract the capital to be able to expand. And so it's an ongoing conversation, and one that gets trickier over time, depending on what business you're in.</p>
B11. Infrastructure	<p>B11 A30ATJ3</p> <p>It is not possible that everything in a country like India is to be delivered by the state. But the state has to go in, pry open the market, it has to establish the rules of the game. It has to show that volumes can work.</p>

	<p>B11 A05ATJ1</p> <p>One is that in a developing country, the technology that is deployed, in many cases, but not in all, may not be technology that is at the frontier of technology, the best possible available technology. So there would be considerations of cost, there will be considerations of inability or some pressure to cut back on the initial capital investment.</p>
	<p>B11 A35ATJ1</p> <p>The state entered tourism in a big way in the 70s. They actively entered by building the infrastructure.</p>
	<p>B11 A35EJF1</p> <p>We say that our solutions are almost always around adapting existing technology to a new use, with relatively little technical risk. "Building the last social mile," is a common phrase here. It presumes that we're often 90 or 99% there: we need to mainly adapt and repackage existing tech to a new socially important use.</p>
	<p>B11 A05ODV 1</p> <p>In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.</p>
	<p>B11 A05ATJ 9</p> <p>So it's very common for middle level cities and smaller towns and villages in *Maharasta?* for instance, the state area, to have no power during the day in summer for 10 hours, 12 hours, 14 hours, ok? There'll be no power. And the similar case will be true in rural areas. There's a power shortage. For instance, I saw last summer in Rajasthan, places who used to get 10 hours of power now get six hours of power. So for agriculture it means the time you use to run your pump sets, that this is time where you cannot run your pump sets</p>
B12. Product Development	<p>B12 A33EVF1</p> <p>We talk to the people who use our products and find out what they want. Our *product* was developed in 2005 and as we were going into the community after distributing the product and asking people who use it what they like and what they don't like about it. We learned that people were mostly interested in using the *product* when they are away from home. But when they are at home, they need to purify a larger volume of water for cooking and cleaning and washing babies and these kinds of things. They needed a way to purify a larger volume of water, than the *product* itself could do. Based on these feedbacks we went back to the innovation center and came up with a product called *product*, which purifies a larger quantity of water, and is designed to be used in the homes. We listen to our customers, and we listen to government, we listen to NGOs. We come up with a product that meets the needs of the people on the ground.</p>
	<p>B12 A33EJF1</p> <p>Users are involved at just about every step, and a rapid update schedule (new releases every few weeks) gives users plenty of opportunity to provide input. Our first step is engaging users to tell us stories about their challenges, and how they might see technology making their job or life better.</p>
	<p>B12 A34EVF1</p> <p>Mostly that staff is in-house, but we do have external consultants that we bring in from time to time, to help us come up with new products, but we do also have external independent researchers that we hire to study our products in the field and in academic laboratory settings. Most of the people who develop our products are in-house, but we do have some external consultants that we work with.</p>
	<p>B12 A34IPD5</p> <p>Jeg synes han Kevin Star i den filmen (link) er en av de som sier mye fornuftig om hvordan kan du tenke rundt hvordan produktet skal skape impact. Det er rett og slett bare å gå gjennom alle stegene, fra produkt til bruk og se hva som ligger mellom der, og hvor komplisert blir det egentlig da.</p>
	<p>B12 A33AAG2</p> <p>You should develop solutions fitting to each niche. Corporations won't do this. So you have to have user driven innovation, you give them a cloth, and the user will tailor it to his needs. Windows have several hundreds of functions, I only use a few. My mobile phone has hundreds of application, I only use a few. But you pay for all of them. The finished product should be made by the small users, then you will get variation.</p>
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C04. IPR and Replicability	
B15. IPR, Trademarks	B15 A39IPD3 det finnes en merkevarebeskyttelse av den pumpen i India, for å hindre at folk kommer med noe skit som gir seg ut for å være det samme. Så man kan ha en viss tillit til merkevaren
	B15 A39EJF1 I am a believer in trademarks in their most fundamental sense: as a mark of the origin of a product or service, as a mark that can be relied on for quality. We have registered several of our marks, and when we release open source software, we retain trademark control. You can take our Martus or Miradi software source code and make changes and release it widely and freely under the GPL. But, you can't call those derivatives Martus or Miradi, because those products as released by us have Benetech® standing behind them.
	B15 A39EJF 3 At the same time, formal trademark registration is expensive. In the U.S., we start by asserting trademark protection once we start publicly using a new tradename, like BLARGL™. If it gets traction, then we consider spending the money on registration. Of course, getting the web domains and doing basic research is essential (and cheap) as a starting point.
B06. IPR, Patents and Technology	B06 A39EJF2 We agree. It's especially true for social entrepreneurs, where the mission goal is more important than actually being the person delivering on that goal
	B06 A39AAG1 IPR can be important in some cases to prevent misuse of technology, and also create wealth for the inventor. BUT it is important to share also. If your neighbor wants to make a copy of your invention, he is not competing for your profits. In addition, if we all can build on the same tech, we will have competition. If IP comes in the way, we should not have it. If it helps us attract investors, we should have it!
	B06 A39IPD2 IP er ikke noe jeg har tenkt ekstremt mye på, jeg ser ikke for meg at.. altså.. For noen type selskaper, såkornsselskaper så kan det kanskje være viktig å hindre at det kommer konkurrenter inn på det samme markedet.
B07. Replicability	B07 A39IPD1 Så den repliseringsakten er noe man skal oppfordre til, og ikke prøve å hindre som impact first investor. Men det kan være behov for å beskytte seg mot konkurranse i lokale markeder. Eller i allefall at man konkurrerer på like vilkår da, at alle må lage sitt eget produkt, snarere enn at en aktør lager produktet og investerer i R&D og alle andre bare kopierer, det er jo ikke rettfærdig
	B07 A39ANM 1 Replicability is also important of course, but knowledge is to share. Must be shared to develop it further. The more you give, the more you get.
	B07 A39IPD 4 Og vise at det går an å lage en kjede med low cost, high quality for profit schools i slummen i Nairobi. Da ser folk at jøss, går det kanskje i Bombay også, det er ingen grunn til at det skal kunne gjøre det.
C05. Market Entry	
B13. Market Entry	B13 A32EJF1 I think we run into the early adopters/crossing the chasm issues, but they are less acute for us because the alternatives are so weak due to market failure
	B13 A16IPD 1 vi begynte med å snakke med en del bistandsorganisasjoner i Norge, men fant etter hvert ganske raskt ut at det var vel så bra for oss å gå direkte ut til organisasjoner som jobber på bakken i de områdene som vi etter hvert begynte å fokusere på, India og Øst-Afrika
	B13 A31IMB3 I see less of "Hey, I'm going to be social and therefore I'll be competitive", what you really see instead is Hey, I see an un-tapped market, I'm going to go for it.
	B13 A20IPD3 i mange områder så er det vanskelig, i andre områder så er det litt enklere. Vi har valgt det området her (agriculture), fordi ting (social impact parametre) er ganske målbart
C06. Industry Attractiveness	
B17. Industry Attractiveness	B17 A10EVF1 In the bed net side our chemical company competitors really promote their interest in bed nets purely as

	CSR, not as the soul-focus of their company like we do. So our competitors are very large and well-funded, but I think they are in this just to promote the image of their company mostly. And that's what they will tell you. But for us this is our only business.
	B17 A29IMB1 We felt education and health care being two of the most fundamental and therefore areas that we felt were really key to the success of that micro finance customer.
	B17 A31IMB1 If you're there just for competitive advantage you are not necessarily going to be successful in the long run
C07. Stakeholders	
B30. Human Resource Management	B30A28ECJ1 We are trying to create a culture of empathy. So we have a deep understanding of the weaver and a deep understanding of the customers too. And innovation should continue.
	B30 A28ECJ2 We are making it the culture of <i>the venutre</i> . We are transferring this into the staff also. How we can create a culture of performance, a culture of empathy. Because empathy is the biggest thing, to obtain anything. Create empathy in the government, things will go up, the development will go up".
	B30 A28IMB1 you need to think very significantly about what is that mission and how do you really infuse the culture of the organization with that mission even as that organization grows, so that not just the founder thinks "hey, I'm not here not just to make some profits, but to make sure I'm serving this customer base responsibly". That that's really part of the organization, and you structure the way the organization is set up, how you train and everything around that thought. You're not fundamentally different but you're infused with something that may be just a little more complicated than simply "I'm here to grow my business and make profit."
	B30 A28IMB 2 It's important not to fall on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.
	B30 A27IKG1 Brukte eksempel fra Asbergers->PC prosjektet de har vært involvert i, der de trenger topp-folk fra bransjen, og lønningene må dermed være deretter. Kan være kroken på døren for en tidlig oppstart
	B30 A27IPD1 (On HR) Det her kommer til å være veldig businessstankegang på det, der man leverer en opplæring som gjør at, akkurat som man lærer opp arbeidere i en fabrikk, for å sette det på spissen.. Så det kommer ikke til å være noen veldig stor grad av leveranser av spesialtjenester til arbeiderne, det tror jeg de virksomhetene kommer til å være alt for små og svake til å håndtere.
	B30 A23ECJ1 Paid two times in a month, so that they can survive continuously.
B19. The Organization	B19 A28ECJ1 We are trying to create a culture of empathy. So we have a deep understanding of the weaver and a deep understanding of the customers too. And innovation should continue.
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	B19 A23IPD3 I hvert fall ikke like relevant å at man kan gjøre det til en business, man kan ikke tjene penger på påvirkingsarbeid, da skal man i alle fall være ganske kreativ. Og så er det vel noen som mener at det å ha en ambisjon som å skape endringer i stor skala er den viktig del av den definisjonen. Og gjerne det! Men for meg så er man forsovet en liten sosial entreprenør hvis man er en ildsjel som setter opp et eller annet som fungerer i ... ja. Kanskje, kanskje ikke. I entreprenørbegrepet så ligger det vel litt i kortene at man skal ønske å skape noe som vokser og blir varig over tid. Dette vet dere mye mer om enn meg, dere skal fortelle meg om det her, tror jeg.
	B19 A26IMB 1 but a fundamental point for all social enterprises is know that customer, and build relationships in the

	community in which you work, and with that customer, so that your intentions are not later questioned, even as you grow and become successful. Never hide the fact that you are what you are which is you're trying to be a for-profit, scalable business, by that you are trying to do so in a way that really combines your social impact with your financial impact, and think about that from day one, in terms of how do you plan *innovation*, train the organization, structure the goals for your organization, communicate about what you are doing with the community. It's important not to *follow/fall* on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.
	B19 A09IPD 4 For man ser ofte i denne sektoren at det er veldig mye selvrapporing, man rapporterer selv, henter selv inn dataen og rapporterer "se hvor flinke vi er og hvor mange vi har nådd" og sånn. Veldig lite uavhengig verifikasjon på den typen løpende rapportering. Det gjøres mye uavhengig evaluering, sånn i etterkant eller retrospektivt ofte, men lite verifisering av løpende
A14. Investment Model	A14IVS 1 Investment criteria: I utgangspunktet: Any business is good business. Men: Money is for startup help and growth, not running
	A14IKG1 De får ingen eierandeler, men en kontraktsrettet plass i styret i bedriften. I så måte er de ikke investorer, men mer et styrende fond som hjelper med støtte både finansielt, nettverk og med kompetanse, kun til oppstarter i Norge.
	A14IPD1 Og det er noen ulemper med å bruke donasjoner, ikke sant, at hvis man jobber med modeller som trenger kontinuerlig påfyll av donasjoner for å fortsette å vokse, så begrenser det hvor store de kan bli.
	A14IVS2 No high-capital investments
	A14IPD2 Yes. Det har formål som et tidsbegrenset subsidie for å få et marked til å begynne å virke. For fattige mennesker.
	A14IPD3 Så en av de tingene vi har jobbet mye med i det siste er hvordan kan vi gjøre mere kommersielle investeringer med *gjeld og egenkapital?*-instrumenter for å fortsette å skape impact, men å gjøre det på en måte der vi kan få penger tilbake, og bruke de på nytt, og der man kan skape virksomheter som kan vokse gjennom at de tjener penger og reinvesterer de pengene, og kan etter hvert tiltrekke seg større kapital.
	A14IPD4 Vi vil jo kalle oss selv impact investors, og der er det jo en veldig glidende overgang, fra veldig impact first til nesten helt vanlige investeringer, bare tilfeldigvis i en sektor som kan være litt samfunnsnyttig. Så... ja, hva er det man vanligvis bruker? Det skal være en intensjon om å skape noe positivt for samfunnet. Jeg tror kanskje det interessante begrepet for meg er det med "impact first investor" der jeg mener at da skal man være villig til å gi avkall på avkastning for å skape en impact. Ikke nødvendigvis at man får dårlig avkastning, men at man er villig til gå inn i ting som målt utifra rent investeringsmessige eller finansielle kriterier ikke ville vært fullt godt nok. Og sånn er jo fondet vårt også, det er ingen som kommer til å gå inn i det her primært fordi de skal tjene mest mulig penger. Ingen som kommer til å gjøre tregangern på de pengene, og risikoen, nedsiden, er stor. Samtidig så er det disiplinert nok at det definitivt kan levere en positiv avkastning, men ikke sant, man skal ha det som mål, men ikke som det overskyggende målet.
	A14IPD5 Da har han bygget opp over tid, og unngått å hente inn andre investorer. Da tar det jo også litt mer tid å vokse. Da får man en veldig fin modell for å hjelpe de menneskene.
B10. Understanding User Need	B10 A34IPD1 One laptop per child. Glimrende idé, ikke sant, og alle sammen bare over seg og så fantastisk den ideen er, og de må jo selvfølgelig få tilgang til det digitale, og da kan de bare hoppe over mange utviklingstrinn og alt mulig sånn. Men å levere en lap top til 200 dollar til en fattig familie...
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B10 A33AAG2	You should develop solutions fitting to each niche. Corporations won't do this. So you have to have user driven innovation, you give them a cloth, and the user will tailor it to his needs. Windows have several hundreds of functions, I only use a few. My mobile phone has hundreds of application, I only use a few. But you pay for all of them. The finished product should be made by the small users, then you will get variation.
B10 A05ATJ 4	You know people who are into conservation, they want preserve animal life, and they want to preserve wild life etc. Then you fence off the forest, and the moment you start fencing off the forest you create problems for people who's traditional means of sustenance includes the forest as part of the matrix. It is an obvious problem!
B10 A36IMB 1	So we've done a lot of work over the last year and a half really now, to expand from looking at micro finance to see what else it would be reasonable and synergistic for us to do to *really* support that same customer, the micro finance customer, which is not the very bottom of the pyramid, to use bottom of the pyramid phrase, because obviously those folks really need a lot of government services, *but* that next level up, that is working and has some form of livelihood, and therefore can make their way in paying for the services that they need, and they are really missing access to financial services of all kinds, as well as all types of *??* infrastructure
B10 A38IMB 1	other really key critical part of that is fully understanding your customer, now this is something that any business that wants to be successful has to do.

	But it is a very very key critical part of social entrepreneurship, understanding that customer, know who you're serving, and that you are building your relationship to that customer and sensitive about how you serve that customer so that you not only can be successful over time, but your perception of the community never becomes one that you're taking advantage of a vulnerable customer base.
	B10 A12IMB2 If you really want to be successful you must have a good model, you must know your customer, but you also must be scalable, that means having a business that's scalable in how you operate and how you design your ability to expand, but also being able to attract the capital to be able to expand. And so it's an ongoing conversation, and one that gets trickier over time, depending on what business you're in.
A04. Social Impact Examples	A04ECJ 1 Better education for the children. The way of life is better. They were getting 40 rupiees from their middlemen, now 130-150. Great social economic changes in the rural areas.
	A04ECJ 2 The workers are now aware of that it is a good idea sending their children to school. Focus on the next generation. Hygiene in the houses. Health awareness. Provide them with business sense. Without income, understand and knowledge about competitors, they can't survive.
	A04ANM 1 Solving problems for the poor will ultimately help the rich. And people are starting to understand this. People are starting to see the big picture. If everyone is better off, there will be peace. Things like water, energy, climate change, are important for everyone!
C08. Segmentation	
A36. Segmentation	A36IMB 1 So we've done a lot of work over the last year and a half really now, to expand from looking at micro finance to see what else it would be reasonable and synergistic for us to do to *really* support that same customer, the micro finance customer, which is not the very bottom of the pyramid, to use bottom of the pyramid phrase, because obviously those folks really need a lot of government services, *but* that next level up, that is working and has some form of livelihood, and therefore can make their way in paying for the services that they need, and they are really missing access to financial services of all kinds, as well as all types of ** infrastructure
	A36ECJ 1 Weaving is the main occupation. But essentially women are associated with this, because they have much more free time. They sit at home, they actually can utilize that time for weaving. The man is busy with the agriculture process or with some small scale industry or other kind of business. <i>The venture basically focus on remote areas, where there is no other facilities, and other resources for income. Obviously they want to connect with us.</i>
	A36ODV 1 In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.
C09. The Value Chain	
B20. The Value Chain in General	B20 A24AAG1 The reason is,(make it affordable of course) if you want to fight poverty, the best thing is to keep people involved in low value earning activity. You must create a value chain! Then some can work at this level, some at the next level etc..
B25. Procurement	B25 A04ECJ1 Better education for the children. The way of life is better. They were getting 40 rupiees from their middlemen, now 130-150. Great social economic changes in the rural areas.
	B25 A24ECJ1 Focus is to connect directly to the weavers, so that there is no need for middle men.
	B25 A24ANM1 Middlemen are the bad thing. They buy for 10, sell for 1000, without doing any work.. Especially true for Kashmir wool. Their sharing of the profits are not good
B26. Sales and Exports	B26 A23IPD2 om Jaipur-modeller (Produkt fattig -> rik, cash rik-> fattig Og den type forretningsmodell ser vi ganske mye av, eksport av alt fra kaffe til babymais til sukkererter og alle mulige sånne ting. Og ofte legges det ganske mye vekt fra eksporthuset på det å lære bøndene å produsere med god nok kvalitet, så man får en sånn kompetansehevingseffekt.

	<p>B26 A23IMB3</p> <p>If your customer is a wealthy Indian consumer, how much money you make is not really questioned. If your customer is not vulnerable, you don't have to worry in that same way about profit maximization. [...] If you start a school for example, you have to think about it the other way. So you will then have a much lower earning more vulnerable customer base, and you will have to think about the profits you make on that school business. Both can be called a social enterprise, but both are very very different, and that's my point; to think about why it's a social enterprise.</p>
	<p>B26 A37EVF2</p> <p>I would say that we primarily sell to Ministries of Health. We sell to all the major relief organizations, from; The Red Cross, Unicef, The faith-based organizations, private charities. Really to every group you have ever heard of. MSF</p>
	<p>B26 A37EVF1</p> <p>Red Cross, government, ministry of Health. Those are our main customers, those are the groups that buy from us and distribute to poor people around the world</p>
	<p>B26 A24IPD1</p> <p>Også en del modeller som selger mer inn mot de lokale markedene. Det kan være noe så enkelt som en maismølle, som gjør at bøndene slipper å selge råmais direkte til en trader som kommer til gården for en lav spottpris, men heller sørge for at det foregår en value ad i det lokale markedet, så det eksporteres på en mer proff måte, mer foredlet, og legger mer verdi igjen bakover til bøndene.</p>
B27. Distribution	<p>B27 A24EVF1</p> <p><i>Are you being looked at as Masonkas?</i></p> <p>No. We work in every country in Africa, we have offices in four countries. But we have agents and distributors in every country. Because we hire local people and we make our products in the developing world, we really have no problem with governments, and getting our products to any one country.</p>
	<p>B27 A37EVF1</p> <p>Red Cross, government, ministry of Health. Those are our main customers, those are the groups that buy from us and distribute to poor people around the world</p>
	<p>B27 A01IGS2</p> <p>it's really about redesigning the way in which you think about this, it's sort of the next generation of thinking about how you can bring this whole social win – win, social and financial do not have to be at loggerheads, they can really be working together, and therefore create better outcomes for companies and communities, and this is how we're going to have to think about 21st century business.</p>
B28. Marketing	<p>B28 A34IPD2</p> <p>Det er jo veldig ofte sånn at teknologutviklerne har litt for lite forståelse for viktigheten den biten, de tror at "nå når jeg har laget et så fantastisk produkt, selvfølgelig kommer det til å selge. Jeg har laget en solkoker som er mer effektiv og varmer raskere enn noen andre. Selvfølgelig skal det selge, det er bare å få produsert det og sende ned til Afrika, og så kommer det til å selge." Og så høres det jo veldig fornuftig ut, de har sol og så trenger de varme, og det er genialt. Men, så ser man det at folk ikke er interessert i å stå under sola og koke middagen sin. Alt for varmt og slitsomt, og de er vant til å gjøre det på kvelden når de er ferdige med alle andre oppgave som må gjøres i dagslys, ikke sant. Og dessuten, røyken fra bålet eller cook stoven som de bruker gir en smak til noen av rettene som er en viktig bit, og gjør at det smaker helt annerledes, det kan være alle mulige ting som gjør at det ikke fungerer i den konteksten.</p>
	<p>B 28 A34IPD6</p> <p>Vi ønsker å jobbe med folk som er på bakken og som kjenner forholdene, og som viser at produktet fungerer i markedet</p>
B29. Operations	<p>B29 A05ODV 1</p> <p>In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.</p>
	<p>B29 A05ATJ1</p> <p>One is that in a developing country, the technology that is deployed, in many cases, but not in all, may not be technology that is at the frontier of technology, the best possible available technology. So there would be considerations of cost, there will be considerations of inability or some pressure to cut back on the initial capital investment.</p>
	<p>B29 A05ATJ3</p> <p>So if you set up industry in various areas, they will have some different natural resources. And they would of course, as typical to industry, maximize efficiency by cutting, among other things, environmental protection. In countries like India it's not just environmental problems. They cut salaries, they cut back on safety, they cut back on social welfare, they don't pay workers benefits to government run schemes as they should. They do a whole lot of things which are wrong. Among these is not taking care of the</p>

	environment
	B29 A05ATJ7 I think the question of the environmental and social issues comes at a variety of levels. One, there is an obvious, like it is known anywhere in the world; In a developing country we call it development vs. environment. In a country like yours or Europe or Japan you call it industry vs. development. The parameters and issues are very much the same
B30. Human Resource Management	B30A28ECJ1 We are trying to create a culture of empathy. So we have a deep understanding of the weaver and a deep understanding of the customers too. And innovation should continue.
	B30 A28ECJ2 We are making it the culture of <i>the venture</i> . We are transferring this into the staff also. How we can create a culture of performance, a culture of empathy. Because empathy is the biggest thing, to obtain anything. Create empathy in the government, things will go up, the development will go up”.
	B30 A28IMB1 you need to think very significantly about what is that mission and how do you really infuse the culture of the organization with that mission even as that organization grows, so that not just the founder thinks “hey, I’m not here not just to make some profits, but to make sure I’m serving this customer base responsibly”. That that’s really part of the organization, and you structure the way the organization is set up, how you train and everything around that thought. You’re not fundamentally different but you’re infused with something that may be just a little more complicated than simply “I’m here to grow my business and make profit.”
	B30 A28IMB 2 It’s important not to fall on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.
	B30 A27IKG1 Brukte eksempel fra Asbergers-PC prosjektet de har vært involvert i, der de trenger topp-folk fra bransjen, og lønningene må dermed være deretter. Kan være kroken på døren for en tidlig oppstart
	B30 A27IPD1 (On HR) Det her kommer til å være veldig businessstakegang på det, der man leverer en opplæring som gjør at, akkurat som man lærer opp arbeidere i en fabrikk, for å sette det på spissen.. Så det kommer ikke til å være noen veldig stor grad av leveranser av spesialtjenester til arbeiderne, det tror jeg de virksomhetene kommer til å være alt for små og svake til å håndtere.
	B30 A23ECJ1 Paid two times in a month, so that they can survive continuously.
B32. Service	B32 A34IMB4 You have to be ready for working in tough markets, solving problems that no one else has solved, dealing with external stakeholders that are going to make, you know, your life harder and maybe potentially un-savvy, although not as un-savvy as you think, customer base.
B12. Product Development	B12 A33EVF1 We talk to the people who use our products and find out what they want. Our <i>product</i> was developed in 2005 and as we were going into the community after distributing the product and asking people who use it what they like and what they don’t like about it. We learned that people were mostly interested in using the <i>product</i> when they are away from home. But when they are at home, they need to purify a larger volume of water for cooking a cleaning and washing babies and these kinds of things. They needed a way to purify a larger volume of water, than the <i>product</i> itself could do. Based on these feedbacks we went back to the innovation center and came up with a product called <i>product</i> , which purifies a larger quantity of water, and is designed to be used in the homes. We listen to our customers, and we listen to government, we listen to NGOs. We come up with a product that meets the needs of the people on the ground.
	B12 A33EJF1 Users are involved at just about every step, and a rapid update schedule (new releases every few weeks) gives users plenty of opportunity to provide input. Our first step is engaging users to tell us stories about their challenges, and how they might see technology making their job or life better.
	B12 A34EVF1 Mostly that staff is in-house, but we do have external consultants that we bring in from time to time, to help us come up with new products, but we do also have external independent researchers that we hire to study our products in the field and in academic laboratory settings. Most of the people who develop our products are in-house, but we do have some external consultants that we work with.
	B12 A34IPD5 Jeg synes han Kevin Star i den filmen (link) er en av de som sier mye fornuftig om hvordan kan du tenke rundt hvordan produktet skal skape impact. Det er rett og slett bare å gå gjennom alle stegene, fra

	produkt til bruk og se hva som ligger mellom der, og hvor komplisert blir det egentlig da.
	B12 A33AAG2 You should develop solutions fitting to each niche. Corporations won't do this. So you have to have user driven innovation, you give them a cloth, and the user will tailor it to his needs. Windows have several hundreds of functions, I only use a few. My mobile phone has hundreds of application, I only use a few. But you pay for all of them. The finished product should be made by the small users, then you will get variation.
	B12 A35EJF1 We say that our solutions are almost always around adapting existing technology to a new use, with relatively little technical risk. "Building the last social mile," is a common phrase here. It presumes that we're often 90 or 99% there: we need to mainly adapt and repackage existing tech to a new socially important use.
	B12 A36ODV 1 In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.
	B12 A05ATJ 4 You know people who are into conservation, they want preserve animal life, and they want to preserve wild life etc. Then you fence off the forest, and the moment you start fencing off the forest you create problems for people whose traditional means of sustenance includes the forest as part of the matrix. It is an obvious problem!
B11. Infrastructure	B11 A30ATJ3 It is not possible that everything in a country like India is to be delivered by the state. But the state has to go in, pry open the market, it has to establish the rules of the game. It has to show that volumes can work.
	B11 A05ATJ1 One is that in a developing country, the technology that is deployed, in many cases, but not in all, may not be technology that is at the frontier of technology, the best possible available technology. So there would be considerations of cost, there will be considerations of inability or some pressure to cut back on the initial capital investment.
	B11 A35ATJ1 The state entered tourism in a big way in the 70s. They actively entered by building the infrastructure.
	B11 A35EJF1 We say that our solutions are almost always around adapting existing technology to a new use, with relatively little technical risk. "Building the last social mile," is a common phrase here. It presumes that we're often 90 or 99% there: we need to mainly adapt and repackage existing tech to a new socially important use.
	B11 A05ODV 1 In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.
	B11 A05ATJ 9 So it's very common for middle level cities and smaller towns and villages in *Maharasta* for instance, the state area, to have no power during the day in summer for 10 hours, 12 hours, 14 hours, ok? There'll be no power. And the similar case will be true in rural areas. There's a power shortage. For instance, I saw last summer in Rajastan, places who used to get 10 hours of power now get six hours of power. So for agriculture it means the time you use to run your pump sets, that this is time where you cannot run your pump sets
C10. Social Impact Measurement	
A20. Importance and Reasons for Social Impact Measurement	A20IPD1 det tror jeg er noe av utfordringen, og noe av grunnen kanskje til at bistandsbransjen ikke er blitt flinkere til å måle ting enn det den er, det at "skal vi først gjøre det så må det være så innmari perfekt". Men vi mener jo at det er bedre å ha noe data som du vet det er svakheter ved, men som du likevel kan forholde deg til, og så bruke det for hva det er verdt da, enn å ikke ha noen ting. Det er bedre å ha en 60% sannhet enn å ikke ha noe informasjon i det hele tatt.
	A20IPD2 dere kjenner jo sikkert til den kontroversen som har vært rundt mikrofinans i India og sånn i det siste. Jeg mener jo at mye av det skyldes at man ikke har vært flinke nok til å fange opp informasjon om hvordan går det med klientene? Man har hatt styringsinformasjon på den finansielle biten selvfølgelig, men ikke på impact biten. Og da er det den finansielle biten som får fokus, det som måles det følges på en måte opp.

	A20IPD3 i mange områder så er det vanskelig, i andre områder så er det litt enklere. Vi har valgt det området her (agriculture) , fordi ting (social impact parametre) er ganske målbart
	A20IPD4 Det kan være en person som setter opp en human rights watch, eller en eller annen informasjonsinnhentnings påvirkningsorganisasjon der den typen business tankegang rundt å måle og følge opp, og levere og styre prosjekter tett og sånn ikke er fullt så relevant, selv om det sikkert er noe som er relevant der og.
	A20AAS1 I do not want to measure Social Impact
	A20IPD 5 For man ser ofte i denne sektoren at det er veldig mye selvrapporing, man rapporterer selv, henter selv inn dataen og rapporterer "se hvor flinke vi er og hvor mange vi har nådd" og sånn. Veldig lite uavhengig verifikasjon på den typen løpende rapportering. Det gjøres mye uavhengig evaluering, sånn i etterkant eller retrospektivt ofte, men lite verifisering av løpende
A09. How to measure Social Impact	A09IMB1 Because it is incredibly hard to measure impact. The true impact studies take three to five years, they cost a lot of money, much more money than a social enterprise has at the beginning.
	A09IPD1 Så, man må jo være pragmatisk også, den studien vi gjør der er kjempedyr. Og den eneste grunnen til at noen er villige til å putte penger i en sånn studie er at den kan bidra til en større del av mikrofinanslitteraturen, bli publisert i tidsskrifter, og det er ikke ting man kan gjøre sånn for sin egen del på et prosjekt.
	A09IMB2 One is the inputs, everything from the mission and strategy and operating systems and products, staff that go into the business. And the fact that you have a better chance at coming out with the impact, which is the other side, the real measurable, more hard core impact.
	A09IPD2 De her er egentlig et ganske standard rammeverk som vi bare har forenklet og forenklet, det er en del av den jobben BCG gjorde for oss i 2008. Først så legger man inn noe tid og ressurser og penger etc., man gjør en del aktiviteter som man gjør for de pengene, og så får man en output som da er veldig konkrete ting man som har levert for eksempel skoler man har bygget eller kursing som er blitt holdt eller lån som er blitt gjort tilgjengelig eller sånne veldig konkrete, lette ting å forholde seg til, operasjonelle parametre. Så kommer vi da til outcome og impact, jeg vet ikke om dere har sett noe særlig på definisjonene av det. Men vi gjør for enkelthets skyld, når vi snakker til folk rundt oss som ikke vet noe særlig om det her, så bare slår vi det sammen for enkelthets skyld og kaller det impact, og sier at det er den mer brede utviklingseffekten det her fører til. Her er for eksempel det antall vannpumper vi har solgt til fattige mennesker, her er det som skjer med de familiene som følger av det. Økt inntekt, økt levestandard, og forhåpentligvis flere barn på skolen og den type ting
	A09IPD3 Men i hvert fall at man har en survey-mekanisme som fanger opp utviklingseffektene. Man tar en baseline kort etter at man har solgt en pumpe, så kommer man og spør "hvordan har du det nå?". Så kommer man tilbake et år senere og spør "hva har skjedd siden sist?".
	A09ANM1 The measurements depend on the social impact you want to create.
	A09IVS1 Social impact metrics: Number of companies started and number of employment created in a commercially viable way. VERY easy to measure. ("Don't even need an excel sheet.")
	A09IPD4 For man ser ofte i denne sektoren at det er veldig mye selvrapporing, man rapporterer selv, henter selv inn dataen og rapporterer "se hvor flinke vi er og hvor mange vi har nådd" og sånn. Veldig lite uavhengig verifikasjon på den typen løpende rapportering. Det gjøres mye uavhengig evaluering, sånn i etterkant eller retrospektivt ofte, men lite verifisering av løpende
	A09IKG1 Veldig få ting kan måles, hvordan måler man "bedre liv"? Trivsel f.eks. Antall skoler, antall elever. Lett og måle. I tillegg har mange skoler trivselsundersøkelser. Viktig med benchmark, for så å følge opp.
	A09IPD5 Man greier jo ikke å vitenskapelig bevise de greiene her 100% i alle de tilfellene....
	A09IM3 you can never have a true control and impacted group . You can never say "this community is going to sit

	over here in a box without micro finance and without any other positive or negative impacts in terms of drought or NGOs or anything else. And you can never say "here's a community that gets just micro finance and none of the other positive or negative things that happens for development or like life has it with nature and you know. And so it's incredibly hard to after three or five years to say what really is the impact, what are the positive or negative impacts, and how are you sure even if you see impact, that that was all the about micro finance input or some other input.
	A09IMB5 There are many initiatives currently active within the measuring of social impact, however, this is a difficult subject for a number of reasons
	A09IKG2 Finne sos.impact i NOK? Ikke noe for oss. vi trenger ikke vite det.. Foreløpig kun en kvalitativ, hva er det de gjør, approach. 1 MNOK vs 20.000 glade barn, er det verdt det?
	A09IPD5 å regner vi det ofte om til en total samfunnsmessig avkastning i monetære termer. Og det betyr jo at det er noe som mistes derfra til dit, ikke sant, hvis kvinner som får tilgang til lån får sterkere selvtilitt og står mer fram og tar mer tak og bestemmer mer hjemme og sånn, det greier du ikke å regne om til penger og få med her. Så vårt formål med det har vært at det bør i alle fall være en kjerne av impacts eller outcomes som kan regnes om, som gjør at man ser at kun basert på de så får man igjen noen ganger de pengene man legger inn her, og så er det veldig bra selvfølgelig om det finnes andre mer indirekte ting eller vanskelig kvantifiserbare ting på toppen
	A09IPD6 I et av prosjektene så har vi kontrollgrupper, med veldig avansert måte å jobbe statistisk for å finne landsbyer som matcher hverandre sosioøkonomisk så man tror det er en valid kontrollgruppe. Og det må man jo ha, hvis man skal si at man har funnet noen impact. I et annet prosjekt så har vi ikke noen kontrollgrupper.
C11. ROI vs. Social Impact	
A08. ROI vs. Social Impact	A08IPD1 og det er fortsatt mange som sitter litt og tenker det at selvfølgelig, jo bedre de selskapene lykkes finansielt, des flere mennesker har de nådd, og des større endringer har de skapt. Og akkurat det er den underliggende tankegangen med mikrofinansbransjens store vekst, men også nå kontrovers. Og hvis det blir veldig mange stemmer da, som hevder de argumentene der i de ulike sammenhengene der man sitter og diskuterer så kan det fort danne seg en sånn følelse i gruppa at det tross alt er ROI-en som er den viktigste indikatoren.
	A08IPD2 mye av den interessen rundt impact investing kommer jo fra veldig sånn kommersielt tenkende miljøer, pensjonsfond som tenker at "våre kunder har sikkert lyst til å begynne å allokere noe av sin pensjonssparing inn i den typen produkter etter hvert". Men, de skal jo ha høyest mulig avkastning!
	A08IPD3 Vi startet med donasjoner, men vi har gradvis vært mer interessert i, og brukt mer tid på å prøve å finne ut hvordan kan vi investere? Men, vi har vært interessert i å gjøre investeringer på en måte vi kaller "impact first", der man setter det å skape høyest mulig impact foran høyest mulig avkastning. Men man må jo selvfølgelig ha en viss avkastning for.. ja.. hvis ikke så fungerer ikke systemet, og hvis ikke så har man sannsynligvis ikke skapt noe levedyktig heller.
	A08IPD4 Hele asset management bransjen er gira veldig opp mot å skape høyest mulig risk adjusted return, og det er varierende vilje til å sette seg inn i hva impact egentlig er. Så den dimensjonen kommer til å være den svakeste i veldig mange sammenhenger.
	A08IPD5 (Om å bruke all profitt på å hjelpe arbeiderne gjennom diverse tjenester som helseforsikring og skole for barna) Så det er jo mulig, hvis du selger et produkt i et ordentlig high value marked med gode marginer, og eieren er motivert first and foremost av å hjelpe de menneskene.
	A08IMB1 Because the reality is, even the global development finance institutes, although they are social-commercial, they're not doing this as charity, they're not giving the money away and nor do they want zero percent return
	A08IMB2 Most of our investors are development finance institutions. and European development finance organizations. They understand the fact that we are not looking to just maximize profits. We are looking to develop strong businesses which serve customers, and that therefore our returns will be different than the purely

	profit maximizing folks.
	A08IMB3 you also have to think about this and be ready to really think through these challenges as you go along, and see social and financial as being really complementary rather than in competition.
	A08IMB4 On the other hand you can't make yourself a simply break-even business who can't handle bumps in the road, because people will not invest in you, and you will not be able to scale, and therefore the impact you can have will be limited.
	A08EJF1 Customers love us. The skeptics were more Silicon Valley types who felt that if it didn't make maximum profits, it clearly wasn't worth doing.
	A08IKG1 Vi er ikke ute etter ROI, kun sosialt!
	A08IKG2 "Hvis du ikke er opptatt av penger, vil du ikke lykkes!" bold statement, men som har noe sannhet i seg
	A08IGS1 it's really about redesigning the way in which you think about this, it's sort of the next generation of thinking about how you can bring this whole social win – win, social and financial do not have to be at loggerheads, they can really be working together, and therefore create better outcomes for companies and communities, and this is how we're going to have to think about 21st century business.
	A08IPD 6 Jeg tror kanskje det interessante begrepet for meg er det med "impact first investor" der jeg mener at da skal man være villig til å gi avkall på avkastning for å skape en impact. Ikke nødvendigvis at man får dårlig avkastning, men at man er villig til gå inn i ting som målt utifra rent investeringsmessige eller finansielle kriterier ikke ville vært fullt godt nok. Og sånn er jo fondet vårt også, det er ingen som kommer til å gå inn i det her primært fordi de skal tjene mest mulig penger. Ingen som kommer til å gjøre tregangern på de pengene, og risikoen, nedsiden, er stor. Samtidig så er det disiplinert nok at det definitivt kan levere en positiv avkastning, men ikke sant, man skal ha det som mål, men ikke som det overskyggende målet.
C12. Environmental and Sociopolitical Factors in Target Market	
B21. Political factors	B21 A25ATJ 1 It is not possible that everything in a country like India is to be delivered by the state. But the state has to go in, pry open the market, it has to establish the rules of the game. It has to show that volumes can work.
	B21 A30ATJ2 The state entered tourism in a big way in the 70s. They actively entered by building the infrastructure
	B21 A30ANM1 one of the reasons for social entrepreneurship in India is that the "government is not able to deliver what they are supposed to; people will start taking charge, taking ownership, and doing something about it." One example of this is Sulabh toilets.
	B21 A30ATJ6 You see the point is that guaranteeing access to water requires the intervention of the state.
	B21 A30ATJ4 Software in India, to the extent that it is successful, it is true because of huge state investments in engineering education and huge state investments in these so-called "software technology parks", were you know, facilities were provided, the first internet links were provided.
B34. Social factors	B34 A36ECJ 1 Weaving is the main occupation. But essentially women are associated with this, because they have much more free time. They sit at home, they actually can utilize that time for weaving. The man is busy with the agriculture process or with some small scale industry or other kind of business. <i>The venture</i> basically focus on remote areas, where there is no other facilities, and other resources for income. Obviously they want to connect with us.
	B34 A05ANM 2 If I'm happy, and also you are happy, there will be less crime. If I have three cars, and you have none, there will be anger and violence. The differences is a lot of the reason for the criminal problems, so how do you bridge the gap?
	B34 A03ATJ1 It is true that in the absence of the state we cannot starve and die, so we have to do something to survive, so survival is a necessity. So that pushes people.
	B34 A05ANM 1 The caste system is very much alive in the country. The entire political systems is based on castes.
	B34 A05ATJ 6 So the withdrawal of the state where it has been replaced by entrepreneurship in all these issues has

	resulted in a dual system where the private sector caters to the need of the wealthy who can afford to pay for it and the government does here and there a little bit for the poor.
B35. Environmental factors	B35 A05ATJ 3 So if you set up industry in various areas, they will have some different natural resources. And they would of course, as typical to industry, maximize efficiency by cutting, among other things, environmental protection. In countries like India it's not just environmental problems. They cut salaries, they cut back on safety, they cut back on social welfare, they don't pay workers benefits to government run schemes as they should. They do a whole lot of things which are wrong. Among these is not taking care of the environment
	B35 A05ATJ 5 The other class of problems have to do with the question of poverty being the source of damage to the environment.
	B35 A05ATJ 7 I think the question of the environmental and social issues comes at a variety of levels. One, there is an obvious, like it is known anywhere in the world; In a developing country we call it development vs. environment. In a country like yours or Europe or Japan you call it industry vs. development. The parameters and issues are very much the same
	B35 A05ATJ 8 At the same time this direct first order dependence, not even agriculture, but the collecting of leaves, the collecting of forest produce the collecting of you know wood for fuel. You know the whole variety of such things, hunting for small animals as a nutritional addition to food "receptives", there's a whole variety of such direct dependence on natural resources.
C13. Scalability	
B03. Scalability	B03 A25IPD1 Men det vi også har lært er at de kommer ikke til å skalere videre på en sånn hockeystick-aktig måte etter at vi er ute.
	B03 A25IKG1 Tenker også på internasjonalisering, men foreløpig gjøre Norge så bra som de kan. Hvis de skal internasjonalt, vil de bruke det eksisterende nettverket.
	B03 A25ANM1 An idea has to be scalable, if not it is limiting! Replicability is also important of course, but knowledge is to share. Must be shared to develop it further. The more you give, the more you get.
	B03 A25ATJ 1 It is not possible that everything in a country like India is to be delivered by the state. But the state has to go in, pry open the market, it has to establish the rules of the game. It has to show that volumes can work. It is in the nature of Indian capital that it never believes that volumes will work. It's a state of mind.
	B03 A25IPD2 Og vise at det går an å lage en kjede med low cost, high quality for profit schools i slummen i Nairobi. Da ser folk at jøss, går det kanskje i Bombay også, det er ingen grunn til at det skal kunne gjøre det.
	B03 A25IMB1 If you really want to be successful you must have a good model, you must know your customer, but you also must be scalable, that means having a business that's scalable in how you operate and how you design your ability to expand, but also being able to attract the capital to be able to expand. And so it's an ongoing conversation, and one that gets trickier over time, depending on what business you're in.
	B03 A25IPD3 Og det er noen ulemper med å bruke donasjoner, ikke sant, at hvis man jobber med modeller som trenger kontinuerlig påfyll av donasjoner for å fortsette å vokse, så begrenser det hvor store de kan bli.
	B03 A01IPD2 Og så er det vel noen som mener at det å ha en ambisjon som å skape endringer i stor skala er den viktige del av den definisjonen. Og gjerne det! Men for meg så er man forsovet en liten sosial entreprenør hvis man er en ildsjel som setter opp et eller annet som fungerer i ... ja. Kanskje, kanskje ikke. I entreprenørbegrepet så ligger det vel litt i kortene at man skal ønske å skape noe som vokser og blir varig over tid.
	B03 A08IMB4 On the other hand you can't make yourself a simply break-even business who can't handle bumps in the road, because people will not invest in you, and you will not be able to scale, and therefore the impact you can have will be limited.
C14. The Organization	
B19. The Organization	B19 A28ECJ1 We are trying to create a culture of empathy. So we have a deep understanding of the weaver and a deep understanding of the customers too. And innovation should continue.

	<p>B19 A28IMB1 you need to think very significantly about what is that mission and how do you really infuse the culture of the organization with that mission even as that organization grows, so that not just the founder thinks “hey, I’m not here not just to make some profits, but to make sure I’m serving this customer base responsibly”. That that’s really part of the organization, and you structure the way the organization is set up, how you train and everything around that thought. You’re not fundamentally different but you’re infused with something that may be just a little more complicated than simply “I’m here to grow my business and make profit.”</p>
	<p>B19 A28IMB 2 It’s important not to fall on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.</p>
	<p>B19 A23IPD3 I hvert fall ikke like relevant å at man kan gjøre det til en business, man kan ikke tjene penger på påvirkingsarbeid, da skal man i alle fall være ganske kreativ. Og så er det vel noen som mener at det å ha en ambisjon som å skape endringer i stor skala er den viktig del av den definisjonen. Og gjerne det! Men for meg så er man forsovet en liten sosial entreprenør hvis man er en ildsjel som setter opp et eller annet som fungerer i ... ja. Kanskje, kanskje ikke. I entreprenørbegrepet så ligger det vel litt i kortene at man skal ønske å skape noe som vokser og blir varig over tid. Dette vet dere mye mer om enn meg, dere skal fortelle meg om det her, tror jeg.</p>
	<p>B19 A26IMB 1 but a fundamental point for all social enterprises is know that customer, and build relationships in the community in which you work, and with that customer, so that your intentions are not later questioned, even as you grow and become successful. Never hide the fact that you are what you are which is you’re trying to be a for-profit, scalable business, by that you are trying to do so in a way that really combines your social impact with your financial impact, and think about that from day one, in terms of how do you plan *innovation*, train the organization, structure the goals for your organization, communicate about what you are doing with the community. It’s important not to *follow/fall* on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.</p>
	<p>B19 A09IPD 4 For man ser ofte i denne sektoren at det er veldig mye selvrapportering, man rapporterer selv, henter selv inn dataen og rapporterer “se hvor flinke vi er og hvor mange vi har nådd” og sånn. Veldig lite uavhengig verifikasjon på den typen løpende rapportering. Det gjøres mye uavhengig evaluering, sånn i etterkant eller retrospektivt ofte, men lite verifisering av løpende</p>
B30. Human Resource Management	<p>B30A28ECJ1 We are trying to create a culture of empathy. So we have a deep understanding of the weaver and a deep understanding of the customers too. And innovation should continue.</p>
	<p>B30 A28ECJ2 We are making it the culture of <i>the venture</i>. We are transferring this into the staff also. How we can create a culture of performance, a culture of empathy. Because empathy is the biggest thing, to obtain anything. Create empathy in the government, things will go up, the development will go up”.</p>
	<p>B30 A28IMB1 you need to think very significantly about what is that mission and how do you really infuse the culture of the organization with that mission even as that organization grows, so that not just the founder thinks “hey, I’m not here not just to make some profits, but to make sure I’m serving this customer base responsibly”. That that’s really part of the organization, and you structure the way the organization is set up, how you train and everything around that thought. You’re not fundamentally different but you’re infused with something that may be just a little more complicated than simply “I’m here to grow my business and make profit.”</p>
	<p>B30 A28IMB 2 It’s important not to fall on that later, when you may be too big to make a difference. You have to infuse the culture of the organization with those goals and objectives right away.</p>
	<p>B30 A27IKG1 Brukte eksempel fra Asbergers-PC prosjektet de har vært involvert i, der de trenger topp-folk fra bransjen, og lønningene må dermed være deretter. Kan være kroken på døren for en tidlig oppstart</p>
	<p>B30 A27IPD1 (On HR) Det her kommer til å være veldig busnesstankegang på det, der man leverer en opplæring som gjør at, akkurat som man lærer opp arbeidere i en fabrikk, for å sette det på spissen.. Så det kommer ikke til å være noen veldig stor grad av leveranser av spesialtjenester til arbeiderne, det tror jeg de virksomhetene kommer til å være alt for små og svake til å håndtere.</p>
	<p>B30 A23ECJ1 Paid two times in a month, so that they can survive continuously.</p>
C15. The Entrepreneur and Team	

B08. The Entrepreneur and Team	B08 A03IKG1 Entreprenører er veldig like mtp drivet som trengs, kan virke som om flere "vanlige" entreprenører er sosiale pga dette
	B08 A03IKG2 Vanlige gründere og sosiale gründere er veldig like. Eneste forskjellen er på hva de har fått ideen sin på. Sosiale: Fikse samfunnet. Vanlige: Fokus på ny teknologi osv.. Begge må ha samme driven for å kunne lykkes!
	B08 A03IMB1 So it's not enough to have just a dynamic, very socially driven background, you have to have god business model and you have to have a good team, but you also have to think about this and be ready to really think through these challenges as you go along, and see social and financial as being really complementary rather than in competition.
	B08 A03EVF1 Our leader, a very driven leader who LOVES to go to Africa and go to rural and poor communities and stay there and learn about their problems, and try to come up with a way to make a difference in people's lives. For us I don't think we would have been AS successful if we did not have such a visionary leader and if we did not have someone in the top of the company who was willing to make the personal physical sacrifice to learn about the challenges that the least fortunate people in the world have. And come up with a way to both make a difference in their lives, but also to make a profit and create a business that is successful and employs a lot of people of around the world and makes a difference in the lives of real people. It is really thanks to (main founder) that we are the company we are today. Without a doubt the driving force of the company.
	B08 A03IPD1 Vi ønsker å jobbe med folk som er på bakken og som kjenner forholdene, og som viser at produktet fungerer i markedet
	B08 A03IMB2 So really the most critical thing is you should make sure you have a successful business, and all the elements of that which you have probably studied, you have to have really a strong founder or team(...)It's all the same element that you've studied in entrepreneurship that makes any entrepreneur successful.
	B08 A08IKG2 "Hvis du ikke er opptatt av penger, vil du ikke lykkes!" bold statement, men som har noe sannhet i seg
	B08 A15IVS2 Idea is 1%, executability and passion is the most important
	B08 A15IVS3 Preferably entrepreneur with experience in the relevant field as well as entrepreneurial experience
	B08 A15IVS4 Team is also important: Always bring someone with business capability along!
C16. Resources	
B22. Resources	B22 A05ATJ1 One is that in a developing country, the technology that is deployed, in many cases, but not in all, may not be technology that is at the frontier of technology, the best possible available technology. So there would be considerations of cost, there will be considerations of inability or some pressure to cut back on the initial capital investment.
	B22 A16IVS 1 Most investment objects found through networking
	B22 A36ODV 1 In urban areas energy consumption is high. The same is the value addition created, while the human input in terms of work is low, compared to in rural areas where human input is high, but energy consumption is low. The takeout is that to empower rural areas, they need access to reliable, cheap energy, as well as enabling technology.
	B22 A12ERB1 But since the last two years, from the district administration, we have not received a single penny. A very small amount of money we collected from the local add. Third one is DA's internal projects where they need communication support, for their projects and create awareness generation and information generation in their projects areas, they approach us. And we produce programs, and radio spots for them, and they pay us.
C17. Social Impact Projections	
A22. Social Impact Projections	A22IMB1 One of the things I would say is that it's hard to make social projections in terms of the impact, it is easier to make social projections around the inputs.

	<p>"I'm going to make sure that X number of people now have an actual toilet to use in the morning." It's those types of thing that we see are the easiest ones to start out with.</p>
<p>C18. Originality of Business Model or Concept</p>	
B02. Originality of business model or concept	<p>B02 A11IPD1 Men noe av det som er veldig viktig, synes jeg, med impact first investering generelt er jo at man bidrar til å bevisse nye forretningsmodeller. Og vise at det går an å lage en kjede med low cost, high quality for profit schools i slummen i Nairobi. Da ser folk at jøss, går det kanskje i Bombay også, det er ingen grunn til at det skal kunne gjøre det.</p>
	<p>B02 A01IMB3 before you even talk about some of the common elements of social venture I'll say that they are as diverse as starting a business in all those different areas, it's not like starting a social venture in health and education are exactly the same thing, they are just as hard an different as starting a health or education business anywhere else in the world and making sure they're successful.</p>
	<p>B02 A34IMB4 You have to be ready for working in tough markets, solving problems that no one else has solved, dealing with external stakeholders that are going to make, you know, your life harder and maybe potentially un-savvy, although not as un-savvy as you think, customer base</p>
<p>C19. Sources of Funding</p>	
A12. Sources of Funding	<p>C20 A12IMB1 social ventures actually need some soft money to begin with, which is some long term low-interest loans, or some grant money to get over a hurdle in some particular areas before they go out and look for investors, but they really should look for investors that are likeminded with themselves so there aren't those conflicts early as the organization is really trying to solve you know, the key challenges of going from being a small company or start-up to a successful medium sized or large company, and these are issues than any company has.</p>
	<p>C20 A12ERB1 But since the last two years, from the district administration, we have not received a single penny. A very small amount of money we collected from the local add. Third one is DA's internal projects where they need communication support, for their projects and create awareness generation and information generation in their projects areas, they approach us. And we produce programs, and radio spots for them, and they pay us.</p>
	<p>C20 A12ERB2 One source of funding is local market, one source of funding is internal projects. Internal projects has need for origination. And a third is, we are approaching some other external funding agencies also, those funding agencies are also giving some funds to us.</p>
	<p>C20 A12IVS1 Money comes from founders.</p>
	<p>C20 A12IMB2 If you really want to be successful you must have a good model, you must know your customer, but you also must be scalable, that means having a business that's scalable in how you operate and how you design your ability to expand, but also being able to attract the capital to be able to expand. And so it's an ongoing conversation, and one that gets trickier over time, depending on what business you're in.</p>
	<p>C20 A12IMB3 this is also a big consideration for an entrepreneur when they are looking to raise funds, because this is something that has been questioned in the micro finance industry, is that you want to make sure that the goals of your investor are aligned with the goals of your organization, so when you face these hard choices that it doesn't become a trade-off, it becomes something where you can find the best choice for the organization without having to be at odds with your investors, essentially get voted down eventually on how you run your business. So it is very important for social entrepreneurs to think about who they bring in, especially early days</p>
A14. Investment Model	<p>C20 A14IVS1 Investment criteria: I utgangspunktet: Any business is good business. Men: Money is for startup help and growth, not running</p>
	<p>C20 A14IKG1 De får ingen eierandeler, men en kontraktsrettet plass i styret i bedriften. I så måte er de ikke investorer, men mer et styrende fond som hjelper med støtte både finansielt, nettverk og med kompetanse, kun til oppstarter i Norge.</p>
	<p>C20 A14IPD1 Og det er noen ulemper med å bruke donasjoner, ikke sant, at hvis man jobber med modeller som trenger kontinuerlig påfyll av donasjoner for å fortsette å vokse, så begrenser det hvor store de kan bli.</p>

	C20 A14IVS2 No high-capital investments
	C20 A14IPD2 Yes. Det har formål som et tidsbegrenset subsidie for å få et marked til å begynne å virke. For fattige mennesker.
	C20 A14IPD3 Så en av de tingene vi har jobbet mye med i det siste er hvordan kan vi gjøre mere kommersielle investeringer med *gjeld og egenkapital*-instrumenter for å fortsette å skape impact, men å gjøre det på en måte der vi kan få penger tilbake, og bruke de på nytt, og der man kan skape virksomheter som kan vokse gjennom at de tjener penger og reinvesterer de pengene, og kan etter hvert tiltrekke seg større kapital.
	C20 A14IPD 4 Vi vil jo kalle oss selv impact investors, og der er det jo en veldig glidende overgang, fra veldig impact first til nesten helt vanlige investeringer, bare tilfeldigvis i en sektor som kan være litt samfunnsnyttig. Så... ja, hva er det man vanligvis bruker? Det skal være en intensjon om å skape noe positivt for samfunnet. Jeg tror kanskje det interessante begrepet for meg er det med "impact first investor" der jeg mener at da skal man være villig til å gi avkall på avkastning for å skape en impact. Ikke nødvendigvis at man får dårlig avkastning, men at man er villig til gå inn i ting som målt utifra rent investeringsmessige eller finansielle kriterier ikke ville vært fullt godt nok. Og sånn er jo fondet vårt også, det er ingen som kommer til å gå inn i det her primært fordi de skal tjene mest mulig penger. Ingen som kommer til å gjøre tregangern på de pengene, og risikoen, nedsiden, er stor. Samtidig så er det disiplinert nok at det definitivt kan levere en positiv avkastning, men ikke sant, man skal ha det som mål, men ikke som det overskyggende målet.
	C20 A14IPD5 Da har han bygget opp over tid, og unngått å hente inn andre investorer. Da tar det jo også litt mer tid å vokse. Da får man en veldig fin modell for å hjelpe de menneskene.
A18. Stuck in the middle of financing	C20 A18EJF 1 Unrestricted/risk funding is our main challenge. We're a tech company that doesn't offer venture capital financial returns. Donors aren't used to investing in new technology. Much easier to sell our tech once it's built and operating
	C20 A18IPD1 mye av den interessen rundt impact investing kommer jo fra veldig sånn kommersielt tenkende miljøer, pensjonsfond som tenker at "våre kunder har sikkert lyst til å begynne å allokere noe av sin pensjonssparing inn i den typen produkter etter hvert". Men, de skal jo ha høyest mulig avkastning!
C20. ROI	
A07. ROI	A07IMB1 You would find in good, healthy micro finance businesses that it was not hard to get a good 20 – 25% return.
	A07IMB2 whereas if you're truly into these earlier stage impact investments, you may have to be in there for ten years before you start to see returns and the complete return on your investment and the profits you're thinking about, and the secondary network to buy your shares at some price that you feel is going to give your investors a reasonable return.
C21. EXIT Opportunities	
B05. EXIT Opportunities	B05 A17IPD1 EXIT-markedet er såpass dårlig at man kan liksom ikke regne med det på en hel portefølje. Så derfor investerer vi i instrumenter som betaler seg tilbake, dvs. for kanskje et lån med en konverteringsrettighet til egenkapital i tilfelle salg. Men hvis det ikke blir et salg, så får man i alle fall tilbakebetalt investeringen sin med rente. Og hvor man kan legge inn standardmekanismer også for å få en viss oppside på det her, selv om det ikke blir et salg av selskapet. Så det er tankegangen der, så det er egentlig å hente... Hvis selskapet går bra finnes det da nok cash i selskapet til å kunne tilbakebetale de investeringene ikke sant.
	B05 A17IPD2 Det er et interessant tema, for det er ikke lett å få omsatt den her typen typen selskaper som vi snakker om, det er ganske tidlig fase selskaper. Som ikke er modne for å gå på børs for å si det sånn. De kommer nok fortsatt til å være litt for små, mange av dem, innen den tidsrammen vi opererer med til at de kan tiltrekke seg kommersiell private equity *?*. Så ja, det vil komme til å være EXITS i form av salg til *?* eller til industrielle spillere i noen tilfeller
	B05 A17IPD3 Ja. I enda større grad en i grant porteføljen, for her vi en forpliktelse til å levere penger tilbake til investorene, og da er vi nødt til å ha veldig klare tanker om hvordan pengene skal komme ut igjen fra

	selskapet.
	B05 A17IMB1 Micro finance is really struggling at the moment, which seems to have shed some doubt on whether IPO is a suitable exit for a social venture. Exits in social entrepreneurship is still a major question.
	B05 A17IKG1 En EXIT, er derfor ikke et salg av konseptet, men målet er at de skal kunne drive selv. Ferd skal ikke tjene penger på prosjektene!
	B05 A17IKG2 Kun to av de 7 prosjektene som har noen som helst mulighet til en tradisjonell exit..
	B05 A17IMB2 This is the number one question in India right now. What are those exits? You started to see that with the first IPO of micro finance in India, that created a lot of backlash. There have been some secondary purchases so early investors selling off to later private equity firms in micro finance, but this is a huge question in social business.
	B05 A17IMB3 And think about the fact that there will at least be a secondary market for that part of the company as it grows and becomes successful, even if it never goes on the public market
	B05 A07IMB2 whereas if you're truly into these earlier stage impact investments, you may have to be in there for ten years before you start to see returns and the complete return on your investment and the profits you're thinking about, and the secondary network to buy your shares at some price that you feel is going to give your investors a reasonable return.

Appendix 2a: Letter of Explanation to Reviewers

Background

As proposed and recommended by management literature, lecturers, consultants and practitioners worldwide, the first step towards realizing any business idea should be to conduct a preliminary feasibility analysis, the conclusion to which will be one of two outcomes; 1) Carry on, usually the next step will be a more thorough analysis and business plan; or 2) Rethink or discard the idea. The analyst can choose to employ a number of existing models and tools, and the focus is primarily on the financial feasibility of a proposed concept.

Concept

It is the fundamental premise of our Master Thesis that new tools are needed to assess the feasibility of technology based social business concepts, ranging from non-profits to for-profits and everything in between, in order to capture intended non-monetary value creation. This presumption is based in theory as well as empirical findings from interviews we have conducted in India, Norway and also the US (via internet). Our findings revealed that social entrepreneurs need to address the following topics more thoroughly than what is common among entrepreneurs today:

- The *differentness* of the target market as opposed to the reality of the entrepreneur and/or innovator, including the need to fully understand the problem to be solved, and the context and preconditions of the user.
- The creation of non-monetary value in interaction with all stakeholders, not only the customers and investors, but whole communities within which the organization operates.
- The measurability of the social impact of the organization.
- Potential hazards of the proposed business concept.

We therefore propose 7 models and tables to facilitate feasibility analysis of technology based social business concepts. These models vary in complexity, as well as foundation. Some models are existing models we have borrowed from established academics and placed in a new context. Some are combinations of existing models and theoretical constructs, while a few are models of our own design, based on empirical findings as well as theory. For our thesis, we have chosen to focus on the areas of technology/product, and organization, and less on the market/industry and finance. The overlaps between these areas and our focus areas are, however, significant.

Status quo at the time of analysis may differ greatly, from napkin sketch stage, to having a functioning technology and exploring ways to commercialize it, to having launched a new organization, and wishing to take a step back and evaluate ones options. The relevance of each tool will therefore vary between analysts. However, as we are predominately experienced in early stage analysis, and also intend these tools for early stage analysis by other students of technology based entrepreneurship, this has been the main focus of our development.

Review

We sincerely hope that you find the above stated concept interesting enough to have a look at the 5 slides included, which show the proposed analysis tools. The slides include short accounts of theoretical grounding for each model. We kindly ask you to do one or more of the following:

- Examine the models and determine whether they
 - Make sense to you
 - Add value to a feasibility analysis
 - Have obvious strengths and weaknesses

- Suggest changes and improvements to the models
 - Through written descriptions
 - Through sketching on the slides either digitally, or by printing and scanning
 - Through recommending alternative literature, websites or other references

- Suggest other areas of feasibility analysis that are in need of innovation

We are very grateful for all contributions to our Thesis, and hope you have the time to provide us with feedback on our work so far. Due to dead-lines placed upon us by the university, we must ask you to send us your response via e-mail (ida.groth@gmail.com or linema@gmail.com) as soon as you are able, and preferably before May 20th. We apologize for the short response time.

Best regards

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Appendix 2b: Review Slides

The Proximity Matrix

Figure 1 Addresses the distance between the reality in which the product idea was conceived, and the reality in which it is intended to be used. The analyst must place the product idea in the proximity matrix, according to the innovator-user proximity along two dimensions: the problem to be solved, and the context in which the problem must be solved. This can be national culture, classes in a society, religious group or other relevant context. Both dimensions have three steps: shared (user and innovator share the problem or context), experience (the innovator has significant experience with the problem or context), or none (limited or no relevant experience). This model is of our own design, and is based on interviews with investors, who point to lack of firsthand experience as a major obstacle for entrepreneurs aiming to solve social problems.

Product and Technology

Problem proximity	Shared problem innovation	Shared problem, context experience	Peer Innovation Shared context and problem
	Problem experience	Context and problem experience	Shared context, Problem experience
	External innovation Limited or no experience	Context experience	Shared Context Innovation
Contextual proximity			

Figure 1: The Proximity Matrix

The Product Trajectory

Figure 2 Addresses the issue of identifying the different customers, and addressing their respective needs. This model is designed by us, and based on the methodology used and recommended by impact investor Kevin Starr. The exercise is meant to be conducted as follows: Model the product trajectory backwards from the intended end-user to the point of departure from the organization. Identify users and buyers. Determine their respective main criteria for purchase and use of the product, which determines if the product is likely to be accepted and allow to "pass through" each actor.

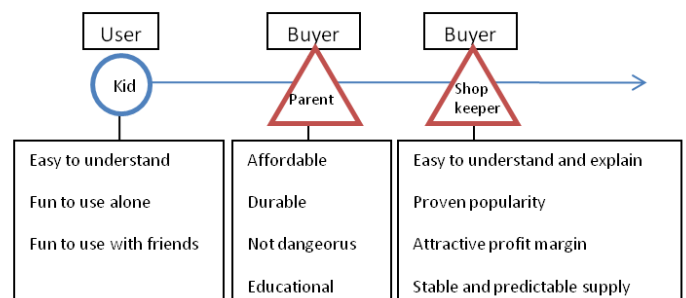


Figure 2: The Product Trajectory

The Dependency Matrix

Dependence of the asset on the innovation	Specialized (unilateral dependence of asset on the innovation)	Co-specialized (bilateral dependence) e.g. container ships and ports.
	Generic	Specialized (unilateral dependence of innovation on the asset)
Dependence of the innovation on the asset		

The Life Cycle Description

Figure 4 is a table based on the most basic principles of LCA analysis and life-cycle design, in combination with Eason's (1987) concept of 3 tiers of users. Eason's users are, however, defined with more regard to purchasing decisions, so the definitions have been somewhat augmented. Primary contact denotes first hand contact with materials and processes, while secondary contact denotes immediate proximity to materials and processes, as well as to the individuals who experience primary contact. Tertiary contact denotes the surrounding actors in a wider perspective.

The idea of the model is simply to assess physical hazards the materials and processes proposed may entail, without demanding quantification. It forces the analyst to think through all the life cycle stages of the product, and the individuals that may be affected by each of them. The life-cycle phases listed are very generic, and the analyst is free to adjust the stages to fit alternative life-cycles, for example for software concepts.

Stage of the product life-cycle	Material/Process	Primary contact	Secondary contact	Tertiary contact
Resource extraction: Account for the materials utilized in the product design, and their associated environmental risks with regards to extraction and pre-processing.	Example: Material X, Manufacturing process Y	Example: Worker, with first hand contact with the resource extraction process. Little or no risk.		Example: Everyone. Increased CO ₂ emissions
Manufacturing and assembly process: Account for the intended manufacturing processes, and their associated environmental risks, included health risk of workers.	Example: Material X, Process W	Example: Worker, with first hand contact with the manufacturing process. Danger of toxic fume inhalation.	Example: Inhabitants of the area where manufacturing takes place. danger of local leaks of poisonous gas.	
	Example: Material X Process P	Example: Worker with firsthand contact with process. Little or no risk.		
Distribution: Account for the planned distribution methods, and potential environmental risks associated with these methods.				
Use: Assess the potential environmental impact the product will have during its life in use.				
Retirement: An assessment of possible retirement options for the product, listed for each material.	Example: Material X, incineration Generic options include: Re-use: Components are used as-is in another application Remanufacture: Components are re-used in the same or a different application, after minor repairs and overhauls are made. Primary Recycling: reprocessed into material for use in another high-value product. Secondary Recycling: reprocessed into material for use in a low-value product, such as concrete filler or fence posts. Tertiary Recycling: Polymer components are chemically decomposed into their basic elements, and processed into new plastic or other products such as petrol, heating oil or asphalt. Quaternary Recycling: incinerated for the production of heat and/or electricity. Disposal: eliminated without the recovery of any intrinsic value.	Example: Worker, with first hand contact with the retirement process. Danger of toxic fume inhalation.		Example: Everyone. Increased CO ₂ emissions

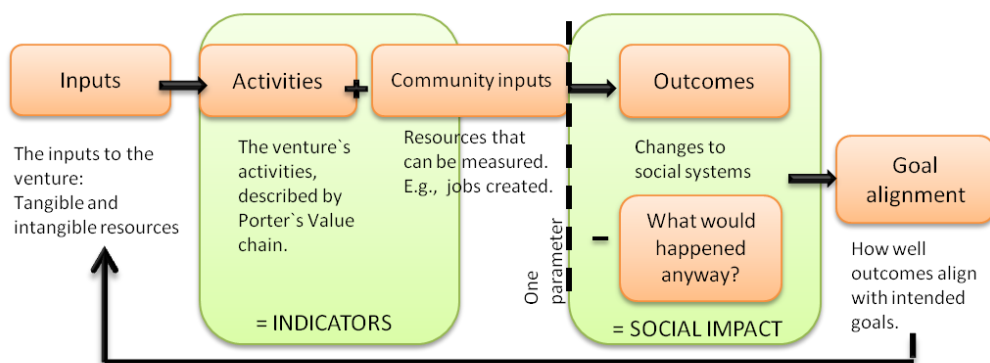


Figure 5: The Impact Value Chain (A) / Impact Measure Model (B)

Source: Impact Value Chain in The Double Bottom Line Methods Catalog, Clark, Rosenzweig, Long and Olsen and The Rockefeller Foundation, 2003

The Impact Value Chain

Figure 5 (A): In the impact value chain, the analyst must define the activities that will enable the venture to achieve its intended mission and/or social impact.

The analyst should also list the inputs to the organization, and assess the ventures tangible and intangible resources (e.g., human (where the stakeholders are one potential resource), technological)

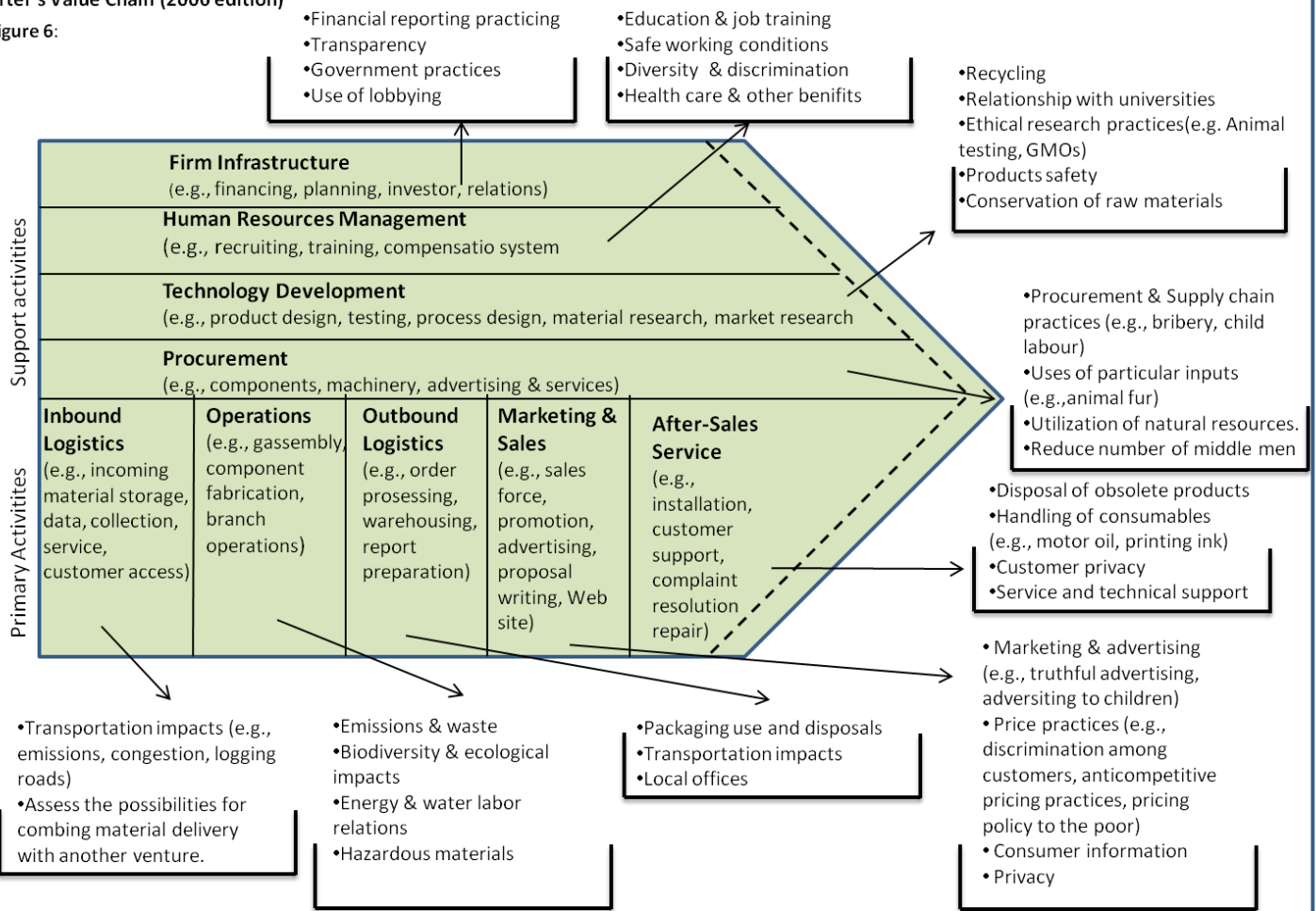
Porter's generic value chain is a framework suited for both mission driven and relationship driven start-ups. The framework points out several aspects that can create social impact for a wide range of stakeholders, which can be found in Porter and Kramer's *Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility* (2006), a social take on the original model. See next page.

Figure 5 (B): When the analyst has completed the subsequent stakeholder analysis and activity assessment (next pages), Figure 5 may be employed to assess the organization's potential social impact. Depending on how far along the start-up has come, use either:

1. Goal attainment as a measure (observed impact, preferable with control group)
2. Quantifiable outputs from the organization, equaling the input into the target community (number of public toilets, irrigation pumps etc.) The main idea is that he or she uses the last step in their output chain that is easily quantifiable.
3. Impact, in terms of one single parameter as a measure. In this case, the analyst may use; reduced mortality rate, increased literacy rate etc. Causality is a challenge here.

Porter's Value Chain (2006 edition)

Figure 6:



Source: Michael E. Porter and Mark R. Kramer, *Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility* (2006)

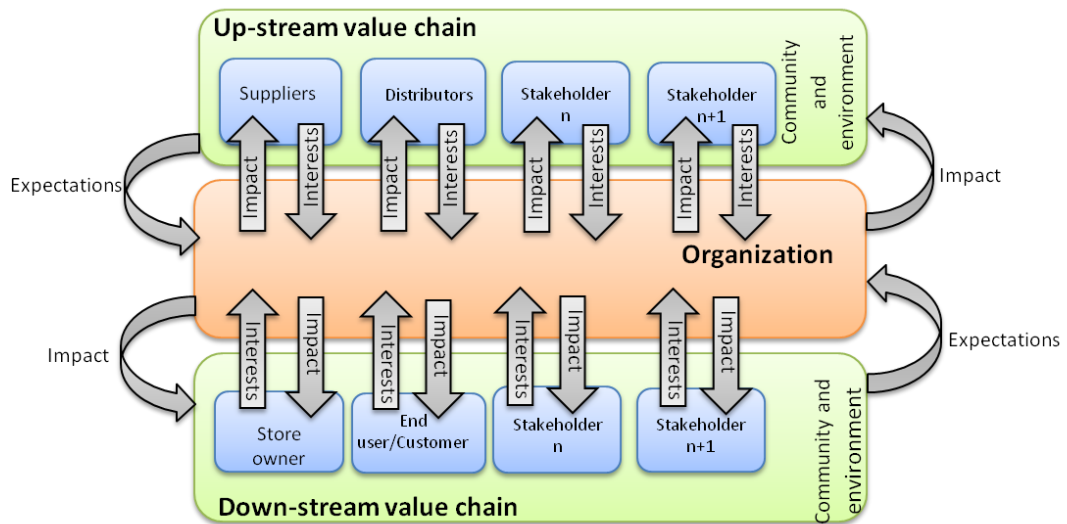


Figure 7: Impacted Stakeholders

Impacted Stakeholders

Figure 7: Assess the potential social impact on down and up-stream stakeholders. Identify conflicting interests among the stakeholders.

The entrepreneur can choose to address more than one community on each side of the organization, if for example the venture has production sites on different locations. The model is inspired by ISO:26000.