Tutor: **Hans Sjögren**

**Negative Unintended Consequences of Innovation - a case study regarding innovation and sustainability**

The new Extended Value Creation Mechanism for Global Sustainability, the SNE SFI GS-framework

Chra Ali Rashed, George Mouyiasis
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Authors:
Chra Ali Rashed and George Mouyiasis

Advisor:
Hans Sjögren

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# Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>v</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vi</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>vii</td>
</tr>
<tr>
<td>Negative Unintended Consequences of Innovation-NUCoI</td>
<td></td>
</tr>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1 The aim of research; unintended negative consequences of innovation and valuing the natural society</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Objective</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Outline</td>
<td>5</td>
</tr>
<tr>
<td>2. Method</td>
<td>6</td>
</tr>
<tr>
<td>2.1 Method</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Quality of Research</td>
<td>10</td>
</tr>
<tr>
<td>2.2.1 Validity and Reliability</td>
<td>10</td>
</tr>
<tr>
<td>2.2.2 Scope</td>
<td>10</td>
</tr>
<tr>
<td>2.2.3 Delimitations</td>
<td>11</td>
</tr>
<tr>
<td>3. Theoretical Framework</td>
<td>13</td>
</tr>
<tr>
<td>3.1 Human social progress with innovation and the profit mind-set</td>
<td>13</td>
</tr>
<tr>
<td>3.2 The emergence and dependence on innovation</td>
<td>14</td>
</tr>
<tr>
<td>3.3 Innovation in relation to NUCoI</td>
<td>15</td>
</tr>
<tr>
<td>3.4 The relation to NUCoI, when innovation creates output and wealth</td>
<td>17</td>
</tr>
<tr>
<td>3.5 Connecting relevant theorist views regarding UNCoI and the Pro-innovation Bias</td>
<td>19</td>
</tr>
<tr>
<td>3.6 Value Creation in innovation related to UNCoI</td>
<td>24</td>
</tr>
<tr>
<td>3.6.1 New Value Creation Chain</td>
<td>24</td>
</tr>
<tr>
<td>3.6.2 Value Chain à la Michael Porter</td>
<td>26</td>
</tr>
<tr>
<td>3.6.3 Innovation, Society and Value</td>
<td>27</td>
</tr>
<tr>
<td>3.6.4 Innovation Value Chain in relation to UCoI</td>
<td>28</td>
</tr>
<tr>
<td>3.7 Stakeholder theory and sustainability</td>
<td>30</td>
</tr>
<tr>
<td>3.7.1 Global sustainability in relation to organizational sustainability</td>
<td>35</td>
</tr>
<tr>
<td>3.8 Value in the Societal Natural Environment</td>
<td>36</td>
</tr>
<tr>
<td>3.8.1 The Natural Environment as a primary stakeholder in regards to a global society</td>
<td>38</td>
</tr>
<tr>
<td>3.8.2 Back to basic thinking- for the unity of us all</td>
<td>40</td>
</tr>
<tr>
<td>3.8.3 Connecting social complexity with innovations concerning NCoI</td>
<td>43</td>
</tr>
<tr>
<td>3.9 Synthesis of theory</td>
<td>45</td>
</tr>
</tbody>
</table>
3.9.1 Unintended consequences of innovation .............................................. 46
3.9.2 Value creation in sustainability and innovation ........................................ 46
3.9.3 Stakeholder theory relating to secondary stakeholders ................................ 47
3.9.4 Value in the Societal Natural Environment ............................................. 48
3.9.5 The global societal natural environment as a primary stakeholder ............... 48
3.10 The Model ................................................................................................. 49
4. Empirical findings ......................................................................................... 53
4.1 Andersons’ viewpoint .............................................................................. 54
4.2 Manager in Fex Nutrition and People’s Choice ........................................... 56
4.3 CEO Green Earth Citizen ......................................................................... 64
   4.3.1 CEO of Chinese environmental corporation ........................................ 68
4.4 Consumer marketing manager ................................................................. 69
   4.4.1 Medical industry manager .................................................................. 70
   4.4.2 Manager in Dubai .............................................................................. 71
   4.4.3 Manager in AB Limited in South East Asia ........................................... 73
   4.4.4 Automobile industry group and the pro-innovation bias test .................. 76
4.5 Analysis .................................................................................................... 77
5. Discussion and Conclusion ....................................................................... 95
   5.1 Suggestions for further research .............................................................. 98
6. Reference index ......................................................................................... 99
   Book-based literature: .................................................................................. 99
   Internet-based literature: ............................................................................ 102
   Periodical literature: .................................................................................... 103
Empirical Findings References: .................................................................. 108
   Empirical Interviews: ................................................................................. 108
   YouTube-Videos: ........................................................................................ 109
Appendix 1 ................................................................................................. 110
Appendix 2 ................................................................................................. 113
Appendix 3 ................................................................................................. 114
Appendix 4 ................................................................................................. 117
Appendix 5 ................................................................................................. 119
Appendix 6 ................................................................................................. 121
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//Chra and George
List of Figures
Figure 1; displaying contemporary interest in the field of NUCoI ................................................................. 4
Figure 2; authors’ position in research regarding NUCoI ........................................................................... 12
Figure 3; displaying the increase in publications regarding innovation in social science ........................ 15
Figure 4; displaying the difference between invention and innovation ...................................................... 17
Figure 5; hindering factors for consequence prediction regarding stakeholders, in Merton (1936) ............ 20
Figure 6; Innovation with intended and unintended consequences ........................................................ 21
Figure 7; In 26300 articles, only 26 related to undesirable and UCoI .......................................................... 22
Figure 8; suggesting research to start before innovation implementation ............................................... 23
Figure 9; displaying the outdated view of value-adding as static ................................................................. 25
Figure 10; displaying porter’s famous Value Chain ..................................................................................... 26
Figure 11; displaying the five approaches of innovation and economics .................................................. 28
Figure 12; the simplistic linear model of innovation .................................................................................. 28
Figure 13; innovation value-added chain (IVC), secondary stakeholders and radical technology development ................................................................................................................ 30
Figure 14; describing four theoretical approaches of CSR ....................................................................... 31
Figure 15; stakeholder map involving all groups and individuals affected by the organizational goal ...... 32
Figure 16; displaying the importance of primary stakeholders in relation to secondary stakeholders .... 35
Figure 17; conceptual framework for the Natural-Resource-Based View of the firm .................................... 39
Figure 18; displaying related aspects of Responsible Research and Innovation ........................................ 40
Figure 19; four practices for approaching natural capitalism ..................................................................... 41
Figure 20; displaying the five stage model of creating opportunities with sustainable development ...... 42
Figure 21; displaying five guidelines on how to manage a social working venture .................................. 43
Figure 22; Merton’s five-step framework for managing risk and returns of innovation ............................ 45
Figure 23; synthesis of theory conceptualized ......................................................................................... 46
Figure 24; displaying the flower story of secondary stakeholder importance .......................................... 51
Figure 25; interlude from model part 1 to model part 2 ............................................................................. 52
Figure 26; weight and relevance of findings ............................................................................................. 53
Figure 27; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 56
Figure 28; "Word cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 63
Figure 29; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 67
Figure 30; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 69
Figure 31; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 70
Figure 32; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 71
Figure 33; "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013 .......... 73
Figure 34; "Word cloud" tool for summarizing findings. Source: Wordle official website, 2013 .......... 76
Figure 35; displaying responses from authors’ general test regarding innovation .................................... 78
Figure 36; displaying authors’ elaboration regarding value perception ...................................................... 93
**List of Abbreviations**

CEO: **Chief Executive Officer**

CO2: **Carbon Dioxide**

CSP: **Corporate Social Performance**

CSR: **Corporate Social Responsibility**

ET AL: **And others**

HR Manager: **Human Resource Manager**

IEDS: **Institute for Environmental Diplomacy and Security**

IVC: **Innovation Value Chain**

MNC: **Multinational Corporation**

NGO: **Non – Governmental Organization**

NPD: **New Product Development**

NUCoI: **Negative unintended consequences of innovation**

OECD: **Organization for Economic Co-operation and Development**

PH.D: **Philosophical Degree**

R&D: **Research and Development**

RRI: **Responsible Research and Innovation (framework)**

**The SNE SFI GS-framework:** **The Societal Natural Environmental Stakeholder Framework for Innovation and Global Sustainability**

UCoI: **Unintended consequences of innovation**

UNCoI: **Unintended negative consequences of innovation**
Negative Unintended Consequences of Innovation-NUCoI

Extending the Innovation Value Mechanism to include negative consequences of innovation from the Natural Environment and Stakeholder-perspective

Advisor: Hans Sjögren

Authors: Chra Ali Rashed and George Mouyiasis

Abstract: Innovation is often related to positive outcomes for the majority to enjoy that enhances welfare and facilitates everyday activities. In different fields of study (economics, management, sociology, history and science and technology) it is becoming a field of magnitude (Malerba and Brusoni, 2007). Fagerberg and Verspagen (2009) discuss the emerging interest of innovation in the field of social science. Although the interest within the subject of innovation is high, very little research has been done regarding the aim to contribute to the design innovation policy, developed by scholars studying the field of innovation. One often so neglected study within innovation is in the field of negative unintended consequences of innovation (NUCoI) (Sveby et al, 2012). One main contributor of innovative activities is organizational operations leading to value for end customers. While firms often have the aim to create value with innovation for the greater benefit in society, sometimes these value-creating mechanisms may create unintended negative consequences in addition to the positive effects. While innovations are increasing in rapidness and numbers of output produced, the effects on society and the natural environment needs to be highlighted. With assumptions regarding vague CSR implementation in corporations (Newell, 2005), this research tries to grasp understanding on how NUCoI is perceived from the managerial perspective in organizations regarding their stakeholder viewpoint. As a starting point, the authors use Charlie Chaplin’s famous quote “More than machinery, we need humanity” from the movie “The Great Dictator” indicating the importance of caring for various stakes.

Purpose: The aim of this research is to highlight the new field of study in social science; Negative unintended consequences of innovation (NUCoI) in relation to the societal natural environment (society and the natural environment). The research contributes to the existing frameworks on organizational value creation mechanisms in innovation policy to incorporate the aspect of negative consequences of innovation (NCoI), in terms of sustainability to highlight the importance of secondary stakeholders.

Results: The new Extended Value Creation Mechanism for Global Sustainability, the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability framework (SNE SFI GS-framework), aims to contribute in the long-term perspective for research in innovation policy by highlighting one aspect of a field of the often so neglected societal natural environment perspective, when competing rivalry becomes too fierce. The framework highlights the importance of secondary stakeholders, where primary stakeholders may act as a “link” between the organization and secondary stakeholders. Additionally, the authors suggest going to basic practices regarding sustainability with valuating the natural resources for a prospering sustainable society. The aspects in the research include stakeholder-theory, value-creation in terms of the societal natural environment, and innovation as a field of social science, negative consequences and organizational sense-making.

Key Words: Negative Unintended Consequences of Innovation, Value Creation, Globalization, Strategy, Management, Stakeholder theory, CSR, Pro-Innovation Bias
1. Introduction

The introduction presents relevant fields of study with the aim of raising interest to the reader. This research focuses on highlighting the unintended negative consequences of innovation (NCoI) as an outcome of the globalized society of today with the focus on sustainability. It connects to subfields of CSR, stakeholder theory, value creation and society. It gives the reader the understanding of what unintended NCoI may be perceived as.

“We have developed speed, but we have shut ourselves in” –

Charlie Chaplin from “The Great Dictator”

How do you define innovation? One of the most important phenomena relating to commerce and economics is innovation (Swann, 2009). However, the Pro-Innovation Bias found in research suggests innovation often related to positive outcomes. Because of this attitude-based bias, the possibility of unintended negative consequences of innovation (NCoI) might be increased in society (Rogers, 2003; Hull and Kaghan, 2000; Abrahamson, 1991; Fazio and Olson, 2003; Schlenker, 1978; Nelson and Winter, 1982; Baumann and Martigoni, 2011). Negative unintended consequences concern when using human-made progresses, aimed at creating positive effects, incurs additional negative effects. Global warming and climate change are examples of human made consequences claimed by many scientists to be a result of human making (Winston, 2010) relating to sustainability.

Charlie Chaplin, with his silent movies, amused the western modern society in a time of sorrow and depression (The Great Depression and WW2). In his movie “The Great Dictator” he made a speech, found more relevant in today’s society than ever before where humanity, greed and innovation are the connecting themes throughout in connection to this research (Appendix 2). Throughout this research, his transcript is used for connecting fundamental themes of relevant research. The authors suggest that one needs to get an understanding on how to critically view the mechanisms in society in relation to innovation, in specific the business world where innovation happens at an incredible speed (Hanken External Relations, 2012). As Merton (2013) argues, innovations carry risk associated with the infrastructure of the society, in which they are introduced in. Even a small fraction such as a single family can be defined as a society (Santayana, 2005). Economic crime can have many insights, as highlighted by Sjögren and Skogh, (2004), but damaging the planets’ natural resources is a topic of continuous relevance (Amory et al, 2007). In developing economies the focus seems to be on poverty-elimination rather than environmental protection (Haanaes et al, 2013). Innovations aim helping people to carry out tasks which they could not accomplish before or carry out current tasks better (Merton, 2013). However, NCoI is a topic of neglected research in social science (Sveiby et al, 2012). Damanpour (1991) strengthens this by arguing that sub theories of innovation regarding differing dimension-research with testing or effectiveness evaluation, needs to include differing aspects.
This may help future guidance in research regarding organizational innovation (Damanpour, 1991). Professor Karl-Erik Sveiby explains; “When we are introducing change with innovative measures, we must be aware of the fact that we don’t quite know the future, we cannot plan the future. There will always be things that go the way we didn’t intended, and those are the things I think, if we address them and take them up at an early stage, we might increase the net benefit, positive effect of innovation. They don’t go away just because we don’t talk about them”- (Hanken External Relations, 2012).

NCoI may be evident on the natural environment in society as a consequence of lacking precautions on how to consider scarce resources. Corporations need to focus more on the resource total returns, rather than on equity and assets (Haanaes et al, 2013). The natural environment and society may be assumed to be regarded as stakeholders in various research (Snowdon and Stonehouse, 2007; Freeman, 2010a; Garriga and Melé, 2004; O’Riodran and Fairbrass, 2008), but with referring to them as “communities” or “environmentalists”. These are often considered as secondary stakeholders where favor is given to primary stakeholders such as consumers, shareholders, employees or suppliers (Hall and Martin, 2005). This view may not last for the future. As suggested, (Haanaes et al, 2013; Heerad, 2011; Speth, 2009) serious action-taking, in terms of preserving the natural environment in society, is something that needs to be given more in today’s society. In relation to Charlie Chaplin, his speech emphasizes this in a sublime matter by stating “more than machinery, we need humanity” (Charlie Chaplin, Tragedy and Hope, 2011). By taking secondary stakeholder and treating them as primary, this research aims to provide an insight regarding NCoI in terms of a silent actor; the societal natural environment (the society and the natural environment). As an outcome of ignorance, environmental destruction, due to corporate innovation-practices, eventually may lead to a future case of corporate crime. This may be regarded as a taboo, referring to Watts reasoning (1966). The innovation value-add needs to consider non-value adding mechanisms regarding secondary stakeholder importance, for responding to unintended NCoI. This highlights that the corporations working in society need to take into consideration a sustainable long-term strategy, acknowledging importance of the natural environment for a prospering society as suggested by Haanaes et al (2013). Hart (1995) developed the natural-resource based view of the firm more than fifteen years ago. Combining this field of sustainability with unintended NCoI regarding the natural environment, the authors aim to raise awareness in research to the relevant field of study.

1.1 The aim of research; unintended negative consequences of innovation and valuing the natural society

“Machinery that gives abundance has left us in want”-

Charlie Chaplin from “The Great Dictator”

One of the 20th century thinkers, Alan Watts, highlights the notion of a constant continuation of something taboo. Whatever the situation, taboo will always exists, something that is un-admitted, unsettling for a direct look and repressed (Watts, 1966). With him denying that “we” may destroy the natural resources of the world with vague safeguarding in an ironic approach, this is actually something of relevance because of the changing methods of carrying out activities. Although he states that civilization may induce technological success on a larger scale, the methods for them
will keep changing on a continuous basis. It is like playing a game where the rules are constantly changing forcing one to never return to older ways of playing it (Watts, 1966). Malerba and Brusoni (2007) highlight the magnitude of innovation studies. Fagerberg and Verspagen (2009) argue the interest within the subject of innovation as high, but very little research has been done to contribute to the design of innovation policy developed by scholars studying innovation. This may be because of the lacking acknowledgement of innovation as a scientific field of discipline study accompanied with textbooks, departments, programmes and graduates. Emergence of innovation studies challenge and blur traditional boundaries and existing organizations within science patterns (Fagerberg and Verspagen, 2009). Increasing regard of knowledge as an economic resource highlights that every aspect of innovation needs to be taken into consideration (Whitley, 2000). One often so neglected study within innovation is in the field of negative UCoI (Sveiby et al, 2012). Throughout the social context of though, unanticipated consequences of positive actions have been treated by almost all significant contributors in this field. Since the variety in terms and contexts treating this phenomenon (stretching from technology to theology), unanticipated consequences has been concealing continuousness, in this reflection of endurance. Because of this distinct diversity of context, both the extensive uniqueness of the dilemma has been ignored and no scientific systematic analysis-treatment of the issue has yet been made. Although it is a widely recognized process, a systematic conduct is required with demanding specification on a further extent. What needs to be highlighted is the difference between unforeseen and undesirable consequences. This is because an unintended consequence does not always have to be a negative consequence, while intended and anticipated action-taking with positive outcomes always is desired by the actor but not always to the outside viewer. (Merton, 1936).

Although innovation has many advantages, there is actually a downside to it that is found neglected in research (Sveiby et al, 2012). Using a multiple case-analysis for grasping insights on non-value mechanisms of innovation in relation to sustainability, this research highlights the prevailing attitude towards the Pro-Innovation Bias found in various literatures (Rogers, 2003; Hull and Kaghán, 2000; Abrahamson, 1991; Fazio and Olson, 2003; Schlenker, 1978; Nelson and Winter, 1982; Baumann and Martigoni, 2011) as one possible explanation for negative UCoI. Relating innovation to value-creation (Hall and Martin, 2005), Porter’s Value Chain has been in the field of business relating to competitive advantage for a few decades (Porter, 1998). It describes the value adding mechanisms as often including efficiency and profit gains in organizational activities (Grant, 2010). Since Porter’s Value Chain ignores the value-destroying mechanisms that cannot be foreseen in advance, this research also attempts to extend the framework to incorporate negative consequences of innovation, as suggested by Merton (2013), considering risks and complexity of societal infrastructure when introducing an innovation. It introduces an extension of the value creating mechanisms in organizations regarding innovation policy, more appropriate for the fierce innovation-age in today’s society in the field of managing innovation in relation to the Innovation Value Chain, discussed by Hall and Martin (2005). One cannot neglect the importance of co-production of value (Normann and Ramiréz, 1993) where the increasingly complex environment requires organizational re-thinking and re-invention of static value creation activities. The developed new framework relates to organizational sustainability where stakeholder importance is fundamental (Berman et a, 1999).
By arguing for sustainable thinking in terms of production is often something corporations have obstacles with (Haanaes et al, 2013). But sustainable production can be less expensive in the long-run, when investing in more expensive materials and methods together with a fundamental mind-set on thinking about lowering costs. Additionally, the mind-set regarding lowering costs of separate parts needs to be bounded instead of focusing on efficiency increase of the whole system of the corporation. Ways of carrying out business activities adapts to earlier practices, where effects on the society and environment were not as evident as in western corporations. Often these corporations try to palliate their damage on the environment by rebuilding, which are costly and underwrite breakthrough technology innovations (Haanaes et al, 2013). Relating to Vitousek (1994), he argues that “human land use/land cover change has transformed one-third to one-half of Earth’s ice-free surface. This in and of itself probably represents the most important component of global change now and will for some decades to come; it has profound effects on biological diversity on land and on ecosystems downwind and downstream of affected areas” (Vitousek, 1994). The relevance of this argument suggests organizational action-taking for sustainability (Haanaes et al, 2013). There have been many advantages from innovations (Winston, 2010). From the societal natural environment (society and the natural environment) rather than the individualistic perspective, and highlighted in Sveiby et al (2012), the topic of UCoI is often neglected in research. The innovation value adding mechanisms needs to consider non-value adding mechanisms for unintended undesired consequences of innovation, as highlighted by Hall and Martin (2005). Instead of viewing the natural environment and society collectively as secondary stakeholders, these need to be regarded as primary stakeholders. Figure 1 displays the contemporary interest in the field of NCoI found relevant regarding the societal natural environment (Figure 1).

1.2 Objective
Innovation is often positively attached to social welfare (Smith, 1776; Smil, 2006; Dosi et al, 2006; Clarkson, 1995; Swann; 2009), but to social wellbeing for preserving the natural environment; it is something found lacking in research. Strengthened by the arguments regarding the pro-innovation bias (Rogers, 2003) where innovation is positively related, this research intends to focus on the relatively new field of study in social science; negative unintended consequences of innovation (NUCoI) in relation to Corporate Social Responsibility (CSR)
practices of organizational activities. Innovation is referred to as a value-creating mechanism for organizational competitive advantage and increased welfare for society (Swann, 2009). The authors’ contribution to existing research is with the new Extended Value Creation Mechanism for Global Sustainability; the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability framework (SNE SFI GS-framework) for long-term competitive advantage. With the intention to highlight the importance of secondary stakeholders, the research intends to answer the following;

1. How would the first step of implementing of the new Extended Value Creation Mechanism for Global Sustainability, the SNE SFI GS-framework work in practice?

In addition, with an intended multiple-case study covering the consumer goods sector, the institutional sector and the social venture sector, answers the following the sub-question;

2. How do different managers in different industries consider innovation and negative consequences of innovation in terms of value, strategy, stakeholder-perception and sustainability?

1.3 Outline

Chapter 1: The first chapter displays the background with introduction to the research topic, the field of study, research problem and purpose relating to the research questions that are aimed to be answered with the intended research. It also provides the scope and outline for a more comprehensive idea of content for the reader.

Chapter 2: This chapter covers the methodology discussion followed by the chosen method relevant for the research. Relevant theory covering methodology and method is discussed for justifying the chosen method approach, with a line of argument regarding the methodology.

Chapter 3: For the theoretical background chapter 3 discusses chosen relevant theories and concepts for the research foundation. After theory reviewing and extensive research within the research aim, an extended new framework is developed, the SNE SFI GS-framework.

Chapter 4: This chapter concerns the empirical findings and analysis of the research. With a multiple-case study of three main sectors, insight is provided on how these work with value creation, innovation, sustainability and their view stakeholders from their perspectives.

Chapter 5: The final chapter includes a discussion concerning the empirical findings and conducted analysis related to the theoretical framework and the author’s contribution in the related topic of innovation policy, ending with conclusion and suggestions for further research.
2. Methodology

Saunders, Lewis and Thornhill (2009) provide a framework for undertaking a research project on realistic perspective. The term *method* means that procedures and techniques are used to analyse and obtain data. Interviews and questionnaires are included accompanied with techniques on how to analyse qualitative and quantitative data; non-statistical and statistical data. The term *methodology* refers to the manner research ought to be taken theoretically. A content analysis of 232 articles, combining these two approaches in the field of social science conducted by Bryman (2006), finds a cross-sectional design including semi-structured interview being preponderated by qualitative approaches. On the quantitative approach, cross-sectional design including questionnaire research and structured interview seems to prevail. The following section explains the method and methodology used for conducting this research.

There are many ways of conducting a research and therefore it is important to state which chosen methodology one finds appropriate to apply. Gephart and Robert (2004) highlight the importance of the relationship between methodology and theory. This prevails because of the need for researchers to express the theoretical view with methodologies that are consistent with respectively aims and assumptions. This research focuses on the phenomenon of NCoI related to stakeholder theory and sustainability. The particular empirical findings mainly come from different managers working in the chosen organizations, to give different insights with in-depth interviews. The following section describes relevant methodology and further justify why the specific method is chosen.

There are two starting points when conducting a research with relationship to theory. These are the deductive approach and the inductive approach that depends on the entering of the business research. The deductive method is when relevant theory guides the research for the intended topic, while the inductive approach is when research guides for an outcome of the theory itself. The process of the deductive approach starts with exploring relevant theory for stating a hypothesis, continuing with data collection and investigating in the findings. Then, the hypothesis is either confirmed or rejected and is concluded with a revision of the theory. In the inductive process, generalizations are taken out of chosen observations, observations or findings lead to theory. Depending on the research one aims to conduct, one can either start from the top (deductive) or the bottom (inductive) of the theory process, evolving into the research topic. The research method can both be qualitative and qualitative (Bryman and Bell, 2007). The qualitative method concerns emphasis on words in the research, rather than on quantification of data and analysis collection. This often emphasizes the inductive method with rejection of positivism and norms and practices of the natural scientific model. The quantitative method is often strategized by focusing on quantification in data collection and analysis. It has an approach of deductive nature with testing theories accompanied with positivism and incorporates practices and norms of the scientific model. The first method views social reality, entailed as an embryonic property in the individuals’ creation that continuously shifts. The latter views social reality objectively as an external reality, as argued by Bryman and Bell (2007). The first thing one need to consider is to explain and show the chosen methodological path of preference to follow with thoughtful and careful proposition of objectives or research questions. This begins with a systematic review of relevant literature (Yin, 2009).
Qualitative research highlights the individualistic reality views and the importance of talks and words to create text, suggested as a verbal analysis. It is much of a descriptive method that narrates how, why and when but also emphasizes on who said what to whom. Qualitative method explains observations in research with the providence of well-substantiated abstract insight. These insights have the aim of revealing the operations in specific cases focusing on broad theories and concept. In quantitative research, it differs in using a hypothetical-deductive model with the purpose of testing general propositions, looking at important variables for uncovering important relations. Qualitative research focuses on humanistic and intrinsically literary, while statistical and mathematical knowledge grounds quantitative research, as argued by Gephart and Robert (2004). One value advantage of a qualitative study is of real life organizational settings that constitute understanding and description of meanings, processes and human interaction. It highlights the importance of naturally occurring meanings with its high accessibility, lacking in distant if the quantitative method is considered. Both data collection and data analysis is involved in qualitative research. The challenges faced by research managers in terms of mathematical, measurement and statistical when using quantitative, calculative techniques or perspectives in qualitative data are something of occurrence. When using quantitative tools of analysis, labeled qualitative research, these challenges may be overcome. Another advantage of qualitative research is that it can provide memorable examples of different concepts and management issues, enriching the field of study. In terms of fundamental relationships and phenomenon amongst variables, it can serve as bases with fundamental management for understanding of social processes. By stressing human meaning and interaction, the potential to make theory and research more humane, is often acknowledged in this field, underlying the relationships and phenomenon amongst variables. (Gephart and Robert, 2004).

There are different ways to approach a qualitative study. Included are observations, case studies, textual analysis and grounded theory, giving one a choice of approaches are necessary the intended research. A case study describes a changing-over-time “case” or phenomena often using sources, combining qualitative and quantitative data with documentary or archival data. An interview can involve related methodologies and may be of different types. They involve sited interaction on a face-to-face basis, where typically respondents answer the questions posed by the researchers (Gephart and Robert, 2004). A case-study does not have to be confined to only observe a single case-study but can involve a multiple case approach (Bryman and Bell, 2011). Yin (2009) highlights the main obstacle to use case studies for the purpose of the research within the field of social science. Eisenhardt (1989) attempts to contribute in literature regarding case study researches and the way to build theories extracted from this, with describing the process by using case studies to persuade theory. Eisenhardt (1989) aims to add in social science research to be included in the larger perspective of placing case study theory building, as part of it.

Yin (2009) states the importance of conducting interviews if one tries to answer why some specific event has occurred. A conduction of a case study is preferred to be used for research on events that are contemporary but where non-manipulation of relevant behaviors exists. There may be an overlap of history and case studies. Technical reliance is of similar nature as in a history but includes two important features, often not included in the collection of the historian. Taken the event of study, these are the direct observations and personal interviews of the concerned. They
highlight the strengths of conducting a case study dealing with multiple evidence variety (observations, documents, artifacts and interviews), that might be lacking in the study of history being conservative. Gubrium and Holstein (2001) argue that interviews are becoming so widely used in society, that practically some form of interviewing is carried out when professionals and researchers are dealing with people. Qualitative interviews is where a specific topic or more of choice include conversation of a special kind between interviewers asking questions aimed for responders answering these questions. These answers are then listened to and recorded by the interviewer. The different ways of conducting an interview may vary and includes personal interaction, over the telephone, some may be audiotaped while others videotaped, depending on the current situation and circumstances (Warren in Lewis-Beck et al, 2004). Qualitative research with interviews from face-to-face interaction has the prospective to gain insight in overflow regarding peoples’ situations and lives, highlighting its unique feature of excellence. With the interaction of extended conversation exchange between parties trust, the respondents get an insight of understanding essential elements that relate to their own lives. From the interviewees’ perspective, interviews provide the importance discovery on the discussed elements. Limitations in interviews relate to biased answers and fear from the interviewers to the interviewees and vice versa, cautioning the reader to acknowledge the uncertainty of presented results. (Bean in Conrad and Cerlin, 2011). When conducting an interview there are many strategies one can choose to apply, especially when constructing a semi-structured depth interview. A classical semi-structured in-depth interview concerns fully structured questions that are partially prepared by the interviewers and researches with apprehension of the initial theoretical framework. There are also biographic-narrative interviews, where there is interviewing structuring on minimal level. Both of these types may have advantages (Wengraf, 2001).

2.1 Method
One fundamental requirement of qualitative research is that it requires methods that are qualitative. This highlights the importance to explicitly show how the research process was conducted and pronounce the transformed observations into insights, finding, data and result of the research practices conducted. The complexity of methodology used does not need to be a requirement and the account of the methodology does not have to be dominating in the writing of the report. For findings to be credible and comprehensive, it is also important to explicitly and clearly reveal data in terms of operations of concept. In sum, there is an importance in data analysis practices, as well as types and sources of data that deserve equal attention by the researchers for reporting. (Gephart and Robert, 2004).

This research mainly has the focus as an inductive multiple-case study. The starting point regards the phenomena of lacking research of unintended NCoI, in the field of social science. It combines both quantitative and qualitative research methods. The research started with readings on UCoI and then continued with relevant theories on innovation. Subsequently, the common link between them was identified as value adding mechanisms. While most innovations relate to the positive consequences of facilitating human life, the global society may be suffering in different aspects. While CSR practices are a topic of many researchers, often the stakeholders relating to these practices are secondary with conflicting goals than organizational profits. Therefore, this research focuses on contributing to the theoretical field of stakeholders relating to innovation to emphasize
the importance of taking into consideration the NCoI. The theories are then applicable to the intended multiple-case study. Bryman and Bell (2007) describe a multiple-case research, working as extension of a case study design, where the focus in on a comparative design since the common purpose for these analyses is of a comparable nature. With comparing similarities and differences in various cases, the researchers are encouraged to view the findings with theoretical reflection. The chosen approach is cross-sectional design where emphasis of the study tries to produce general findings. Each case is treated with the same regards of importance with little context preference of one specific case or the other. To prove this phenomenon as applicable to a specific multiple-case research and the level of analysis (Bryman and Bell, 2007), is individuals working in three differing fields of the consumer society; institutional, capitalistic and socialistic venture. The in-depth interviews provide the research different perceptions about how people actually regard their working-place in taking into consideration the NCoI at management level. At occasions regarding the organizational level of analysis, insight on how they actually state working with the issues is perceived from public statements. As the consequences of innovation on the societal natural environment rarely is the outcome from one specific organization, generalization on these facts are highlighted as an introduction to the empirical findings. The purpose of the conducted in-depth interviews intend to give insights of how real-life practices and different aspects of situation looks at NUCoI. The interviews highlight the unawareness of considering the negative consequences, in relation to the societal natural environment. Preparations before conducting the interviews were based on the development of the theoretical framework, thus this and additional information about the research subject (Appendix 1), before the actual questions were handed out. This gave the interviewees a chance to grasp the subject and reflect upon the issue of the negative side of innovation. Pre-interviewing was one element when conducting the interviews with all the potential interviewees, since it was found more relevant for the intended topic, some via e-mail while few face-to-face. This also gave them the chance to think and provide critical thinking for their responds. These interviews were sent out via mail where continuous conversation and taking notes was conducted regarding the different aspects.

Out of our conducted interviews, all of our participants, except one, wanted to be kept confidential in terms of revealing their real names or the organization they worked within. This was the case because of 1) the research topic including a critical viewpoint, 2) it is a relatively new field of study in social science and 3) the topic related to organizational social responsibility and innovation. The organization with the respectively CEO who wanted to be stated in the research was GreenEarthCitizen, with Fen Wang. This was since they work for preventing harmful effects on the societal natural environment. Therefore, publicity for them would be beneficial since it is considered a startup organization. All other interviewees and information about the chosen organizations were kept confidential, as agreed and stated in the introduction letter included for the interviews, where they had the option to be kept confidential if preferred. Confidentiality agreements are stated as an option in Bryman and Bell (2007). With confidentiality as a major fragment of the findings, it is important to keep in mind the magnitude of information one reveals about the participants and the ethical trust the interviewees give to the interviewer (Bryman and Bell, 2007). One of the interviewees was a CEO who spoke Chinese and therefore the authors of this research used a translator from their seminar-group to help form
applicable questions and transcript the answers from Chinese to English. The research also included a quantitative method, where approximately 100 students mainly in campus area were asked the simple question “what is the first thing do you think when you hear the word innovation?” and they were told to either state a word or a phrase. Out of 107 respondents, 100 were conducted face-to-face and 7 via instant chat and text-messages by phone. The face-to-face interaction was conducted by one of the authors and additional help from another seminar group working with their research with gathering the answers for the authors. One of the respondents wanted to use Google for answering the question. All the respondents remain confidential. Additionally, 4 employees from an Asian corporation producing spare parts and accessories in the automobile industry participated with briefly answering the authors’ questions via e-mail.

2.2 Quality of Research

2.2.1 Validity and Reliability

Three different evaluation criterions in management and business research are dominated by reliability, replication and validity. Validity refers to whether the research generates conclusion integrity or not (Bryman and Bell, 2007). According to Hesse-Biber and Leavy (2011), validity is a process where the researchers have credibility earnings from the reader and receives their confidence. For providing validity in this research, the authors have used credible books and articles from academic literature but also add critical support and insight from different perspectives in different settings, in terms of the empirical findings. Since it includes a general contribution to theory, it can be adapted to different contexts and provides a broader perspective of the subject giving a more unbiased contribution, as argued by Hesse-Biber and Leavy (2011). Whether the results of the study are repeatable or not, distresses the reliability of the research. Consistency of concepts in management and business is commonly relational for questioning the devised measures (Bryman and Bell, 2007). Using a combination of qualitative and quantitative methods stretches insight from different perspectives, giving the reader the possibility to reflect on the discussed subject since the topic is relatively new in the field of social science and insights from different perspectives are considered. Because of continuous feedback sessions, critical reflections from different views have been taken into consideration for formality reasons. Since the intended research contribution is combining different theories to come up with new contributions, replication is not considered as a major criterion. Replication refers to duplication findings of other researchers (Bryman and Bell, 2007).

2.2.2 Scope

The scope of the research includes materials from published articles in academic journals, academic books often with experienced authors combined with books in human philosophy, in order to make it more interesting to read. The findings are mainly based on conducted interviews and respectively official publications on related information. In total, 12 respondents were used for conducting the in-depth empirical findings and the analytical framework. Additionally, 107 respondents answered the question regarding innovation-assumption. Since the originators for terms such as strategy, management and innovation and society relating to business has been in research for a long time, the research tries to give a wider perspective for the readers to understand the NCoI due to the novelty of the topic. It focuses on combining stakeholder theory
within social science in relation to sustainability. The SNE SFI GS-framework intends to be used for considering secondary stakeholders as primary, highlighting the evolving society in relation to the natural environment and firms as responsibility-takers in relation to innovation. In regards to creativity, most of the illustration is made by the Windows program Paint if nothing else is mentioned with the intention of making a standpoint with using the “old school” thinking making the research more interesting and original.

2.2.3 Delimitations
The focus of this study is mainly an approach to contribute in research concerning the subject of NCoI, by combining the lack of research in social science within this field with stakeholder theory and sustainability. Research concerning UNCoI is a very limited field, as suggested by Sveiby et al (2012). The suggested contribution only concerns a perception of reality in relation to the literature review. The field of study about NUCoI has a limited variety of research in social science. In combination to other fields, it may give the reader some awareness and hopefully future research on the topic to become. The in-depth interviews are conducted on 3 primary interviewees from three different sectors; institutional, commercial and social. Additionally, more interviews were conducted in different industries for a more comprehensive understanding. In attempts to conduct more interviews, the results of the answers were found to be of less relevance since the depth of the answers were unexpectedly vague. Therefore, these interviews were used for comments and making the analysis more inclusive. In total, 12 study participants were used for conducting the in-depth empirical findings and the analytical framework. Additionally, 107 respondents answered the question regarding the pro-innovation bias. The interviews were conducted via e-mail for giving the respondents the flexibility to reflect and understand the aim of the research. As the result presents, only the main findings were selected from the interviews for the empirical findings and the analysis. With the main contributor from the interviews (“Johansson”), continuous contact were kept via phone and e-mail, for getting the most out the time the authors had to complete the research. Most of the findings are held confidential on request of the participants. The research does not include in-depth analysis of a specific field in relation to innovation, but rather aims to provide contributing in the gap regarding research related to UNCoI, focusing on sustainability (figure 2). The research do not intend to look at annual reports and websites for main sources of findings and are hence only used in relation for a fraction of the interviewees’ answers with most of them kept confidential on request.
Figure 2; authors’ position in research regarding NUCoI
3. Theoretical Framework

This chapter covers the fundamental theories relevant to this research. Different definitions in the field of innovation, stakeholder theory with the perspective on society, the natural environment and value creation on a long-term basis are used. As a common feature throughout the research, quotes from Charlie Chaplin’s speech in “The Great Dictator” is used. The main contribution is to regard the society and natural environment as primary stakeholders with current primary stakeholders acting as intermediaries for managing NUCoI of business innovations regarding innovation policy.

“Even now my voice is reaching millions throughout the world….The misery that is now upon us is but the passing of greed, the bitterness of men who fear the way oh human progress”

- Charlie Chaplin from the “Great Dictator”

3.1 Human social progress with innovation and the profit mind-set

A society can constitute of a biological family implementing principal functions with morally accepted institutions. However, egoism is something that lies in human nature (Santayana, 2005). The socio-biology challenge regarding the altruism natural selection suggests considering the interaction of altruists’, egoists’ and utility maximization behaviour (Becker, 1976). Despite the natural tendency of egoism, it is essential for the human to understand his imagination becoming affectedly and intellectuality fair instead of inconsiderately, thoughtfully imaginary as in a lingering manner (Santayana, 2005). Greed has always been in human nature with a reproduction and preservation instinct. Although greed has a biological basis, more strength lies in the social basis (Sharma, 2006). Relating greed to egoism, Becker (1976), argues that egoists’ fortune may be greater because of their willingness to take every act for increasing their wealth, disregarding the effects brought on others. With human nature regarding technology use, power of controlling the environment extending to species modification is today possible (Winston, 2010). Innovation is identified by Joseph Schumpeter (1939) as a distinct transformation factor internally when detached from invention. Drucker (1895) argues concerning the positive outcomes of innovation in society where both innovation and entrepreneurship is needed in the economy, businesses, society and public-service institutions. As an organizational competitive advantage, innovation serves as a major source of contribution (Goswami and Mathew, 2005). However, Dosi et al (2006) state that “the obvious premise is that some expectations of “profiting from innovation” is and has been throughout the history of modern capitalism a necessary condition for entrepreneurs and business firms in order to undertake expensive and time-consuming search for innovations themselves” (Dosi et al, 2006, p. 1118), where firm-specific capabilities determine the success regarding a specific innovation allowing the organization to “profit from innovation” (Dosi et al, 2006, p. 1120). Larson (2000) strengthens where entrepreneurship concerns innovation. With encouraging innovation (Goswami and Mathew, 2005) and the nature of egoism (Becker, 1976), evidence reveals the production of hazardous waste, damaging the earth and oceanic ecosystem with higher rates of mortality and morbidity to humans and non-humans. The
dumping of hazardous waste is an environmental transnational inequality that occurs across national borders (Pellow, 2007). Management systems in hazardous waste facilities have been discussed in literature for managing the challenge (Elliot, 1984; Smith et al, 1986). All organizational sectors generate technological developments contributing to toxic chemical waste (Pellow, 2007). Hazardous toxic waste can be seen as a NUCoI since it damages the natural environment and the people living there, in societies.

In the book “Challenging the innovation paradigm” the good and the bad aspects of innovation is discussed. Through a brief discussion between Professor Karl-Erik Sveiby from Hanken School of Economics and Professor PH.D Karl-Heinz Leitner from Austrian Institute of Technology (Appendix 3 for dialogue), aspects concerning undesired UCoI are brought up. Because of complex and constantly changing business environments, societies have difficulties regarding awareness of UNCoI and for people to foresee such mechanisms (Hanken External Relations, 2012). Although different concepts regarding sustainability rests on the notion of improvements in efficiency apropo resource or energy, overestimation of possible saving properties are inclined. This is due to ignorance of behavioural replies induced by technological enhancements (Binswanger, 2001). There is a motive amongst individuals to push forward innovation forms and models trying to avoid NCoI with sustainable and energy saving technologies in the beginning phase of the innovation. However, pressure to innovate brought upon organizational workforces may cause issues with mental health, another aspect of NCoI (Hanken External Relations, 2012). Unintended NCoI is the unforeseen negative aspects of innovations. Although extensive theory about innovation has been conducted in research, often so neglected are the NCoI (Sveiby et al, 2012).

3.2 The emergence and dependence on innovation

Disregarding natural catastrophes or the biophysical preconditions, the world today contrasts in almost all other facets than it did centuries ago. Extensive social changes and accelerated intense economic progress have extended and advanced by these undertakings mainly due to the new innovations commercialized and the technological innovation overflow (Smil, 2006). Santayana explains; “In the workaday world, determining the purpose of productive activity is rarely problematic. Some problems needs remedy, or some function would benefit by improved efficiency” (Santayana, 2011, p. xxxvi) relating to the complexity of todays’ world, where the majority of people lives in excessive man-made environments (Smil, 2006). The human capabilities of cognitive kind reach far more sophistication than any living on this planet. The fastening of the innovation pace accelerated with modern humans over the last fifty thousand years (Fagan, 2004). Santayana (2011), in “Reason in Art”, described art as “the paradigm of all productive activity” (Santayana, 2011, p. xxxv). Continuing, he describes human progress as art that enhances the state of existence. Today, our everyday livelihood is inattentive with different kinds of technologies. The technologies by themselves are as important as the experience and skills behind it. The capabilities of true inventors are not easily understood since it requires seizing on chance, experimentation requiring patient and quietness, fulfilling a need or careful observation (Fagan, 2004).
The dependence on complex technical systems with infinite number of processes, machines and devices affects almost all aspects of our lives. These complex system interactions functions with drifts of electricity and fossil energies without interlude. Countries with low income are more reliant on these advances in technicality. If it would not have been for the developed pesticides with irrigation and artificial nourishments, both China and India would not have been able to produce massive food for their overwhelmingly large population. These countries raising their living standards partly depend on the production of global markets and the access of shipping that is containerized, computerized and involves telecommunication (Smil, 2006). Anthony et al (2006) argue regarding the unpredictability of an innovation process swarming amongst investment, quality and speed tradeoffs that may become cheaper, better and faster. With more efficient resource allocation and accelerant innovations of highest potentiality, companies have the prospective of success highlighting the efficiency gain of innovation (Anthony et al, 2006). With these, technical advances, higher standards of living, rise of life expectancy under the 20th century and welfare likening in the Western world prospers with global similarities (Smil, 2006).

3.3 Innovation in relation to NUCoI

It lies in human nature to do things in better and new ways. Although the important contribution of innovation in today’s society, scholars have not always gave it the deserved attention it ought to have. However, in recent times the trend seems to be reversed with many publications regarding innovation in social and economic change. Publications in social science regarding innovation have increased more than other publications in the same field in recent years (Figure 3). Subsequent is the increasing knowledge for society within the field of innovation processes, the social and economic impact of innovation and their determinants. (Fagerberg et al, 2005).

As an organizational competitive advantage, innovation serves as a major source of contribution. Even though innovation has been given attention and resulting enthusiasm, there has still not been a widely accepted agreement on how to define innovation amongst earlier research. The way to measure innovation can be troublesome creating one of the greatest obstacles for understanding. Different authors define innovation in different ways. In many arguments, the value of innovation lies in adding economic value or giving profits. Depending on how the organization defines innovation, it can create a success-factor for the organization (Goswami and Mathew, 2005). Famous economist Schumpeter differs between five types of innovations. These
are new methods of production, new products, new sources of supply, new ways to organize businesses and exploitation of new markets (Fagerberg, 2003). In the book “Innovations and Organizations” by Zaltman, Duncan and Holbek’s from 1973 (cited in Van de Ven and Rogers, 1988), innovation in an organization context have certain distinctive characteristics. The main contributing variable being studied is the shift of study to implementation from adoption. Ulwick (2005) describes four different ways of adapting innovation in corporations. These are service or product innovation, new market innovation, disruptive innovation and operational innovation. If the corporation is a start-up, an existing firm or if the market is mature or growing, different ways of innovation are adopted. The Organization for Economic Co-operation and Development (OECD) categorizes innovation into four classes. They use the Oslo manual for measuring innovation where these are product innovation, process innovation, marketing innovation and organizational innovation (OECD, 2013).

Grant (2010) states that innovation is typically something in terms of product or process innovation where embodiment of technology is made. In the context of strategy, innovation can serve a key source of competitive advantage working as strategic innovation. In strategic innovation, new business models are included as new approaches to do business. In the context of management, innovation requires a different set of management skills and knowledge for enhancing competitiveness than ordinary business administration (Tidd et al, 2001). Anthony et al (2006) highlight this argument by the assumption regarding the ability for companies to decide where they want to implement their innovation strategies. There is a difference between an innovation and invention given that these sometimes may be very closely linked to each other (Fagerberg et al, 2005). Brozen (1951) explains the link between invention and innovation with noting an invention as one of the more essential feature impacting the innovation rate (Brozen, 1951). Fagerberg et al (2005) refer invention to the occurrence of an idea of a new process or product, while innovation denotes carrying the out invention into first time practice. The requirements to carry out an invention in order for it to become an innovation is based on that resources normally such as capabilities, skills, resources and knowledge is needed in a combinative way. The time lags between the occurrence of an invention and carrying out the innovation (or to market it) may have to do with the lacking need for it at the current occasion. This has to do with the lacking availability of essential complementary resources and inputs (Fagerberg et al, 2005). Sahal (1983) adds that the time between invention and innovation varies depending on the specific situation. Holmquist (2012) also distinguishes the difference with having an idea and creating it. While an idea of something new is an invention, the actual creating process of an object affecting the world is an innovation. Invention, alongside with entrepreneurship is generally regarded as human activities of the most ‘free’ kind but at the same time incurring iron rules (Marchetti, 1980). Swann (2009) explains the difference between innovation and invention in a similar way. He states that innovation is not just about new idea generation; it is about commercial exploitation. Because of complexity and time-consuming processes, often inventions never make it to be innovations (Swann, 2009).

Relating to innovation of magnitude, Ahlstrom (2010) argues, the creation of new businesses through disruptive innovation has occurred regularly over the past two centuries and has led to the establishment of a range of new industries (Christensen, 1997). Major new markets created in
recent decades by disruptive microcomputers and other portable information technology devices have grown to more than ten times that of the previously dominant mainframe computer market, with much more growth expected (Anthony et al, 2008). Disruptive innovation, according to Penrose (1959) and Peng (Peng, 2003; Peng, 2001; Peng & Heath, 1996) suggests number of ways that firms can grow. Ahlstrom (2010) explains that some recent research add to the importance of firms staying close to their core skills and utilizing scope economies when possible (Slywotzky and Wise, 2004; Zook, 2004). In sum, innovation is an organizational practice generating beneficial output with inputs.

Figure 4; displaying the difference between invention and innovation

Author’s own elaboration based on literature review.

3.4 The relation to NUCoI, when innovation creates output and wealth

Marchetti (1980) states that “invention and innovation during the last 250 years appear in precisely structured waves that lend themselves to robust prediction” (Marchetti, 1980, p. 267). Despite this, NUCoI are often neglected until they actually occur. This is because they are literally unintended consequences. Swann (2009) states that the original initial intention and effect of an innovation may appear neutral but are often regarded as beneficial in relation to the environment. Considering the implications in terms of industrial structure, overcrowding, obsolescence and transport, the environmental effects can be changed drastically. This is because wealth creation by innovations often refers to material wealth in the sense of tradable goods and services produced (Swann, 2009). John Stuart Mill argues that wealth is commonly known with a notion to everyone normally accurate for sufficiently purposes in his book “Principles of Political Economy”. Wealth is a sum of articles regarding value produced. Value, in turn is based on cost of production (Swann, 2009). John Ruskin defines wealth and value differently in an insidious matter by stating value as “to avail towards life” (Ruskin et al, 1994, pp. ix). He notices something that classical economists often did not; judgements that were biased in determination of what humans counted as wealth or valuable. In his view, this is of crucial importance (Ruskin et al, 1994). The difference between mercantile wealth and ‘Ruskinian’ wealth is where the former relates to traded wealth and the latter relates to transferring the material wealth (mercantile) into wealth for quality of life. Although much literature has been written concerning the relationship between happiness and economic growth, the findings in these claims suggest the relationship far from clear-cut (Swann, 2009).

Winston (2010) highlights the lack of public dialogue with scientists when it comes to a society with magnitude of technological advancements. Better methods of control are needed to stay
away from harm caused by the enlarging influential tools used. This can be made possible with engagement between community and the technology and science sectors to create a successful living, where all aspects of the community need to get involved. This is required for a better understanding and learning about science, for eventually having a say on how the usability of science is used. Winston (2010) questions if human made resourceful ideas actually always have developed into merely desirable results with the good intention it originated from to continuously function for human wellbeing. One needs to realize that the control and regulation of the earth is something out of peoples’ control. With the increase of refined mechanisms and the complexity of ideas, increase of controlling the environment and improvements of human life is realized in multiple ways. Increasingly, nearly all the technologies developed gets threatening making one take into consideration of this exposure. Despite celebration of these achievements, these improvements might bring humans, animals and plants on earth closer to destruction. Global warming and climate change are examples of human made consequence argued by many scientists to be an outcome of human making (Winston, 2010). Vitousek (1994) strengthens the argument concerning global warming with stating that a number of fragments in changing the global environment are caused by the human. These changes are referring to ecological changes with significant ecological consequences (Vitousek, 1994). Regarding these consequences Winston states; “It is very clear that in the modern society we have to be much more responsive, I think and recognize that, a, the adverse effects of what we do has an effect on society as much as it has on us...And therefore, a, ethical responsibility is something which we need to think about fresh which we haven’t done before. Ethics is not taught to science students except in medicine, virtually at all routinely. And I think it should be, I think it is one example of what I’m kind of pleading for...every aspect of our inventiveness has a downside, ahm, that, ahm... there is a dark side to every advance and that’s generally not recognized at the time that the advance is first published ...” (TheGuardian, 2010). In relation to Winston’s (2010) statement of a complex society, Lewin (1999) describes a complex system as “one whose properties are not fully explained by an understanding of its parts” (Lewin, 1999, p. x). The human society as a complex system with intercession is not one-sided. This complex system reacts in different ways depending on the situation when arty is made to bring about change. Some of these different reactions are intended while others are unintended. The intended reactions depend upon to incur the changes with the intervention as designed. The unintended reactions are a consequence of the planning for the intervention that did not have the expectance of these reactions at all (Aoi et al, 2007).

Sveiby et al (2012) argue that most innovation research is conducted to distress what is economically valuable for change agents and innovating corporations, on what can be directly quantifiable. They find that only 0, 1 percent of an article search in peer-reviewed journals regards undesired and UCoI and respectively only 0, 4 percent of 6 handbooks are mainly significant. Neglected is research about unfavorable consequences of innovation for further stakeholders (except unemployment) in society. When more innovations are related to positive outcomes, the effect of it is a similar increase in the NUCoI, as Sveiby argues (Hanken External Relations, 2012). Winston has a similar opinion where he states that “you can’t control science, so to some extend you actually have to control the effects of science” (TheGuardian, 2010). In sum, climate change and global warming can be seen as a NUCoI in relation to sustainability.
3.5 Connecting relevant theorist views regarding UNCoI and the Pro-innovation Bias

Different authors from the 20th century and earlier discusses about innovation and its consequences. Starting with Schumpeter’s theory and definition about innovation from 1939, additional included are Rogers’s communication theory from 1983 on the diffusion of innovation (with newer editions available from 2003), Merton’s theory on the field of sociology from 1936, economic theory relating to Adam Smith’s work on tracing back to the 18th century and stakeholder theory developed by Freeman in 1984. What needs to be highlighted is Rogers differing view in his theory of innovation diffusion when describing consequences. These are the differences between direct versus indirect, desirable versus undesirable, anticipated versus unanticipated (Sveiby et al, 2012). In the dominion of economic life, innovation refers to doing things differently. Joseph Schumpeter (1939) identifies innovation as a distinct change factor internally when it is detached from invention. It is internally associated because turning the internal processes of the existing factors of production into new ones, making it an economic process. This is a purely capitalistic behavior in a capitalistic society. He defines innovation as a new production function that is set up, covering new forms of organizations, opening up new markets, introducing a new commodity and further on. Innovation is to carry out new ways as of combination of new factors. In an economic sense, each time an innovation is introduced with fixed prices to a factor of production, the quantity of output costs less than before (Schumpeter, 1939). Rogers (2003) explains diffusion of innovation as one of the essential building blocks of processes by humans, amplifying social change. Diffusion is concerned with forwarding messages of new ideas through communication. Uncertainty is of importance since it concerns newness. The uncertainty is high if many alternatives exist in comparison to the new diffusion where information-seeking is motivated by uncertainty. To seek information depends on the set of alternatives that exists, causing a matter-energy (Rogers and Kincaid, 1981 cited in Rogers, 2003). An innovation can generate uncertainty. Rogers (2003) defines innovation as a newly perceived object, practice or idea by a unit adopting it. It gives the organization or individual new ways for problem-solving together with new alternatives. For the potential user of the new innovation, he or she tries to find information because of the uncertainty associated with it. The uncertainty lies in the unknown superiority of the new idea compared to previous practices. Innovation is associated with social construction on a process-like basis since it involves subjective evaluations from peers about the innovation for information grasping. The meaning of it is worked out by degrees. Diffusion of innovation is a network of interpersonal convergences where information swapping evolves of an innovative idea. It is where individually apparent new-idea information is conversed by a social progression on a one-to-one basis (Rogers, 2003).

There are different factors affecting the unanticipated consequences of positive action (Merton, 1936). Firstly, it is the uncertainty of knowing the consequence of an action with unawareness of every certain aspect of a given situation, involving scarce resources of energy and time. This is the factor of ignorance perceived. It includes psychological limits affecting the outcome for a possible unexpected result. The second factor concerns error where the expectation of same occurrence needs to be taken into consideration that may not always be repeated in the next case of the same occurrence. The third factor evolves from the actor excluding other or further consequences of the action taken with interest including instance arrogance. This may be related
to Adam Smith’s invisible hand theory where the intention of the act leads to an end that was not assumed. The forth factor deal with human basic values. No further consequences are to be taken into consideration because of certain fundamental values for the human, felt with the necessity of the actions taken. The orientation of certain values from activities releases processes that change the value scale, originally triggered. Fifth, the dealing of social development is mentioned incurring unanticipated consequences because of public predictions changing the cause of events initially being a human conduct issue. This is because these public predictions are not precisely sustained on a regular basis. These five factors described by Merton (1936), are hindering the possibilities of stakeholders and agents to predict accurate consequences. Figure 5 displays these five factors in a more comprehensive approach based on findings in Sveiby et al (2012).

Figure 5; hindering factors for consequence prediction regarding stakeholders, in Merton (1936)

Source: Sveiby et al, 2012

Freeman developed a framework regarding strategic management in 1984, highlighting stakeholder importance. It is a framework where services-providing organizations and businesses are facing unstable times. From the “production view of the firm” (Freeman, 1984. p5), where consideration was taken in three steps excluding direct consideration of the environment (from the supplier to the firm and last the customer), changes were created for new corporate conditions. When new sources of power, technologies, new production processes, and changing demographics accompanied with political and social emergence, the role of management became a central factor separating the merging stake between control and ownership. Along the development, external change became increasingly important where an existing model or method of the organization, excluding the environment, were no longer working. This was because of entrance of new issues, events and groups which could not be explained by existing frameworks and needed further file ordering. With external change comes uncertainty. The essence of Freeman’s (1984) theory is to include stakeholder groups such as environmentalists, governments, media, foreign competition, consumer advocates and other special interest groups previously not considered to the same degree. At the same time, developing a new conceptual approach when dealing with traditional external stakeholder relations with suppliers, consumers, employees and owners, is essential. He defines stakeholders as an individual or group who is affected or can distress the achievements of organizational objectives relating to the content of an organization (Freeman, 1984). Sveiby et al (2012) defines this introduction as innovation, relating to Freeman’s overview to the achievements of objectives of the organization (Freeman, 1984).
Figure 6 displays the connection of the theories by Merton (1936), Rogers (2003) and Freeman (1984). As with most ratings of theory, some aspects may overlap. The negatively affected outcomes of innovation and the consequences of them found undesirable, as described by Sveiby et al (2012), is found fundamental in the described connection. It highlights the difference between unintended indirect and direct consequences of innovation. It is found that indirect, undesirable effects of innovation are afflicting upon bystanders, social structure and society, whereas direct undesirable consequences of innovations mainly effects consumers and organizational employees. The main common feature foreseeing undesirable consequences as a parable limiting the ability of actors is found to be myopia. Managerial myopia hinders introduction of processes in terms of the organizational context but also in relations of industry innovation reduction and reliance growth for societal development aid (Sveiby et al, 2012).

Additionally, a review of article findings conducted that in a total of 26 300 innovation articles, only 26 were found relevant for to the subject of unintended and undesirable consequences of innovation (Figure 7) based on types of innovation, the undesirable consequences of innovation, stakeholders, change agents and their research methodology respectively (Sveiby et al, 2012).
One possible factor that may boost the presence of NCoI is the Pro-Innovation Bias. The Pro-Innovation Bias refer to "the implication in diffusion research that an innovation should be diffused and adopted by all members of a social system, that it should be diffused more rapidly, and that the innovation should be neither re-invented nor rejected" (Rogers, 2003, p. 106). The Pro-Innovation Bias is seldom stated in a straightforwardly manner in publications about diffusion but is something implied and assumed. This can lead to dangerous intellectual sense of recognition. Research ignorance due to the bias leads to a lack of study in anti-diffusion agendas with the design purpose for preventing ‘bad’ innovations and their spread. People, to a greater extend know much more about the successes of innovations than innovations that fail. To avoid the Pro-Innovation Bias is to investigate diffusion in a broader context. This may include involving change agent’s decision to diffuse an innovation. Or it may be a research on how an innovation creation starts in the beginning of the Research and Development (R&D) phase to the final form of the innovation (Rogers, 2003). For the personnel working with R&D it is suggested that “the R&D people must be free to think up new approaches, and they must also be closely coupled to the problems and challenges where innovation is needed” (Cohen and Levinthal, 1990, p. 135). Figure 8 displays this idea where the research starts before the implementation phase of the innovation. The data gathering ought to start where the indicated blue circle is illustrated in the figure for conducting research. For instance, these may involve research regarding prevention of ‘bad’ innovation (Rogers, 2003).

Abrahamson (1991) adds to this argument about the bias regarding pro-innovation by indicating the reviews in literature suggesting the occurrence of diffusion and diffusions of innovation benefitting their respectively adopters. To overcome these innovation diffusion-literature assumptions and biases about innovation, theory development can be created for organizational academics to study technically inefficient innovations and diffusions of them, as well as rejecting efficient ones on a technical basis (Abrahamson, 1991). A more recent research questioning the benefits and purpose of innovation is conducted by Hull and Kaghan (2000). They argue that in many conducts, rather than focusing on equilibrium, the emphasis is highlighting deviations that may enable societal positive changes. Change management that focus on an explicit matter, both flexibility and innovation, may often façade toughening of underlying disparities (Hull and Kaghan, 2000).
The Pro-Innovation Bias relates to how general opinion regarding a term or subject often is positively evaluated. In this case innovation is related to something progressive (Abrahamson, 1991; Hull and Kaghan, 2000; Rogers, 2003). Baumann and Martignoni (2011) argue that using a Pro-Innovation Bias may enhance the exploration effects with increasing the performance in stable and complex environments on a long term basis. If the bias is becoming too pronounced the reverse effect might occur with a substantial decrease in performance. Adding, Nelson and Winter (1982) highlight the importance and interest of economic change. Fazio and Olson (2003) discuss the importance of attitudes in the psychological world nowadays when thinking in terms of the negative or positive aspects. For example the human ability to think regarding the ‘good’ or the ‘bad’; ‘avoid’ or ‘approach’; the ‘desirable’ or ‘undesirable’, are all outcomes emerging from attitudes. If these were not to exist there would be a lack in positive tendencies towards outcomes in an optimistic nature or tendencies of progressive outcomes. There would be a lack in the mental ability for avoiding negative aspects, surrounding the individual environment. Questions might rise such as; “How do we come to evaluate objects in our environment as positive or negative?” or “How are they represented in memory, and how does this representation affect the ways they operate in predicting behavior?” (Fazio and Olson, 2003, p. 123). These questions have been proven in history to be part of the most challenging and important in social psychology (Fazio and Olson, 2003).

Jansson (2011) suggests consumer behavior as connected to norms and attitudes in consumer adaption. Ajzen and Fishbein (1977) strengthen this assumption regarding the correlation between attitude and behavior with the examination concerning correspondence of behavioral and attitudinal entities concerning their conducted research. Schlenker (1978) raises the identification of attitudes as a construct that are interpersonally patterns of response towards social objects and (or) events of particular kind. It can be either favorable or unfavorable. He puts his definition explaining “Attitudes is usually defined as the amount of positive or negative affect held toward a particular object and/or event” (Schlenker, 1978, p. 352). Regarding innovation theory, innovation refers to a change in routine. With innovation, uncertainty follows on terms of designing a new product, establishing a new market policy or a new way of product production to mention a few examples. The uncertainties generally concerns two main differing kinds; the precise nature of the innovation occurrence and the consequences of innovation employment
(Nelson and Winter, 1982). Relating back to Baumann and Martignoni (2011) regarding the Pro-Innovation Bias, they suggest that under most differing conditions, disregarding the complex- and stable environment in relation to the long-run performance basis as they argued for, an objective evaluation that is unbiased for opportunities with a novel nature for effective outcomes is more preferable suggesting the negative aspects of the Pro-Innovation Bias. In relation to efficiency, Binswanger (2001) discusses the rebound effect where an increase in efficiency often tends to result in a demand for resources. An 1% increase in efficiency often have far lower than 1% resource use reduction, occasionally even an increase the resource use (Binswanger, 2001). Where industries increase in rapid development, often they are seen as laggards for sustainability. Although the citizens are raised from poverty, the protection of the environment is often neglected. In markets where recourse depilation is intense, efforts on corporate responsibility in terms of sustainability have developed to be an innovation source. Recently, a study conducted by the Boston Consulting Group together with World Economic Forum reveals companies in the developing world having the most effective sustainability practices. Their suggestion exposes the power of sustainability practices for redevelopment of businesses that face resource limitations and limitations regarding buying power from the customers that actually may benefit the companies (Haanaes et al, 2013). In other words, sustainability can be a source for value creation.

3.6 Value Creation in innovation related to UNCoI
“Let us all unite. Let us fight for a new world, a decent world that will give men a chance to work that will give youth a future and old age a security”.

Charlie Chaplin from the “Great Dictator”

3.6.1 New Value Creation Chain
The logic of value creation has changed, raising strategic importance in terms of thinking and making it more complex (Normann and Ramiréz, 1993). Pagani (2013) defines value creation as “the output of a process that encourages creativity and diversity, yet does not allow the players to go out of tune completely” (Pagani, 2013, p. 627). The traditional value thinking underpins the industrial model of the economy with attached assumptions about it. Viewing strategy in an artistic manner, the aim is to understand the value chain and then placing the company in its right place. This view assumes that the value chain is occupied with different companies at every specific position. Figure 9 provides the previous view of value-creation as static where each part of the chain contributes to the value-added, represented by Normann and Ramiréz (1993). Conversely, with changing markets, technologies and globalization, new value adding activities have opened up. Drastically growing options for customers, suppliers and companies have increased alongside with more uncertainty and risk. Past forecasting becomes unrealistic and marginal factors become change key drivers in companies’ key markets. Further, unrelated sectors with invaders may change the rules of the game overnight (Normann and Ramiréz, 1993). Nowadays, companies cannot act independently and customer importance regarding co-creation of value is of essential importance where interaction is highlighted (Prahalad and Ramaswamy, 2004).
The task for successful companies is not fixed to merely value adding anymore but to reinvent the value in the competitive environment thickened with unpredictability. The focus is on the whole value-creating system. Involved economic actors are the allies, customers, business partners and suppliers for co-creating value (Normann and Ramiréz, 1993). Chen et al (2012) suggest voluntary participation, commitment and individual contribution being essential for initiating co-creation of value. In order to organize value creation by new players in new forms assemblage, the key task relating to strategic thinking is role and relationship reconfiguration. The main task is to continuously create improved organizational fit between customers and competencies. Normann and Ramiréz put it in this way “successful companies conceive of strategy as systematic social innovation: the continuous design and redesign of complex business systems” (Normann and Ramiréz, 1993, p.1). Prahalad and Ramaswamy (2004) nurture the argument regarding the customer-corporation interaction for value creation and suggest process understanding through four building essential blocks; transparency, access, dialogue and assessment of risk.

The new value creating mechanisms are denser in that they provide more than just a simple product. They satisfy more than one essential need or want with value packed in offerings in a far greater extend today than previously. Three strategic implications for companies are presented within this view. The first is to acknowledge that the competitions are no longer between firms as much as it is for the offering to the customers, where they take value for themselves (Normann and Ramiréz, 1993). Relating to Prahalad and Ramaswamy (2004), they highlight the interaction between companies and consumers for co-creation with a focus on individualistic perception. Continuing, Normann and Ramiréz (1993) suggests that the total offering involves a wider range of actors such as allies, businesses, suppliers and partners in new combinations where individual offerings have the same importance as the complete value creating system. Thirdly, the only relevant competitive advantage is to take and make the entire value creating system work since co-produced offerings of value for the customers is found as a key factor (Normann and Ramiréz, 1993).
3.6.2 Value Chain á la Michael Porter

“I think real innovation in ideas requires the bridging of different disciplines. I see my work as integrative. This is what I was trying to do with my early work on strategy and competitiveness…”


Porter (1998) argues that organizational pursue for grand improvements in terms of quality, speed and productivity has developed a range of management techniques and tools. These include benchmarking, total quality management, time-based competition, partnering, outsourcing, reengineering and change management. The task of transferring these to sustainable profitability has been something many companies obstacle with. Strategic innovation involves these changes (Porter, 1998). Snowdon and Stonehouse (2007) conducted an in-depth interview with Porter and the answers he gave relates on how to develop innovative ideas in business research. Porter has been in the field of economics for years with his fundamental theories on economic analysis to research in ‘competitiveness’ at national, industry and firm level. Ranked as one of the world’s most influential business intellectuals in 2003, he has made contributions in many fields of theory, among others in innovation and related fields of social obstacles such as environmental, healthcare and philanthropy problems. Relating to the latter in relation to strategy, Campbell and Slack (2007) states that “An emerging genre of work relating to corporate philanthropy concerns its use as a part of the overall strategy and strategic positioning of a company” (Campbell and Slack, 2007, p. 327). The main theme in all of his research is to develop sophisticated and deep comprehensiveness about individual markets in terms of competition. He argues that strategy is when one positions their business at a distinctive and unique spot, providing customers something that others do not. Equally important, is to understand the importance of the direct environment for effective operations (Snowdon and Stonehouse, 2007).

Porter states that value adding in an enterprise depends on how well corporations’ core competencies are integrated into the value adding mechanisms. His view leans toward the economics of competition, fundamentally important to strategic management. A few decades later, Porter believes the validity of the theories is still relevant. When developing the theory of the value chain the focus ought to be on the specific details depending on the specific situation.
One needs to understand it in the lenses of profitability in association with monotonic clearness (Snowdon and Stonehouse, 2007). Relating to Tallon (2012), a value chain consists of considering process level extension of alignment effects. Presence or absence in any of the process alignment may create business performance implications somewhere else in an interconnected value chain (Tallon, 2012). The relation between society and capitalism on a general basis has caught increasingly significance by Porter. When connecting social with profitability objectives Porter states that the combination of capitalism and socialism has developed into the idea of a ‘third way’ system. On the basis from the environmental perspective, Porter has a negative viewpoint on this idea arguing that it is essentially defective, because it involves an assumption of a trade-off between economy and ecology, viewed from the outset. This is based on the assumption that artificially adopted policies needs to be re-examined. To be able to trigger innovation, proper designing of environmental standards need to be carried out. This is done by rethinking current process design instead of imposing new by regulation as in Porters’ example of a corporation contributing to pollution. Assumingly, there is a tradeoff between the environment and productivity output. This leads to imposed costs for reducing pollution. Instead, one needs to encourage rethinking current processes so that the negative effects in the first place do not occur. He argues the latter process often saving money when comparing with implementing the need to handle hazardous waste and recourse allocation for cleaning up waste matter (Snowdon and Stonehouse, 2007).

One of Porters’ more recent works discusses corporate philanthropy. His viewpoint is that the investments made by corporations relating to philanthropic activities need to generate resulting benefits for the society, which in turn would impact the corporations’ businesses on long-term attractiveness. Currently, two dominant approaches of practicing philanthropy are questioned whether they actually provide social benefit or merely work as means for corporate branding. The first approach relates to quiet critics of anti-corporation, while the second approach explains philanthropy to be branding as choosing charity organizations for donation. Both these approaches are argued with criticism by Porter since they actually do not enhance social benefit in reality with essential focus (Snowdon and Stonehouse, 2007). As a strategic tool, corporate philanthropy relates to possible interest of policy. It has the possibility to support strategies regarding soliciting of strategies and ability for attracting a shareholder value return. The latter is accompanied with purposing of resource allocation regarding the corporate governance paradigm with foremost capitalist pattern from the agency viewpoint (Campbell and Slack, 2007).

3.6.3 Innovation, Society and Value

Few understand full implications of widespread innovations in terms of human society and economy. The field of research in innovation may be young compared to other areas of study, with more importance in the economy rather than economics discipline. It has become an area of study for young economist of one of the most popular research field (Swann, 2009). Innovation with paradoxical aspects is a recurring subject in the book “The Economics of Innovation” written by Swann (2009), highlighting the contribution from the famous political economist and philosopher John Stuart Mill living in the 19th century. In his book Mill states “Hitherto [1848] it is questionable if all the mechanical inventions yet made have lightened the day’s toil of any human being. They have enabled a greater population to live in the same life of drudgery and
imprisonment, and an increased number of manufacturers and others to make fortunes” (Mill, 1859/1929 p. 80 cited in Swann, 2009). This and 19 other influentials in the related field of study, as a starting point on the discussion about contributors of innovation with key insights in economics, highlight 20 different innovation perspectives for a more comprehensive view of fundamental insights in relation to the economics of innovation. All these 20 contributions can be summarized in five different approaches based on their themes (Figure 11) highlighting the topic regarding the emergence of unexpected innovation concerns (Swann, 2009). The innovation and sustainability approach is strengthened by the argument from Larson (2000) where sustainable innovation is regarded as an important change force in relation to society and business.

![Figure 11; displaying the five approaches of innovation and economics](source)

Swann (2009) defines the innovation process by the following figure (Figure 12). As can be seen from the first step creativity and research accompanied with hard work and luck generates an idea. The idea is the invention and for it to become an innovation it needs to be put to commercial use. Commercial use refers when the innovation is offered for market sale within the company’s production process. Relating back to the five different approaches highlighted by Swann (2009), the emergence of the unexpected side-effects with the paradoxical non-effects and sustainability related to innovation has created some acknowledgements regarding NUCoI in the field of economics. This relates to social science where Sveiby et al (2012) explain the field of NUCoI lacking in research.

![Figure 12; the simplistic linear model of innovation](source)

3.6.4 Innovation Value Chain in relation to UCoI

The concept of a new idea that generate profits is mentioned by Afuah (2003), where he combines theory on the resource-based view and product-market position, explaining how
innovation makes the firm gain competitive advantage. Innovation can emerge in many different forms. Innovations can also be other than breakthroughs. Often, innovations refer to change in both economical and organizational context, making any models explaining the observable of it to an automatically multidisciplinary issue. For a successful exploitation of an innovation to be successfully implemented, both its strategy and its implementation needs to work accordingly where co-existence of the strategy alongside the system, organizational structure, the right people and systems are of equal importance. New knowledge is needed when dealing with innovation turning collected information to be transformed into new products and services (Afuah, 2003). In today’s competitive environment with turbulence as an essential contributor, the static value creation mechanisms that previously were regarded how to create value are outdated (Normann and Ramírez, 1993). Teece et al (1997) highlight that environments of high technological change can be analyzed by the framework of dynamic capabilities, where the methods and sources of wealth capture and creation are carried out by private enterprise firms. Innovation can be maintained and gain competitive advantage for many firms (Afuah, 2003). Hall and Martin (2005) suggest that there is a need to address and attempt to resolve potential unforeseen and unintended consequences of controversial and radical innovations, but also to tackle its potential benefits for the innovation to be successfully applied. They explain innovation success as dependent on firm ability to assimilate and acquire new knowledge without disrupting suppliers, customers and additional innovators in the value chain. This is the case when discussing contemporary frameworks that evaluate content in technological innovations. The lack in these frameworks is the advises they can give relating to controversial, radical innovations that may add on the effects and create undesirable social, health and side effects. Social uncertainties are added on the commercial, technological and organizational uncertainties that face developers of that type of technologies. These activities may be difficult due to secondary stakeholders’ additional complexity and difficult-to-settle and/or repeatedly contradictory concerns (Hall and Martin, 2005).

Hall and Martin (2005) argue that while conducted research focusing on determinable effects on new product or process with competence destroying attributes for suppliers, customers or complementary innovators, these findings suggest minimizing disruption within the value-added chain as a way to strive for innovative success. What seems to be lacking is an extended look beyond members of the innovation value-chain considering the perspective of secondary stakeholders (Figure 13). The main focus ought to be on the innovations that causes both substantial benefits and potential new adverse side effects in terms of health, environmental and social aspects. In the field of radical technology development one key obstacle is to manage exploitation of potential benefits of the technology but also to manage, minimize and assess its unforeseen (or perceived) unintended negative consequences. Secondary stakeholders are outside the primary stakeholder perspective in the innovation-value chain because of their conflicting goals, non-market concerns and pressures affecting them and their behavior. Requirements of more recourse are the effect of this complexity to figure out the current situation and the differing rules of the game by stakeholders. All the differing stakeholders are related to individual entities (Hall and Martin, 2005). Although the presented framework relates to radical technology, analogy to other innovation-related sectors affecting secondary stakeholders is of relevance.
3.7 Stakeholder theory and sustainability

“In this world there is room for everyone. And the good earth is rich and can provide for everyone. The way of life can be free and beautiful, but we have lost the way” -

Charlie Chaplin from “The Great Dictator”

Corporate Social Responsibility (CSR) is part of stakeholder theory where social community needs are taken into consideration by the affected corporation. While primary stakeholders seem to have major saying in what the organization do to fulfill their needs, this research acknowledges that secondary stakeholders need to get the same attention in terms of NCOL regarding the societal natural environment. A few decades ago Votaw (1972) defined CSR as something, but not constantly the same thing to everybody. It can be interpreted as to act socially responsible in the sense of ethics; it can be interpreted as an idea of liability or responsibility in a legal sense; others define it in “responsible for” in a causal mode. Some refer it to a charitable contribution; others define it as being social conscious; “legitimately” is a frequent synonym of it for many being proper, valid in the sense of “belonging”; a minor scale sees the responsibility on businessmen taking it as a fiduciary with higher behavioral standards rather than on the higher scale of citizens (Votaw, 1972). CSR has been in the field of business within formal writhing with its modern era since the 1950’s, although it can be traced back for centuries where concerns for society of the business community were evident. Expansion of the definition and continuous flourishing in the field emerged during the 60’s and 70’s. More empirical research and themes of alternatives emerged in the 80’s with business ethics theory, stakeholder theory and corporate social performance (CSP). CSR was still working as an essential construct in the 90’s but frameworks of alternative themes emerged (Carroll, 1999). There are many complexes, unclear and controversial propagated approaches within its landscapes of theories. These approaches are mapped in four different categories relating to ethical values, social demands, profits and political performance (Figure 14) (Garriga and Melé, 2004).
Branco and Rodrigues (2007) add by stating that the aim of meeting the expectations of stakeholders incurs the need to concern about corporate responsibilities (views of dominance) and social norms. They state that “there have always been widely spread assumptions about what a modern company should be and how it should behave” (Branco and Rodrigues, 2007, p. 13). Porter and Kramer (2006) state that while many organizations already have done much for their improvements in preventing their consequences regarding the social and environmental aspects; the outcomes have not yet reached its full potential. They do not see business and society as interdependent but pit them against each other. Additionally, CSR is seen as a general approach instead of adapting it to firm specific strategies. They (Porter and Kramer, 2006) suggest the way to overcome the fragmented and disconnected CSR activities in relation to business and strategy is to view it as a source of competitive advantage, innovation and opportunity. Business practices that are conducted in a sustainable manner emerge because of stakeholder request from a variety of stakeholders; shareholders, customers, employees, boards NGO: s and governments. However, most corporations act to these in a stepwise, responsive manner (Lee, 2010). Freeman (2010a) states that the management assumption of primary shareholder concerns limited to return on investments are no longer to be valid. In terms of the customer perspective, they can now choose from a range of products across national boundaries, making U.S market dominance failing where productivity have dropped. Hence, the framework so familiar to the firm has changed. With changing roles of suppliers, customers, employees and owner implications and challenges for managers and management theory are relevant for shifting places. Freeman (2010a) maps a stakeholder theory with the aim to display all the individuals and groups in relation to the firms’ organizational purpose that are affecting or affected by. They are called stakeholders because they have a stake in the corporation affecting the success of the enterprise. This map is displayed in figure 15 below.
Branco and Rodrigues (2007) suggest stakeholder theory as the social responsibility of companies demanding them to take into concern all parties of interest that are affected by company undertakings. Contradicting, Freidman (1970) argues that responsibilities ought to be given to humans and not businesses. Corporations work as artificial persons with responsibilities also considered artificial, and therefore complete businesses cannot be said to have responsibilities. The primary objectives of a manager are to serve the owners of the corporation or eleemosynary institution. The only responsibility of corporations, as Freidman (1970) state in his book “Capitalism and Freedom”, is to increase its profits with its resources. This is attained by engaging in a free and open competition within the game rules excluded from fraud and deception. Porter and Kramer (2006) argue that CSR proponents use four approaches for argument in a general sense; sustainability, moral obligation, license to operate and reputation with the moral obligation suggesting companies to act as good citizens that “do the right thing” (Porter and Kramer, 2006, p. 81). Extending Freeman’s (2010a) stakeholder map, Pajunen (2010) introduces the emergent stakeholder model of the firm where the firm, as previously separated to their stakeholders, includes a number of internal emergent stakeholders at firm-level. It is the correlation between employees, owners and management with external stakeholders that may have implications on the practical level of management, classification and identification of different stakeholders. Freeman (2010b) highlights the stakeholder vs. shareholder debate that has been emerging after the development of the stakeholder theory. The theory of the firm approach contributes to the stakeholder approach in an even more sublime matter. The insight at its explicit center of the stakeholder theory is the stakeholder interest joint-ness. While the last 30 years have
been focusing on enriching and varying research on stakeholder theory next is to incorporate it with value creating, trade and ways we think about it. Porter and Kramer (2006) connects the corporate-society approach in relation to stakeholders suggesting “To advance CSR, we must root in a broad understanding of the interrelationship between a corporation and society while at the same time anchoring it in the strategies and activities of specific companies” (Porter and Kramer, 2006, p. 83). They highlight the importance of external stakeholders holding companies accountable for their effects resulting in social issues affecting and incurring the potential of financial risks on any firm that are conducting unacceptable practices (Porter and Kramer, 2006).

The interaction between suppliers, financiers, employees, communities and managers create value by interacting with each-other in business for understanding how stakeholder management works. Highlighting this, Freeman states “Building and leading a great company has always been about managing for stakeholders” (Freeman, 2010b, p. 7). This uncontroversial idea has been taken into consideration by businesses around the globe. Although CSR has been in the research field for a few years, for corporations to actually implement it is still ambiguous. Newell (2005) highlights the issue that CSR practices ought to be differentiating depending on the current situation. This is because mainstream practices of CSR do not fit for the assumed non-existing situation that is the case around most of the world where a preset of conditions attempts to incorporate these practices. The practices of CSR may work for some cases depending on the time, people, place and issues. Branco and Rodrigues (2007) connect CSR practices and stakeholder management with relating it to issues of complexity suchlike human resource management, supplier and consumer relations, local community relations, work safety and health and environmental protection. Porter and Kramer highlight ambiguity in stakeholder concerns stating “The vehemence of a stakeholder group does not necessarily signify the importance of an issue- either to the company or to the world” (Porter and Kramer, 2006, p. 82). Votaw (1972) refers to the post-industrial society where economy is no longer the center of attention in society. It can be defined as the overwhelming of the economy in the total system or the industrial society as mature and production that has already achieved its foremost goal in society. Society is surrounded by scarcity economics at focus while an over-supplied society of plenty regards economics as one member or the total court. Speth (2009) highlights the fact that more attention need to be paid by global leaders in the field of a post-growth society where evidence of negative effects of growth in terms of the environment prevails.

Relating to Sveiby et al (2012) argument about the lack of unintended NCoI in social science research, Speth (2009) suggests that economic growth still prevail prospering problems on a higher scale than what they are solving. A more recent article suggests a new type of organization called the for-benefit enterprise. Often, the aim of the entity in mature economies is to operate like a business in traditional ways in many aspects but the original foundation for it is to be a social benefit provider rather than focusing on financial returns maximization (Heerad, 2011). One way to tackle stakeholder ambiguity is to implement a found stakeholder dialogue on a practical level (Pedersen, 2006). Depending on the corporation’s ability, willingness, interest and consciousness of the success of their stakeholder, dialogue may be influenced by these practices. The practice of stakeholder dialogue does not reassure sanction-free practices due to stakeholder filters working as constraints from the perspective of the corporation. Firms may incur a dialogue
mostly determined by their own set of rules of the society, agenda and stakeholders by making it complex from the stakeholder dialogue perspective to attach comprehensiveness to it. Pedersen (2006) also notes that the simplification of the dialogue taken into practice attaches an approximation of the “ideal” situation in stakeholder dialogue, adding caution to the usability of it. Three fundamental inter-correlated guidelines have been developed about value-creation in stakeholder theory. Firstly, stakeholders stand together in a value-creation process. Additionally, executives have the job to create as much value for stakeholders as possibly attainable. Third, stakeholders are humans with names and faces and not something artificially created by academics and executives. With these considerations stakeholders need to be managed in minimizing trade-offs to the furthest extent, excluding self-interested behaviorism (Freeman, 2010b).

With the notion that every stakeholder-need ought to be taken into consideration with trying to balance these interests (Freeman, 2010b), recently Garvare and Johansson (2010) discuss the notion of global sustainability. It refers to guaranteeing every human a proper life without damaging survival for future generations for them to enjoy the same way of living in the ecological system, with value created by the total economic activities. In a state where nature and human thrive and where requirements of social and environmental concerns as well as distributed economic prosperity are essential. Stakeholders refer to parties that can take actions if their needs are not met, while the term interested parties have interest in the outcome, output or activities of the organization but do not have any significant influence for the organization itself or its shareholders. To be able to do this, elaboration of the influence regarding mature shareholders needs to be done. There is also a terminology of latent stakeholders and overt stakeholders while the former describes the shareholders not known by the organizational management but the latter is. Relating back to Hall and Martin (2005), secondary stakeholders need to be addressed and defined. Clarkson (1995) defines primary stakeholders as a group which the corporation is dependent upon for survival on a continuous concern. Often these groups are investors or shareholders, suppliers, customers or employees. Public stakeholder groups (communities and governments) are considered as primary stakeholders with abiding the laws, regulation and taxes accompanied with markets and infrastructure. The interdependence level is high between primary stakeholder groups and the corporation. Secondary stakeholders are defined as not being fundamental for the organizational vitality with the non-existing transaction base. They are considered as either affected by or affecting the corporation or influencing or influenced by the corporation. It includes interests groups considered special such as the media mobilizing public opinion about certain acts, both favorable and unfavorable (Clarkson, 1995). Figure 16 demonstrates the importance of primary stakeholders from the corporation’s endurance perspective in relation to secondary stakeholders interpreted from Clarkson (1995). Eesley and Lenox (2006) give two outcomes following if not responding to secondary stakeholders’ action-taking that might impose consequences on firms. It may increase the direct costs for firm; legal fees, stakeholder managerial attention if demands are not met and public relations expenses. The organizational reputation might be jeopardized with reasons such as attracting employees and customers including the shareholder and regulatory conciliating.
3.7.1 Global sustainability in relation to organizational sustainability

“Sustainability is defined as the innovative and potentially transformative corporate activities that generate new products and processes that challenge existing practice” (Larson, 2000, p. 305). Global sustainability does not indispensably coincide with organizational sustainability because of conflicting interest of different parties involved accompanied with the relating time frame. In relation to time, global sustainability measures in centuries while organizations often focus on short-term activities for the near future. In terms of interest, global sustainability concerns the natural environmental and future generations while the concern for organizational sustainability often involves sole stakeholders that are primary and secondary (Garvare and Johansson, 2010). The definition of Sustainable development by UN Documents is prospering development excluding compromising for future generations to meet their needs but at the same time meeting the need for the present generation. UN Documents conceptualizes strategy for sustainable development as promoting harmony between nature and humanity and among humans (UN Documents, 2013). With the prospering economic growth of todays’ economies, this might be more of an ambition than what the case really shows. The environment is incurred with new risks of stability when new opportunities of technology access, trade and knowledge sharing to give quality of life and wealth due to globalization of the economies are produced. Since the population is growing at a fast pace, not everyone in this world get these opportunities. One of the most unrelenting global obstacles of this century is that while many people enjoy these improvements, millions are suffering from poverty and hunger around the globe. (Global Reporting Initiative, 2000-2011). To be able to have a long-term mind-set regarding sustainable development, the need and choices of innovative and new ways of thinking is required. To resolve the threats and risks for sustainability in economies, environments and social relations the developments in technology and knowledge can have the potential of helping and not merely focusing on economic development. The organizations are confronted by their global influence in terms of the people, the earth and the economies to make new choices regarding management, public policy and technological innovations accompanied with new knowledge (Global Reporting Initiative, 2000-2011). Nill and Kemp (2009) adds that, “fostering technological innovation is considered as an important element of policies towards sustainable development” (Nill and Kemp, 2009, p. 668). Transparency regarding environmental, social and economic impact makes
up an important element in market relations such as investment decision and effective stakeholder relations. This is due to the critical and enormousness of threats and risks regarding collective sustainability accompanied with cumulative opportunities and choices (Global Reporting Initiative, 2000-2011).

O'Riodran and Fairbrass (2008) highlight the critical attention on ‘big businesses’ in general is becoming an increasingly relevant topic in research. Stakeholder dialogue may serve as an efficient way of overcoming this. With different stakeholders and corporations participating in these processes with their differing views, they can together decide what types of social responsibilities and magnitude that needs to be considered by the corporation. A developed model for implementing stakeholder dialogue highlights four different aspects of the stakeholders. These are the context of the stakeholders and firm, the event significance, the stakeholders’ nature and responses of management relating to these giving a more comprehensive outlook of the systematic approach. In relation to innovation, there seems to be a lack of defining the conflicting interest of secondary stakeholders in the field of sustainability management. Although they can viewed as customers (Garvare and Johansson, 2010) or another group of relevance, what seems to be evident is that depending on the current parties one is involved with, value is defined differently by differing organizational parties. The negative side of innovation is lacking from organizational operation which primarily focuses on individualistic value offering. The society and natural environment suffer if one continues to think of own beneficial gains.

3.8 Value in the Societal Natural Environment

“Let us fight to free the world! To do away with national barriers! To do away with greed, with hate and intolerance! Let us fight for a world of reason, a world where science and progress will lead to all men’s happiness”-

Charlie Chaplin from the “Great Dictator”

Rokeach (1979) states the assumptions of cross-cultural and interdisciplinary study in his volume “Understanding Human Values” gives chance for stating that the quantity of human values are small across the world and gives room for differing arrangements in terms of structure. These in turn are dependent on the results of psychological and societal needs that are determined and learned from society, culture, personal experience and society’s institutions. Consequently, are determinants of judgments, attitudes, actions, attributions and choices capable of going through changes based on changes in society, self-conceptions, situation and self-awareness. Central changes in value have important consequences for social behavior and knowledge (Rokeach, 1979). The individualistic value perception may eventually affect the society changing the preference depending on the circumstances. Values are standards that are internalized, derived and learned from institutions and society. Societal-, organizational-, ideological- and individual values require the same attention in social movements in terms of value-transmitting functions (Rokeach, 1979). Relating to the stakeholder theory where a corporation has stakeholders (Donaldson and Preston, 1995), major themes are categorized as following. The stakeholder theory is descriptive in that it describes the corporation with a constellation of competitive and cooperative interests with inherent value. It is seen as instrumental of the potential connections
between corporate performance goals and shareholder management practices. It is seen as normative meaning that each stakeholder is driven by instinctive value and that they always have an interest in the corporation, whether the corporation is mutual in this sense or not. In other words, it is seen from their perspective. It is a managerial theory where recommendations regard practices, structures and attitudes that are referred to as stakeholder management. Simultaneous attention is given to different stakeholders that have a legitimate interest and needs to be a key fundamental consideration for managers, governments, shareowners and others. One dilemma is that the stakeholder theory does not resolve the long-term problem of identifying shareholders and understanding which are to be given a ‘legitimate’ stake in the corporation. Another raising point is that all stakeholders are not to be involved on equal terms depending on the processes and decisions (Donaldson and Preston, 1995). To sum, value means different things to different stakeholders.

While individualistic value may influence societal value, organizations need to start thinking of society and the natural environment as major stakeholders for achieving a competitive strategy in 2013. This requires organizational change (Senge and Sterman, 1990) with explosive environmental, technological and political change as some of contributing factors of the turbulence existing rapidness of organizations. To proceed requires defining society and the natural environment as stakeholders affecting the stakeholder theory on a primary concern. Simon (1962) argues regarding complex systems in the field of behavioral science often neglecting to define the specific content which the complexity involves. He defines a complex system as a sum of a large number of components interacting in a non-simple basis relating to the assumption by Lewin (1999), where a complex system is understood as a scarce explanation of its component fragments. Simon (1962) strongly argues that complexity in systems often is hierarchy-like. In regards to social systems, the organization works as a fundamental fragment with firms, governments and universities considered more essential in the social hierarchy. Families are a grant part of societies where grouped into villages or tribes continuing to larger groupings forwarded. The interactions in these groupings are so dense in these types of clusters that a hierarchy-like structure emerges.

Mitchell et al (1997) recognize the lack in the full theoretical status of stakeholder theory. They extend the stakeholder theory by including three relationship attributes that may be possessed by stakeholders; legitimacy, urgency and power. Combined, these generate stakeholder typologies that create their saliency for firm managers and additional management and research implications. The distinction is made between primary and secondary stakeholders. The need in the stakeholder theory is to separate between stakeholders and non-stakeholders that is reliable, because of the lack of explanation of to what and whom managers need to pay attention. The definition of what a stakeholder is includes a wide arrange of entities. Mitchell et al state “There is not much disagreement on what kind of entity can be a stakeholder. Persons, groups, neighborhoods, organizations, institutions, societies and even the natural environment are generally thought to qualify as actual or potential stakeholders”(Mitchell et al, 1997 p. 855) for managers that want to serve stakeholders morally and legally (Mitchell et al 1997). Clarkson (1995) suggests the importance of stakeholder management when the invisible hand theory of economics does not always work when only considering shareholders with profit-earning
mechanisms. There is a difference between shareholders and stakeholders. Clarkson (1995) defines the social and economic purpose of businesses to “create and distribute increased wealth and value to all its primary stakeholder groups, without favoring one group at the expense of others” (Clarkson, 1995, p. 112). He also note that profits, share-prices or dividends are not the only means for value and wealth creation and risking the primary stakeholders groups as expense for satisfying shareholder claims is not the way for managers to act. They need to be held accountable for managing all the primary stakeholders’ claims and take responsibility in respect for the firm. Ethical choices and judgments for managing these conflicting goals of corporate value and wealth distribution with the claims from primary stakeholders need to be made. Treating all the primary stakeholder groups’ fairy is necessary for corporate survival. Enviably, this has become of major importance for corporate strategic implication. Although managing these stakeholder interests might not be illegal to ignore, it deserves ethical and moral action-taking for corporations (Clarkson, 1995). While these theories suggest primary stakeholder considerations, secondary stakeholder consideration needs to be acknowledged with the same rights as any other stakeholder. As suggested by Bar-Cohen (2006) nature has been modeling for mechanisms, processes and man-made devices at the present situation relating to Mitchell et al (1997) where the natural environment can be seen as a stakeholder. Therefore, secondary stakeholder importance needs to be taken more seriously regarding the society and the natural environment (societal natural environment).

3.8.1 The Natural Environment as a primary stakeholder in regards to a global society

Efficacy of management practices vis-à-vis stakeholders with descriptive accuracy regards two implicit familiar views. The first is the strategic stakeholder management model where the emphasis is to view the stakeholder group managerial, concern as perceiving, solely financial performance of the firm. The second view regards the intrinsic stakeholder commitment model, where commitment to stakeholders in a moral (normative) sense is regarded as treating them positively, eventually shaping their strategy for financial performance. Five different aspects of stakeholder importance for firm operation are discussed in Berman et al (1999), by connecting firm strategy to stakeholder relationships. The five aspects are community relations, employees, workplace diversity, customers and issues of product safety and the natural environment. Relating to the latter, Bar-Cohen (2006) explains that “nature can serve as a guide to determine the appropriateness of our innovations in terms of durability, performance and compatibility” (Bar-Cohen,2006, p. 11), promoting innovations based on nature. Berman et al (1999) continue discussing the importance of relationship with stakeholders effecting financial performance. Key stakeholders ought to be prioritized for fostering positive connections to help profitability of the firm. Two stakeholder parables in their findings on the direct effect on the stakeholder model, the employees and product safety/quality, have strong effects on financial performance. However, diversity, community and the natural environment still deserves the contribution of moderation in strategy-performance (Berman et al, 1999).

Bar-Cohen (2006) argues humans’ effort to mimic nature that has led to increases in advances simplifying achievements of process, system and biological method replications. Regarding the natural environment in relation to the firm, Hart (1995) presents a framework for sustained competitive advantage to care for the natural environment. The framework consists of three
different strategies that are interconnected; product stewardship, sustainable development and the natural environment. This is connected to the resource-based theory of the firm where resources and capabilities that are costly-to-come and valuable as essential resources. Increasing ecological difficulties signifies needed change as suggested to include the natural environment to the firm as the Natural-Resource-Based View of the firm. Figure 17 describes the conceptual model described by Hart (1995), where key resources and capabilities affect firm sustenance for competitive advantages (Hart, 1995).

![Figure 17; conceptual framework for the Natural-Resource-Based View of the firm](image)

**Source:** Hart, 1995

From the stakeholder perspective, establishments of how to deal with unintended consequences deserve attention in relation to the societal natural environment. Responsible Research and innovation (RRI) relates to interest between policy makers, public society groups, researchers and companies. RRI is about creating a shared understanding of appropriate behaviors of governments and businesses fundamental in creating trust and confidence throughout the public and other stakeholders in processes and products of innovation. A powerful driver for RRI can be the potential for the negative unintended consequences, even if it has to do with beneficial innovations. Winston (2010 cited in Sutcliffe, 2011) states that it is extremely difficult to anticipate negative consequences if they are not managed from the beginning and convert any problems that arises. The potential for long-lasting human health or environmental interruption, either unintentional or vigilant, is expanded as the technologies become more complex and difficult for non-experts to comprehend (Sutcliffe, 2011). In terms of the lack of trust, Sutcliffe (2011) states that businesses and governments find it really hard to convince their citizens that the science and technology choices they fund are for the public good and not simply for financial or personal gain. New ways and new methods must be used in order to involve everyone in the process where the available choices are and the decision-making is made. Bar-Cohen (2006) argues taking inspiration from nature for impacting human lives and leading to technological improvements. This requires better understanding of nature with developing capability gains. Figure 18 displays the trends on a global scale, platforms and innovation relating to technology in RRI (Sutcliffe, 2011). As can be seen, most of the innovations relate to man-made artificial
objects while the trends indicate the more “natural” want of a sustainable natural world in accordance with more ‘natural-innovation’ suggestion by Bar-Cohen (2006).

3.8.2 Back to basic thinking- for the unity of us all

The ability of the planet to sustain life and in turn generating economic activity is threatened by the way people misuse resources with processing, extracting, transporting and disposing them. It is estimated to be more than twenty times the average (Amory et al, 2007). Nidumolu et al (2009) argue that many companies believe that when they become more environmental-friendly, the more they put their competitiveness at stake. If they take these environmental-friendly precautions, more cost and less profitability is the short-term outcome. Many of the CEOs of these companies think that they are placed in disadvantage in relation to their competitor in developing countries that do not face the same pressure. Therefore, most executives treat the sustainable want as distant from the objectives of their businesses (Nidumolu et al, 2009). While industries have a narrow focus on the exploitable resources on the planet, the whole ecosystem might be at risk as it is taken for granted. Both ecosystem service and resources come naturally from the planet, but the value emerging from these services provided by the ecosystem is not stated on corporate balance sheets, making it dissolute for both companies and governments (Amory et al, 2007). Nidumolu et al (2009) suggest that becoming environment-friendly can be regarded as lowering costs since the sum of inputs decreases. Strategy is shaped by culture as the popularity of sustainability illustrates (Ignatius, 2009). Sustainability can even be regarded as a source for innovating in corporations. Competencies can be developed for early-movers to treat sustainability as a goal of the businesses that may grant them a competitive advantage in relation to their rivals (Nidumolu et al, 2009). Introducing an innovation involves risks and modeling of consequences is required for adequate assessment (Merton, 2013). Denning et al (2010) argue that innovation needs to transform a work or social practice to qualify as innovation and therefore
consideration of its social life is necessary. The society needs to accept the innovation and often making the community see the world differently than before. To make them do it, to implement the change is the art of innovation. Evidence from reporting businesses show that only 4 per cent are dedicated to initiatives of innovation success. No systematic way of increasing innovation success is clear among many. Even Albert Einstein referred to insanity as supposing different results when repeatedly doing the same thing. He understood that new thinking is required for solving a problem initiated (Denning et al, 2010). Profits, competitiveness and biosphere protection can be achieved with more productive use of resources with practicing advanced techniques generating benefits for current and future shareholders with ‘natural capitalism’ (Amory et al, 2007). The approach highlights proper valuation of ecosystem services as the ‘natural capital’, involving four business practice shifts. Figure 19 displays the four practices of natural capitalism. The essence of argument is while resource such as labor and machinery can be replaced money and technology; it can never replace a productive biosphere and stable climate. In other words, no price can replace the priceless. Natural capitalism shifts the paradigm in the same matter industrialism first replaced agrarianism, both profitable and necessary with a combination of economic and ecology-based goals for competitive advantage (Amory et al, 2007).

![Image of Figure 19: four practices for approaching natural capitalism]

Source: Amory et al (2007)

Another way of receiving sustainability is introduced with a five stage idea in order for the associated challenges to be transformed into opportunities. Figure 20 briefly goes through this model where sustainability can be perceived as innovation (Nidumolu et al, 2009). As can be seen, value is highlighted as a driving force for sustainability. Nidumolu et al (2009) highlight the importance of having both a top-management team and the right staff in the organization. Staff involvement in green corporation processes may help to nurture employee morale when high layoffs and economic stress emerges. Approaching the people in the organization to commit for green thinking may involve supporting employees at home to think green and to form environmental teams at workplace for supporting green practices. The most important thing to focus on is the core business with green strategy to improve the organizational competitive advantage. Encouraging excitement amongst employees to work for sustainability and the environmental impacts of the organization may render loyalty in the organizational workforce (Winston, 2009). Additionally, some rules of implementation may serve importance for
businesses to develop sustainable competitive advantage. Organizations need to start from the future goal in order to enable them to get there. Additionally firms need to understand how to execute plans for sustainability investments. Tactical continuous adjustments alongside with collaboration outside the corporation, and globalization presence where experimentation across nations are enabled are essential for sustainable innovation. Since sustainability has become of a greater interest in emerging markets, this gives space for multinationals to introduce sustainable innovations in these markets (Nidumolu et al, 2009).

The society as a whole needs to understand that changing behavior of organizations to switch their practices for sustainability takes time. Bernotat (2007) enhance this challenge by highlighting the costs in monetary terms and time-phase for switching sources of energy becoming renewable and clean. One way to deal with this is to be considered as a social venture for taking actions against social problems and economic challenges facing the world. Entrepreneurial efforts that are socially minded may create profits later encouraging them to grow even larger (Thompson and McMillan, 2010). A five step model is suggested by Thompson and McMillan (2010) on how to create markets in uncertain environments. While their suggested idea mainly focuses on launching a business for solving problems in emerging markets, the idea fits all differing types of organizations. Figure 21 displays their idea where the main line of argument is that these five steps are applicable in challenges facing new market creation for maximization of scarce resource but at the same time thrive to meet their organizational goals. As Westley discusses in Weber (2012), in the emerging field of social innovation, there is a need to have...
experimentation in order to provide social and institutional entrepreneurs practical skills and analytical frameworks. The relationships, resources, and risks necessary to find and change the relationships that can lead to worthwhile innovation, require some combination of luck, courage, and creativity. Jing and Gong (2012) explain that innovations must be sustainable to produce replicable models of civic engagement, strengthen social entrepreneurship, and build capable nonprofits that meet the needs (and increasing demands) of citizens throughout the society. They must be premised on, and oriented towards citizens. Additionally, government’s social regulation system should be further relaxed to encourage innovation. More political and operational space for nonprofit organizations may be created at the same time.

**Social Working Ventures**

1. Define of scope the venture by taking into consideration of what you actually are going to do.

2. How to neutralize opponents and attain support mobilization with attending the socio-politics.

3. Discovery-driven planning ought to be highlighted by looking at emerging data.

4. If you leave, find a way without leaving a footprint of magnitude.

5. Unintended Consequences, both positive and negative needs to be tried to anticipated.

*Figure 21; displaying five guidelines on how to manage a social working venture*  
*Source; Thompson and McMillan, 2010*

All the four models displayed; figure 17, figure 19, figure 20 and figure 21 adapted from Armory et al (2007), Nidumolu et al (2009) and Thompson and McMillan (2010) have the intention to show that working for a social cause may benefit organizations but at the same time respect the natural environment for long-run sustainability. While the approaches may differ, having the goal to work as a value creator for social good is apparent. What seems to be lacking is the connection between the society and the natural environment and their interconnection to the potential value-creating organization when taking into consideration NCoI.

**3.8.3 Connecting social complexity with innovations concerning NCoI**

“We do have to communicate with society and not always trust government because they may have other agendas” -

*Professor Robert Winston (TheGuardian, 2010)*

With this statement Winston (TheGuardian, 2010) and Elias et al (2002) discuss R&D in connection to stakeholder management. They suggest that depending on the different R&D
projects different stakeholders are affected in different ways. Since innovation is an outcome of an invention that emerges from research and creativity (Swann, 2009) one might connect the fields of innovation and stakeholders combined for further research on organizational innovation in different fields of society. Since society may be considered as a secondary stakeholder, vaguely suggested in Hall and Martin (2005) and a very recent article suggesting that “In a world of scarcity, companies will need to consider their total return not just on assets but on resources” (Haanaes et al, 2013, p. 114) importance to the natural environment deserves attention. Combining society and the natural environment, the societal natural environment is found as secondary stakeholders to organizations. The limits with new product innovation are accessing the prediction of it, recently highlighted by Merton (2013) defining that “New products and services are created to enable people to do their tasks better than they previously could, or to do things they could not before” (Merton, 2013, p. 50). As an outcome of innovation, risk is greatly determined by the choices people do when they actually carry out using the innovations. The degree of riskiness of an innovation depends on the level of consciousness and information provided of choices made by people. The consequences of innovations attention corporations and policy makers to make corrects judgments about the future of human behavior and trade-offs they make. They need to be aware of the risk-limitation associated with the implementation-models of peoples’ decision-making in terms of using the innovation. Evidence shows impossibility of making correct judgments about riskiness of influenced changed behavior regarding choices of another nature often in domains that are unrelated. Therefore it relates to UCoI.

Merton (2013) points out that is that the more complex the system in, the more risks are associated with the innovation. “As more complex the system of innovation enters the more likely and severe those consequences will be” (Merton, 2013, p. 50). The focus is not on the innovation itself but rather depends on the infrastructure it is introduced in. As a suggestion of one way to manage and minimize the risk and return trade-off associated with NCoI, is by understanding product or service choices that are informed with five rules of thumb applicable to users, policy-makers and companies. Figure 22 presents these five suggestions in a framework followed by a description in accordance to Merton’s (2013) argument on how to deal with managing risks and returns of innovation. Merton (2013) suggests a five-step framework on how a corporation can view the risks and returns in innovation. With the argument of Amory et al (2007), this framework can be extended to include the natural environment. In the first step, the recognition of making a model of risks and returns are associated with innovation. The second step involves modification of discaradation of innovation. In the third step one realizes that all the unforeseen consequences cannot be seen in advance, therefore the unexpected ought to be expected. Forth, the importance of situation dependance is highlighted with a clear understanding of the user and the use of the model-application. Lastly, the infrastructure and innovations are arguably continously evolving and therefore acceptance of its management needs to be understandable (Merton, 2013).
3.9 Synthesis of theory

This research is within the fields of unintended NCoI in relation to global sustainability. It combines the fields of stakeholder theory, value creation in terms of the natural environment, innovation and globalization in the viewpoint of social science. With the speech of Charlie Chaplin from the movie “The Great Dictator” (TragedyandHope, 2011), working as a teaser throughout the research the aim is to provide the reader with an interesting research more relevant today as it was many decades ago.

Chapter three starts with the assumption that innovation may sometimes be connected to greed (Sharma, 2006), with evidence from hazardous waste production in industrialized Northern countries and firms (Pellow, 2007). Innovation is essential for our daily life (Smil, 2006; Fagan, 2004) and has been defined by various authors in research (Fagerberg, 2003; Fagerberg et al, 2005, Holmqist, 2012; Grant, 2010; Denning et al, 2010; Ulwick, 2005;) where in many ways the innovation value relating to organizations lays in economic value added or profits (Goswami and Mathew, 2005; Drucker, 1985; Sveiby et al, 2012). What needs to be distinguished is the difference between an invention, an idea and an innovation, carrying out the idea into practice (Swann, 2009). Figure 23 displays the findings in theory relating to the research topic. NUCoI is related to climate change and global warming as outcomes affecting sustainability in this research (Winston, 2010).
3.9.1 Unintended consequences of innovation

Unintended consequences of innovation (UCoI) have been a field of research neglected in social science. Sveiby et al (2012) argue that most innovation research is directed towards distressing economically valuable aims for change agents and innovating corporations (Sveiby et al, 2012). This is true because it is unpredicted and one observes it when it has actually occurred (Swann, 2009). Unintended consequences are also brought up by Aoi et al (2007) regarding the complex system of human society. While human progress often is celebrated, the possibility for self-destruction deserves attention (Winston, 2010). Four main authors of relevance about unintended undesirable consequences of innovation (Schumpeter, 1939; Merton, 1936; Rogers, 2003; Freeman, 1984) have been highlighted by Sveiby et al (2012). One negative unintended consequence of innovation is to avoid taking precaution for environmental sustainability (Haanaes, 2013). Relating back to the speech of Charlie Chaplin in “The Great Dictator” (Tragedy and Hope, 2011), value in sustaining a healthy planet is essential for survival for future generations (Global Reporting Initiative, 2000-2011). However, pro-innovation bias is a challenge in literature relating to the obstacles of rejecting an innovation and the ways people think about the subject (Rogers, 2003; Hull and Kaghlan, 2000; Abrahamson, 1991; Fazio and Olson, 2003; Schlenker, 1978; Nelson and Winter, 1982; Baumann and Martigoni, 2011).

3.9.2 Value creation in sustainability and innovation

Normann and Ramirez (1993) discuss the changing logic of value creation regarding strategic implementation in society. With the previous static view of value being static as an in-and-out viewpoint, where value is added from the supplier, the corporation and eventually by the end-consumer, these highlight the fact that globalization, technologies and changing markets have
been encouraging for change. The task for successful corporations is to reinvent it in the competitive environment thickened with unpredictability by focusing on the whole value-creating system for social innovation. Related aspects in value creation are highlighted by Snowdon and Stonehouse (2007), where a discussion with Michael Porter is conducted. When connecting social objectives with profitability, Porter states that the combination of capitalism and socialism has developed into the idea of a “third way” system. The need for proper design of environmental standards with rethinking current processes is essential for lowering the outcome of negative effects happening. Eventually, this hinders hazardous waste and resource allocation for cleaning up happening in the first place (Snowdon and Stonehouse, 2007). Swann (2009) approaches the key contributors for innovation in economics that are divided into five areas of field; innovation and sustainability; innovation and wealth creation; through which channels does innovation work?; innovation and competitiveness; innovation, unexpected side effects and paradoxical non-effects. All of these fields may be related to NCoI in one way or another.

3.9.3 Stakeholder theory relating to secondary stakeholders

Strategy can be seen as a way to create value (Normann and Ramiréz, 1993) and innovation provide competitive advantage for firms (Afuah, 2003), where high technological change can serve as a technique for capturing and creating wealth (Teece at al, 1997). For innovations to be successfully applied, Hall and Martin (2005) suggest that there needs to be attempts to resolve potential unforeseen and unintended consequences of controversial and radical innovations, but additionally tackle the potential benefits relating to it for the innovation to be successfully applied. With Friedman’s (1970) argument of business goals that needs to aim for profits, they bring up social uncertainties affecting secondary stakeholders that may add additional complexity and contradictory concerns. Secondary stakeholders are outside the primary stakeholder perspective of the innovation value chain mechanism, due to their conflicting goals and non-market concern. This requires organizations to understand the differing stakeholder rules (Hall and Martin, 2005). Stakeholder theory relates to this research by highlighting the lack of considering the importance of secondary stakeholders for long-term value creation to the society to enjoy, as suggested by Hall and Martin (2005). In addition, CSR relates to concern about society and business (Carroll, 1999). Four different approaches of CSR are mapped categories relating to ethical values, social demands, profits and political performance (Garriga and Melé, 2004). Included are instrumental theories, political theories, integrative theories and ethical theories with an emerging trend to be socially ethical. Freeman (2010a) highlights this importance of not only considering primary stakeholders to a further extend. With his stakeholder-model of a very simplified view of reality, more space is given to elaborate sub-categories for each stakeholder. For example, Pajunen (2010) introduces the emergent stakeholder model where internal stakeholders inside the organization between employees, owners and management with external stakeholders that may have implications on the practical level of the management, identification and classification of different stakeholders. The main line of argument is that business profits is no longer the center of attention in society (Votaw, 1972; Pajunen, 2010; Garriga and Melé, 2004; Hall and Martin, 2005; Freeman, 2010a; Freeman, 2010b; Speth, 2009; Heerad, 2011), but the fact still remains regarding corporations actually implementing CSR activities that may be ambiguous (Newell, 2005) and that more actions need to be taken to prevent NUCoI (Sveiby et al, 2012). The negative side of innovation is absent from
the organizational side of operation, which mainly focuses on idiosyncratic value offerings. However, the society as a whole suffers if one continues to think of its own beneficial gains.

Highlighting that every stakeholder ought to be taken into consideration and trying to balance these interests (Freeman, 2010b; Clarkson, 1995) with, for example of stakeholder dialogue on a practical level as argued by Pedersen (2006) and O’ Riordan and Fairbrass (2008), Garvare and Johansson (2010) discuss global sustainability. In a state where nature and human flourish and requirements for social and environmental concerns as well as distributed economic prosperity is of importance. But to be able to have a long-term mind-set regarding sustainable development, the need and choices of innovative and new ways of thinking are required (Global Reporting Initiative, 2000-2011).

3.9.4 Value in the Societal Natural Environment

Rokeach (1979) discusses human values being dependent on a range of values in their societal and psychological needs and that central changes in value have important consequences for social behavior and knowledge. Humans are included in all perceptions of stakeholders. However, the stakeholder theory does not resolve long-term problem of identifying shareholders and understanding which are to be given a “legitimate” stake in the corporation. Stakeholders are viewed from the corporations’ perspective. Additionally, all stakeholders are not involved on same terms relating to processes and decisions (Donaldson and Preston, 1995). Evident is that organizational change is required (Senge and Sterman, 1990) with the complexity in social systems to be a part of the hierarchy-like societies (Simon, 1962). Continuing on the stakeholder-theory Mitchell et al (1997), a lack in its full theoretical status where again, the distinction of primary and secondary stakeholders discussed as part of the relationship attributes of their extended view of the stakeholder theory. Practically it is agreed that everything can be a stakeholder, even the natural environment and society can be an actual or potential stakeholder. Quick-tempered environmental, technological and political change is some of the causative factors of the turbulence existing, and the rapidness of organizations change, is a fundamental requirement. What needs to proceed now is to define the society as a stakeholder affecting the stakeholder theory as a primary objective.

3.9.5 The global societal natural environment as a primary stakeholder

This research suggest that the societal natural environment ought to be seen as a primary stakeholder as one way of dealing with unintended NCoI. Berman et al (1999) discuss five different aspects of stakeholder importance for firm operation connecting firm strategy to stakeholder relationships. The five aspects are community relations, employees, workplace diversity, customers and issues of product safety and the natural environment. Hart (1995) presents an agenda for competitive advantage to be concerned with the natural environment with three interconnected strategies; product stewardship, sustainable development and the natural environment. The framework presented by Hart (1995) is the Natural-Resource-Based View of the firm for firm competitive advantage. At a more societal level on how to deal with unintended NCoI, interest between policy makers, public society groups, researchers and companies relates to the RRI framework for shared understanding (Sutcliffe, 2011).
The planet is at risk because of the way of doing business (Amory et al, 2007). Many firms believe that they put their competitiveness at risk when they concern more for the environment (Nidumolu et al, 2009). Taking precautions for sustainability can even be considered as a way of innovating and with sustainable innovation Nidumolu et al (2009), introduces a five stage opportunity-creating model for perceiving sustainability. Introducing an innovation involves risks and modeling of consequences is necessary for sufficient assessment of these risks (Merton, 2013). Recently a framework for risk-management of innovation has been introduced (Merton, 2013). A requirement for an innovation is that it transforms a work or social practice with acceptance from society as a prequisite. With the introduction of the Natural Capitalism framework, the main line of argument is that a natural productive biosphere or stable climate can never be replaced with man-made devices (Amory et al, 2007). Jing and Gong (2012) highlight sustainable innovations to produce replicable models of civic engagement, strengthen social entrepreneurship, and build capable nonprofits that meet the needs (and increasing demands) of citizens throughout the society to be regarded necessary. Changing organizational behavior takes time (Bernotat, 2007). One can manage this challenge by implementing the ideas of a social venture. A five step model for managing market creation in uncertain environments is introduced by Thompson and McMillan (2010). The goal for all the presented frameworks (Thompson and McMillan, 2010; Amory et al, 2007; Nidumolu et al, 2009) is to provide evidence that working for a social cause may benefit both organizations and the societies in the future without incurring harmful consequences on the natural environment. Haanaes et al (2013) highlight this objective by arguing that firm ought to consider their total return on resources, rather than just on assets where scarcity prevails. With the opening up of innovation (Chesbrough, 2003) and the complexity of infrastructure an innovation is introduced in (Merton, 2013), this research aims to contribute with the analyses on how different organizations in different sectors view the UNCoI in regards to the societal natural environment. This emerges by the authors introducing The new Extended Value Creation Mechanism for Global Sustainability with the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability (the SNE SFI-GS Framework).

3.10 The Model

“In you! You, the people, have the power, the power to create machines, the power to create happiness! You, the people, have the power to make this life free and beautiful, to make this life a wonderful adventure….let us use that power”-

Charlie Chaplin from the “Great Dictator”

The suggested theoretical framework highlights the current situation by acknowledging the gap in combining stakeholder theory with UNCoI in terms of the societal natural environment. After the synthesis of the theoretical framework, the following section provides the authors’ own contribution to research. The result is The new Extended Value Creation Mechanism for Global Sustainability is the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability (the SNE SFI-GS Framework), in order to suggest a mechanism for possible lowering of risks damaging the societal natural environment. The proposed contribution suggests organizations that aim to contribute to CSR-practices, consider the society and the
natural environment as first hand stakeholders. If organizations are concerned for future generations in society they need to re-think current perceptions regarding innovation to a greater extend. The planet has a pre-set of scarce natural resources and more respect ought to be given to these. As authors a question arises; how many innovations have been prevailing without long-term consequences on either the society or the natural environment? The societal natural environment affects the people closer than other stakeholders because people live in a close interaction with nature. Some of these people may work for organizations, other acting as consumers, suppliers, governmental workers or practically occupy any of the suggested stakeholders within the stakeholder theory. If they realize the damage caused and understand the value of sustainability, then they may work harder to sustain the environment. From being considered as secondhand stakeholders to gain first-hand stakeholder acknowledgements, the effects of NUCoI may be alleviated. Diffusion of innovation increases when more people get access and adopt the innovation (Holmquist, 2012), more when globalization and wealth increases. The NCoi in society additionally needs acknowledgements (Sveiby et al, 2012), when more and more people adopt the innovation. Together with the increasing complexity of the infrastructure in society, the more risks it incurs (Merton, 2013). With the the opening up of the innovation process (Chesbrough, 2003), more people are involved developing new innovations (Teher, 2002) with the speed of innovation, globalization and co-creation. Recently there seems to be a trend towards keeping things as simple as possible and going back to natural mechanisms (Haanaes et al, 2013), by valuating and respecting the societal and natural environment (Nidumolu et al, 2009; Amory et al, 2007; Hart, 1995) when making business. Taking into consideration the NCoi, the innovation-value creation mechanisms may be regarded in a more long-term approach, make the society and natural environment gaining more stakeholder respect. One needs to see the societal natural environment as an organ for long-term value-creation. In the presenting model to come, the authors’ suggestion of secondary stakeholder importance in terms of society in the natural environment is displayed. With globalization, rapid growth and increasing living standards, the over-using of scarce resources emerges.

Innovations have facilitated many aspects of life for humans, but as more people enjoy these facilitations, the more damage it will also cost for the environment (Hanken External Relations, 2012). Examples relating to the societal natural environment may be global warming and climate change (Winston, 2010). The society and the natural environment (societal natural environment) might currently not have a stake in the organization as much as shareholders, consumers or workers, because they lack of sameness in claim. More importantly, they cannot speak for themselves because they are not individual entities. However, Haanaes et al (2013) claim basic practices of sustainability as a way to make profits in 2013, indirectly considering NCoi in relation to the societal natural environment. Figure 24 provides the authors literature perception regarding contemporary importance of secondary stakeholders. Even though the emergence of secondary stakeholders has been prevailing in literature, to consider their importance as primary in relation to NCoi is a relatively new suggestion. The figure tries to make a comprehensive short story about a flower in, representing the consideration of the societal natural environment as a stakeholder in theory.
When the flower (the societal natural environment) was considered as an external factor, it was a prospering beautiful aromatic flower. This may be because globalization was not spread out and mainly the western world contributed to pollution and the negative externalities (a small fraction of the world’s combined population). As more and more people enjoyed welfare with technical and mechanical innovations in their everyday lives, these organizational innovative activities were often aimed for primary stakeholders who had a direct claim in the organization. The natural environment was seen as a secondary stakeholder whose claims were not the organizations’ primary concern. Since the flower became more polluted and contained hazardous waste from the activities of organizations, it became lousier and lousier until it died. If this continues, the natural resources on the planet will risk extermination but due to the fierce competition and high innovation-pace of organizations, there will be attempts to create artificial flowers. In the long-run this would make the world artificial place for humans to live in and then it may be late for the world’s population to do something. The authors suggest the society and the natural environment to be considered as primary stakeholders in the organization, so that their stake matter from the beginning. However, if organizations are to implement this mindset, the current primary stakeholders need to speak up for the current secondary stakeholders. If this ought to occur, awareness of the relationship between current primary stakeholders and secondary stakeholders need to be established. Putting individual greed and organizational profit-maximization aside, new approaches for innovation need to be established where secondary stakeholders are prioritized. In this way, the natural environment gain more respect where a society exists. If this idealistic mindset prevails, many flowers will flourish in different sizes and colors, still natural. This may be maintained if more research regarding NUcoI is conducted.

Relating to NUcoI, the global societal natural environment may be considered as a stakeholder affected by the organizational innovative activities. Therefore, the contribution in this research regards the societal natural environment, where the society and the natural environment are considered as first-hand stakeholders, hence more NCoI can be acknowledged. The new Extended Value Creation Mechanism for Global Sustainability is the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability (the SNE SFI-GS Framework). The presented model consists of displaying two fragments. The first is the current situation in the authors’ interpretation of literature. The second displays the authors’ thoughts regarding the idealistic situation, where primary stakeholders may act as intermediaries for...
secondary stakeholders giving them the same claims regarding organizational activities.

Model part 1 (Figure 25) conceptualizes the planet by the big green circle. The stakeholder theory favors a primary stakeholder that has a direct stake in the organizational activities; whereas the secondary stakeholders do not have a direct stake on the organizational activities, nonetheless is affected by them negatively in one way or another. There is a barrier between the primary and the secondary stakeholders creating an arena for unintended NCoI to emerge in relation to sustainability. With both the society and the natural environment to be considered as secondary stakeholders, in the long-run, harm on these may create tremendous negative consequences for human life. The red Xs in both models represent the NCoI, reflecting on the societal natural environment. As can be seen, in the current situation the negative consequences are rather numerous. Additionally, the green area surrounding the primary stakeholders indicate the missing line of communication between the primary and secondary stakeholders. In other words, there is a barrier blocking the important interest from the secondary stakeholders in the organization. Model part 2 (Figure 25) provides the recent findings in literature combining the NCoI relating to the natural societal environment with the authors own contribution. As it can be seen, secondary stakeholders are now considered as primary and therefore organizations need to act on behalf of them, in addition to the previously regarded primary stakeholders. In the future, this creates a green ecosystem prospering the health for the future generations to enjoy, where respecting natural resources as it may be used to spur sustainability innovation. The green surroundings going in a circle indicate the prospering continuation of exploring the natural resources on a healthy conscious manner by indicating the consideration of secondary stakeholders. The less frequent X: s indicate a decrease in unintended NCoI affecting the societal natural environment. In this situation, both the primary and secondary stakeholders are interconnected with the same importance for the firm.
4. **Empirical findings**

A multiple case-study is conducted for grasping different insights to the topic of NUCoI in relation to the authors’ developed framework considering secondary stakeholders as primary. It starts with an in-depth interview with one of the main research contributors in the relatively new field of NUCoI. Proceeding, two corporations from the consumer-goods sector are aimed to highlight evidence if corporations actually consider their effect on NCoI in terms of sustainability. Additionally, findings on two start-ups in the field of sustainability provide evidence on their insight on NUCoI. Proceeding, 4 different managers working in differing industries, highlight the contribution relating to the topic. Ending, 4 employees from the same organization provide a fraction of insight of relevance from the automobile industry. Relating to the theoretical framework presented in chapter 3 and the authors’ own contribution, the empirical findings provide the reader with a more comprehensive understanding of the subject. It contains information from their viewpoints working as managers in different fields. Due to the participants request to keep the information in the conducted interviews confidential (exception: the CEO of GreenEarthCitizen), artificial names are constructed to refer to the findings from these. Official publications are used when referred to. Figure 28-35 found at the end of each section is conducted using the online Wordle for creating “word clouds” (Wordle official website, 2013) for displaying the most commonly occurring ‘buzzwords’ in the findings and conducted interviews. The second interview with Fex Nutrition and People’s Choice has most insight regarding the for-profit sector, followed by the previous manager working in AB Limited. The experience from the managers in the medical industry, the technological industry and the service industry have approximately same weight in the analysis and the employees from the automobile industry contribute with a vague, but important insight. The ‘general opinion findings’ with the 107 respondents regarding innovation served as an insightful contribution for the coming analysis. Additionally, both of the insights from the social venture CEOs gave an equally important contribution to the findings. The following sections display these findings that the authors find of highest relevance for this research. Figure 26 displays the weight of each participant.
4.1 Andersons’ viewpoint

As a postdoctoral researcher in social science regarding unintended NCoI, Anderson (2013) provides an interesting discussion regarding the neglected research in the chosen field. Due to the experience of working as an HR manager, project manager, coordinator for different educational issues and dedication to research in academia, Anderson raises many valid arguments reasoning on why NUCoI have been prevailing for a long time without getting the attention it deserves. With her meaningful and interesting work as a full-time researcher as her current position, her daily activities constitute of participation in conferences and seminars, reading, collecting and analyzing qualitative data, supervision for research writings, some mobility internationally and giving a few presentations/lectures per year (Anderson, 2013). Relating to the topic of this research, Anderson (2013) states that few studies in innovation focuses on consequences of innovation on society. Therefore, she thinks that our research seems to be of relevance. (Anderson, 2013).

The first dialogue concerns her insight on why she thinks the neglected field of NCoI in social science is prevailed. She starts by stating the revealed reflectance of finding research where negative or undesirable consequences decreases radically as compared to research about innovation (Anderson, 2013). On the question why this is evident, Anderson (2013) believes an important factor to be a prevailing presumption that innovation is good, regardless of its consequences. She refers to it as the “pro-innovation bias” argued by Abrahamson (1991); Kimberly (1981) and Rogers (1983) according to who it restricts decision makers’, change agents’ and researchers’, abilities to foresee undesirable and unintended consequences. To develop insight into how the pro-innovation bias is continuously maintained we can explore how innovation is socially constructed at various societal levels. Questions may be raised such as how innovation is talked about by various authorities (researchers, funding bodies and policy makers); the way assumptions establish discussion about innovation. Additionally, the focus and conduct is based on the consequences of these assumptions for innovation research (Anderson, 2013). She states; “It is important to challenge the pro-innovation bias by asking, for instance why and how the dominant perspectives of innovation are produced and maintained. Likewise we should ask “what the consequences are and how marginalized voices can be brought forth in the research field of innovation” (Anderson, 2013).

Anderson assumes that the UCoI have been studied but mainly outside the innovation research field, such as in medicine, and sustainable development drawing on various theories, perspectives and methods. Therefore, it seems that innovation studies rarely consider undesirable consequences of innovation brought up by other fields of research. Because of this, severe implications can prosper (Anderson, 2013). But Anderson (2013) mentions that notable exceptions exist, such as the special issue in the journal of Technology Analysis & Strategic Management, 2000, volume 12 issue 3. For the moment, critical studies on innovation are not gaining much attention and are marginal. In the nearby future she does not think that this field of research will increase significantly. In the future, Anderson (2013) hopes that research concerning unintended undesirable consequences of innovation will upsurge at a rapidly pace for increase in mutual learning and interaction among innovation scholars and other researchers.
Some researchers have expressed their interest in the field and Anderson (2013) believes that they will get a gain with their voices to be heard over time. As an example she highlights the arena of policy making, especially now since the financial and euro crises. For example, EU is considering new ways of handling poverty, climate change and other challenges. In this situation, EU views innovation as an important contributor to solve different challenges but not as the foundation for undesirable social conditions. Since EU is a research funder of importance, questions may be rising such as; “how will undesirable consequences be considered at the policy level in the near future and how will it influence research?” (Anderson, 2013).

The discussion continues concerning the authors’ standpoint of thinking about innovation providing welfare, but at the same time damaging the natural resources which in turn affect the society. On the question on how she thinks this can be prevented in the future she starts by stating that this can be addressed at many different levels. While she states that she is not an expert in the field of natural resources but her understanding of the consummation is that still we, in the western world, consume natural resources to a lot greater extent than in the rest of the world but at the same time “export” pollution and production etc. to other places of the world. Therefore, there is a need to start taking responsibility by acknowledging the facts and not blaming others as for example emerging economies. However, the global problem still remains (Anderson, 2013).

On how the problems can be prevented, she does not have a direct answer but highlights that the issue needs to be presented on the program of politics, research, business to mention a few. Although this has already happened, the issue has not yet been interpreted into satisfying action-taking. From her viewpoint as a researcher, the first step ought to be questioning the dominant discourse of innovation. The challenge lies in raising awareness and to create a critical debate about the field of research concerning undesirable and UCoI (Anderson, 2013). She states that “We need to bring forth previously silenced and marginalized voices, to learn from these and make methodological improvements in order to further foster research on consequences of innovation” (Anderson, 2013). In terms of education, the topic ought to be included in the agenda of various fields, such as sustainability and CSR, raising interest among students to write their Master of Science research relating to the topic regarding unintended NCoI. Researchers need to engage in dialogues with the corporate world and policy makers. As a last point, she highlights the importance of changing individual habits for further teaching our children these new practices. At the same time, it is important to enjoy life without feeling too guilty by getting absorbed and depressed about the current situation. (Anderson, 2013).

The last part of the discussion concerns who actually is to be blamed for the NCoI. The notion regarding the discourse of innovation is brought up. As the authors highlight that greed and profits often are related to the effects on the environment caused by corporations, Anderson (2013) believes greed and profits only are part of the problem. One can also explore the question from a discursive view with different dialogues. For example the dominant discourse of innovation and the discourse of economics; these different discourses build reality in certain ways. Relating to the field of innovation, the dominant discourse of it constructs innovation objectified as something that is ‘always good’. Anderson (2013) highlights by adding that “various actors, including politicians, the corporate world, media, researchers, individuals etc.
all together contribute to producing these meanings or discourses attached to innovation and in doing so they neglect undesirable consequences of innovation” (Anderson, 2013).

Anderson (2013) argues because of power relations, some of these actors influence the meaning more than others. As an outcome, the meaning of these emerges through social interaction on a daily basis. This, accompanied by power relations, eventually make us perceive the meanings for granted, resulting in easily forgotten critically standpoints about innovation. Relating to greed and profits, Anderson (2013) reasons that the meaning of innovation around any social reality gives space for diverse possibilities regarding human action-taking causing greed and profits, amongst others (Anderson, 2013). The winners of the dominant discourse of innovation one could say is often corporations of various kinds. However, they are not alone in creating the social realities they perform in. But they need to take responsibility Anderson (2013) argues, and the desirable objective would be that those respect and listen to the actors influenced negatively by the actions of the corporations. They ought to engage in the aspect of changing the dominant discourse of innovation. She also highlights the fact considering blaming where she does not know if it would help much for gaining purposes. Instead, debates and constructive critique are elements of importance applicable to societal change. The authors end the discussion with her notion that consumer also carries a responsibility when making decisions of various kinds (Anderson, 2013).

4.2 Manager in Fex Nutrition and People’s Choice

Johansson works as a category buyer for Capital Expenditures (investments) at Fex Nutrition in Stockholm. He has a previous experience as a Procurement Manager for Capital Expenditures and Procurement of Human Resource and Professional Services in another Multinational corporation. He acquires a master’s degree in Social Science related to human resource. His current position in Fex Nutrition gives him many advantages that make him delighted with his work. He gets to talk to different suppliers on a daily basis and having a close contact with dairy sites. By this, he gets to contact and meet a wide range of people to work with in various projects. “This makes the job interesting” (Johansson, 2013) he states, ensuring his enthusiasm with the current position he convey to the authors of this research. He also gets the chance to design his own work in relation to for example choosing which projects he finds interesting to participate in.
Often these projects are grant and deliver value, creating the attractiveness of the job. He also expresses his way of finding the position making him learn, develop and gain experience through the job. “I can be innovative and challenging thus come with new ideas to my team and the teams I support” (Johansson, 2013).

However, the other side of the position carries some disadvantages which he finds to be an immense work-load that needs to be done fast, and at the same time be done well. Another disadvantage he believes is the difference in agendas with differing goals among employees in the organization. This may cause tension and to overcome this, one needs to fight for making oneself understood by cooperating with people from other departments. He gives a valid suggestion for future becoming workers at large corporations at managerial levels by stating “if you succeed in making people see your point and what’s in it for them to cooperate with you then you will go a long way in your career” (Johansson, 2013). The discussion continued to concern the strategies happening internally in the organization. The organizational strategy characterizes the whole organization and this he believes is the case for most multinational companies. “This strategy is then cascaded down to the departments, which have to follow it, who make their own version of the strategy by applying and implementing it on their own department goals. In the beginning we decided what needs to be done, based on overall strategy and our department strategy” (Johansson, 2013). He also highlighted their frequent meetings or calls with his Line Manager to check evaluation and progress of the work for reaching strategy achievements and goals in the corporation. (Johansson, 2013).

In regards to value creation in the organization, Johansson believes it is being embedded in the corporate strategy making it one of the core strategy goals when the organization has to bring maximum value for their primary stakeholders. This means that the primary stakeholders need to receive the highest possible price for the product provided by the company to the primary stakeholders. Depending on the product price-level the primary stakeholders receive, the company creates value in accordance to the price. Johansson highlights this by stating that “the highest the (confidential) price the (confidential primary stakeholder) receive the highest is the value created by the company” (Johansson, 2013). In terms of organizational value mechanisms, Johansson explains his viewpoint concerning a three-fold argument on the value-creating mechanisms. The first concerns getting higher sales and promotion of (confidential)-products in the consumer market. Secondly, the corporations aim to gain market-share in the industry. The third is found to be the most interesting in relation to sustainability. He states that one of the organization’s main value-creating mechanisms is “promoting the company with its slogan (confidential) showing that our products are natural, and trying to impact the environment less with our operations. This makes the company more likable for the consumer, which is good both from an environmental approach but also for people to come closer, like our products and buy them” (Johansson, 2013). He ends his argument by highlighting the fundamental fact when doing business by stating a few words of wisdom “if people don’t like something or it is not in line with their values they don’t buy it correct?” (Johansson, 2013).

Continuing the dialogue with Johansson the topic concerning stakeholders comes into the agenda. The magnitude of the discussion can require in-depth long answering but the authors try to keep the dialogue short and essential relating to the research. He briefly starts stating about the
magnitude of the influence on the organization he works for. This can be exercised by Governments, the EU Food Authorities, Farmers, Competitors but most importantly the Consumers. Reflecting on this statement the authors find that understanding this issue can involve being societal, economic, political and ethical as emphasized by Johansson. “At the end of the day, in my opinion, the moment of truth comes when the customer picks your product at the supermarket shelf. If you manage to bring excellence of quality in your products and your operations, you outcompete competitors which means that you have put a big effort, fulfilled many demands and become leading in your field, keeping stakeholders happy” (Johansson, 2013). This includes the stakeholders and a mindset occurring in the organization that is “customer is the boss!” (Johansson, 2013).

Enduring the interview, the authors came to the field of CSR. In Fex Nutrition’s CSR is regarded as very highly. They actually have one of the organizational goals relating to this. He states “there is a goal in the strategy of the organization as to always consider the environment and society in everything we do. We need to do this as an ethical duty towards our surroundings. This is what sustainability is all about” (Johansson, 2013). He exemplifies this by stating that the received resources from the environment is used to run your operations but at the same time giving back even more which will result in less harmful effects. (Johansson, 2013).

The discussion regarding CSR continues with the topic of future generations in society, and two discourses are highlighted. In relation to CSR, the organization is trying to understand what takes place in the society and the world. Then the organization adapts to this exemplified environmental discussion, by complying with regulations and new rules for the purpose of minimizing the effects of the environment. An example of this is the trucks within the corporation having better engines and systems, thus emitting less co2 into the environment. In relation to a human resource orientation one, can view the organization as having plans recruiting people from all walks of life and additionally trying to incur a labor force displaying a micro-graph of the society with the purpose of mirroring the world we live in, as Johansson highlights. (Johansson. 2013).

The authors asked Johansson if they had a model for value-creation, the usage of it and the risk associated in the corporation he works in. Maybe it was because of that he only has worked there for a short period of time, because he was not sure about this question. However, he tried to answer it the way he perceived it from the corporation. He explains “I think that deep down it’s all about value creation. What you do at your job that can make things better for your company, your team and the world. Every department should, if not already done, think in their agenda and strategy that what they deliver should be transformed into value terms” (Johansson, 2013). He takes up an example of how they work internally for value-creation. He talks to suppliers trying to get the best possible deal in projects that are for the company. If he manages to save 20% of the capital that was aimed to be invested in a certain project, this would indicate and mean that the company can take this 20% of the money for using it somewhere else working as a driving force to go forward. “This is how my department creates value, in the case by bringing costs down” (Johansson, 2013). He briefly mentions other examples of value-creation including risk-management in projects but also controlling supplier capabilities meaning who delivers what and how they do it. (Johansson, 2013).
The other half of the interview concerns innovation in terms of the specific company. The corporation’s contribution to innovation in his perspective is very highly regarded. The idea is embedded to be so innovative to be able to accommodate the needs of the society for the situation when people’s stomach cannot handle dairy products anymore. For that situation they should manage to provide alternatives. “Telling people you cannot eat or drink, that is not fun, we need to come up with the answer and this can only come though innovation” (Johansson, 2013).

Another example concerns the product “whey protein” which is an innovation originally based on a by-product previously thrown away initially. Then it was discovered to be a very protein-rich by-product, turning out to be a useful product for people involved with exercise. (Johansson, 2013).

Developing the discussion about innovation the authors asked if Johansson considers NCoI in his work, and if he applies any model for handling them. From his perception as a category buyer for Capital Expenditures he reasons “of course I do. I should always bear in mind that I deal with suppliers, who might own their own company and if they don’t get granted a project this mean they get less sales, they have personnel to pay and costs to bear and not getting a project doesn’t make it easier. I always take into consideration that they might not be able to come down to the price I need to have and in this case it all depends how flexible we are to find other ways to solve things and again at the end of the day they need to be competitive. If you push a supplier so much that they go into bankruptcy this is absolutely the wrong way. I need to have a supplier who is able to deliver and has a cost-model that can allow them to be competitive” (Johansson, 2013).

In addition to this, Johansson emphasizes the human nature of having feelings and that he is in fact not a machine, bearing in mind the understanding of difficulties to handle different kinds of situations like this. Continuing, the model for handling these situations he thinks from an honest viewpoint to invest in mutual understanding of each other and try to negotiate for creating a win-win situation. However he states that “unfortunately there is a ‘war’ in the market and we cannot overlook this, suppliers need to always deliver excellence in quality and price...then they win in the market place by convincing the customers to buy their product” (Johansson, 2013). He notifies ending the dialogue by highlighting that the customer in this case is the buyer in the organization and that quality and price relates to the earlier discussion about value creation. (Johansson, 2013).

The last section of the interview deepened the understanding regarding the NCoI prosper. The authors asked Johansson if the organization he works for takes responsibility for the NCoI, which might have an impact on society and the environment regarding products and innovations. In fact, they actually do take responsibility he believes. He states “as mentioned I am quite new but what I have seen up to now makes me believe that we don’t try to neglect our responsibility... We try to think of all possible impacts before something is done, although sometimes things come up that could not be foreseen resulting in uncomfortable situations. If this happens then things are taken very serious and actions are taken by the appropriate teams and departments” (Johansson, 2013).

On the question regarding his thoughts on who is to be held liable for the environmental effects, the authors wanted to know Johansson’s viewpoint regarding the assumption that it is a capitalistic system consequence. He states “In every situation you have ‘the good, the bad and
the ugly’, meaning people follow a linear sequence of understanding events” (Johansson, 2013). Johansson exemplifies this with someone producing something and they stand for the biggest part of the blame for the negative effects of industrial production. Taking a fun and concrete example he explains is the one concerning co2. While people in general think that the biggest contributor to co2 pollution is industry and factory gases with cars and the traffic, for mentioning some of the contributors, there is another side of the story. While this is indeed a major problem, reports and statistics with reliable facts show that a very high contributor to the dilemma is the cows’ flatulence with their natural gases. And the way of solving the problem is not eliminating all the 1, 5 billion cows on the planet; “certainly not” he highlights. (Johansson, 2013).

There needs to be an understanding of the problem, being innovative and solving it. However, one needs to understand that greed and profits are human traits of unnoticeable nature for some people and therefore the discussion can involve a societal and psychological nature. And to take things to be more complicated, the capitalistic system we have with the EU economic crisis occurring it is not working at its best anymore. He explains it to be ‘fed’ for survival. He continues “So, in general people need to blame someone for something, they don’t bother to analyze the problem and how we got there in the first place, and what they done themselves individually to avoid this, because it’s easier like that. I am not a psychologist but I would believe such an approach makes us happy at the end of the day” (Johansson, 2013). He uses this to exemplify that humans know who to blame, for otherwise there would be uncertainty which humans cannot handle very well. (Johansson, 2013).

“On the other hand I am not trying to say that corporations are not to blame. Indeed, they need to change the way they operate and discuss alternative ways to produce things as to consider their surroundings. If they give back more to society then people will characterize them as less greedy” (Johansson, 2013). He also states that when it comes to profits in his opinion, everyone needs to have an understanding of it in a bigger sense to grasp that without profits the world would actually go nowhere. He highlights the fact that he is not only talking from an economical perspective but rather a societal, bringing the progress in the world forward. He notifies that greed and profits is in fact incorporated in our education already as children and we are taught to think it that way. He gives a valid suggestion for the future “we need to also take our responsibility to educate ourselves more to understand why this is happening in order to break loose from the chains of greed and profits…the solution still remains to be given, some companies operate better than others…” (Johansson, 2013). As a concluding remark he states “perhaps research & innovation can show us the way” (Johansson, 2013).

Extending the discussion about the NCoI, product and service development becomes the topic of discussion. Although not working as a product developer, Johansson thoughts concerning product development deserves attention for future consideration. “I certainly believe that any wise product developer should be having a detailed overview of that they are trying to produce” (Johansson, 2013) he states, by exemplifying by using a SWOT analyses and a starting point where all the possible outcomes ought to be considered. “At the end it all boils down to economic terms because this regards a risk management perspective” (Johansson, 2013). He clarifies this by stating that if the developer does not regard NCoI, they might actually produce the best product in the world but at the cost of getting their innovation killed by the financial advisors not
supporting them with capital. This is true because they might view the negative aspects, or even worse, at the industry and society at large, with the product already launched causing major failure because of the magnitude of money invested to launch products into the market. The product then is killed by critics and competitors, because of reasons such as that they are harmful to the environment (Johansson, 2013). As an ending valid point he states “careful planning and consideration must take place and NCoI should be an integral part of risk management in any project development” (Johansson, 2013).

The authors conducted a second interview with Johansson because they found out about his past working experience in a Multinational Organization, People’s Choice. After the development of the authors’ own contribution in the research (Model part 1 and 2, Appendix 4) they wanted to know Johansson’s opinion about this in regard of working in the managerial level in both Fex Nutrition and People’s Choice. His first comment was that it is a nice thought to put it in pictures for good sense-making. His opinion was that it was well-done. He starts by stating that “this model you have created is already happening as we speak. Although this is not company specific, this is an industry norm nowadays.” (Johansson, 2013). He explained this by stating that every company, especially big multinationals have an understanding that there is an effect on the environment caused by NCoI. The fact that in the last hundred to two hundred years of industrial revolution it is only in the last thirty or forty years people started to think in these terms, he extends. However, only recently organizations understanding of what the impact is and therefore is a fatal factor that may be bringing their operations coming to an end. Then, having taken into consideration and caring for the environment, people and society in general have both a positive effect on the ozone layer indicating on the environmental impact and huge economic, political, marketing profits and employer branding benefits Johansson mentions as a few examples. (Johansson, 2013).

“What I mean is that by applying such an approach with your developed model, this means that organizations come closer to consumers and as you rightfully mention understand their values, ideals, thoughts about how life should be lived in society in a harmonic cooperation to the surroundings. This means by default that if an organization manages to develop such a model successfully they will be at the forefront of change, showing to people that they do share values and take care not to harm society at large with their innovations” (Johansson, 2013). This in turn indicates that they think of the negative consequences and do something about it, something customers are looking at nowadays. “If you position yourself as an organization which is better than competitors and convince consumers about it, this means that they will buy your products resulting into economical profits” (Johansson, 2013). Further, if you have convinced them about your operating framework this also means that you are displaying your company as good and attractive, that makes many to look up to and maybe even creating a want to work there. This result in a proper marketing of the organization creating a good market name that brings more money in. Extending from an investment perspective many would say that “you know it just costs a lot of money to invest in new technologies to remove negative aspects...” (Johansson, 2013). But the answer to such critics he says is to actually understand how value and profit maximization occurs, which they are lacking or that they only think short-term, Johansson explains. (Johansson, 2013).
Johansson gives an excellent example making this much clearer for the authors to understand. If one invest in a full water recycling water treatment plant for your plant where you use but also reuse your water supply 100% and not causing any spill on the environment, one can mention this the whole world and as an outcome of this huge investment to perform this, this means winning the consumers’ hearts in the long run with them buying your products. “Also what is not so often explicitly named is the money saved by such acts, I cannot give you numbers but you can imagine what it means to recycle and use your water supply. As mentioned in the beginning such a model can bring prosperity to society and organizations at the same time” (Johansson, 2013). One cannot think linearly but rather one need to have a more sphere-shaped view on how things work. Adding, the magnitude of challenges promoting such a way of working causes you to challenge the status quo and for enabling this, you need to be a pioneer in your field, well studied and at the same time to think of most things that may come up to destroy your plan. For getting a more detailed description on how these two companies currently work with sustainability, he advises the authors to check the annual reports published. (Johansson, 2013).

The authors continue the discussion by bringing up the pre-mindset in the often so prevailing mind-set of humans associating and considering innovation as something positive. “I think this is because this innovation is a buzzword, popular and delusional new. In my view this has to do with deeper more sociological, psychological reasons. It is not about the company it is more about the people I would say so again this is not company specific, it has to do with the individual and deep rooted human values” (Johansson, 2013). He shortly exemplifies this with the performance society we live in today, where absolute performance is not just enough and where you have to do more as competitors exist in a constant and global scale. Therefore, people want to show that they can do more than their peers adding on to the “thinking outside the box” prospering new solutions, ways of thinking and ideas on the table. This is in turn based on peoples’ need of having a feeling of an achieved good job by receiving appraisal but also receiving in terms relating to economic and status aspects such as higher salary or better job performance (Johansson, 2013). “So innovation is something which is embodying all these but remember that this is not something new, thus the delusion. Innovators and entrepreneurs have always been around to challenge the status quo with their breakthrough thinking to help the world develop in the right direction and in better ways for the human kind”(Johansson, 2013). He mentions a few characters in history as examples; Isaac Newton, Christopher Colombo, Da Vinci, Magelan and Galileo. In this sense he argues, one sees innovation being quite interesting and popular because it regards new ways of doing things (Johansson, 2013). The discussion continues for getting an inside viewpoint if the multinational corporation People’s Choice takes a serious consideration about the negative impact on the environment, as he had the experience working there for a longer period of time. He states that People’s Choice “is probably one of the best companies in taking such measures for the environment when they apply innovation (Johansson, 2013). Continuing “having said this they are not 100% error free, they need to make some things better, but the idea, approach and mindset is there which shows that they are going towards the right direction” (Johansson, 2013) ending with advising us to read their CSR Plan. (Johansson, 2013).
Since the research intends to take a standpoint of regarding the importance of the societal natural environment, the authors want to know Johansson’s viewpoint on the suggestion made by Haanaes (2013), where the natural resources of this world needs to be taken care of to a greater extend today in 2013, investing in nature and ecology for long-term organizational success. He agrees 100%. “From my view I would like to mention that this is viable but you need to always think “What’s in it for me?” something which everybody does all the time, but not everyone admits” (Johansson, 2013). He highlights that this has to do with the issue of deep values of maximization, having its roots in our ancestors and history of the human development. Therefore, organizations think about what’s in it for them if they invest in products with a more natural appeal. Do the organizations win anything? The answer is of course they do. However, a magnitude of people does not understand the business world and therefore, complain in companies that they think of profit. “What can I say? I am not a capitalist but you need to understand that whatever you do you need to keep things running, and this has to do with profit/value maximizing. If you always have the same salary, even after working for 20 years...you will have a problem”(Johansson, 2013). He exemplifies with the fact of the commodity prices continuously increases and that of inflation. Therefore someone needs more and talks to their boss who is somehow willing to increase the salary if this person performs well or change job, because someone acknowledges the skills and experience this person have. And this applies for companies on organizational level in the exact same manner, Johansson highlights. Companies need to keep running and increase profits enabling them to pay higher bills and create more money for expanding operation to mention a few examples. This leads for employees to ask the boss for higher salaries which means asking the consumers to pay more money to the corporation by buying more of the products they offer as the consumers believe in the organization. This is because in the end, the consumer is the boss. This is the case since the corporation “have the same values and think of the environment and also take measures to avoid NCoI” (Johansson, 2013).

Figure 28; "Word cloud"-tool for summarizing findings. Source: Wordle official website, 2013.
4.3 CEO Green Earth Citizen

Fen Wang created GreenEarthCitizen with the aim of a social enterprise rather than being associated as a profit-driven organization. He wants to contribute in society for a better environment and at the same time foster the transition in society for a green and equitable economy with sustainable development. With his team, he gives the members of the organization the freedom to work as much as they prefer and at the same time foster freedom for the members to act. In addition to this, once a week they work with the directors of the various projects they are fostering to drive. Regarding the value perception in their organization, he states that “It is fundamental as all members working with us are working for the values” (Wang, 2013). The members create value for their organization in various ways as Wang (2013) highlights with exemplifying value related blogs, journals or articles. However, in his viewpoint as a founder of Green Earth Citizen he is the one creating the value in the organization. In his experience the main purpose of his organization is set in a way that probably makes anyone join GreenEarthCitizen. He states the aim to “create value change in the society for solving those challenging environmental and climate change issues, and to accelerate the society transition to green and more equitable economy and sustainable development” (Wang, 2013).

As the founder and president of the newly established GreenEarthCitizen in Linköping, Fen Wang, is a green visionary for sustainability practices. His previous experience was working as a Junior Researcher at IEDS, Vermont University in USA and additionally carries a master degree in Science of Sustainable Development. With one year of experience in his current position, he highlights the advantages of committing to their green mission but also highlights that there is a lot of work that has to be done. In his day-to-day activities tasks, such as planning for activities and coordinating directors for their performances are involved. All the different members in the organization have different tasks. The organization itself can be said to be member-based as highlighted by Wang (2013). For their value-creating mission he states that “Environmental security concerns all members and people within the society” (Wang, 2013). He defines a stakeholder as anyone that can be harmed by the environmental degradation and climate change for mentioning a few. The stakeholders that create the most value for his established organization is the current board members and the ‘Directors’ of the various ‘Projects’ they have. (Wang, 2013). According to their official website, their stakeholder group consists of humans including future generation which they aim to advance and protect; the bio-divert and ecosystem; their members and supporters. This includes groups of civil society such as the scientific and technological community, youth and children, farmers, women, indigenous people, business and industry, farmers, trade unions, local authorities and workers. It also includes the general public; the media, those whose behavior, policies and programs they wish to influence; regulatory bodies affecting their establishment and operations; their partnership and cooperation organizations where interaction exists; individuals and organizations providing them with goods, services or donations; their voluntaries, staff and interns. GreenEarthCitizen contributes by advocating four areas of relevance. These consist of influencing the reforming processes of environmental institutions; protect the environment; the environmental and social responsibility of corporations; cooperation and governance of climate change; empowerment of women. (GreenEarthCitizen official webpage, 2013).
GreenEarthCitizen have deep incorporated values consisting of human rights, harmonism, freedom of expression and democracy. Together, these work for their aim to create a greener and better future for both members of the organization as well as the civil society in reviewing the growing process of the civil society and NGOs. The unique means for the GreenEarthCitizen group is the arrangement of harmonism and democracy to create organizational truth for the members, by and of the members. For approaching their issues they have a set of principles they ensure to follow. These are to have civil self-determination; the strengths of will, discipline, solidarity and spirits; independence; effective programs; non-discrimination; non-confrontation and peaceful and non-violent resolution. Environmental governance is their core business. Ensuring that they advocacy is in line with their mission and promoted publically defined interests rooted in their work, GreenEarthCitizen manage potential conflicts of interests of their different stakeholders. Additionally, they thrive to have clear processes for adopting public policy propositions, having ethical policies and stakeholder identification (GreenEarthCitizen official webpage, 2013). The organization has existed for one year, so it is a relatively new social enterprise where the main value creating mechanisms is through their green blog project he mentions. In the future, however he has the aim to create more value via interviews and short-films he highlights as some step-taking of his future vision. In relation to CSR, Wang (2013) believes that GreenEarthCitizen promotes their green mission to be achieved through the corporations as one contributing factor. In this way they actually promote corporate social responsibility regarding their organization (Wang, 2013).

GreenEarthCitizen focuses on future generations is society. Wang (2013) highlights this by stating that explaining the reason behind the naming of the organization and promoting their essential concept. GreenEarthCitizen actually stands for their definition of sustainability. “The term “GreenEarthCitizen” is coming from my 3 years research in Global Environmental Governance, the fundamental and transformative solution in the value change for common survival, green + earth + citizens + no separation = heaven + earth + mankind + harmony = Sustainable Development” Wang(2013) explains. In his viewpoints, this is his definition of sustainable development. He also highlights that this may be a little different than mainstream definition of the concept of sustainable development. He refers to the former Prime Minister of Norway, Brundthland from “Our Common Future” in 1987 in the organizational official webpage for more in-depth information (GreenEarthCitizen official webpage, 2013). In modeling value-creation in GreenEarthCitizen, Wang (2013) has two approaches he uses regarding the structure of the organization. The first is the combination of members, the R&D team, president and Board of Advisors and the second one constitutes of only the president and the R&D team. With R&D, the discussion extends to further the innovation dialogue. Wang (2013) explains the organizational contribution in terms of their innovation activities. With brainstorming sessions, green innovation ideas are created and then executed through the projects and the members of the organization. The focus is on environmental innovation (Wang, 2013).

Concerning NCoI in their work, Wang highlights their apprehension by explaining that this is something of consideration in the organizational work. In particular, when they establish new partners, they are very concerned “...about the potential risks their innovation may pose to the environment” (Wang, 2013). They handle their NCoI though their independent research in their
Research & Development department. On the dialogue if they, as an organization take responsibility for the NCoI related to their viewpoint, it is clear that this is something they highly value. As Wang puts it “not only we do, but also we ask other companies to take responsibility to proactively seek solutions of for the potential negative consequences to the environment with their innovations. We urge them to write reports for environmental evaluations” (Wang, 2013).

The discussion continues with the essential dilemma on who actually needs to be blamed for the effects on the environment and if it caused by corporations often related with attributes of profit-seeking and greed. He starts to explain “It is not helpful to blame them for being greedy and profits-driven; it is not the faults of them, but pure capitalism. Capitalism to some extent is creating efficiency and productivity for the industry and creating more innovations. But Capitalism without moral concern would be a disaster for the nature, the environment, the Earth Climate…” (Wang, 2013). He also highlights the issue about climate change and argues it as becoming the greatest threat for human kind to ever be confronted. To deal with this as fundamentally solving the problems, he suggests that we must work for creating new values in a system. As part of this discussion with its significant magnitude, Wang (2013) suggests the authors to get inspired from a text he recently wrote on their official webpage when he attended a summit and heard the discussion with a Professor, Oren Lyons, chairman of the Board in Plantagon (GreenEarthCitizen official webpage, 2013).

The first example is from the World Economic Forum in Switzerland occurring almost every year. He told the forum coordinator that he wanted to speak to these people but at the same time put a condition on this. This condition was to put them up on the Alps, as they already were located there, for 24 hours on the top. Here he would speak to them. The forum coordinator doubted them to go there because of this. Professor Lyons then argues that the reason for making them go up there is because he thinks he needs to be able to influence their thinking in accordance to the wishes of the forum coordinator, and this was the purpose for him to be there, to be able to associate them with the certainty of the real world. Because these people are heavily shielded and do not deal with reality. Instead they deal with business. There is a difference between reality and businesses where they are lacking. Instead they are in business. Therefore, if putting them up here for 24 hours to just let them freeze, they would get feeling of another sort of authority, another form of power. The forum coordinator started to laugh and would agree to it being a good idea but at the same time he thought that nobody would do that, even thought he would have loved to do that. (Wang, 2013, GreenEarthCitizen Official Webpage, 2013).

Continuing on the important point highlighted by Professor Oren Lyons, the following dialogue is based on his idea of Onondaga Nation from 2008. One of the important points mentioned is the responsibility of the human being. With gifts being granted people differently, in another perspective these gifts are responsibilities. The task for humans is to develop these gifts and then to share those with the people not granted these gifts. This is the reason everything have equity and the reason why one needs to come back to that. (Professor Oren Lyons, 2008 in GreenEarthCitizen Official Webpage, 2013). Extending the discussion, the authors ask Wang about his opinion about the assumption on why innovation always is related to good things within society. He explains “innovation is not always related to good things; sometimes they could generate more harm than good if the innovations have not taken consideration of moral and
other ethical values. "Innovations should be problem-solving driven" (Wang, 2013). With this he exemplifies by stating that some innovations may help with climate adaption and mitigation, while some other can help with addressing environmental problems and others with dedication illegal hunting and logging indicating the variety of the problem-solving mechanisms. He extends the discussion by implementing value. He states the importance of value with stating that “...they are the fundamental bases for innovations. Good values will generate good innovations. Green values will help in generating green innovations...” (Wang, 2013) he states by adding on the technological aspect. He takes the example of climate change and explains that, to some extent it is the greatest threat that ever has confronted mankind. This is caused by the technologies with great productivity in polluting waters and oceans, cutting trees, draining the fossil fuels to mention some. “I would suggest an interface between science, innovation and value systems to be created to facilitate technological innovations” (Wang, 2013).

Because Wang is the CEO of a “green” organization concerning for the environment, it seemed natural to ask him which sector in society he thought created the most harm on the natural environment. He notifies that almost all industries generate some level of pollution but only to the extent that the levels are different. “Chemical manufacturing generates a great deal of pollution. Fertilizer companies, the pharmaceutical industry, and companies which manufacture pesticides all pollute copiously around the world. The indirect consequences of these pollutions are hardly incalculable” (Wang, 2013). Continuing, “The manufacturing and processing of metals, cement, plastics and paper is also a major culprit in global pollution. Mining can cause additional pollution issues, as harsh chemicals are often used to process materials at mines, and these chemicals often wind up in the environment” (Wang, 2013). Another example he brings up is oil refining as another major source of pollution. The previous city where Wang lived in for 4 years has been significantly polluted by factors such as the industry, the air, the water and the ecosystems. Another example he brings up is about GHG emissions where farm animals generate a great deal of methane is raised in high volumes. Ending this discussion, Wang highlights the issue about which industry causing the most harm, he highlights the fact that it totally depends on the regions where different cities have different key polluters. Relating to his history, he mentions City Zibo where the largest polluters are chemical manufacturing and pharmaceutical sectors (Wang, 2013). Ending the discussion with Wang he clarifies that in product/service development in society “We must consider, and before we create something, we think about the negative consequences first” (Wang, 2013).
4.3.1 CEO of Chinese environmental corporation

Jou has been working since 1990 as CEO in China in an environmental concerned corporation with tasks such as handling manufacturing relative equipment and environmental problems and design. The current position gives advantages such as working for environmental protection. He believes this as a social concern deserving attention, as one of the most contributing challenge to sustainability and social welfare. His daily activities concern negotiation and communication with customers, designing the company strategy, designing projects and managing the corporation’s activities. He has two employees working in the organization responsible for business-talk. Special for his organization is that they produce and sell equipment for gas and water pollution but also project designing for pollution solving. They have a leading position in the industry with their equipment offering. Their main customers are companies that produce waste gas and garbage transfer stations. (Jou, 2013).

Jou found motivation in creating his company by noting of the promising industry of the environmental industry. The industry contributes to the sustainability of the society, a Chinese emerging industry. Profitability in the corporation is maintained from after-sales service and equipment selling of handling waste gas and water. The company strategy aims to provide the best equipment and solution for protecting the environment. The current market is targeted to China mainly but customers from Thailand, Singapore and Malaysia are also on their clients-base. The organization plans to expand into international business and has already been scheduled for their business meeting. (Jou, 2013).

Value-regarding in their organization lies in their efforts for reducing environmental effects for the customers. This is accomplished by providing solutions in a professional manner with comparative low prices. The company also uses deodorization technology superior to their competitors Jou’s states and possesses patent in treatment of waste gas. Value-creation is achieved by helping companies to lower their negative environmental impact for achieving their aims for CSR relating to their company. The main value-creating mechanism in Jou’s operations is projects designed for pollution and environmental solutions regarding new products with innovations on continues basis. Their most important stakeholders in their organization is stated by Jou as their customers providing them with buying the product and service offerings. Actually, the innovations for protecting the environment are stimulated by the customer problems. With excellence in pollution solving customized projects and equipment for environmental protection, this is considered as innovation highlight in the organization. (Jou, 2013).

Jou highlights the challenge with many corporations chasing profits and leaving environmental negative impact. He exemplifies this with the manufacturing industry that contributes to the negative environmental effects with magnitude in terms of producing waste gas and water. The synthetic leather and electronic industries polluting the atmosphere consequently harms the natural environment. He also thinks that innovations to some extend contribute to negative consequences of the environment, and therefore he suggests, long-term insights ought to be considered before innovating to be able to understand weather the environmental negative impact is caused by the innovation. Then, if this answer is positive, companies ought to consider if there are any possible solution for abolition of these environmental negative effects. After, a detailed
sustainability plan for the benefit of society may be created by the organization. He concludes by stating that innovation in itself is not bad, because there are actually innovations created for protecting the environment. This is because these protection solutions regarding environmental innovations can defeat the negative impact created by innovations. (Jou, 2013).

4.4 Consumer marketing manager

Jacobson works as a consumer marketing manager in a high technological software company. The current position offers advantages such as flexibility, challenges and large responsibilities and the daily tasks involve improving customer experience, adapt and improve marketing assets and project work. Specific features the corporation is offering customers comfort, safety and flexibility in their product offering. A stakeholder is defined as a “person who has an interest” (Jacobson, 2013). He defines value as something that is equal to add. The value creating mechanisms in the organization is that the end-consumer receives a simplicity offering he explains. However, they do not have a model for value-creation in the corporation. In regards to stakeholder-management, Jacobson argues their most value-creating stakeholder to be the end customer and the merchant customers. These two objectives are inter-connected when satisfied consumers promote the usage of the used product, leading to a requirement of the merchant customer for proposing the offerings from the organization Jacobson works within. Dialoguing NCoI in relation to stakeholders, Jacobson explains their engagement by stating “as part of the culture is creating a great and friendly environment for all stakeholders, we are encouraged to promote a healthy business model. Exploitation potential of our products is considered and we are encouraged to avoid these scenarios” (Jacobson, 2013). They also have a system that is programmed to avoid customers that may cause them challenges in future payments (Jacobson, 2013). In considering CSR activities, Jacobson explains it as a strong asset where they engage in an active manner. Future generations of society are of focus in the engagement of the corporation regarding the CSR with many employees own initiative taking. He explains that “Since it is a very young workforce, the level of engagement and ambition is very high” (Jacobson, 2013). As an innovative corporation, they are considered as first movers and key innovator in Sweden.
offer their relatively unique services. In their work with innovation and considered as a product organization, they work with advancing and developing their product offerings on a continuous basis. The focus is on internal innovation but they also have solid connection with market innovations. For ensuring the potentiality of innovative products, they also have strong association with Silicone Valley. (Jacobson, 2013).

The authors wanted to know if the organization Jacobson worked for had any model implementation regarding handling NCoI. He responded that “there is no set model to handle negative consequences but it is part of the company culture to act transparently and fairly. Profit should always be balanced with social responsibility” (Jacobson, 2013). On the question if the corporation takes responsibility for NCoI, he responds that it depends on the meaning of taking responsibility but ensures the customers treatment of transparency and fairness. The main purpose of the organization in Jacobson’s opinion is to create profits, but at the same time revolutionize in their market with simplicity and safe product use. Additionally, the authors wanted to know Jacobson’s opinion about the assumed blaming of corporations causing the effects on the environment. He starts by explaining that in his opinion that the fact that externalities (meaning the environmental effects) actually are not taken into account. He states that “if there was a private ownership of public goods like air and water then it would be much easier to calculate profits after environmental effects. Greed is a very subjective word in this context since companies exist to increase shareholder value, there is no “emotion” like greed or glutton” (Jacobson, 2013).

4.4.1 Medical industry manager
With a degree as a medical doctor and previously working as a sales manager but currently working as a reimbursement analyst, Fredricsson, gives a different perspective about how his employer organization works with NCoI. The advantage with the work is that Fredricsson gets to be in contact with different technologies that are innovative, but also the ability to understand and analyze different reimbursement systems within a variety of different European countries. His day to day activities involve finding, digesting and analyzing information for supporting new technologies in terms of value. Fredricsson states that in his perspective, they deliver customized recommendation and advice that distinguish their cooperation in their branch. In his experience, the main purpose of the organization he works with is “understanding and communicating the value of innovative product/technologies with stakeholders” (Fredricsson, 2013). He defines a
stakeholder as anyone impacting the product or process. The most value creating stakeholder in the organization he thinks is the physicians because they provide most valuable information. Additionally, patients can be stakeholders of high importance, but it is not allowed for the workers to contact them. (Fredricsson, 2013).

In the corporation he works for, the internal strategies consist of individual or team gathering continuing to foreseeing implication of the technology, the product and the existing data. The final recommendation and strategy are consulted with senior consultants, relating to the technology. Value creation is the most important objective in their company since it is a consultancy company. He expresses it as “we mainly sell the created value by us to customers” (Fredricsson, 2013). The organization does not have a very solid model for value-creation but value is created by them “systematically search for data, analyze it; make it more meaningful and useful for the customers with blending it with our experience and then extract actionable advice out of it” (Fredricsson, 2013).

Fredricsson regards the organizational contribution to innovation as supporting innovative corporations with their innovations to communicate their respectively value (because they act as a consultancy company). In his work NCoI is highlighted by the fact that in certain situations, testing of innovative products is not considered enough. In other cases, the value precision claimed is vague. However, they do not have any model in how to handle NCoI. The responsibility for this issue as he explains is “out of scope of the work that we do; however, we communicate the negative aspects of innovative products with innovators” (Fredricsson, 2013). They consider the NCoI when they develop products and services mainly internally because they sell their expertise to the customers, in his views. “In that case, we may spend time and money for our innovative services that may not work in the expected way” (Fredricsson, 2013).

Figure 32; "Word Cloud" - tool for summarizing findings. Source: Wordle official website, 2013.

4.4.2 Manager in Dubai

With Ericson previously working as a business manager in Dubai, this insight highlights the research from a different perspective. The position gave advantages such as developing competences, recognition and experience and some usual disadvantages in such a position; communication problems, routine and stress. The work involved tasks such as reporting, coaching, planning and leadership internally in the organization. External working tasks included
recruitment of new opportunities in business and streams of revenue, presentation preparing, market intelligence, key accounts management and affairs (contractual). Communication and coordination where highly required when working with services in the hedonic and aesthetic appeal. The company offered service location and diversity. He defines value for customers as “customer overall satisfaction as a return worth the monetary value the customer has to pay to acquire the company services of products” (Ericson, 2013). Stakeholder he defines as “those which their interest gets associated with or affected by the existence of the company” (Ericson, 2013).

Ericson’s perception on how value is regarded in the corporation he worked for, he stated “like in all other for profit corporations, the company perspective of value is that of profitability” (Ericson, 2013). His perception of how value was created in the organization he previously worked for was that value was co-created with the customers because of the fact that the organization produced services and therefore, the customers always are involved in the co-creation of the value. The authors wanted to know what the organization told him about value-creation when entering the workforce and he states “the argument for value at for profit organizations is usually associated with competition, in particular when analyzing the competitive position of rivals, which is a topic any recruiter would bring on the hot list to their new comers who are expected to help the company succeed. Executives regard value creation for customers as a focal point when designing the company strategy, it is mandatory for managers to realize how value is created in order to offer what satisfies customers” (Ericson, 2013). The authors wanted to know his view on how the organization creates value. He explains that realizing the interest of stakeholders and shareholders, with thriving to create a trade-off that is consented. Important is also to balance between these. This, he believes creates a managerial challenge where explains stating that “the key to failure is trying to please everyone” (Ericson, 2013). The stakeholder he believed created the most value in his organization is the customers where they not only produce value but “they are at the end the reason why any for profit organization would ever exist” (Ericson, 2013).

The discussion then continued with relating to the issue of CSR. The organization Ericson worked for had several projects in association to the concept of CSR. These include activities related to social and environmental concerns, as well as projects in the philanthropic matter. In relation to focusing on future generations, Ericson argues that “if this is an environmental question, I would say that service production usually has less damaging effects on the environment, if this is a socio-psychological question I would say the effects is twofold, everything in this life is subject to right or wrong use, I would say that it’s pretty much related to the user” (Ericson, 2013). In terms of the firm’s contribution to innovation, Ericson states that the corporation he worked for had a high raking in investment size and contribution in their operating field with their constant market-introduction with new services. Highlighted, in his previous work was regarded as “Innovate or exit the market would clearly summarize the intensity of competition. Customers are the focal point due to the aforementioned business type” (Ericson, 2013), indicating the service industry but in relation to the environment it was not considered to be applicable. The NCoI when developing products and services, in his regard, were considered in the work because “doing business ethically is a target of service companies
where reputation among customers is everything.” (Ericson, 2013). The authors end the discussion by asking Ericson why he thinks people often associate innovation as something positive. He states that “to some extent, people usually associate innovation with intelligence, knowledge, and expectations of value. This doesn’t mean however that all the people are not aware sometimes of the negative consequences of innovation, those who are better informed about some seriously negative impact of innovation might stand against it and try affecting the opinions of corporations through media and publicity” (Ericson, 2013). He gives an example of this with the organization Greenpeace. (Ericson, 2013).

![Word Cloud](image)

**Figure 33:** "Word Cloud"-tool for summarizing findings. Source: Wordle official website, 2013.

### 4.4.3 Manager in AB Limited in South East Asia

With years of experience working as a manager for a local-based organization in South East Asia, Larsson provides a justifiable insight of high importance in the research. While the previous interviewees had experience working from industrialized countries, Larsson’s experience working in a developing country provides an ecstatic perspective that differs. The innovation highlighted in her work was both based on product and process level for company growth on a continuous process for hindering growth recession. The first discussion with Larsson concerned how they worked with sustainability innovation. She explained AB Limited as endorsing the UN Global Compact already in 2003, with the organization starting its journey in 1992 with one of their missions to concern sustainable development. In AB Limited they have six established values as Larsson explains; Customer Focus, Quality, Fairness, Transparency, Innovation and Continuous Improvement. The organizational mission is to provide people enriching their life-quality with responsible application of technology, skills and knowledge. Therefore, Larsson argues the company striving for sustainability development promotion for their stakeholder advancements, both internally and externally. Larsson gives an example of employees getting recognized and rewarded by the company Managing Director bi-per annum for sustainable innovation. This in turn inspires the employees for achievements of the mission of the company, but at the same time promotes individual social responsibility. This highlights the different Corporate Social Activities taken by AB Limited, promoting the sustainable development concept for general people’s and consumer’s lifestyle. Larsson gives the example of the leading role of AB Limited for promoting environmental responsibility on a greater basis among the farmers in the country. The team of agricultural experts in the company (from Strategic Business Unit and AD Limited Agribusinesses), trains to educate the farmers producing crops all over the
rural nation about Good Agricultural Practices, focusing on environmental friendly practices. This aims to result in farmers attaining field level education aware of environmental protection for eliminating hazardous chemical use on their farms. This in turn, allows them to take informed decisions making them more responsible for full societal well-being (Larsson, 2013). The discussion continued and the authors wanted to know the types of innovation highlighted in Larsson’s work from her experience as a manager. For four years, she has been working for the marketing division in the Strategic Business Unit “Consumer Brands” in AB Limited. In their business portfolio, products such as personal Care & Hygiene, Home Care, Commodity Foods, Consumer Electronics and Household Insecticides. Because these products aim to facilitate with comfort and upgrading for consumers’ daily lives, it is important to prioritize improvements of product quality on a continuous basis. The special focus ought to be on product innovation, aiming to minimize the side effects of the chemicals used in the products with the adding of green environmental friendly ingredients. In terms of technological innovations, the processes focus to enhance efficiency at production level for operating smooth business with profit level standardization, Larsson explains. (Larsson, 2013). The interview progressed with asking Larsson about their organizational consideration regarding NCoI, in terms of the society and natural environment. She agreed that they do. AB limited attempts to minimize the NCoI and this is especially the case concerning the natural environment “within its limits” (Larsson, 2013) she explains. She continues to explain the reason for this being the company commitment to certain regulatory bodies for qualifying the business scope in the nation, but also to work for a market leading position. One important factor relevant for the research, Larsson mentions that the competition of AB limited Strategic Business Units and joint ventures compete with MNCs such as People’s Choice (Johansson interview) and others locally. AB Limited also has partnerships with other corporation’s on an international basis. Besides this, they also export food products and pharmaceutical products to other countries, highlighting the importance of enforcing environmental and social concerns of the company. (Larsson, 2013). Larsson continued to explain her view on how the organizational responsibility taking regarding NCoI is executed. She explains “I do agree partially that this organization tries to act responsible for any negative consequences of innovation. But situation is not always in favor of the company even though they have good intension. Because, due to nature of distribution channel, negative image in consumer mind, fear of media exposure and other financial facts, its sometimes really hard to take action immediately” (Larsson, 2013). For explaining her statements, she gives an example of one of her experiences of working in AB Limited. Once she had the responsibility to recall some bad products from the market due to the harmful side effects; microbial infected Antibacterial hand Wash. “It took long time to solve this problem since products were already in the market and mostly was consumed by the institutional buyers such as Hospitals, Clinics and Restaurant who are very sensitive consumers to be convinced again for buying this product with trustworthiness. Regardless its financial loss and negative impact on brand image, company took the call and recalled all defective products from the market” (Larsson, 2013). In addition, this she explained was because of one important thing regarding social cause; the safety for the consumers (Larsson, 2013). Larsson worked in the fast consumer goods industry. Therefore, she explains when discussing the next question, it will be based on her perspective for highlighting her expertise. The question concerned the profit and
The authors wanted to know why this seemed to be the case and how this may be prevented in the future. She explains the good intention of corporations to be active in facts relating to environmental issues and having part of their strategic action-taking being CSR activities, the environment of the industry makes them handicapped for running after profits for organizational survival. In this industry, profit margin of the product is too low to meet the existing market competition. This is the case in a developing county, where peoples’ willingness to pay a bit of extra for products that are eco-friendly for their own benefit does not exist. She explains “We can’t blame the corporations only for their irresponsibility. Being consumer, we have to be concerned about environmental facts and motivate corporations to become eco-friendly” (Larsson, 2013). Enforcing responsibility action-taking for the cause of environmental concerns is needed from governmental agencies, strict rules and regulations from subsidiary and Governmental bodies or any special support that will impose corporations for this cause. Additionally, it requires interactive campaigns of awareness among the corporations, the primary stakeholders and governmental agencies to work together protecting secondary stakeholders in the future. Regarding product and service development, the concern for preventing negative innovation consequences is decided by their New Product Development (NPD) protocol, decided by a team of cross-functional structure, but also at each development level, concerns are taken by a person or division who works with the negative innovation effects. (Larsson, 2013).

The dialogue continued regarding the prevailing notion of why people associate or consider innovation as something positive and the authors wanted to know Larsson’s perspective from her experience. She states by arguing different innovation synonyms; “technologically upgraded”, “better quality” and something “very good” positive to the masses of people. She gives a good argument of this when she states that “because we believe that innovation is possible through development in science and it always work for the betterment of human life. But reality is different! For example, though Swedish chemist and engineer Alfred Nobel invented Dynamite, the first safely manageable high explosive with a good intension to solve problem in mining and construction works...” (Larsson, 2013), but she argues that the present world, suffering in terms of dynamites negative invention consequences. (Larsson, 2013).

The last section of the discussion with Larsson concerned how the company she worked for communicated CSR. She explained as being an integral fragment of the business units in the company, regarded as part of the strategy in the business building consumer relationships of sustainable nature. Exemplifying this, AB Pharmaceuticals offer medicines free of charge in rustic parts of the country when natural disasters occur, such as cyclone or flood. Additionally, she adds “my business unit used to offer free education on hygiene practice at schools in villages to upgrade their living standard” (Larsson, 2013). She explains that in the rural areas in the nation agriculture plays a large part where post people there are involved in these activities. For this, the organization offers support where “free training on farming technology is really helping to solve farmer’s farming related problems as well as to protect environment from harmful side effect of fertilizers”(Larsson, 2013). As a finishing discussion and relating to her experience, the authors wanted to know Larsson’s view of the suggested findings in literature, which emerging markets nowadays are starting to take sustainability practices as a competitive advantage and if
she could describe it in the market she worked in. She agrees that practices of sustainability work as a competitive advantage of magnitude for products of a specific kind, where consumers don’t concern paying more for the cause of personal health and the future generation. She gives an example in their product category Household Insecticides, the organization invested in developing a safe eco-friendly product for mosquito repellent with using green ingredients for the cause of avoiding health negative side effects of hazardous chemicals, bad for both end consumers and factory people. Although the charging price of the product is high, this is an example of an innovation working as a competitive advantage for the company of bring forth the “sustainability concern” image, where highlighting the importance to take on more consumers aimed for safe living.(Larsson, 2013).

In relation to the conducted pro-innovation bias test and with 107 respondents, Appendix 6 displays what the first thing people thought when hearing the term innovation and where asked to answer either with one word or phrase to test the pro-innovation bias. 100 respondents were asked face-to-face, where the other 7 was conducted virtually via text-messages or chat. With the help of 3 students from the same seminar-group as the authors of this research, the results are displayed in figure 35 in the analysis. Due to duplication reasons, some of the answers were deleted in the display.

In sum, the empirical findings combine different views from the managerial perspective, regarding value-creation, sustainability and innovation. Then it adds the dimension of the two CEOs from ‘sustainable’ ventures topped with a researchers’ viewpoint in the field of NUCoI. The authors combine these findings into a green heart-shaped light bulb, symbolizing value (heart), sustainability (green) and innovation (light bulb).
4.5 Analysis

The Pro-Innovation Bias is partly based on attitudes and meanings that connect innovation to something positive. In an organizational sense, this positivity aims to create value for both the customers and the organization (in terms of profit). The interconnection between primary stakeholders and the organization is found strong. The NUCoI may be an outcome due to neglecting this direct connection for secondary stakeholders.

In this section, the analytical process is described where the authors’ attempt to connect the conducted theoretical framework with the empirical findings in a systematic approach. Relating to Charlie Chaplin’s speech from The “Great Dictator”, where he argues for the importance of caring for each other, the analysis provides insight in this aspect relating to the NUCoI regarding sustainability and society and the importance of stakeholders and how those connect to sustainability and innovation. The authors relate the theoretical frame with up-to-date findings, for strengthening the coming conclusion. The majority of research regarding innovation relates to positive outcomes and mainly not regarding negative consequences of innovation (Sveiby et al, 2012). This is strengthened by the concept of the pro-innovation bias found in literature (Abrahamson, 1991; Hull and Kaghan, 2000; Rogers, 2003). In relation to the review regarding attitudes (Fazio and Olson, 2003; Schlenker, 1978; Nelson and Winter, 1982; Baumann and Martignoni, 2011), the authors wanted to test this assumption and conducted a survey where the respondents were asked to answer the simple question; *What is the first thing that comes to your mind when you hear the word innovation?*

The authors wanted them to answer by one word or phrase to really get the essence of their findings. The answers were wrote down on a piece paper and then computerized. For a comprehensive approach, the authors created a “*word-square*” in different colors and sizes (Figure 35). As can be seen from this figure the variety of respondents differs in magnitude. Some answers were repeated at occasions and therefore, the authors only illustrated the differing answers. The jumble of both Swedish and international nationalities in relation to the respondents gave the results more essence. A couple of comic situations emerged where one respondent at first glance said “invasion” instead of innovation and another respondent that wanted to “Google it”. The concepts involved everything from *company brands* to *Albert Einstein* and future.

Additionally, the authors conducted a second attempt of randomly asking people about the first thing that they think about when hearing innovation and the answers were similar from the previous conducted random exploration. In total the authors received 107 respondents whereas 100 were conducted face-to-face and 7 via text-messages and instant chat. The pro-innovation bias was evident. None of the respondents said anything negative in relation to innovation. The concepts were either positive or neutral. This made authors more motivated to find out why and how this related to sustainability and society since the theory suggest that more attention needs to be given the handling of the scarce natural resources in organizational practices (Hart, 1995; Thompson and McMillan, 2010; Amory et al, 2007; Nidumolu et al, 2009; Haanaes et al, 2013).
Researcher Anderson was contacted for more insight regarding NUCoI. Anderson is one of few highlighting the challenge of this neglected research in social science. The pro-innovation bias came to the agenda when Anderson referred to different research about it. The authors got the suggestion to look at “how” innovation is socially constructed. Relating back to the “word-square” they understood that the acceptance of innovation as something good in society may have created some causes of relevance in the investigation. The authors and Anderson understood the importance of going beyond the pro-innovation bias. Fagan (2004) and Smil (2006) described the
emergence and dependence of innovation and how humans have used it throughout their existence in this world. Regarding theories reflecting upon innovation, Goswami and Mathew (2005) regards innovation to be seen as a competitive advantage and Drucker (1985) highlights the positive outcomes in society that may be caused by innovation. These findings confirmed the discussion with Anderson (2013) about the pro-bias innovation. Winston (2010) discusses the possible NUCoI questioning if human wellbeing was the locus of desirable results from resourceful ideas. Stealth destruction of the earth with the animals, plants and humans may be an outcome of celebrated achievements of human progress (Winston, 2010), also reflecting the argument of the pro-innovation bias by Anderson (2013).

Karl-Erik Sveiby and Karl Heinz Leitner discusses the book “Challenging the innovation Paradigm” by Sveiby et al (2012) with relevant challenges addressed in society related to innovation (Appendix 3). Sveiby acknowledges both the positive and negative sides of innovation but highlights that the need for unintended effects of innovation to be brought up in the early stages, to prevent future damage and increase the net positive benefit effects as in accordance to managing innovation-risk as stated by Merton (2013). Innovation, Sveiby believes is one of the most powerful sources of change in society but while every innovation has positive effects, they also have negative side effects. Leitner also highlights this lack because of the complexity and changing society and business landscape (Hanken External Relations, 2012). Anderson (2013) also highlighted a specific section from the book (Sveiby et al, 2012), where unintended undesired NCoI are discussed for clearer understanding of the topic. Four theorists were found utterly important in their research discussing the connection concerning the topic (Merton, 1936; Rogers, 2003; Freeman, 1983; Schumpeter, 1939). For a deeper understanding of the subject of UNCoI, the authors contacted actors in the field of business. This, for attempting to find their views on value-creation and innovation but also how they view the environment and their CSR practices in their perception when working. The mission is to see if a prevailed understanding between innovation and sustainability exists.

Referring to Anderson (2013) explaining the relationship between multinational practices and the environmental consequences harming the societal natural environment, the understanding was to be an outcome of the western world overconsumption of the planet’s natural resources as compared to the rest of the world. Parallel to this, they export pollution and production to other places than their residence. There is a cry out to start taking responsibility for these facts instead of blaming others, like the emerging economies. This relates to the argument by Bar-Cohen (2006) where he suggests expending the natural surroundings for inspiring human-made innovation and the argument by Winston (2010) highlighting communication essential for co-understanding among the different actors in society. The dominant discourse of innovation needs to be addressed at the first stage. “We need to bring forth previously silenced and marginalized voices, to learn from these and make methodological improvements in order to further foster research on consequences of innovation” (Anderson, 2013). Additionally, “various actors, including politicians, the corporate world, media, researchers, individuals etc. all together contribute to producing these meanings or discourses attached to innovation and in doing so they neglect undesirable consequences of innovation”(Anderson, 2013). Anderson explains that there is a necessity to address the issue on how corporations ought to start respecting and influencing
the actors negatively harmed by corporations actions by themselves, engaging in the discourse of innovation. Societal change may preferably occur by essentials of constructive critique and debating as in accordance to Sutcliffe (2012) and Winston (2010) with Anderson’s argument.

In research regarding value, Normann and Ramiréz (1993) find organizational value-adding as static and outdated. Going from capitalism to society, the authors find an interesting interview with Porter discussing the relationship between capitalism to society where a “third way” system is developed (Snowdon and Stonehouse, 2007). Confirming Anderson’s (2013) argument of bringing forth marginalized voices, Porter claims rethinking the current process design, with the proper design of environmental standards, is needed to keep triggering innovation. Porter notifies that this can eventually lead to long-term cost savings if properly implemented (Snowdon and Stonehouse, 2007). The authors find this as a pattern between sustainability and innovation.

Stakeholders are defined by Freeman (2010a) as groups that have a stake in the corporation determining the corporate success. Through further research the difference between primary and secondary stakeholders is revealed. Clarkson (1995) distinguishes between primary and secondary stakeholders as the former concerning the survival of the corporation and the latter relating to affecting or influencing the corporation and vice versa. Secondary stakeholders are considered as they are stated in terms of importance, secondary. Reflecting back to Anderson (2013), the authors find the ignorance of the importance of secondary stakeholders in research connected with sustainability may have been a contributing factor causing NUCoI. Hall and Martin (2005) support Andersons (2013) reasoning regarding innovation with the neglecting consideration of secondary stakeholder involvement. The findings regarding stakeholders may connect to CSR (Carroll, 1999; Garriga and Melé, 2004, Porter and Kramer, 2006). The main reason of attention in society can no longer be based on merely corporate profits (Votaw, 1972; Pajunen, 2010; Garriga and Melé, 2004; Hall and Martin, 2005; Freeman, 2010a; Freeman, 2010b; Speth, 2009; Heerad, 2011) for wealth creation. Therefore, corporations need to take responsibility for the environment they work in, since ambiguity of corporations actually carrying out there practices suggested by Newell (2005) is found relevant to UNCoI. With globalization, it is not enough to think about society as merely a group of people, even if the definition of society can be as small as a family (Santayana, 2005) but today with all the advances in innovation, the whole world may be seen as a society. Hence, there needs to be globally bases for sustainability as notified by Garvare and Johansson (2010). Interconnecting with sustainability, secondary stakeholders are as important as primary and the more environmental awareness and research regarding NCoI, the importance is more evident.

Johansson (2013) explains his current new position in Few Nutrition and highlights the positivity he encounters there. Relating to the field of investigation, he gives a powerful recommendation for people to have their voices heard in large corporations at managerial levels by stating “if you succeed in making people see your point and what’s in it for them to cooperate with you then you will go a long way in your career” (Johansson, 2013). Johansson feels it necessary to know how Fex Nutrition works with their internal strategies since it characterize the whole organization. And then the departments make their own version of which they follow with their department goals. This correlates to Grant (2010) highlighting innovation as a strategic key competitive
advantage. Others findings highlighting strategy in relation to innovation is Tidd et al (2001) and Normann and Ramírez (1993) approaching social innovation. Johansson adds to the discussion that they encourage him to be innovative and challenging in work coming up with new ideas for their work team. In relation to differing innovation definitions, organizational activities are included (Fagerberg, 2003; Ulwick; 2005; OECD, 2013).

The authors wanted to know if this multinational corporation understood the importance of community and the natural environment for strategy-performance relationships regarding their stakeholder model, relating to Berman et al (1999). Therefore there was a need to know their view on strategy in relation to their value creating mechanisms. Value can be regarded in similar perspective as Ruskin et al (1994) where the essence lies in the avail of it. Johansson (2013) states that in relation to their organizational goals the value-creating mechanisms in Fex Nutrition are aimed to provide maximum value to their primary stakeholders. However, their value-creating mechanism in the organization is three-fold. To get higher sales and promoting of products to the market, gaining market share in industry and promoting the sustainability-concept as he states is increasing the likeliness of the corporation from the consumer perspective by creating a win-win situation for the environment and for people to buy their products. Essentially, Johansson (2013) states, those customers buy what they like in line with their values. In other words, everything is interconnected in a chain of events.

Relating to the discussion of stakeholders, Johansson (2013) states that at the end of the day and even though the organizational operations are influenced by actors such as governments, the EU Food Authorities, primary stakeholders, competitors the “customer is the boss”. This is exemplified by providing excellence quality in operations and quality outcompeting competitors by putting effort in keeping stakeholders happy. The authors started to reflect if acts of CSR only were merely an act for competitive advantage or if for-profit organizations actually cared for their NCoI, affecting the societal natural environment relating back to Newell (2005). Johansson (2013) explains that Fex Nutrition regards this issue highly. In their strategy they have a goal to always view the environment and society in everything they do as an ethical duty for their surroundings. Johansson (2013) views sustainability as a way of borrowing environmental resources for their operations and then giving even more back, resulting in lesser effects of harm as in accordance with the argument by Hart (1995) and Amory et al (2007) regarding natural capitalism. Johansson (2013) further explains the importance of future generation is society in accordance with UN Documents (2013) where Fex Nutrition takes actions for understanding the happenings in society and the world for compliance with regulations and new rules, as mentioned by Clarkson (1995) complying with primary stakeholder needs. Porter however, contradicts this view in Snowdon and Stonehouse (2007), where preference is given to the design of current process rethinking. Additionally, Jing and Gong (2012) suggest the social regulation system by the government to boost innovation. Another interesting note is when Johansson (2013) mentions about the organizational plans for recruiting people to represent a micro-graph of the world from all walks of life. This is highlighted in the argument by Winston (2009), where encouraging employee excitement for sustainability and its environmental impact may lead to workforce loyalty. To sum, individual preferences may lead to how the organizational activities are carried out.
Hart (1995) suggests framework for taking on the Natural-Resource-Based View of the firm and in combination with the Responsible Research and Innovation framework presented by Sutcliffe (2011) for a more societal approach. Combining these with theories in Harvard Business Review on responsibility for the natural resources of the planet (Amory et al, 2007; Nidumolu et al, 2009) and risk-management of innovation (Merton, 2013), there is a need to know if these suggestions for changing organizational behavior actually would be time-consuming, as suggested by Bernotat (2007). The ideal situation for preventing environmental harm by for-profit organizations would be to create a social venture as suggested by Thompson and McMillan (2010). In order to reconsider this theory approach, Haanaes et al (2013) suggest considering the total return of resources used for taking environmental actions. The authors’ developed framework connects and combines relevant theories for The new Extended Value Creation Mechanism for Global Sustainability with the SNE SFI-GS Framework.

Haanaes et al (2013) and Hart (1995) discuss the importance of the natural resources on the planet. Investing in ecology and the natural environment may actually create long-term strategic success. Relating to Haanaes et al (2013) Johansson “agree 100 %” “From my view I would like to mention that this is viable but you need to always think “What’s in it for me?” something which everybody does all the time, but not everyone admits” (Johansson, 2013). Not surprisingly, this was related to value maximization because organizations need to think about what is in it for them if they invest in these aspects. People, however also need to understand that profit making is part of keeping business going. This is also the reality of human nature, Johansson (2013) explains. Questioning whether Fex Nutrition takes responsibility regarding their products for the NCoI that may have an impact on society and the environment, Johansson (2013) believes they do. In Fex Nutrition they try to think of all possible impacts before they actually occur, but the unforeseen cannot be neglected as an outcome sometimes. This confirms Merton’s (2013) argument on how to deal with managing the risks of innovation and the innovation risks discussed by Sveiby and Leitner (Hanken External Relations, 2012). If these situations occur, things are taken to a degree of very serious mattering accompanied with action-taking by relevant departments and teams, Johansson (2013) explains. His argument can be connected in accordance to one of the categories highlighted by Garriga and Melé (2004), where they discuss about ethical theories but also confirming the research by Nidumolu et al (2009) where the importance of environmental sustainability is brought up. However, Johansson explains that although many people think they have an idea about a certain situation, these statements are often biased. As he explains, “In every situation you have ‘the good, the bad and the ugly’, meaning people follow a linear sequence of understanding events” (Johansson, 2013). It is not a matter of blaming each other but rather trying to take steps of solving future undesirable scenarios. Generally, Johansson (2013) explains, it is natural for people to blame. Instead they need to analyze the problem and understand why it showed up in first place and beware that it may actually be based on their individualistic behavior as suggested by Winston (TheGuardian, 2010). Johansson (2013) explains humans often inability handling uncertainty well and therefore they blame for getting a sort of “control”. He explains a three-step approach: understanding of the challenge, taking innovative steps and then trying to solve the challenge (Johansson, 2013).
The global awareness for a more ideal situation on managing innovation is connected to the newly published article by Merton (2013), where a model for handling innovation risks is presented. One of the arguments is that the more complex a society is, the more uncertainty will be added to an innovation presented for that specific society. Johansson (2013) adds, “careful planning and consideration must take place and negative consequences of innovation should be an integral part of risk management in any project development” (Johansson, 2013). This connects with the contradictory but strong argument in Haanaes at al (2013) where natural and non-complex ways of doing business may actually generate benefits and competitive advantage. At the same time, care for the natural resources in the environment is encouraged. Innovation preachers of the future need to get a clearer understanding between innovation benefits but also innovation risks when structures and systems become more complex, for this public dialogue is required (Winston, 2010). Johansson’s (2013) argument is that for-profit organizations have actually made societal development flourishing with societal progression of the world as agreed in literature (Smil, 2006; Sharma, 2006; Swann 2009; Ruskin et al, 1994; Teece et al, 1997). However, corporations have part of the blame of causing NUCoI. Changing their way to operate with alternative ways of producing things is of high relevance. Giving back more to society helps these big corporations to be assumed greedy to a lesser extent. Johansson suggested that “perhaps research & innovation can show us the way” (Johansson, 2013), in according to Anderson’s (2013) similar view where more research needs to be conducted.

A primary stakeholder as a consumer or an employee, have a stake that matters in organizations. The authors tested a small test in their pre-final seminar treating the participants two brand of orange juice. One brand was low-priced mass produced and the other more exclusive with freshly pressed oranges. The opinion differed on which they preferred. The main point of this test was to clarify the authors’ viewpoint on arguing that natural non-complex approaches may be better and that this approach of caring for the natural environment is recently suggested in Haanaes et al (2013). What needs to enhance this argument is to create awareness as suggested by Anderson (2013) since people often do not know how mass-produced, efficiency gains for corporations effect limited natural resources, referred to as the rebound-effect (Binswanger, 2001). Charlie Chaplin states in the speech “We all want to help one another. Human beings are like that. We want to live by each other’s’ happiness, not by each other’s misery.”(Tragedyand Hope, 2011). Therefore, the natural resources of the planet (including humans, animals, plants and ecosystems), may be positively affected if secondary stakeholders are considered as primary. Regarding the SNE SFI GS-framework, additional information would be more applicable from Johansson’s (2013) understanding. This is due to his previous experience working in the Multinational Organization, People’s Choice (See Model 1 and 2 in Author’s own contribution in Appendix 4 for a more comprehensive understanding of argument). Johansson said “this model you have created is already happening as we speak. Although this is not company specific, this is an industry norm nowadays”(Johansson, 2013). The sphere-shaped view rather than the linear needs to be adapted. Big multinational may have an understanding of the NCoI. But it is only recently that the impact may incur organizations understanding of their operations to come to an end as relating to CSR (Carroll, 1999; Garriga and Melé, 2004). With the developed model organizations come closer to their customers since customers actually do think about the negative consequences of corporate actions (Johansson, 2013). “...this means that organizations come ...
closer to consumers and as you rightfully mention understand their values, ideals, thoughts about how life should be lived in society in a harmonic cooperation to the surroundings. This means by default that if an organization manages to develop such a model successfully they will be at the forefront of change, showing to people that they do share values and take care not to harm society at large with their innovations” (Johansson, 2013). Relating this to the suggested frameworks by Haanaes et al (2013), Amory et al (2007), Nidumolu et al, (2009), Hart (1995) and the innovation discussion by Sutcliffe (2011), it seems evident that Johansson knew the importance of the authors’ research. If MNCs do not start to take these suggestions of precaution, organizational survival may be jeopardized as argued by Freeman (2010a) and Clarkson (1995).

Johansson was asked why people often associated innovation with positive outcomes for everyone to enjoy. Relating back to the pro-innovation bias discussed with Anderson and found in literature (Rogers, 2003; Hull and Kaghan, 2000; Abrahamson, 1991), Johansson (2013) explains this because in his view, innovation is a popular delusional new buzz word that has to do with more sociological deeper reasons on a psychological basis. He explains that innovation is not company specific but rather individual, deep rooted human values as suggested by Fazio and Olson (2003), Schlenker (1978), Nelson and Winter (1982) and Baumann and Martigoni (2011). Innovation is also not a new thing but has been around for a long time as highlighted by Smil (2006) and Fagan, (2009) as he then continues stating “Innovators and entrepreneurs have always been around to challenge the status quo with their breakthrough thinking to help the world develop in the right direction and in better ways for human kinds.” (Johansson, 2013). As many of the respondents from the survey regarding their perception about innovation, Johansson (2013) also believes that innovation is related towards new ways of doing things. Relating to the theoretical frame, this view is to a large extent consistent with the authors’ findings in literature (Fagerberg, 2003; Van de Ven and Rogers, 1988; Ulwick, 2005; OECD, 2013). Johansson refers to his previous responsibility working on People’s Choice regarding negative impact of the environment and highlights the fact that the organization “is probably one of the best companies in taking such measures for the environment when they apply innovation” (Johansson, 2013). Continuing, “having said this they are not 100% error free, they need to make some things better, but the idea, approach and mindset is there which shows that they are going towards the right direction” (Johansson, 2013). Therefore he finds the authors’ suggestion of major advantage and applicability for any organization caring for the future. Johansson highlights the interconnectivity between the corporate values, environmental precautions and measure-taking for avoiding NCoI as customers because in the end the customer is the boss (Johansson, 2013).

Jacobson, Fredricsson and Ericson are three additional participants in the findings from different organizational sectors with different experiences from different for-profit industries. The three respondents have been asked questions on a similar basis as with Johansson. All three replied differently to the question concerning their definition on stakeholders and how important they are in the organizations they work for. Jacobson (2013) referred to them as a person having an interest, Fredricsson (2013) as anyone impacting a product or process and Ericson (2013) as them which interests are affected or associated by the company existence. They all viewed stakeholders as a personal identity, indicating the lack of taking secondary stakeholders as serious as primary (Hall and Martin, 2005; Clarkson; 1995) in their perception working as managers.
Regarding value, the three participants defined them differently based on their previous experience and interest relating to their work. Continuing the stakeholder dialogue for Jacobson (2013), their stakeholders that create the most value for their organization is the merchant and end consumers. Fredricsson (2013) understand the main purpose of the organization he works for to communicate and understand the innovative products/technologies with their stakeholders in terms of value and regards the most value creating stakeholder being the physicians for their innovation providence. Patients are also of high importance for them as a stakeholder. For Ericson (2013), he believes the customer as creating the most value in their organization when he worked there because without them no for-profit organization would ever exist. These differing viewpoints confirms the challenge to balance different stakeholder needs (Garvare and Johansson, 2010; Freeman, 2010b).

Jacobson (2013) worked with delivering simplicity to the end-customer and adding on the previous discussion between the authors and Johansson (2013), the NCoI in relating to stakeholders “as part of the culture is creating a great and friendly environment for all stakeholders, we are encouraged to promote a healthy business model. Exploitation potential of our products is considered and we are encouraged to avoid these scenarios” (Jacobson, 2013). Fredricsson added to the conversation by highlighting the importance of end customers working in a consultancy company as “we mainly sell the created value by us to customers” (Fredricsson, 2013), and Ericson as defining value for customers as “customer overall satisfaction as a return worth the monetary value the customer has to pay to acquire the company services of products” (Ericson, 2013). As an insight from these three viewpoints, profit gains and efficiency depend on the goals regarding value adding mechanisms of the organization as suggested by Grant (2010). Furthermore, Jacobson explains this subject as a strong asset in their organization with their active engagement. This is especially viable with the own initiative taking in the workforce as Jacobson (2013) explains, indicated by the high ambition and level of engagement due to the relative young workforce. This is found in accordance to the arguments by Pajunen (2010) and Freeman (2010b) with workforce encouragement (Winston, 2009). Ericson (2013) regarded their CSR in their organization as including activities related to environmental and social activities. He also included philanthropic matters as several projects related to the topic as suggested by Porter, in order to act as a competitive advantage for corporations Snowdon and Stonehouse (2007) and Campbell and Slack (2007) regarding a strategic instrument when referring to philanthropy. Additionally, Ericson highlights that since he worked in a service organization, there may be less environmental effects but notifies that “if this is a socio-psychological question I would say the effects is twofold, everything in this life is subject to right or wrong use, I would say that it’s pretty much related to the user” (Ericson, 2013). This can be connected with the discussion highlighted by Sveiby (Hanken External Relations, 2012) and Winston (2010; TheGuardian, 2010) but also the recent suggestion by Merton (2013), where the risks associated with innovation may be an outcome on how people use them.

The conversation regarding NCoI, started with Jacobson’s explanation on their organization’s connections with Silicone Valley for conveying innovative products. On the matter whether they implement any model for handling NCoI or not, he states that “there is no set model to handle negative consequences but it is part of the company culture to act transparently and fairly. Profit
should always be balanced with social responsibility” (Jacobson, 2013). This coincided in accordance to the statement of Freeman (1984) to balance the interest of the different stakeholders. However, he believes that the main purpose of the organization is to create profits as in accordance to Freidman argument on organizations main agenda to create profits (1970) but to transfigure in their market with their competitive advantage (Jacobson, 2013). His view on why the blame for negative consequences in the environment often is related to this profit making of businesses, he believes that this can be the outcome from not taking the externalities of environmental effects into account. He continues “if there was a private ownership of public goods like air and water then it would be much easier to calculate profits after environmental effects. Greed is a very subjective word in this context since companies exist to increase shareholder value, there is no “emotion” like greed or glutton” (Jacobson, 2013). Again, this pointed to the main purpose of the authors’ exploration highlighted by the theoretical research (Hall and martin, 2005; Berman et al, 1999; Nidumolu et al, 2009; Amory et al, 2007; Haanaes et al, 2013; Hart; 1995), to show that the societal natural environment that currently works as a secondary stakeholder needs to be regarded as primary, and for this to happen, primary stakeholders ought to speak up in favor of secondary stakeholders.

Fredricsson (2013) explains that their organizational strategies concerns foreseeing implication of existing data, the product and the technological implication. Regarding innovation contribution they work as a consultancy organization and therefore, the importance is to communicate the value-creating mechanisms. But he highlights the fact that some innovative products not always are considered as tested enough. Additionally, the value perception in other cases may be considered vague. They do not have a model for handling NCoI as suggested by Merton (2013), because he believed it as “out of scope of the work that we do; however, we communicate the negative aspects of innovative products with innovators” (Fredricsson, 2013). The consideration of the NCoI is regarded internally. Because of this, there is a risk for the innovation to work in unexpected ways. Ericson believes the value-perception was the same in his previous position as other for-profit organizations, profitability as in accordance to Friedman (1970). The customers are in co-creation of the value where “… it is mandatory for managers to realize how value is created in order to offer what satisfies customers” (Ericson, 2013). This relates to the argument concerning co-creation of value in Normann and Ramírez (1993) and Chen et al (2012), as in accordance with the stakeholder importance perspective with customer importance argued by Freeman (2010a; 2010b). He (Ericson, 2013) also brings up the different stakeholders to satisfy as brought up by Garvare and Johansson (2010), Freeman (2010b) and Clarkson (1995) where stakeholder dialogue is suggested by O’Riordan and Fairbrass (2008) and Pederson (2006). Ericson states that “the key to failure is trying to please everyone” (Ericson, 2013). Regarding the importance of innovation when working in Dubai, Ericson argues their contribution on the fierce competition on the market with “Innovate or exit the market would clearly summarize the intensity of competition. Customers are the focal point due to the aforementioned business type” (Ericson, 2013) in relation to the argument by Grant (2010) and Leitner in his discussion with Sveiby (Hanken External Relations, 2012). He states that “to some extent, people usually associate innovation with intelligence, knowledge, and expectations of value. This doesn’t mean however that all the people are not aware sometimes of the negative consequences of innovation, those who are better informed about some seriously negative impact of innovation might stand
against it and try affecting the opinions of corporations through media and publicity” (Ericsson, 2013). This related to the pro-innovation bias suggested by Anderson (2013) and related theory (Rogers, 2003; Abrahamson, 1991; Hull and Kaghan, 2000).

Regarding the multi-respondent interview with the four employees from the automobile spare part and accessories organization (Appendix 5), one of the comments relates to the findings about corporations’ practices in terms of CSR linking to ambiguity (Newell, 2005). Person A states “...what many forgets is that its often the highest managers that set the targets, regarding our company its often sales target. All the other targets like purchase target, environment or transport reduction targets is less important or not the highest priority” (Person A, 2013). As the findings reveal (Appendix 5), sales target is an important factor of more relevance than other targets of lower priority. Questions were asked relating to value creation and innovation in their organization. The first question related to how the different employees in the organization defined value for their customers. Three of the respondent relates value to customers. Continuing, it was important to know their stakeholder definition; one of the employees seems to have a clue of what it meant for their organization while another hints by questioning if the owners were part of stakeholders. This is found to be (somewhat) surprising relating to stakeholders which the authors assumes to be communicated internally in any large corporation (Carroll, 1999; Freeman, 2010a; Freeman, 2010b; Pedersen, 2006). The next topic related to value creation again and this time it concerned the employee’s perception on how they think value is created in their organization. Two of the respondents relate it to processes, one to different value perceptions and the last relates it to customers and the organization. This is in accordance to the theory of differing values by Rokeach (1979). Continuing to the discussion about CSR, all respondents highlighted their lacking efforts. Maybe because they were occupied with tasks relating to other strategic goals, but as Newell (2005) suggests, this can be a question relating to MNCs vague CSR implementation. In relation to the requirements of the UN Documents (2013) where hindering future generations to prosper is prohibited, it seems evident that the perception in this automobile industry regarded this vaguely. Maybe this was a case of, as Jacobson (2013) mentions, lack of regarding public ownership of public goods. If this mindset continues the planet would be endangered regarding their natural resources as suggested by Amory et al (2007).

Regarding their organizations contribution to innovation, the answers differ. Two of them regard idea generation prospering from individuals rather than the organization, suggesting the theory to include employees for sustainability thinking (Winston, 2006; Nidumolu et al; 2006). The dialogue continued regarding innovation and the focus in their organization seems to be efficiency, highlighted as a way of organizational behavior (Grant, 2010; Haanaes et al, 2013). Regarding NCol the major attitude the employees associates it with was the process of getting an innovation approved. It seems that the pro-innovation bias among their perception is hinted as suggested by Anderson (2013) and reviewed literature (Abrahamson, 1991; Hull and Kaghan, 2000; Rogers, 2003). The last innovation dialogue regarded the negative consequences when they actually have occurred. As grasped, Merton’s (2013) framework about risk management of innovation seems to be of relevance to use. Contradicting, one respondent believed customers wanting products fast, cheap and saving costs hinting Smith’s theory about individual gain (Smith, 1776). Continuing on this, Freidman (1970) theory is confirmed according to one respondent regarding the aim of corporations to make profits. This mindset seems to be imprinted
in the workforce, hindering the ability for organization change, highlighting the time-consumption for change to emerge (Senge and Sterman, 1990; Bernotat, 2007).

Regarding sustainability innovation in AB Limited with manager Larsson, they applied UN Global Compact a decade ago, this in accordance to the global requirements of UN Document (2013), Global Reporting Initiative (2000-2011) and the argument by Larson (2000) highlighting the importance of sustainability innovation. Their organizational values were transferred from internal to external regarding their sustainability promotion where employee involvement and encouragement is evident. Larsson (2013) gives the example where employees were recognized and rewarded for their efforts in sustainable innovation inspiring individual social responsibility. This indicates the findings about employee involvement (Pajunen, 2010; Freeman, 1984; Freeman, 2010b; Nidumolu et al, 2009; Winston, 2009). What seems to be evident here is the philanthropic approach of organizational activities, also recognized by Ericson (2013) highlighting what is stated in Snowdon and Stonehouse (2007). What assures this even more is AB Limited’s action-taking for promoting environmental responsibility among farmers with education and training with Good Agricultural Practices encouraging societal well-being. In that case, CSR in AB Limited was related to the concept of a Social Venture by Thompson and McMillan (2010). Furthermore, Larsson (2013) continued discussing between the different types of innovation highlighted in AB Limited, since the aim of the investigation was to connect sustainability with innovation. As a manager in business unit “Consumer Brands” Larsson often prioritized improvements of the quality regarding their product offerings continuously. The continuous improvement effort highlights the innovation definition by OECD (2013), Winston (2010) and Porter (1998) where a product innovation focus externally and process enhancement internally, both highlighted by OECD (2013). Regarding the NCoI, Larsson (2013) emphasizes their ambition to take precautions since they were placed in a market where competition is fierce and therefore applicable to Grant’s (2010) argument about strategic innovation. It was surprising that one of their competitors was People’s Choice on the national basis. AB Limited understood the benefit to act as a corporation concerning about their CSR Practices on an international level coinciding with the argument about global sustainability suggested by Garvare and Johansson (2010). Additionally, Larsson (2013) gave an example of her experience regarding microbial infected Antibacterial hand Wash she had the duty to recall. The understanding was the importance for the safety of the customers, which was a key issue regarding social cause. If this was a case of stakeholder dialogue as suggested by O’Riordan and Fairbrass (2008) or not, Larsson (2013) explains “I do agree partially that this organization tries to act responsible for any negative consequences of innovation. But situation is not always in favor of the company even though they have good intension. Because, due to nature of distribution channel, negative image in consumer mind, fear of media exposure and other financial facts, its sometimes really hard to take action immediately” (Larsson, 213).

The next dialogue with Larsson (2013) was related to the assumption about corporate pursuit of profits with assuming the corporation having a greedy mindset. Larsson starts by stating that corporations may in fact have good intention for sustainability precautions but the industrial environment hinders them and therefore they need to cope for profits for the survival of the organization. Because this concerns a developing market, the people there do not have the same
motivation to pay that bit of extra for products of an eco-friendly nature. “We can’t blame the corporations only for their irresponsibility. Being consumer, we have to be concerned about environmental facts and motivate corporations to become eco-friendly” (Larsson, 2013). Everyone needs to co-operate with the same aim for creating awareness for generating secondary stakeholder importance she explains. Relating to the author’s developed model, the SNE SFI-GS Framework, this related to the theory of Berman et al (1999), where stakeholder involvement is highlighting five aspects of stakeholder importance; community relations, employees, workplace diversity, customers and issues of product safety and the natural environment in relation to what Larsson (2013) states.

The negative innovative effects are handled by their protocol regarding New Product Development (NPD) and a person or division at the development level, suggesting a modified model of the risk-management argument as brought up by Merton (2013). Regarding the generally assumed perception about peoples association of innovation and positivity, the authors wanted to know Larsson’s viewpoint on the matter. She explains that innovation synonomous actually is positively related such as “better quality”, “very good” or “technologically upgraded” correlating with the pro-innovation bias test with randomly selected people on what they associated the notion of innovation with. She explains that “because we believe that innovation is possible through development in science and it always work for the betterment of human life. But reality is different!...”(Larsson, 2013). She continues with an example “though Swedish chemist and engineer Alfred Nobel invented Dynamite, the first safely manageable high explosive with a good intension to solve problem in mining and construction works...”(Larsson, 2013). This was an evidence to support the pro-innovation bias and the attitudes of people (Rogers, 2003; Hull and Kaghan, 2000; Abrahamson, 1991; Fazio and Olson, 2003; Schlenker, 1978; Nelson and Winter, 1982; Baumann and Martignoni, 2011). Larsson was asked whether she had any experience in environmental friendly activities when she worked in AB Limited. The communication there was part of the core business fragment; to develop a sustainable nature with the help of a consumer relationship, Larsson (2013) explained. This confirms the new article about sustainable long-term strategy exemplifying how developing countries have started to carrying out their activities (Haanaes et al, 2013) with a natural-resource respect highlight (Hart, 1995). She states that “my business unit used to offer free education on hygiene practice at schools in villages to upgrade their living standard” (Larsson, 2013). She approves practices of sustainability working as a competitive advantage of scale for products of precise kind where consumers do not concern paying more for the cause of personal health and the future generation, highlighting the findings in Haanaes et al (2013) and the requirement of UN Documents (2013). AB Limited offers support where “free training on farming technology is really helping to solve farmer’s farming related problems as well as to protect environment from harmful side effect of fertilizers’”(Larsson, 2013). This reveals the suggested indication on sustainability trends by Sutcliffe (2011) and a way of approaching natural capitalism (Amory et al, 2007), where importance of the natural environment prevails.

The authors conducted an interview with Fen Wang, the CEO of the Environmental Institution Green Earth Citizen, where people are engaged to work for a green cause. In their official website they explicitly describe the areas of relevance where they were advocating (GreenEarthCitizen...
official webpage, 2013). This relates to the article regarding the emergence of sustainability innovation (Larson, 2000) finding similarities to the mission of GreenEarthCitizen. Relating to the literature review, the wide range of stakeholders had one thing in common; all were involved in relation to consideration the natural environment and society that was considered as secondary as lacking stakeholders importance highlighted in literature (Hall and Martin; 2005, Carroll, 1999; Garriga and Melé, 2004; Freeman, 2010a). However, in this organization, the ecosystem, the general public and the scientific and technological community were regarded as stakeholders (GreenEarthCitizen official webpage, 2013) relating to the topic of inter-connecting innovation, society and the natural environment.

By asking in what ways this organization can function in society, Wang (2013) wants to nurture the transition in society for a green and equitable economy with sustainable development but also to contribute in society for a better environment. His aim with GreenEarthCitizen is to create a social enterprise, rather than being associated as a profit-driven organization in accordance to the article discussing social ventures (Thompson and McMillan, 2010). GreenEarthCitizen also acknowledge their core business as environmental governance with ensuring advocacy to manage potential stakeholder conflicts (GreenEarthCitizen official webpage, 2013), again in accordance to the aim of a social venture (Thompson and McMillan, 2010), the suggested stakeholder-balance promotion (Garvare and Johansson, 2010; Freeman, 2010b; Clarkson, 1995) and stakeholder dialogue (Pedersen, 2006; O’ Riordan and Fairbrass, 2008) in literature. To be able to achieve this, freedom of work among team members is essential. Relating to the value creating mechanism Wang explains that “It is fundamental as all members working with us are working for the values” (Wang, 2013). But more importantly, it was him that established the organization with the position as a CEO and he believed himself as creating the value in the organization. This was in accordance to the value-adding mechanisms as a way of integrating core competencies (Snowdon and Stonehouse, 2007). There is an understanding on the matter that since this venture is in a start-up phase, the CEO may be one of the main value-creating mechanisms. The attractive purpose is put as to “create value change in the society for solving those challenging environmental and climate change issues, and to accelerate the society transition to green and more equitable economy and sustainable development” (Wang, 2013). His statement reflects to the findings in Vitousek (1994) where global warming and change are concerned for as consequences relating to ecological awareness. He adds their mission relating to value creation as “Environmental security concerns all members and people within the society” (Wang, 2013).

This strategic mindset of involving everyone in their mission confirms the argument by Ignatius (2009) where strategy is shaped by culture. Wang (2013) defines a stakeholder as anyone that may be harmed by climate change and environmental ruin as an example, relating to viewing sustainability as a competitive advantage (Nidumolu et al, 2009; Hart, 1995) highlighting the argue of importance regarding climate change and the change in global environment (Winston, 2010; Vitousek, 1994). This mind-set is lacking in for-profit organizations, view the society and the natural environment as secondary stakeholders. Part of the solution is implementing the author’s suggestion with the developed SNE SFI-GS Framework for encouraging sustainable practices. Accompanying Wang’s (2013) visionary new thinking, this is something of high importance in society if innovation is to occur in social practices (Denning et al, 2010).
Relating to CSR, the organization works as promoting the green mission in corporations enabling them to achieve these practices. Relating this to their concerns about the NCoI Wang states that “particularly when we are establishing new partners, we are very concern about the potential risks their innovation may pose to the environment” (Wang, 2013). The organization even has an independent research established in their department of Research & Development. He continues, “not only we do, but also we ask other companies to take responsibility to proactively seek solutions of for the potential negative consequences to the environment with their innovations. We urge them to write reports for environmental evaluations” (Wang, 2013) in accordance to the encouragement-mechanism for rethinking current processes (Snowdon and Stonehouse, 2007). The authors wanted to know Wang’s opinion on why it is assumed that blame for the negative effects on the environment often is associated with greedy for-profit corporations. He states that this was a case of pure capitalism that to some extent nurtures innovation creation, but without moral the nature, environment and the ‘Earth Climate’ would suffer. This was related to the argument regarding organizational wealth-creation (Snowdon and Stonehouse, 2007, Swan, 2009; Freidman, 1970; Teece et al, 1997; Sharma, 2006; Smith, 1776; Clarkson, 1995; Smil, 2006). In addition, one of the speakers in GreenEarthCitizen’s website highlighted the importance of making people understand the situation to really grasp what is happening in the real world. There is a difference between reality and businesses where they are lacking understanding, he argues (Professor Oren Lyons, 2008 in GreenEarthCitizen Official Webpage, 2013). This strengthens the suggestion that many corporations may have ambiguous implementations regarding CSR practices as stated by Newell (2005). Additionally, the speaker highlights human responsibility where ‘gifts’ granted to different people incurs ‘responsibilities’ where the task is to develop these gifts and then to share those with the people not granted these gifts (Professor Oren Lyons, 2008 in GreenEarthCitizen Official Webpage, 2013). The authors find this related to earlier findings in Berman et al (1999) regarding stakeholder involvement and earlier discussions about consumer awareness with Johansson (2013) and Larsson (2013).

The next topic of discussion concerned the assumption that people relate innovation to good societal possessions. Wang actually do not agree to this assumption with stating that “innovation is not always related to good things, sometimes they could generate more harm than good if the innovations have not taken consideration of moral and other ethical values. Innovations should be problem-solving driven” (Wang, 2013), indicating that this is a case where the pro-innovation bias (Rogers, 2003; Hull and Kaghan, 2000; Abrahamson, 1991) is finally rejected. This relates to the argument regarding overestimations of sustainability concepts (Binswanger, 2001). Wang (2013) actually believes that innovation can be used to support climate adaption and mitigation while other innovation implementations may help addressing environmental problems, others with dedication illegal hunting and logging; this demonstrating the variety of the problem-solving mechanisms. The findings relating to these arguments have been found in literature regarding sustainable innovation (Nidumolu et al, 2009; Jing and Gong, 2012; Thompson and McMillan, 2010; Larson, 2000). This requires a mindset promoting green values for innovation as Wang states where “Value are very important, they are the fundamental bases for innovations. Good values will generate good innovations. Green values will help in generating green innovations... ”(Wang, 2013) in accordance to the green value perception in Hart (1995), Amory et al (2007) and Nidumolu et al (2009). For the great challenges in today’s society such as
climate change he suggests “…an interface between science, innovation and value systems to be created to facilitate technological innovations” (Wang, 2013), in accordance with the concern regarding global warming (Vitousek, 1994), the innovation trends suggested in Sutcliffe (2011) and the importance of technological innovation discussed in Nill and Kemp (2009). As the CEO of a ‘green’ organization, it is useful to know Wang’s argument on which societal sector he believe creates most harm to the natural environment. While almost all industries contribute the pollution level, the levels differ. “Chemical manufacturing generates a great deal of pollution. Fertilizer companies, the pharmaceutical industry, and companies which manufacture pesticides all pollute copiously around the world. The indirect consequences of these pollutions are hardly incalculable” (Wang, 2013), and he adds the oil refining as a large pollution resource. With 4 years living in a city with major polluting factors such in the industry, the air, the water and the ecosystems, one can understand his willingness to work for the cause to have a greener environment. His statements are found supporting the notion about that there ought to be more research conducted regarding the NUCoI (Sveiby et al, 2012) and the importance of secondary stakeholder consideration (Hall and Martin, 2005). He highlights that when developing products/services in society “We must consider, and before we create something, we think about the negative consequences first” (Wang, 2013) supporting the framework by Merton (2013).

One more CEO was contacted for interview, Jou. Working for environmental protection is one of the advantages working in an organization like this. This since it is a social concern that deserves attention for being one of the most highlighting challenges for social welfare and sustainability as it was related to the suggestion encouraging social ventures (Thompson and McMillan, 2010) and working viewing the natural environment as a stakeholder (Berman et al, 1999). The organization works with producing and selling equipment for gas and water pollution, pollution-solving and project designing for their main customers being companies producing waste and garbage transfer stations. In China, they have a leading position in the industry (Jou, 2013). This statement connects to the encouragement for organizations to work with environmental friendly activities as a competitive advantage (Haanaes et al, 2013). Jou (2013) explains that the promising of the environmental industry was the motivation for him to create the business in China and with customers from nearby countries they are planning to expand the organization internationally. This industry has the aim to contribute to sustainability in the society, associated to the suggestion by Hart (1995) with the natural resource-based view of the firm. Additionally, their practices highlight the argument by Nidumolu et al (2009) with sustainability innovations as opportunities for businesses, Armory et al (2007) with their approach regarding natural capitalism and Heerad (2011) with a business working for a social cause.

Jou (2013) explains the organization creating value for their customers by helping them reduce the environmental effects with combining comparative low prices and professional solution-providence that act as lowering the negative environmental effects. This in turn, may help corporations achieving their CSR practices. Relating to the findings grasped in literature, Jou (2013) helps changing organizational behavior that may take time (Bernotat, 2007) for their implementation in the area of sustainability in a way of implementing open innovation (Chesbrough, 2003) regarding the business to business approach. With their environmental solutions regarding new products and projects designed for pollution, this highlight their...
innovation effort in a continuous basis (Jou, 2013) in accordance to sustainability innovation argued by Nidumolu et al (2009) and Sutcliffe (2011) with innovation trends, highlighting sustainability for helping their customers reaching for natural capitalism (Amory et al, 2007). The innovations created for protecting the environment are stimulated by the customer problems as Jou (2013) explains in accordance to Jing and Gong (2012) with their statement regarding the requirement for sustainable innovation. This also strengthens social entrepreneurship, yielding replicable representations of civic engagement and building capable nonprofits for meeting the needs and increasing demands of citizens throughout the society. The issue regarding profit chasing of corporations is brought up and Jou (2013) highlights their actions leaving evidence with the negative environmental impact that may harm the natural environment in accordance to the argument by Winston (2010) regarding harm on the natural environment. He (Jou, 2013) acknowledges the risks with innovation and that they actually can, to some extent, contribute to result in negative consequences on the environment. Jou (2013) suggests a long-term insight to be considered before innovating and by this, understanding whether the environmental negative impact is an outcome of the innovation that precautions might be taken with protection solutions to defeat these impacts. This is found in accordance to findings about risk-management of innovations suggested by Merton (2013). Jou (2013) also argues that companies ought to implement a detailed sustainability plan for societal benefit, in accordance to the requirements of UN Documents regarding sustainable development (UN Documents, 2013). Additionally, Jou (2013) does not believe innovation in itself is bad since there are actually some innovations created for environmental protection as suggested by Nidumolu et al (2009), with sustainability innovation and the argument by Larson (2000) regarding sustainability challenging current practices. Both Wang and Jou can be seen as ‘ideal’ stakeholders acting as ‘links’ between organizational practices and secondary stakeholders encouraging the implementation of the SNE SFI GS-framework work in practice. With this framework, the authors find that the introduction is a theoretical contribution to an observed case; NUCoI. Regarding the viewpoints of Anderson (2013) and Johansson (2013) for the SFI GS-framework, both agree that it is a good contribution and Anderson acknowledges it good for the authors to be able to illustrate it with the model. Johansson recognizes that the visualization contributes so positive sense-making and supports organizational closeness to customer values in surroundings. As a relatively new field, to think in these terms, Johansson (2013) states implementing this framework enhances something customers nowadays concerns about. In the long term, this may generate economical profits as an outcome of convincing the customers to make the right choice when buying the organizational product. As Johansson states, the authors agree that ‘customer is the boss’.

Regarding value-creation, the view of the static value-chain found in theory may hinder responsiveness to others outside the immediate stakeholder-frame, since it only includes value adding mechanisms for these (indicating the name ‘value chain’). At direct observation, it excludes what may happen outside the company-consumer relation, in this case the societal natural environment. In relation to innovation and as suggested by Hall and Martin (2005), to look beyond the immediate stakeholder perspective is found necessary considering secondary stakeholders and to be able to ‘rethink’ processes (Snowdon and Stonehouse, 2007). The authors try to understand the link between innovation and sustainability in regards to value-creation from the managerial perspective and why it may incur NUCoI. After a brief discussion with a lecturer
in strategy and management, the authors realize that the co-creation of value seems to end with the customer consuming the organizational product offering, and then the negative aspects of the value-perceiving offering emerges that may cause harm to the societal natural environment. The theoretical value chain does not directly consider what actually happens after the product is consumed. Looking at various innovation definitions, the majority defines it in terms of ‘improving’ current processes instead of ‘rethinking’ them. Porter highlights this ‘rethink’ as an alternative way instead of imposing regulation. He mentions corporate pollution as an example (Snowdon and Stonehouse, 2007). However, his generic value chain (Grant, 2010) deserves a critical observation. One reason why NUCoI may happen can be because it is may be “out of scope” (Fredrissson, 2013) of what organizational activities do as the authors found from one interview, regarding their value creating mechanisms. Awareness and rethinking is needed from both the organizational and primary stakeholder perspective.

![Value Chain Diagram](image)

Figure 36; displaying authors’ elaboration regarding value perception

An up to date argument relating to sustainability is the challenge of E-waste. Due to the rapid consumption of electronic goods, the effects of it have similarly increased. With the improvements and intensification through electronics for people, the aftermath of what happens to these, is a global challenge with magnitude (SwedWatch, 2009). If the UNCoI are more acknowledged by various actors in society, long-term value creation may be generated for innovative organizations, as a way of highlighting the argument by Haanaes et al (2013) to consider total returns on resources and not merely assets for global sustainability. As can be observed in figure 36, the feedback loop from secondary to primary stakeholders is lacking that may enhance a clearer communication of consequences on the societal natural environment. From the empirical findings regarding the managerial perspective, value may be perceived as something intangible created and then handed over to the end customer. However, after that it stops. For extending the value creating mechanism regarding sustainability, organizations and primary stakeholders need to acknowledge that natural resources are priceless. It all comes down to the customer, as Johansson (2013) explains. If the customer does not value sustainability, for-profit organizations will not do it either since organizations are man-created entities with a still prevailing mindset. It all comes down to costs and making profits (Friedman, 1970).
5. Discussion and Conclusion

The phrase “we may have wealth, but maybe not future health” emphasizes the line of argument throughout this research, questioning if innovative competition always is fruitful. As Charlie Chaplin emphasized in the “The Great Dictator” stating that “greed has poisoned men’s soul” (Tragedyand Hope, 2011) the authors want to contribute with a little bit of de-poisoning. The human lives in a society today, where much of the objects surrounding them are artificially created originating from human ideas. The subject regarding NCoI has been a field of negligence in social science, as suggested by Sveiby et al (2012). In this case, NUCoI is combined to the field of sustainability and stakeholder value-creation. As the findings present, to be able hinder these consequences in a possible extent, a different mindset is required. In addition, this is required from most stakeholders involved. There is a difference between an idea and an innovation. Reflecting back to the Industrial Revolution in the Western society where they as a fraction of the World´s population enjoyed welfare, the situation is more complex today where many developing countries are prospering at a fast pace making global competition fiercer and more challenging. However, there is only a limited amount of un-replaceable natural resources. As stated earlier in the research, money cannot buy the priceless. Relating this to NUCoI, the authors argue that the global societal natural environment ought to be considered as a primary stakeholder affected by organizational value-creating innovative activities. In relation to global sustainability, where the worlds’ scarce resources need to be respected, this research suggests the Extended Value Creation Mechanism for Global Sustainability referred to as the Societal-Natural-Environment Stakeholder Framework of Innovation and Global Sustainability (the SNE SFI-GS Framework). This research intended to answer the following question;

1. How would the first step of implementing of the new Extended Value Creation Mechanism for Global Sustainability, the SNE SFI GS-framework work in practice?

In addition, with an intended multiple-case study, to answer the following the sub-question;

2. How do different managers in different industries consider innovation and negative consequences of innovation in terms of value, strategy, stakeholder-perception and sustainability?

Regarding the first question the authors found a deficiency in the literature review that needs to be considered, regarding the importance of fulfilling the needs of secondary stakeholders in organizational goals. This was mainly found from the perspective of employees and customers. Employees and customers are important because they buy products with money they receive when working and at the same time, live close enough to see the negative effects on the environment. Relating to the work of Vitousek (1994) where environmental change is an important factor to consider on a global scale, the authors found it necessary to conduct the research in relation to global sustainability. Since employees and customers work as primary stakeholders they may function as a link between the organization and secondary stakeholders. Therefore, the authors suggest them to speak up for the secondary stakeholders. For the SNE SFI-GS Framework to be implemented in practice, the first step ought to be a clear understanding on how stakeholders are functioning in relation to the organization. This requires the natural environment and the society to be considered as primary stakeholders instead of being considered
as secondary. For this to occur, the pro-innovation bias needs to be questioned. People need to start questioning the outcome of innovations and understand that there are always two sides of ‘the same coin’. People also needs to understand the difference between an invention (an idea) and an innovation (taking the idea out into practice) since the latter involves NUCoI. With this, the organizations may get a better understanding of the seriousness of their practices. If their products are not sold, the vitality of the organization may be at risk. As found from the different sources and viewpoints in the empirical findings, respect for the environment is fundamental and awareness of the potential consequences on a long-term basis is not merely a task for organizations, but of same importance for individuals. For the SNE SFI-GS Framework to be implemented in practice, the foremost step to take is regarded as the willingness for change accompanied with more awareness. Everything comes to an equilibrium as Adam Smiths’ (1776) invisible hand theory suggests, and as found in recent research, suggestions of more awareness of innovation risks (Merton, 2013) and sustainability (Haanaes et al, 2013) highlights this argument of change. To sum, the first step of implementing the SNE SFI-GS Framework is to understand how different actors regard NUCoI.

Considering the second question regarding the analysis of findings, it contains both differing opinions but similarities regarding certain aspects. Most of the respondents in the in-depth interviews acknowledged that their organization was innovative and that their organization regarded negative consequences in one way or another. The main value creation mechanisms in each respective industry regarded their suppliers or customers, with them acting as intermediaries creating value internally, as suggested by the generally accepted static value creating mechanism (Normann and Ramírez, 1993). Two of the respondents emphasized the value creation in their organization since they worked as service providers and consultants where their insights mattered and were highly-valued for their customers. One respondent highlighted one of their established organizational values as to improve on a continuous basis for quality improvements of life for humans, indicating a concern for human health. Found surprising, was that this organization established in a developing country in South East Asia. According to one respondent, working in the consumer good, for-profit industry, they implemented value creation regarding sustainability because they find this indicating customer-value. He also believed that the SNE SFI GS-framework in this research makes organization understand customer value more, what the authors found to be one of the main reasons for developing it.

Comparing the for-profit organizations with the two organizations regarded as social ventures, the value perception differed to a large extend. Regarding the latter, environmental security, reducing consumer effects on the environment and the aim of changing the value-perceptions in for-profit organization was a major part of their organizational missions. They facilitate the implementation of CSR practices regarding for-profit organizations. If more organizations were established for this cause, the authors argue that they would contribute facilitating the progress in how UNCoI are handled. The findings regarding stakeholder-perception related to the organizational strategies which in turn indicate how they carry out their organizational operations within the society. The authors found stakeholders often connected to owners or customers. One respondent emphasized that when the customer picks up a product for purchase, this provides an important insight on how every stakeholder is interconnected. When the customer makes that
informed choice of purchase, the interconnection between quality, competition and stakeholder-demand fulfillment is the moment of truth. As long as customers keep purchasing the product offerings, the organization do not have to take precautions. However, what the authors found is consumers having biased knowledge, and for them to make a more rational choice regarding their purchases, more awareness and education regarding NUCoI needs to be emphasized. The stakeholder perception with the CEO in one of the social ventures seemed to be the most accurate to the authors argument of highlighting secondary stakeholders, since he clearly stated how a secondary stakeholder is regarded as a primary stakeholder, an absence the authors found in how the managers in the for-profit organizations defined it. What was more surprising was that majority of the interview respondents defined a stakeholder as an individualistic entity with terms as “person”, “anyone” or “those” in accordance to Freeman (2010b) when he defined a stakeholder in similar manner. In the automobile organization the authors found it surprising that only one of the respondents seemed to have any idea how a stakeholder was demarcated when he defined it as “person or person(s)” (Person A). Regarding the organizational strategy-perception among the respondents it seemed that the majority of the employees we interviewed understood the importance of implementing a strategy throughout the organization, both internally and externally. In the medical industry, the employee defined part of their strategy as to be able to anticipate implications with a certain technology. In one of the social ventures established in China, their strategy combine their sustainability goal while using their core product offerings, which the authors found as an example that may inspire other for-profit organizations working for a social cause (Heerad, 2011). The respondent from South East Asia stated that sustainability was part of their main strategy by forming consumer relationships of a sustainable nature. These findings enabled the authors to view organizational sustainability and CSR precaution from different managerial viewpoints.

As highlighted from the interviewee within the institutional sector, UCoI have been studied in sustainable development to some degrees, although the link between these may be unknown for the perceiver. Therefore, it is found important to agree on including the topic in educational agendas such as sustainability and CSR. The authors agreed that indeed people need education on the topic regarding NCoI for a more reality based theory in social science. Two of the consumer goods companies already have sustainability as one of their main organizational strategies as stated by the managers working there. When disclaiming their CSR practices, the authors found one of the managers in the consumer good organizations focusing on future generations in society with their practices. In another case, the respondent argued about the magnitude regarding impact on the environment when implementing innovations and suggested the authors to read their organizational CSR Plan. Both of the social ventures encouraged other organizations in society to take care of their CSR practices. In the technological organization, the respondent argued for their strong practices focusing on the future generations. Regarding the previous manager in Dubai, he explained their organizational implementation of several projects related to social and environmental concerns with projects in a philanthropic matter. Surprising, was the findings in automobile company where all of their respondents said very little about their activities regarding CSR. If sustainability is indeed part of the organizational strategy communicated to the organizational employees at different managerial levels, the employees may serve as an important link to discourage UNCoI. But this requires the awareness of the link between UNCoI and
sustainability. The employees may be consumers, suppliers or other important primary stakeholders. Since secondary stakeholders requires someone to raise their stake, the primary stakeholders may have this task to milder the consequences in the societal natural environment. Lee (2010) highlighted CSR practices on a stepwise manner while Becker (1976) highlighted the nature of greed supported by Freidman’s (1970) argument regarding organizational goals of profit-creation to their shareholders working as artificial entities. While large organizations state their CSR practices in various reports and statements, we need to question ourselves, what can we do to actually ensure these practices? How can we as individuals contribute for a greener world that encourages green innovation, instead of giving the full responsibility to corporations? The first thing is to understand and acknowledge the power of humans as stakeholder. If organizations act as the ‘parents’ of society providing welfare, we need to make sure they act in assuring the best choices for us. More importantly we need to understand and recognize that humans act as customers, consumers, employees, suppliers in relation to a societal created organization. If organization ought to act as a citizen in society we need to make that happen in practice. They cannot be taken as established welfare entities anymore with ambiguous action-taking, regarding their corporate responsibilities. But this requires us as individual to speak in place of silent resources. We need to speak up for the natural environment and the consequences of innovation affecting society. We need to educate ourselves about what the aim of organizations actually is in the global year 2013 and how they affect the societal natural environment, intentionally or unintentionally with their innovation practices.

Already now there are organizations on both sides of the world, with the aim of preventing the NUCoI established as social ventures. We need to understand that is requires us to act together. If this is to change, we need to acknowledge secondary stakeholders having the same right as primary and not merely regarded as an interested party (Garvare and Johansson, 2010). The main contribution for this to happen the authors argue is to raise awareness with education in social science. Professor Robert Winston argues about the importance of communication with stating that “Communication is a fantastic healer” (TheGuardian, 2010). This was the authors’ task, the reader has another, and together we may change the pro-innovation bias. As Charlie Chaplin say “Let us all unite. Let us fight for a new world, a decent world that will give men a chance to work that will give youth a future and old age a security”(Tragedyand Hope, 2011). Concluding, the authors want to ask the reader; how do you define innovation?

5.1 Suggestions for further research

The SNE SFI-GS Framework is new. The focus in the thesis was based on gathering different opinions regarding the authors’ suggested contribution and there are many ways to proceed. The authors’ suggest this framework to be taken out into a practical implementation in different fields of study. Why not combining innovation to other related topics of the researchers’ interest? The field on NCoI is relatively new giving future researchers a wide arena of findings. To sum, innovation seems to be taken for granted as something positive in society. If this mindset does not change at various levels in society, it may take a long time for things to actually change regarding NUCoI.
6. Reference index

Book-based literature:


**Internet-based literature:**


Periodical literature:


**Empirical Findings References:**


**Empirical Interviews:**


**YouTube-Videos:**


Appendix 1

INTRODUCTORY LETTER

The impact of the negative consequences of innovation on society has attracted considerable interest for some time. Most of the researchers on this field’s development have witnessed tremendous changes.

The above mentioned facts constitute the basis of our master research to be defended at Linkoping University Sweden.

We are sending an interview invitation to you, considering your experience on the subject under study or in a relevant subject. The goal of this study is to examine how negative consequences are perceived and applied by organizations nowadays. Focus in this interview is placed on negative consequences of innovation, value chain, globalization, strategy, management, stakeholder theory and CSR. I would like to take advantage of your valuable experience on the subject under study.

Acknowledging the fact that your schedule is probably overbooked, I would like to underline the usefulness of this study in understanding the formation of the negative consequences that innovation outstretches within the society.

Your participation in this study is voluntary but it would enhance this study’s’ quality, if you accepted the invitation, since the interviewer regards you as a valuable and reliable source of information.

Your answers will be treated confidentially. No personal information will be given out in this study if the interviewee so wishes.

If you have any problems, queries or comments concerning your participation in this study you are welcome to contact the SMIO Master Program Instructor, Marie Bengtsson at Linkoping University. If this is the case, contact us for further information, ChraAli Rashed; 0700-6420 41(Chrra957@student.liu.se) or George Mouyiasis; 0729-3427 52 (Geomo206@student.liu.se).

Underneath this letter, we will provide you with a short description of our topic on the negative consequences of innovation, value creation and corporate social responsibility before your response to the questions that follow.

We would like to thank you in advance for your time and we are looking forward to your contribution.

Yours Sincerely,

Chra Ali Rashed & George Mouyiasis
Innovation is often related to positive outcomes for majority to enjoy that enhances welfare and facilitates everyday activities. One main contributor of innovative activities is operations of corporations leading to value to the end customers. While firms often have the aim to create value with innovation for the greater benefit of society, sometimes these value-creating mechanisms are reversed to create unintended negative consequences.

The aim of this research is to contribute to the existing frameworks of Value creation mechanisms for society to incorporate the aspect of negative consequences of innovation because of changing global dynamics in social science to highlight the fact that there is always another side of the coin of innovation that sometimes may be ignored. The aspects in the research include stakeholder-theory, value-creation in terms of the societal environment, and innovation as a social science, negative consequences and organizational sense-making. In relation to the movie “The Great Dictator” (a short YouTube video clip will be provided to get a better understanding of the idea) where Charlie Chaplin emphasize this in a sublime matter where he states that “more than machinery, we need humanity” (Charlie Chaplin, Tragedy and Hope, 2011). With taking secondary stakeholder as a primary in terms of the natural environment in society, this research aims to provide an insight on negative consequences of innovation of a silent actor; the human natural health. To get the main idea of our intended essence please feel free to watch this short clip starring Charlie Chaplin from the movie “The Great Dictator” [http://www.youtube.com/watch?v=CsgaFKwUA6g](http://www.youtube.com/watch?v=CsgaFKwUA6g).
Questions to ask in interviews with modifications adjusted but to interviewees circumstances:

<table>
<thead>
<tr>
<th>General Questions to every sector:</th>
<th>Specific questions about value creation:</th>
<th>Specific questions about innovation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your current position in terms of work?</td>
<td>What are the internal strategies of your company? Do you have frequent meetings, dialogue about how to aim for the strategies?</td>
<td>In terms of innovation, how would you define your corporation’s contribution to innovation?</td>
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<td>What was your occupation before entering this work?</td>
<td>In your view, how do you think value is regarded in your corporation?</td>
<td>What types of innovation is highlighted in your work?</td>
</tr>
<tr>
<td>What is your higher education degree and in what field did you study?</td>
<td>How do you think value is created in your organization?</td>
<td>Do you consider negative consequences of innovation in your work?</td>
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<td>How long have you been working in the current position?</td>
<td>When you first started your current position, what did the corporation tell you about value-creation?</td>
<td>Do you have a model on how to handle negative consequences of innovation?</td>
</tr>
<tr>
<td>What are the advantages with the current position?</td>
<td>In your experience, what do you think your organizations main value creation mechanism is?</td>
<td>Do you think your organization takes responsibility for negative consequences of innovation?</td>
</tr>
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<td>What are the disadvantages with the current position?</td>
<td>What stakeholders do you think creates the most value for your organization? Why?</td>
<td>In your experience, what do you think is the main purpose of the organization you work with?</td>
</tr>
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<td>Can you describe your day-to-day activities in your work?</td>
<td>How do you think Corporate Social Responsibility (CSR) is regarded in your organization?</td>
<td>Why do you thing the blame for the effect on environment caused by corporations is often related to greed and profits?</td>
</tr>
<tr>
<td>How many in your organization have the same task as you in your office, worldwide?</td>
<td>In terms of atmosphere, how do you regard the organizations focus on future generations in society?</td>
<td>Do you consider negative consequences of innovation when developing products/services? In what way?</td>
</tr>
<tr>
<td>What, in your perspective, do you think your corporation provides for your customer-base that other corporations don’t?</td>
<td>Do you have a model for value-creation in your corporation? (The usage of it – the risks created) Where do you fit in this model?</td>
<td>In your view as a manager how do you think your company regards the developed model (current situation)…..what do you think the company would gain if the new model is adapted?</td>
</tr>
<tr>
<td>How would you define value for customers? How would you define a stakeholder</td>
<td>From your experience in your work why do you think people often associate/consider innovation as something positive? (Manage risk in projects - can you explain more?)</td>
<td>Haanaes (2013) in Harvard Business Review suggests that we need to consider the natural resources of this World to a greater extent than before by implementing natural ways of doing business. For example investing in nature and ecology actually may grant long-term success for businesses. From your perspective, do you see this trend in practice in MNCs?</td>
</tr>
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Appendix 2
Transcript from the Speech from The Great Dictator- Charlie Chaplin:

Transcript:

(Charlie Chaplin):

I’m sorry but I don’t want to be an emperor. That’s not my business. I don’t want to rule or conquer anyone. I should like to help everyone if possible; Jew, Gentile, black men, White. We all want to help one another. Human Beings are like that. We Want to live by each other’s’ happiness, not each other’s misery. We don’t want to hate and despise one another. It this world there is room for everyone. And the good earth is rich and can provide for everyone. The way of life can be free and beautiful, but we have lost the way.

Greed has poisoned men’s souls; has barricaded the world with hate; has goose-stepped us into misery and bloodshed. We have developed speed, but we have shut ourselves in. Machinery that gives abundance has left us in want. Our knowledge as made us cynical; our cleverness, hard and unkind. We think too much and feel too little. More than machinery we need humanity. More than cleverness, we need kindness and gentleness. Without these qualities, life will be violent and all will be lost. The airplane and the Dario have brought us closer together. The very nature of these inventions cries out for the goodness in man; cries out for universal brotherhood: for the unity of us all.

Even now my voice is reaching millions throughout the world, millions of despairing men, women, and little children, victims of a system that makes men torture and imprison innocent people. To those who can hear me, I say “Do not despair”. The misery that is now upon us is but the passing of greed, the bitterness of men who fear the way of human progress. The hate of men will pass, and dictators die, and the power they took from the people will return to the people. And so long as men die, liberty will never perish.

Soldiers! Don’t give yourselves to brutes, men who despair you and enslave you; who regiment your lives, tell you what to do, what to think and what to feel! Who drill you, treat you like cattle, use you as cannon fodder! Don’t give yourselves to these unnatural men--machine men with machine minds and machine hearts! You are not machines! You are not cattle! You are men! You have a lot of humanity in your hearts! You don’t hate! Only the unloved hate; the unloved and the unnatural.

Soldiers! Don’t fight for slavery! Fight for liberty! In the seventeenth chapter of St. Luke, it’s written “the kingdom of God is within man”, not one man nor a group of men, but in all men! In you! You, the people, have the power, the power to create machines, the power to create happiness! You, the people, have the power to make this life free and beautiful, to make this life a wonderful adventure. Then in the name of democracy, let us use that power.

Let us all unite. Let us fight for a new world, a decent world that will give men a chance to work that will give youth a future and old age a security. By the promise of these things, brutes have risen to power. But they lie! They do not fulfill their promise. They never will! Dictators free themselves but they enslave the people! Now let us fight to fulfill that promise! Let us fight to free the world! To do away with national barriers! To do away with greed, with hate and intolerance! Let us fight for a world of reason, a world where science and progress will lead to all men’s happiness.

Soldiers, in the name of democracy, let us all unite.(Tragedy and Hope, 2011)
Appendix 3

Increasing openness and awareness for innovation along with an accelerating speed of innovation are the hallmarks of today’s business. However the negative consequences of innovation are all too often overlooked. Can innovation actually be dangerous? Or irresponsible? This is a discussion on the future of innovation.

Envisioning the future.

Discussion between Karl-Erik Sveiby and Karl-Heinz Leitner

Leitner - The first vision of what we observe is an increasing participation in opening the innovation process which means that we see more deliberate process with citizens, users, customers, research organizations are collaborating together to develop new solutions, new services, new technologies and to some extend this participation and this involvement is of course also driven by the intention of all these actors to develop new or better solutions. So sometimes citizens or users are for instance not satisfied with the innovations which are developed by the companies so they want more sustainable, healthier products with less impact on the environmental dimensions. So they try to get involved. And even developed by themselves these innovations. So I think this is one trend. On the other hand, of course, I think what we observe is in general a strong increase of the awareness of the innovation, so innovation is considered as very important, both for companies but of course also for nations. Companies are very often, almost all companies are pursuing innovation strategies and of course also for nations. Companies are very often, almost all companies are pursuing innovation strategies and of course also countries, nations try to force the innovativeness by very comprehensive policy measures so I would say this is a broad trend and we could even envision a future where we have an innovation imperative and if such an acceleration of pace of innovation that is also have some negative consequences.

Sveiby-In this book “Challenging the innovation paradigm” we explore the unintended and undesired consequences of innovation. Innovation, we say is both good and bad. It both has the good side but is also have the negative sides. How much of that do you actually see in these visions apart from the fact that there are weak signals, companies are opting out of the race but in terms of these unintended and undesirable consequences of innovations.

Leitner- I still think that these is rather low awareness amongst innovation managers, entrepreneurs, about possible unintended or negative consequences and additional I think is becomes more and more difficult if we think often changing and even more complex business environment, landscape and society to foresee such unintended consequences so this is one coin of the metal. On the other hand, what we observed is a lot of forms of innovation models and forms of innovation are motivated and pushed forward by individuals who really want to avoid negative consequences so when they develop new, energy, safe technologies or products that are more sustainable, so they try in the beginning on to avoid possible negative consequences on environment but even probably on mental health if we think on the workforce today there is a lot of pressure to innovate. I think with this project publishing this book entitled challenging the innovation paradigm, do you think that innovation then becomes less important in the future or that we entering a phase where a probably the negative effects will outweigh the positive effects? What is your basic perception of innovation?

Sveiby- First of all, practically all innovations have a part from the intended beneficial effects its, they also have unintended negative effects. Sometimes they are, you know, you don’t have to worry about
them. But sometimes they can be really, really dangerous. And I’m thinking in particular about the financial system. Financial innovation has created a financial system which today is unstable and dangerous and this is the effect of innovation and it’s certainly a situation where I’d say that most of all would say that the negative effects outweigh the positive ones. At least for us in society that are outside the financial sector. But I can’t say whether the negative effects actually will increase; I think it’s enough to say that we should be aware of the fact that this has two sides. When we change something with the intention of creating something good, there are always some spills, side effects. Medicines have side-effects. And every innovation have side-effects and what we are trying to do with the book is to sort of high-light that this is a side of innovation that we haven’t taken into consideration and I think also in your visions, the ones you have intervened there, they haven’t much thought about at least not in this way. Id said that this is an unawareness of the fact that innovations tend to create these unintended consequences.

Leitner- But in general, I would say that you are not against innovation but you would aiming for an innovation which is shaped more by the different actors who are involved in the process towards a more positive impact also and considering different positive as well as negative consequences?

Sveiby-Yes, No I’m not at all against innovation. It’s interesting when I have raised this topic about the negative consequences of innovation. Some people becomes quiet emotional and start thinking. “Oh, he is against innovation”. Not at all. I regard innovation as one of the most powerful forces of change in society. And certainly there are a lot of things we need to change and innovation have a role to play there. All I’m saying is that when we are introducing change through innovative measures, we must be aware of the fact that we don’t quite know the future, we cannot plan the future. There will always be things that don’t go the way we intended. And those are the things I think, if we address them and take them up at an early stage, we might increase the net benefit, the positive effect of innovation. They don’t go away just because we don’t talk about them.

Leitner- Yeah, I think at the same time the challenge is of course for creators, inventors for innovation-teams also to diet the developing but at the same time not to restrict it too much also in an early phase because at the other hand the ideas, sometimes fancy ideas of innovators too push forward the ideas are also very important (Sveiby- Absolutely)than if you probable think too early on too much restrictions and only on the negative aspects of course this should also kill creativity and ambition and motivation of the people who have involved in such processes. Do you think that there is such a risk?

Sveiby-mm, Yes only is we eh sort of automatically assume that anything that trying to reduce negative affects is restraining creativity. I would say that there are huge potentials of creative thinking in terms of creating innovations which are truly more positive from the start and that this invites a lot of creativity and thinking and I don’t think its restrains at all. Yeah on the day of the launce we had a panel of distinguished members of the Finnish society and discussing the issue of increasing the well-being in society through innovation. What did you bring with you from that panel in terms of interesting ideas and thoughts?

Leitner- there popped out or I synthesized two lessons from this panel-discussion. The first was of course that we should also innovate not for the innovation sake but don’t forget to raise the question for what we innovate. And of course I think this debate about this well-being was were are interesting in and was relating to the topic that innovation of course should also address social and societal demands and those at the end should fulfill or enable a better life and higher quality of life so innovate not only for generating profits which is also in itself also important but also to generate the quality of life and I think we had a good discussion how we can measure this, how difficult it is, but is also depends on the society of course. That we will probably not only have one measure we need specific questions, measures and probably the
finished society will define well-being differently compared to a country like China or Italian colleagues.

The second interesting discussion I think was this topic that of course the complexity of the systems of society of economy is increasing and associated this also goes hand-in-hand with more difficulties too foresee and too anticipate the unintended consequences. So, the more dynamic the more, the stronger the speed, speeding up of innovation the more difficult if gets at the same time for companies, for inventors, for entrepreneurs, for, also for users who are innovating together with their colleagues to foresee or to think about unintended consequences. So if you so like even some paradoxical situation in this changing landscape.

Sveiby- on the day we published the results of the research group we also had a ranking made by the audience of some of these visions. And it was a bit strange to me that we ranked it in the same way here in Finland as in the rest of Europe.

Leitner- yea I guess this has to do with the fact that that innovation has become if you so like an even and must or a mantra nowadays in business-press amongst. Company managers when they talk we find slogans like “Innovate or Die”, so you have to innovate so I think this feeling and this impression also diffuses of course across society, and I think that within Europe every country now has an explicit innovation strategy and considers that innovations were important and in this respect I don’t think that Finnish experts or participants of the workshop have very different views about of what we should and what is about of what is the aim of innovation and hopefully what we should and achieve in the future.

Sveiby- You are one of the authors in the book published recently edited by us in Hanken and you among others you found, some, these weak signal that some actually hoped out of the race. Could you say a few words about those?

Leitner-Yeah, for instance we found an example of an American company who announced that was very proud to that they haven’t changed their product for 70 years. So obviously there is also the tendency that companies try to use other competitive strategies for instance branding, brands, advertising or what so ever, also to achieve competitiveness. So this was one example and another example you find those who in the area of creating sustainable solutions also where some agencies develop some guidelines how to develop new products and sometimes one slogan is also “first think how can we make or improve products by the most simple way” so not necessarily make products even more complex and complicated which leads very often to an over-engineering of products but keep it simple and therefore fulfill the basic demands for products and customer.
Appendix 4
The authors’ contribution in a more detailed manner;

Model part 1: Current situation with negative consequences of innovation effecting the global societal natural environment. Author’s own contribution
Model part 2: Ideal situation taking negative consequences of innovation effecting the global societal natural environment into consideration. Author’s own contribution.
Appendix 5
Respondents from the Automobile Industry Organization

1. **What is your current position in terms of work?**
   - Person A: “Operations-Advisor”
   - Person B: “Inventory Management- Assistant Manager”
   - Person C: “Customer Support- Staff”
   - Person D: “Inventory Management- Staff”

2. **What are the internal strategies of your company? Do you have frequent meetings, dialogue about how to aim for the strategies?**
   - Person A: “Of course, mostly all companies have that if not all. But what many forgets is that it is often the highest managers that set the targets, regarding our company it its often sales target. All the other targets like purchase target, environment or transport reduction targets is less important or not the highest priority”

3. **How would you define value for customers?**
   - Person A: “It’s hard to answer that due to that we do not meet the end costumer, but of course our dealers or distributors are important because they are our indirect end customers. We cant forget that our company is based on a service oriented process, so we always do our best if we can”.
   - Person B: “We have KPIs for that, for Inventory Management we have like Filling Rate with a target at 95.5% at this moment. If we are below its terrible, if it is higher than we do our job correct”.
   - Person C: “Without our customers we would not have this job, so I always trying do everything I can to make the Customer happy”.
   - Person D: “to get 100% service rate, but that is hard and we have not reached that level yet. I think customers value is based on sales, if they trust us then we sell more”.

4. **How would you define a stakeholder?**
   - Person A: “A person or person(s) that can be affected by risk analyzes and other actions that organizations/group can affect”
   - Person B: “Owners of a company? Or those person that can take actions in a 3PL?”
   - Person C: “I have no idea”.
   - Person D: “Something with outsourcing I believe”

5. **How do you think value is created in your organization?**
   - Person A: “by all the process we have of course”
   - Person B: “I think our corporation thinks that different value is important.”
   - Person C: “by daily and monthly ask our customers and ourselves how we can increase and create more value to our company”
   - Person D: “long term goals and trying to develop new process to create new values”

6. **How do you think Corporate Social Responsibility (CSR) is regarded in your organization?**
   - Person A: “we do some small efforts, but not worth mention”
   - Person B: “not much”
   - Person C: “”
   - Person D: “we have some small activities but not too often”

7. **In terms of atmosphere, how do you regard the organizations focus on future generations in society?**
   - Person A: “we do some small efforts, but not worth mention”
   - Person B: “I don’t think we do anything like that”
   - Person C: “”
   - Person D: “we don’t have any plan for future society I think”

8. **In terms of innovation, how would you define your corporation’s contribution to innovation?**
   - Person A: “not much, if you ask me. Often there some person that have the new idea and not the corporations”
   - Person B: “there are always new innovation that is discussed, mostly because our market need that”
   - Person C: “yes we do, but not so much in my department”
   - Person D: “according to me it’s more people that get new plans or ideas and not the company”

9. **What types of innovation is highlighted in your work?**
Person A: “cost saving, reduce lead time by doing new set ups for carriers, IT solutions. In general often the IT part is the biggest reason if an innovation can be reality or not”
Person B: “cost saving of course, campaigns and more flexible solutions”
Person C: “….
Person D: “many I think, but often it is more about changing something that already exist and therefore it is become more flexible”

10. Do you consider negative consequences of innovation in your work?
   Person A: “yes, all the process that needs to be approved, to many people involved and to many blocks”
   Person B: “yes, the time. It takes huge time to implement new stuff”
   Person C: “no, but I can imagine those that are working with this things more than me thinks yes”
   Person D: “yes, a change is not always welcome.”

11. Do you consider negative consequences of innovation when developing products/services? In what way?
   Person A: “yes and no, often when an innovation is getting implemented we don’t know for 100% the side effects on it, therefore it often shows late on, maybe then we can sit down and talk why this innovation have bad influence etc.”
   Person B: “no, its just an idea or new solution. The new innovation don’t need to be implemented.”
   Person C: “I have no idea”
   Person D: “no, customer/people wants products better, faster and cost saving so I don’t think so.”

12. Do you have a model on how to handle negative consequences of innovation?
   Person A: “yes, try to contact those people that can fix it, often IT people or different high Managers.”
   Person B: “no, but we try to reach for the responsible person that can change that”
   Person C: “no”
   Person D: “not what I know”

13. The blame for the effects on environment caused by corporations is often related to greed and profits?
   Person A: “we can talk a lot about this, but in general we can say that often these kind of corporations is based on cost savings, high profit, good bonus, trying to show that they are doing something for the environment, dont care more than they need about union rules. That can be political issue, dont forget that the automobile industri is the biggest and affect all markets some how.”
   Person B: “it has been like that for long time and that will not change”
   Person C: “maybe until that day we have cars/products that is green from all environment issue, then we might have different perspective.”
   Person D: “all the factories that supply us and all the scrap we do that actually we don’t need to do. More of a policy I think.”
Appendix 6
Innovativeness (nyskapande)

Future
Uppfinningar
Creativity
Venture Capital
Young Growth
company
Entrepreneur
A new idea which is marketed
New product, new technology, lots of R&D
Uppfinning (device)
Apple
New thinking
Creativity
Progress
Renewal (förnyelse)
Uppfinning (device)
Apple
Something new
Something one adds
Uppfinning (device)
Progress
Innovativeness (nyskapande)
Easy life
Technological development
New thinking
New products

New thinking
creativity
A new-thinking idea that are realized
Technique
Apple
Device, technical
Politics of the Moderats
Airplane
Apple
Unique innovativeness

Sustainable development
Inventor
Development
Inventiveness
Inventive
Device
Creativity
Change
Innovativeness/new thinking
IKEA
Creativity
Unique
Progress
inventive/idearich
courage and creativity
creativity
new thinking
Apple (the company)
Albert Einstein
Future
Companies
New thinking
Creativity
development
Creativity and innovativeness
Technology
New thinking
Steve Jobs
Entrepreneurs
Responsibility
Idea creator
New thinking
Originality
Iphone 5
Creativity
Idea
Venture capital
New
Newthink
Iphon
Possibilities
Technique
Testing new things
Innovation means something creative and new for most of the people
Gen (nyhet)

New thinking
Innovativeness
Liberalisation
Creativity
Simplifying life
Technology
Newthinking
Newapplication
Creativity
Successful
Newthinking
IKEA
Energy & creativity
Green (as in green energy)
Evolution
Windows
Innovativeness & entrepreneurship
Uppfinnar-Jocke
Idea, businessidea
Devices (uppfinningar)
New-thinking
Development
Innovativeness
Newthinking
Technical successes
New idea’s