

THE RISE OF ECO-NOMICS: FROM EGO TO ECO

- How to improve future competitiveness and the **environment** by changing the corporate consciousness



By

Troels M. Kranker

Management of Creative Business Processes (CBP)

Master of Social Sciences Msoc.Sc./cand.soc

With supervision by

Professor, Doctor of Philosophy

Ole Fogh Kirkeby

Department of Management, Politics & Philosophy

and

Centre for Art & Leadership

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HANDELSHØJSKOLEN

Preface

“This is going to be the next big transformation in management thinking.”

Professor Michael E. Porter, Harvard Business School, in his response to this thesis' ECO-nomics theory, at his AVT Business School lecture, October 29, 2010, live broadcasted at The Black Diamond, Copenhagen, Denmark

The idea for this thesis came to me a sunny Sunday afternoon while taking a long walk at Nørrebro in Copenhagen. It was suddenly brought to my consciousness that all the books I had read about sustainability and the future up until that point as e.g. *Company Karma* (Hildebrandt, Stadil, 2007), *Theory U* (Scharmer, 2007), *Natural Capitalism* (Hawkins, A. Lovins, L. Lovins, 1999) and *A World Without Poverty* (Yunus, 2007) all represented a new movement, a new paradigm, a new way of thinking - an entirely new emerging consciousness. I immediately phoned my friend Alex and explained him my thoughts about this new pattern. We, or rather I, talked for an hour. I felt there was something important in this new consciousness and presented my thoughts for my big inspiration, management professor Steen Hildebrandt from Aarhus School of Business. He asked me to write these thoughts in an 18 pages article for *Børsen Ledelseshåndbøger*, which he is the editor of. This article gave me access to sit in at a live broadcasted lecture by Professor Michael E. Porter from Harvard Business School for alumnis of AVT Business School here in Copenhagen, Denmark. After the lecture I raised my hand and presented Mr. Porter for this thesis' ECO-nomics theory and asked for his opinion on it, whereto he replied *“This is going to be the next big transformation in management thinking.”* followed by 10 minutes explanation of why he agreed. He added that I should keep an eye on Harvard Business Review the following months as he would publish an article that strongly supported my theory. In January 2011 his *“Creating Shared Vale”* article was featured at the front page cover, arguing to align business with society to improve future competitiveness. Since then I have presented the ECO-nomics theory for Google Denmark, *Børsen Ledelseshåndbøger*'s readers, Denmark's largest architecture company Arkitema and at the Copenhagen Institute for Futures Studies' *“Leadership of the Future”* event.

It is my sincere hope to continue the humble privilege of spreading and developing the thoughts of ECO-nomics to companies, to better aligning the economy with the ecology in the future.

Troels M. Kranker, Copenhagen, September, 2011

Executive Summary

This thesis addresses the rising pressures from climate change and various stakeholders that are being put on companies to adapt to it. Around eight billion tons of carbon dioxide are emitted into the atmosphere each year due to the burning of fossil fuels, which is approximately five billion tons more than the biosphere can absorb every year. This results in hotter temperatures and global warming. But there is more to climate change than rising temperatures. Water shortages, rising sea levels, more extreme weather phenomena, species erosion, polluted oceans, and deforestation are among other consequences of climate change that impose strong pressures on companies.

However, every action within a company has to be connected to the bottom line and many companies have had prejudice toward sustainability, that it is e.g. merely a cost and too complex to implement. This line of thought has hindered these companies in embedding environmental sustainability in the way they operate. It is, however, apparent that there are many points on which a company can improve competitiveness and earn profits by going green.

To identify them this thesis therefore seeks to answer the following research question:

- *How can companies adapt to climate change and simultaneously improve competitiveness and profits?*

In order for companies to realize the green business opportunities it is the assumption of this thesis that companies first need to change the deepest place from where they operate, i.e. their collective consciousness, from the dominating short-termed, egoistic, greedy, and narrow-minded Ego-consciousness to a holistic, systems thinking, open and long-termed Eco-consciousness. Not because it is moral, ethical, social and responsible but because there is more competitiveness and profits in doing so. This thesis therefore argues that in order for companies to break out of the climate crisis they need to break in to the ecological cycle by changing their collective consciousness and thus aligning the economy, i.e. businesses, with the ecology, i.e. the environment. This should be done by arguing that *going green is going black on the bottom line*. Companies that understand this achieve *competitive sustainability*. Welcome to the new business world of ECO-nomics.

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1. Introduction

"...we need a different approach to business, a new model led by a generation of leaders with the mind-set and the courage to tackle the challenges of the future."¹

Paul Polman, CEO Unilever

Corporations control most of the world's natural resources and most of its wealth and they have an enormous influence on the world's financial, social and ecological systems (Bragdon, 2006, p. 316). These resources are depleting because of companies burning fossil fuels like coal and oil for manufacturing, transportation, and energy use for electricity and heating, which results in a large amount of CO₂ emissions that capture the heat of the sun's rays that would otherwise be reflected back into space (Esty and Winston, 2006, p. 34). Around eight billion tons of carbon dioxide are emitted into the atmosphere each year due to the burning of fossil fuels, which is approximately five billion tons more than the biosphere can absorb every year (Senge, Smith, Kruschwitz, Laur, Schley, 2008, p. 29).

This results in hotter temperatures, also called global warming. But there is more to climate change than rising temperatures. Water shortages, rising sea levels, more extreme weather phenomena, species erosion, polluted oceans, and deforestation are among other consequences of climate change that impose strong pressure on companies.

The climate change caused by these emissions and waste is imposing high costs on individuals, companies, and nations, and they will only get higher in the future. A study conducted by the U.S. government showed that oil and gas supplies will not be able to keep up with the high rising demand and thus prices will rise drastically in the next twenty-five years, as it did between 2000 and 2007 when the price of oil per barrel went from 25 to 100 American dollars (Senge et al., p. 17). The Stern Report on the costs of climate change from 2006 concluded that if action was not taken, the costs of the crisis would go as high as the costs of World War II (Senge et al., p. 28). As of today many companies are dependent on the price of oil, e.g. major industries as shipping and manufacturing. 90 per cent of all energy consumed since the Industrial Revolution is from burning fossil fuels (Senge et al., p. 36). Therefore, the increase in oil prices will have a severe negative influence on the costs of companies all over the world. These facts put pressure on companies for pursuing more sustainable energy sources instead like wind, solar, tidal, geothermal or biobased renewable cleantech energy in order to prepare for a future with expensive fossil fuels. Wal-Mart has

¹ <http://www.mckinsey.com/Capitalism>

already identified this development and committed to be provided 100 % by renewable energy in time (Etsy and Winston, p. 41).

At the same time, because of the devastating consequences for people and nature of companies' polluting behavior, stakeholders of all kinds are putting more pressure on companies than ever before on operating much more environmentally sustainable. NGOs such as Greenpeace, individuals organizing in social media, governments imposing regulation, employees, social investors and local communities to name a few, are increasingly keeping an eye on companies' environmental footprints, forcing them to adapt to climate change but also rewarding those who do economically (Esty and Winston, p. 17).

1.1 Problem area

Climate change and the pressure from stakeholders forced companies to venture upon a new corporate activity, corporate social responsibility, abbreviated CSR. However, it was in the beginning mostly due to compliance with the new environmental laws, to reduce risk and to be used as a communicative PR gimmick. Companies then created CSR departments and made large charity donations for good causes to promote in corporate communications. The next and the newest step has been to include CSR into the strategy, mission, vision and values of companies (Tench and Yeomans, 2006, p. 103). However, it is my assumption that many companies tend to cut on CSR whenever they are in economic trouble, as e.g. a financial crisis like the one from 2008 imposes on them, as CSR is still perceived as mostly a cost by many companies.

There are, however, many ways in which a company can improve competitiveness and earn profits by going green. This thesis argues that the consequences of climate change are creating a new business world in which companies need to adapt their organization and business model to.

In order to adapt to climate change and see the possibilities it initiates to improve competitiveness and profit at the same time, it is the assumption of this thesis that companies need to change the deepest place from where they operate in order for the change to be lasting and sustainable on a long term. The deepest place from where a person operates is its consciousness, as it is what creates the worldview of this person. Therefore, the deepest place from where companies operate is also rooted within consciousness but it is collective in the sense that a company consists of organized individuals. Since so many companies refuse to go

green, one must conclude that factors expressed through the concept “collective consciousness” are among the one which hinders companies in going green besides simple lacks of strategic foresight.

However, surveys and the green initiatives of many companies show that companies can significantly improve their competitiveness and profit. This thesis therefore argues that in order for companies to break out of the climate crisis they need to break in to the ecological cycle by changing their collective consciousness and thus better aligning the economy, i.e. businesses, with the ecology, i.e. the environment, into a new ECO-nomy. Not just because it is moral, ethical, social or responsible, as much of the debate has centered on so far, but because there is more profit in doing so and it improves competitiveness. A host of well known business scholars have already launched this conception, among others, Porter, Senge, and Bragdon. This thesis builds upon their research. Welcome to the new business world of ECO-nomics.

1.2 Research question

This thesis seeks to investigate how companies can adapt to climate change and to the pressures from stakeholders and improve competitiveness and profit at the same time. Therefore, the research question it attempts to answer will be:

- *How can companies adapt to climate change and simultaneously improve competitiveness and profits?*

To support answering the research question following sub-questions are put forward:

- What is consciousness?
- What is collective consciousness?
- What is collective corporate consciousness?
- What does the dominating collective consciousness of companies consist of?
- What should the new collective corporate consciousness ideally consist of?
- What limit companies in seeing the business opportunities in going green?
- How can the dominating collective consciousness of companies be changed?
- On what competitive parameters does sustainability improve competitiveness?

1.3 Delimitation

In this thesis I assume that climate change is human made and primarily caused by corporations as most scientists agree to this point. Disagreement among scientists ranges from how much humans have influenced climate change to not believing in it at all (Esty and Winston, p. 36).

I furthermore assume the existence of collective consciousness in this thesis and account for it in section 3 and apply it to organizations in section 4 and 5.

The thesis focuses primarily on business-to-consumer and business-to-business manufacturing companies as these pollute the most due to the emissions and waste from the manufacturing process. However, service companies can profit from the research and the theory developed in this thesis as well by e.g. isolating their buildings better, and use renewable energy for its electricity and heat use, and e.g. use video conferencing to avoid unnecessary transportation, and thus in this way reduce cost. This is important as 40 % of all CO₂ emissions and energy use of the world come from inefficient buildings².

Focus is on companies in this thesis as they are the key driver to the fundamental change society must undergo argued here (Porter and Kramer, 2011, p. 64). Companies basically use the mechanism of capitalism and thus the driver of greed or profit and shareholder value maximization as their main reason for being. This is an assumption and generalization of this thesis as some companies and social businesses do have a higher purpose than profit maximization. But I do believe that unfortunately most companies still exist only for profit as the end goal and not as a means to obtain a higher purpose.

This thesis should function as a theoretical and conceptual framework to be used for academics and especially leaders and managers as an overview and guide to how companies can go green and profit at the same time by changing their collective consciousness. This is however not supported by empirical data as it would have been too extensive to carry out. A complete ideal analysis of a company's collective consciousness should be done of what kind of solidarity, and all its details described later, its collective consciousness consist of. This would require extensive participative observation and long deep interviews within the company and among its stakeholders. It would take several months to gather all the observable and attainable data and the focus of this thesis is as stated theoretical and conceptual and an important part of it is to understand collective consciousness as a term and to present it as a possible explanatory aspect within a hypothesis of conservative company behavior.

The main target audience of this thesis is companies and their top management as they have the formal decision power and thus the formal power to initiate a change of the collective consciousness within companies. I do recognize that e.g. employees, citizens, NGOs and governments are also important stakeholders in better aligning the economy with the ecology.

²<http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=MTc5Mw&doOpen=1&ClickMenu=RightMenu>, 23-09-2011

The concept of unconsciousness will only be addressed in so far as it is a “shadow” aspect of collective consciousness. I shall not address it directly, since this is far too complicated ontologically, epistemologically and scientifically. I am of the conviction that most actions in a professional company is taking place on the conscious level when for example deciding upon a new strategy or manufacturing process. However, I do recognize that unconsciousness exists within organizations and that some actions in organizations are guided by it.

1.3.1 Definitions of sustainability, going green and ecology

As these terms will be used throughout the thesis it is relevant to specify them and provide a definition that guides the use of them in this thesis.

Sustainability is according to the US Government’s Environmental Protection Agency (EPA) defined as the following:

“Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations.”³

The World Business Council on Sustainable Development’s (WBCSD) definition of sustainable development is:

“We define sustainable development as forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs.”⁴

Although the two definitions resemble each other, this thesis will use EPA’s definition for sustainability as it is broad enough to contain all the complexity of sustainability but more specified than WBCSD’s definition, and thus better to be applied in a thesis concentrating on environmental and e.g. not social issues. It must be made clear that focus in this thesis thus is on environmental sustainability.

The terms of sustainability, environmental sustainability and going green will be used interchangeably throughout the thesis and it should be made clear that they signify the same meaning, i.e. EPA’s definition with focus on the environmental aspects.

Ecology is formally defined as “a branch of science concerned with the interrelationship of organisms and their environments”⁵ and this definition corresponds well with the idea of

³ <http://www.epa.gov/sustainability/basicinfo.htm>, 23-09-2011

⁴ <http://www.wbcsd.org/templates/TemplateWBCSD2/layout.asp?type=p&MenuId=Mzc2>, 23-09-2011

companies existing in balance with its stakeholders, including the natural environment. This definition will therefore be applied in this thesis.

1.4 Method

To answer the research question and its sub-questions much of the latest literature within the field of consciousness, collective consciousness, sustainability, competitiveness, and change management will be applied. I am thus “standing on the shoulders of giants” in this thesis and apply their research by combining and applying it to answer the research question.

The thesis is thus based on secondary data such as books, articles and websites and no primary data has been applied as it would have been too extensive to carry out as explained in section 1.3.

Short case examples will be used to illustrate the theoretical point of how sustainability improves competitiveness.

1.5 Structure of the report

To answer the research question individual consciousness studies are first described to better access and understand the term of collective consciousness as it is the assumption that this needs to be changed for companies to adapt to climate change and profit at the same time. Then, collective consciousness is described and applied to organizations by applying organizational theory and metaphors to illustrate its existence and how it manifests itself. The dominant collective consciousness of companies and the new emerging one is identified through this combination. With that done, I am able to analyze what hinders companies in going green and thus how the dominant collective consciousness of companies can be changed to the new emerging one. Then the economic competitiveness argumentation that is assumed to be needed to change the collective consciousness of companies is presented before the concluding remarks.

2. Clarification of consciousness

The reason why focus is placed upon consciousness in this thesis is the assumption that if transformational change is to occur and stay lasting, the deepest place from where we operate as individuals and collectively in social systems must be changed first. Therefore, in order to

⁵ <http://www.merriam-webster.com/dictionary/ecology>, 23-09-2011

change a social system as e.g. organizations one must change its collective consciousness if the change is to be sustained over time.

In order to change the collective consciousness of companies one first needs to study its field to obtain a thorough understanding of the nature of consciousness, what it consists of and thus it can be influenced and changed.

In this section some of the most significant and relevant studies of the field of consciousness is selected and presented to provide an overview of the scientific and academic research within the area to create a comprehensive understanding of the field.

It is important to stress the fact that no clear consensus on the definition of consciousness exists yet. Extensive research on the topic has been conducted, however, because consciousness is such an abstract, intangible and blurry phenomenon no consensus of a unifying definition has been reached. According to Professor Emeritus Max Velmans from Goldsmith, University of London, attempted definitions of consciousness are either too broad or too narrow focused and consequently confusing (Velmans, 2009, p.139). Many philosophers, psychologists and scientists have attempted to narrow consciousness down to a clear definition, however, strong critique from one another has meant that no agreement has been made. The study and definition of consciousness continues as a field yet to be explored further and more and more research is being conducted in this area at universities all over the world.

Therefore, a clear precise definition of consciousness will not be presented. Instead some significant studies within consciousness will be studied and discussed in this section. It should be made clear that not all great thinkers in philosophy of mind and consciousness studies can be included in this thesis due to limited space. I have selected the ones that in my opinion are most relevant for what consciousness is and those applicable to collective consciousness and organizations. Many great thinkers and important scholars have therefore been left out. These include philosophers such as e.g. Ludwig Wittgenstein, Immanuel Kant and Georg W.F. Hegel.

It is furthermore also important to note that Eastern and Western studies and traditions of the field of consciousness differ as the Eastern has a more spiritual-based focus. However, the two perceptions of consciousness are becoming more inspired by one another. Much research about spirituality and business has been and is still being conducted at Western universities by

e.g. Professor Emeritus Peter Pruzan at Copenhagen Business School and used in popular management and leadership books as e.g. the management consultant Laurens van den Muyzenberg's and the Dalai Lama's book *The Leader's Way* from 2008. However the focus in this thesis will be on the Western tradition and view on consciousness from Western publications.

2.1 Consciousness explained

"Thought creates the world and then say 'I didn't do it.'"

Physicist David Bohm (Jaworski, 1996, p. 6)

This section will present a general overview of consciousness studies in order to better understand what collective consciousness is.

According to Oxford Dictionaries, consciousness is "the state of being aware of and responsive to one's surroundings" and "the fact of awareness by the mind of itself and the world".⁶ The Merriam-Webster dictionary emphasizes the definition of consciousness as the human state of being aware of both one's internal and external worlds⁷ whereas the MacMillan Dictionary describes it as "the knowledge or understanding that something exists or is important" and the "beliefs, thoughts, and feelings of a group of people".⁸ From these general short definitions it is already clear how many different perceptions exist of the same phenomenon of consciousness.

The word *consciousness* is taken from the Latin *con* (with or together) and *scire* (to know)⁹. The two words put together gives *with knowledge*. Consciousness theory and epistemology are on many points similar. Epistemology is narrowly defined as "the study of knowledge and justified belief"¹⁰. One could say, that *to know of* something is the same as being aware and thus conscious about it - to know that you know. However, it is important to underline that consciousness is a phenomenon.

The big questions of what consciousness is, what it does, why we have it, what it consists of and how it relates to the brain, mind and body have been studied intensely by especially

⁶http://oxforddictionaries.com/view/entry/m_en_gb0173150#m_en_gb0173150, 23-09-2011

⁷<http://www.merriam-webster.com/dictionary/consciousness>, 23-09-2011

⁸<http://www.macmillandictionary.com/dictionary/british/consciousness>, 23-09-2011

⁹<http://www.iep.utm.edu/consciou/>, 23-09-2011

¹⁰<http://plato.stanford.edu/entries/epistemology/>, 23-09-2011

philosophers first, and later on psychologists and neuroscientists, throughout much of modern human history.

Two differing, contrasting and competing schools of thought or ontologies exist within the field of consciousness studies; idealism and materialism. In short ontology is the study of the nature of being, of what is and the categories of being¹¹. The materialistic school of thought is based on an evolutionary view that consciousness occurs when the brain's nerve system obtains a specific level of complexity (Pandey and Gupta, 2007, p.890). Consciousness is in this view a result of the biological and natural evolution and has neural existence. However, "The challenge is to understand consciousness in a way that does justice to both." (Velmans, 2000, p. ix).

2.1.1 The Materialistic view on consciousness

The materialistic view on consciousness regards consciousness as a consequence of evolution. The philosopher Daniel Dennett argues that consciousness is just a state or a function of the brain (Velmans, 2000, p. 2). In his book *Consciousness Explained* from 1991 he introduced the term *qualia* which can be described as the "...introspectively accessible, phenomenal aspects of our mental lives."¹². Stanford Encyclopedia of Philosophy sets qualia at the heart of the mind-body problem. However, Dennett denies its existence. He entirely relies on the conviction that consciousness is a natural phenomenon and that no subjective experience exists as it cannot be scientifically proven. As he comments on qualia "... I seemed to be denying that there are any such properties, and for once what seems so is so. I am denying that there are any such properties. But (here comes that theme again) I agree wholeheartedly that there seems to be qualia." (Dennet, 1991, p. 372).

The co-discoverer of the DNA structure and Nobel Prize laureate Francis Crick attempted to account scientifically for the existence of consciousness in his book *The Astonishing Hypothesis* from 1994, wherein he argues that consciousness is a result of the physical functions of the brain's nerve cells working in the tissue of our brain¹³. One could say the materialistic and physiological view on consciousness is similar to looking at the brain as a machine as it attempts to explain consciousness as a result of mere physical functions. Neuroscientists claim to be able to determine many of the things a person is thinking about by looking at the blood flow in the brain through an MRI scanner. They claim to identify

¹¹ <http://plato.stanford.edu/entries/logic-ontology/>, 23-09-2011

¹² <http://plato.stanford.edu/entries/qualia/>, 23-09-2011

¹³ <http://www.time.com/time/magazine/article/0,9171,1580394-2,00.html>, 23-09-2011

whether a person is thinking about a face, a shoe or e.g. a bottle¹⁴. The materialistic view on consciousness applies the epistemological view of positivism as it seeks for a logical and also physical explanation on the existence of consciousness.

2. 1.2 The phenomenological view on consciousness

The other major school of thought in consciousness studies is the philosophical movement of idealism. Idealism concentrates on the subjective experience of phenomena and is therefore closely linked to the study of phenomenology, which studies the structure of consciousness and concentrates on how consciousness creates subjective meaning of experiences¹⁵. The main philosophers behind the phenomenological movement are Edmund Husserl, Martin Heidegger, Maurice Merleau-Ponty and Jean Paul Sartre. Stanford Encyclopedia of Philosophy defines phenomenology as "... the meanings things have in our experience."¹⁶.

Because phenomenology studies consciousness as a phenomenon in itself that cannot be reduced to for example nerve processes if consciousness is to be understood and explained, it does not mean that phenomenology has an idealistic ontology. Idealism argues that consciousness is completely irreducible to material processes. Phenomenology argues that there is no scientific language in e.g. physics that give justice to the existence of consciousness. Here, we have to use everyday language, philosophical analysis and imagination¹⁷.

The dualistic view on consciousness separates the mind from the body but recognizes them as interacting parts (Pandey and Gupta, p. 891). The Greek philosopher Plato for example even saw the soul as imprisoned within the body¹⁸. The French philosopher René Descartes was a firm believer in dualism and represents the foundations of the more modern view on this school of thought compared to the old Greek philosophers. His quote "Cogito ergo sum", which means "I think, therefore I am" is characteristic of his worldview. Descartes believed that the ability to think is what separates man from animals and the fact that one wondered whether he existed was the mere proof of his existence. He perceived the human being as consisting of *res extensa*, the material body and world "...extended in space" and *res cogitans* "an immaterial soul or mind." (Velmans, 2000, p. 11). This is also what is referred to as The

¹⁴ *Ibid.*, 23-09-2011

¹⁵ <http://plato.stanford.edu/entries/phenomenology/>, 23-09-2011

¹⁶ *Ibid.*, 23-09-2011

¹⁷ *Ibid.*, 23-09-2011

¹⁸ <http://plato.stanford.edu/entries/consciousness/>, 23-09-2011

Mind-Body problem. He was furthermore a rationalist and thus of that conviction that the world can be explained by reason rather than by experience as the empiricists believed.

In recent times Velmans has marked himself as a significant voice within the field of phenomenology. As Velmans argues, consciousness refers to the experience of all the things we observe and not just some of these things (Velmans, 2009, p. 141). He furthermore distinguishes between the conscious and unconscious states as divided by being awake or in dreamless sleep. When we are conscious about something, *phenomenal content* is present and vice versa. The *contents of consciousness* include all phenomena that we are aware of and experience within ourselves such as thoughts, images, feelings, perception, memory, desire, bodily awareness, language etc. and what we are aware of and experience around our body¹⁹ (Velmans, 2009, p. 142). In addition to Velmans' description, the definition of consciousness should, however, also include embodied action, imagination and emotions²⁰.

I would likewise argue that our deepest convictions, assumptions, moral, beliefs, sensory input, ambitions, visions, sensations, values, and ethics should be included in the content of consciousness. It is important to underline that the content of consciousness is not the same as the definition of consciousness. Categories of thought such as *limiting thoughts* as e.g. prejudice, fear, and cynicism are more detailed examples of the content of consciousness (Scharmer, 2008, pp. 42-42). They are mentioned here as the limiting thoughts to a large extent are an influential part of our world view.

Consciousness governs our world view, how we understand the world and how we perceive reality. All the above mentioned elements are in my opinion essential to creating our world view and should therefore be included in the content of consciousness.

Velmans furthermore underlines the importance of distinguishing mind from consciousness because the term *mind* is too broad to be the same as consciousness. According to Velmans, mind should rather be associated with psychological states and processes that might be conscious or not. *Preconscious* and *unconscious* states of mind is when one does not experience something and thus Velmans' simple definition of consciousness is to "... experience something" (Velmans, 2000, p. 6).

¹⁹ <http://plato.stanford.edu/entries/phenomenology/>, 23-09-2011

²⁰ *Ibid.*, 23-09-2011

2.1.3 The Easy and Hard Problems of consciousness

Analyzing from where conscious and unconscious thought and actions occur physically in the brain is what the Australian philosopher David Chalmers has termed as The Easy Problem of consciousness studies, which focuses on the cognitive aspects. It is the Easy Problem because with enough funding and time scientists could probably solve it. The Hard Problem of consciousness studies is looking into why we have first-person subjective experience of conscious processes at all and why it “feels like something” to have a conscious process. The Hard Problem of consciousness studies therefore focuses on the phenomenological aspects²¹. This problem is much harder to answer than the Easy Problem because it is highly difficult to prove scientifically that subjective experience do exist and this might just be the point that Dennett in the end is actually trying to state when arguing that qualia does not exist at all, although it seems as if it does, as he mentions.

The philosopher Colin McGinn suggests that the Hard Problem is simply too complex for humans to ever be solved (McGinn, 1999, p. 5). This position has been named *New mysterianism*. However, one could nuance this view and add to it that our current state of evolution is not sophisticated enough to cope with the complexities of The Hard Problem yet but can be with time, evolution and extensive research. The Hard Problem exposes the limits to our current intellectual brain capacity²². That might be why no one has an answer to it yet. This, however, should not mean that we should stop pondering about and researching the realm of consciousness.

To conclude, many contrasting views on consciousness are present and thus no exact and agreed upon definition of consciousness exist. Therefore no exact definition of consciousness will be applied in this thesis. However, the phenomenological view on consciousness will be used throughout the thesis as this correlates most with collective consciousness as it recognizes individual subjective consciousness do exist and that parts of it is shared with and influenced by society. I am of the opinion that indications of consciousness can also be traced physically in the brain, however, I do not believe that it can be reduced to mere neurons processing in the brain.

²¹ <http://www.time.com/time/magazine/article/0,9171,1580394-2,00.html>, 23-09-2011

²² <http://www.time.com/time/magazine/article/0,9171,1580394-6,00.html>, 23-09-2011

2.2 Guiding definition of consciousness

The guiding definition of consciousness used in this thesis will be that consciousness is *the subjective experience of phenomena and the meanings of these* based on the theory presented in the last section.

It is important to underline that this is not a definite definition because much more extensive research needs to be done within the area of consciousness before we come anywhere near a clear definition. This does not mean that we should give up on trying to solve The Easy and Hard Problems. On the contrary this recognition opens up for a long extensive exploratory journey that needs to be ventured upon with the highest priority possible within science as the solution and answer could become the biggest revolution within science so far.

It might require new methods to comprehend the scope of consciousness that are yet to be discovered. One of these could be Neuro-phenomenology first presented by C. Laughlin, J. McManus and E. d'Aquili in 1992 and later taken further by the neuroscientist Francisco Varela. The method attempts to merge and integrate neuroscience's quest for physical evidence of consciousness and phenomenology's study of subjective experience into one unifying theory and method (Lutz and Thompson, 2003). It might also not be up to scientists alone to solve the two problems and other alternative areas of study could be drawn upon. Only the future will provide us with more answers to these existential challenges.

3. Collective consciousness

Having described the concept of consciousness and the development in the pursuit of a definition so far, the term of collective consciousness will be analyzed and extended by applying it to modern organizations. As no definite definition of consciousness exists no exact definition of collective consciousness can be presented. However, focus will be on Émile Durkheim's view on collective consciousness in societies and how it can be discussed and assessed critically to modern organizations.

Other researchers have looked into the area of collective consciousness. The psychologist Carl Jung's term *collective unconsciousness* will not be applied since it appears too esoteric. New scholars such as the Norwegian Ph.D. Harald S. Harung from Oslo University College have looked into the collective consciousness within organizations in his book *Invincible Leadership* from 1999. However, his analysis is based upon the spiritual movement of

Maharishi Vedic Psychology, which still has some difficulty in gaining ground in Western science. The Indian organizational development professors Ashish Pandey and Rajen K. Gupta from Management Development Institute in Gurgaon, India, have likewise attempted to apply the concept of collective consciousness to organizations (Pandey and Gupta, 2007). However, their argumentation for its existence is mainly based on the spiritual scholar Ken Wilber's theories of consciousness, which are not quite broadly accepted in scientific areas of consciousness studies. Because of these considerations focus is narrowed down to Durkheim's collective consciousness.

The *collective conscience*, or *conscience collective* and *conscience commune* in French, was termed by the French sociologist Émile Durkheim in his groundbreaking work *The Division of Labor in Society* from 1893, who later became one of the founders of sociology. It is important to stress the fact that Durkheim's definition of the word *conscience* is the same as consciousness and thus not to be confused with the English definition of conscience referring to moral and ethical conscience (Lukes, 1973, p. 149).

In *The Division of Labor in Society* Durkheim (1964) basically asks the questions of why modern differentiated, labor divided societies do not fall apart? What social bonds create cohesion and social order?

3.1 Durkheim's definition of collective consciousness

To answer these questions Durkheim presents a dichotomy consisting of two types of social bonds that exist in societies, i.e. social systems, in order for societies to function coherently; *the mechanical solidarity* and *the organic solidarity* which represents two types of collective consciousness.

Mechanical solidarity is about how law, punishment and social norms of right and wrong is determined and executed and thus create conformity, uniformity, and social likeness in a society. Organic solidarity is created by the division of labor among workers who have become specialized individuals that due to this *sui generis*, i.e. uniqueness, are individual and less conform (Lukes, p. 153). This means that the more conformity and alignment of the collective consciousness the more mechanical solidarity, and the more individualization in a social system, the more organic solidarity.

Before going further into depth with the two types of solidarity, Durkheim's definition of collective consciousness should be presented as the two types of solidarity are expressions of a social system's collective consciousness.

Durkheim thought of the individual consciousness to consist of two parts; one part shared with society, where society lives and acts within us; and one part which contains our personality traits and makes each individual unique (Lukes, p. 149). A dynamic tension is therefore constantly going on between the two.

Durkheim defined collective consciousness as “...the set of beliefs and sentiments common to the average members of a single society (which) forms a determinate system that has its own life”; it is ‘by definition diffused throughout the whole society, but it none the less has specific features which make it a distinct reality’.” (Lukes, p. 151). In Durkheim's words the collective consciousness of a social system is not dependent of geographic placement and professions. It does not change with every new generation within a society but instead connects generations with each other (Durkheim, p. 105).

When commenting on the agreed upon laws and norms within mechanical solidarity societies another useful angle to the definition of the collective consciousness is found; “As they are graven in all consciences, everybody knows them and feels that they are well founded. “. Collective consciousness is according to Durkheim “... not hesitant and superficial desires, but emotions and tendencies which are strongly ingrained in us.” (Durkheim, p. 78).

Here, Durkheim distinguishes between superficial desires and strongly ingrained emotions. Collective consciousness is thus what is engraved and ingrained in the consciousness of the average mass of individuals in a social system. Figuratively speaking, when a thing is engraved it is deeply rooted within the object, as for example Viking Rune text in stones, and thus not something that can be changed easily and fast. In order for something to become part of the collective consciousness within a social system a critical mass needs to be formed around it so that it is “...common to the average members of a single society.” as mentioned before. Durkheim also assesses the collective consciousness as something “...entirely different thing from particular consciences, although it can be realized only through them.” (Durkheim, p. 80).

As we learned in the last section, individual consciousness consists of the subjective experience of phenomena. The collective consciousness is thus *the collective experience of*

phenomena members within a social system share. Examples of the concrete content of a collective consciousness within a social system could be tolerance for diversity, openness toward strangers, and to be extrovert and embracing. The contents of a collective consciousness guide members of a social system on how to navigate within it in the best way possible without deviating. However, sometimes people in a society deviate from the collective consciousness and develop the society because they have challenged and expanded its collective consciousness.

I agree with Durkheim's point that collective consciousness is a phenomenon deeply engraved within each individual and thus is very hard to change significantly. Through how we are raised, and our primary and secondary networks we learn through influence of these about the functions of the mechanical and the organic solidarity. Especially in the Western world children are raised to be individual but at the same time to be aware of the society and its rules. In that way, the mechanical and organic solidarity elements of that society becomes engraved within the collective consciousness of the children. Because the solidarity elements are engraved from we are young it becomes such an inherent part of our consciousness and worldview that it takes patience and hard work to become aware of them and thus change such deep parts of us.

An important problem arises from the above definition of collective consciousness by Durkheim. Defining "the average member of a society" in an individualized modern world is a challenge. Therefore, assumptions are needed to be taken and generalizations need to be made in order to identify an average member of a society.

At the same time the specific characteristics of the collective consciousness need to be identified as well in order to determine what contents the collective consciousness of a certain society has. However, it should be noted that it is impossible to assign all the specific features of a society's collective consciousness, as many of them are not often apparent to the one's living in it and for people from outside and that there are some aspects that cannot be explained. It should be made clear that analyses based on assumptions and generalizations can always be discussed and nuanced more.

Durkheim assigns three variable characteristics to the social bonds in societal solidarity (Lukes, p. 151);

1. The relation between the volume of the collective consciousness and the individual consciousness.
2. The average intensity of states of the collective consciousness.
3. The degree of determinateness of those same states.

In relation to my central problem it could be stated that the collective consciousness that incorporate an ecological awareness is growing in relation to conservatives; that the consciousness of the importance of sustainability among the general public is rising; and that political claims are going to be put forward to an increasing degree.

3.1.1 Mechanical solidarity

Durkheim uses the term *mechanical solidarity* to signify an analogy of an inanimate body whereas that of a living body is applied to organic solidarity societies (Durkheim, p. 130).

If the collective and individual consciousnesses are very similar mechanical solidarity is present and collective authority is absolute. When the collective and individual consciousnesses are close to similar, social likeness and conformity is evident. Such societies are highly homogenous as their members have a high degree of resemblance. Mechanical solidarity societies, or segmental societies, as Durkheim also refers to them, "...arise from the fact that a number of states of consciousness (*conscience*) are common to all the members of the same society." (Lukes, p. 149). In such instances repressive penal laws and strong uniform belief in authority occur.

Mechanical solidarity societies function and operate, in part, from a common understanding of basic deep generally agreed upon rules, laws and social norms of e.g. what is right and wrong, by its members. A criminal act in these mechanical societies is thus when the strong and defined states of the collective consciousness are breached (Durkheim, p. 80). However, "*We cannot thus draw up a list of sentiments whose violation constitutes a crime; they distinguish themselves from others only by this trait, that they are common to the average mass of individuals of the same society.*" (Durkheim, p. 74). Crime and violation of social norms, i.e. the limits of the collective consciousness, can therefore be different from society to society. The penal laws are the minimum demands on the size of the collective consciousness within an individual consciousness, as the individual has to comply with these or otherwise poses as a deviator to the society. Durkheim interestingly notes that the behavior of an individual in this sort of society is very aligned and repetitive with the collective

consciousness, and thus always creates the same results (Durkheim, p. 106). This observation becomes important when the collective consciousness is applied to organizations in sections 4 and 5.

Durkheim stated that mechanical solidarity societies with a high degree of similarity between the collective and individual consciousnesses are characteristic of less developed societies. He furthermore argued that societies with a high degree of mechanical solidarity are clan-like and deeply religious. By this Durkheim means that when social systems have a large uniformity in especially its beliefs system it consequently develops some sort of religious character because the beliefs within religious systems are deeply shared by almost all members. Such mechanical solidarity functions only as the members do not act on their own. The “social molecules” of mechanical solidarity could only “operate in harmony in so far as they do not operate independently.” (Lukes, p. 148).

3.1.2 Organic solidarity

Durkheim’s idea with the dichotomy of mechanical and organic solidarity was a way of stressing “... the social differentiation of ‘organized’ societies, involving interdependent and multiplying specialized roles, beliefs and sentiments as opposed to the undifferentiated unity of uniform activities, beliefs and sentiments and rigid social control found in ‘segmental’ societies” (Lukes, p. 148).

According to Durkheim the individualization of the Western society was caused by the division of labor into specialty functions (Lukes, p. 148). As more and more people worked with specialty functions they also became more dependent on each other for a unity such as a company or a society to function as a whole. Thus organic solidarity occurred by the division of labor, according to Durkheim. The more specialized people become the more they depend on one another and so the organic solidarity becomes stronger even though people become more individual. In Durkheim’s words “Society becomes more capable of collective movement, at the same time that each of its elements has more freedom of movement.” (Durkheim, p. 131). A modern example of this is the internet and how it empowered the individual with knowledge and information and freedom to pursue its niche interests with other people with the same niche interest. Thus collective movements are founded everyday on the internet through individual interests in e.g. social networks.

Durkheim sees this way of autonomous organizing among the higher animals and therefore this type of solidarity is named organic. Organic solidarity societies function to a larger extent

after the saying that the whole is larger than the sum of its parts. Thus, members of organic solidarity societies recognize the synergies organizing people, by e.g. dividing them into specialty functions, can create, compared to what the members could achieve separately.

It should be noted that Durkheim published these ideas in 1893 before the mechanization of the Western societies had taken hold everywhere. Hereafter, in the beginning of the 1900s the assembly line developed for the Ford T car model took hold and revolutionized manufacturing. This meant that the assembly line also took over most of the coordination between the workers. Moreover, there was only specialization in certain groups of workers in the 1800s. The rest were unqualified and performed the same tasks repeatedly. Because this type of work could be performed by anyone, child labor was broadly used. Furthermore, the labor in especially America was a culturally and ethnically mixed and diversified group, which furthermore spurred organic solidarity.

Furthermore, it is important to state that other strong factors influenced the development of individuality in our society besides the division of labor. The Enlightenment beginning in the 1700s for example, revolutionized science, philosophy, society and politics by becoming able to explain a variety of e.g. natural phenomena through scientific reasoning and independent thought and thus introduced the new modern worldview in the West. It celebrated the individual's intellectual powers and therefore also helped spur the individualization of the Western society²³. Secularization, the separation of religion and the state, at approximately the same time period also strongly contributed to individualization. Johann Gutenberg's invention of the printing press liberalized information and knowledge, and ignited individualization, because everyone who could afford a newspaper or a book and had the ability to read, could get informed about events in nations and cities by Gutenberg's mass-production methods of printing²⁴. However, this was only still a small reserved elite in the beginning.

In contrast to mechanical solidarity societies, organic solidarity societies leave free much more space for the individual consciousness and personality. According to Durkheim this also indicates the collective consciousness to be smaller within the average member of an organic solidarity society. These societies are more heterogeneous than mechanical and in Durkheim's view ceases to top-prioritize society's collective interests (Lukes, p. 156).

²³ <http://plato.stanford.edu/entries/enlightenment/>, 23-09-2011

²⁴ <http://www.hrc.utexas.edu/exhibitions/permanent/gutenberg/html/3.html>, 23-09-2011

This is, however, not the case in present society. The modern Western society is an individualized dynamic society which unites people around common deep values such as democracy or personal freedom while the members at the same time have much more space to express their individual identity compared to mechanical solidarity societies. Durkheim, however, recognizes that organic solidarity societies with its many different specialty societies are united by "... definite relations." (Lukes, p. 153). As labor is more divided in specialty functions each member depends more on each other in order for the whole to function harmoniously. "However limited it may be..." Durkheim writes about the division of labor "... it is never entirely original; even in our occupational activity we conform to practices and ways of acting that we share with our whole corporation... and it leaves much more room for the free play of our initiative." (Lukes, p. 153).

This means that in organic solidarity societies there is more room for individual consciousness while at the same time the members recognize they are part of something bigger than themselves, which they need to serve as well. Modern organic solidarity societies and organizations are becoming much more aware of this fact because serving the whole serves them back in return. In this whole, individuals are grouped "... according to the particular nature of the social activity that they have chosen to devote themselves" (Lukes, p. 154). From this I am forced to conclude that the distinctions developed by Durkheim and presented here only have a limited value as optics of the ultra-modern society. I hope, anyhow, to have demonstrated their use and value in this context.

The volume of collective beliefs is decreasing within organic solidarity, however, in my opinion, that should not indicate that the collective consciousness is weaker. On the contrary the collective consciousness in organic solidarity can be stronger but focused on fewer and deeper collective basic beliefs than mechanical solidarity societies such as democracy and openness as earlier mentioned. This might point to a third form of solidarity created through new conditions of equality and freedom which anyhow create a new level of conformity.

Instead of religious characteristics organic solidarity societies are more secular and scientific based. Individual dignity, social justice and work ethics have top priority in modern organic solidarity societies (Lukes, p. 157). Durkheim argued organic solidarity societies to be more advanced societies. Their morality is more human and rational and Durkheim suggests that in order for these societies to function kindness, performing one's duty well, and to go for a situation where everyone are free to pursue the function they best perform is essential (Lukes,

p. 157). Organic solidarity societies can thus only be born if the social system "... takes smaller toll of us." (Durkheim, p. 130).

This development from mechanical to organic solidarity in modern societies that Durkheim describes is similar to the democratization of power, information and knowledge of especially the Western societies since the Industrial Revolution, from monarchies and dictatorships to democracies and the decentralization organizations are experiencing today by placing responsibility to lower level managers and employees.

By dividing labor into specializations and thus empowering employees through organic solidarity, knowledge can flow more dynamic and free, which can enhance innovation significantly due to organic solidarity's encouragement of diversity. Conformity, likeness and commonness can hinder innovation, as groupthink and blind spots may occur more often without diversity.

However, labor unions can influence the collective consciousness of employees strongly as these unions set forward demands on the employers on the working processes and the working environment that the employees should pursue to implement in their companies. It might, however, be difficult to place them as social phenomena within the tight dichotomy of mechanic versus organic solidarity though.

To conclude, Durkheim's division of solidarity within societies is rather extreme, as it is either mechanical or organic solidarity. It must be assumed that he argued this way to better generalize and easier draw conclusions compared to if he had to nuance his view constantly while arguing.

Solidarity within a social system is rarely an either-or dichotomy but rather a both-and to a certain regard, as there will always be a certain amount of mechanical solidarity or conformity and organic solidarity or individualism in both kinds of societies. Durkheim's dichotomy seems extreme because the world is never black and white. Therefore, nuances should be included.

3. 1.3 Guiding definition of collective consciousness

By combining the analyses of the studies of individual consciousness with Durkheim's collective consciousness, the guiding definition of it must be the deeply rooted, ingrained, engraved, often taken for granted, basic and fundamental *collective experience of phenomena* shared by the average mass of individuals in a social system. This however does not naturally

imply that all of these elements can be spoken. Many of these sensations cannot be described and expressed simply by words and thus cannot be delivered literally. This is of course a *petitio principii*, since we cannot know anything exists, unless we either are able to name it, or re-able to observe its existence indirectly through some effects (a hypothetical relation, of course).

Collective consciousness is the worldview of and the deepest place from which the members of a social system navigate (Scharmer, p. 7). This is not a definite definition of the collective consciousness. Instead, it should be seen as a guide to a future definition, which will take much more research to achieve. It must be noted that any social system with human members no matter its size has a collective consciousness. Therefore, even small groups within companies can form their own collective consciousness.

The degree to how much influence the collective consciousness has on a society and its individuals can vary depending on the division of labor into specialty functions, i.e. the level of individualization in the social system. The more individualization, the less members of the social system share the collective consciousness, according to Durkheim.

A question that needs to be addressed is how does one identify what is common to the society or social system at hand? Durkheim says the deviations from the most agreed upon fundamentals of the collective conscience are specified in laws. This way of identifying the collective consciousness is a mere reductionist top-down method. However, there are many moral and social deviations from the collective consciousness that cannot be written down in laws. Such parts of the collective consciousness are more nuanced and abstract to identify as they are more tacit and inherent. Far from all content within the collective consciousness is top-down, restrictive, repressive laws and possible to define through reductionist methods.

The content of collective consciousness can also be what is naturally encouraged within the social system and what drives it forward. These bottom-up parts of the collective consciousness differ from social system to social system. Some would, however, also argue that there are universal values that all social systems share as e.g. the aversion toward killing and in general doing bad. However, "doing bad" or to cause suffering also differs in different social systems. It must thus be concluded that precisely defining and specifying the content of a social system's collective consciousness is not possible and will thus consist of generalizations and assumptions.

3. 1.4 Comparison of collective consciousness and culture

The term collective consciousness also occurs in other places in academia. Having created a guiding definition of collective consciousness it is possible to discuss how collective consciousness and the field of organizational culture often overlap. From the definitions of the two it is hard to tell the difference as the definitions share some common characteristics. When Ian Brooks gives an overview and presents the development of corporate culture literature in *Organisational Behavior* (2003) he uses many of the same terms derived from the guiding definition of collective consciousness in this thesis. He for example describes organizational culture as "... a shared phenomenon..." (Brooks, 2003, p. 241). Professor of management Emeritus from Massachusetts Institute of Technology (MIT) Edgar Schein is one of the defining scholars within organizational culture. He formally defines culture as "... a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaption and integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." in his *Organizational Culture and Leadership* from 1985 (Schein, 2004, p. 17). Schein further divides culture into three levels; Artifacts, Espoused Beliefs and Values and Underlying Assumptions. The two last levels are also two of the contents of this thesis' guiding definition of collective consciousness. The confusion between the two terms makes clear sense as the two influences each other. It is hard to tell when collective consciousness stops and culture begin and vice versa. Instead, one should recognize the two terms as two optics or ways to view the coherence and solidarity within organizations and their worldview.

Even though the two terms resemble each other I would argue that culture is a broader term than collective consciousness because Schein's term also includes for example history and the behavior of people, traditions, and rituals (Schein, p. 14). The collective consciousness focuses on the shared or collective experience of phenomena within our cognitive selves and is thus more specific, limited and detailed in its definition.

4. Applying the collective consciousness term to organizations

In order to ignite a major structural and organizational change within the capitalistic system it is the assumption that one must appeal to the deepest place from where organized people

operate, i.e. their collective consciousness, in order for the change to be lasting and sustainable. Therefore, to create an analogy of collective consciousness from societies to organizations, the guiding definition of collective consciousness derived from Durkheim's and individual consciousness studies will be applied to organizations by combining it with organizational theory and organizational metaphors.

As it has just been argued all human societies have a collective consciousness. As societies and organizations both exist of people and since organizations more or less form individual communities in themselves, they too, regardless of size, have a collective consciousness. The organizational collective consciousness, however, can be different from that of the society, or societies, within which the organization exist and operate. Following this line of logic, formal working groups inside companies can likewise form their own as well and informal social groups can also have their unique collective consciousness. However, focus in this thesis is on the collective consciousness of companies as a whole as it is this deep level that needs to be changed first, in order to better align the ecology with the economy.

I will argue that combining collective consciousness with organizations opens up for an interesting field within organizations because it contains and focuses on the deepest most basic elements from which an organization as a whole operate. This level within organizations, *the collective corporate consciousness*, is the field which I will argue should be changed in order to initiate new fundamental lasting sustainable transformational change within organizations.

Accounting for a company's collective consciousness is a complex task. When analyzing this field it becomes clear that different types of it occur. It appears not one but three types of collective consciousness should be presented; one which is the company's Intended Collective Consciousness, its Actual Collective Consciousness and the Identified Collective Consciousness. The Actual and Intended could be termed as the Internal Collective Consciousness and whether the company shares its own collective consciousness with the ones of its external stakeholders, termed the External Collective Consciousness.

It can seem problematic to assess the collective corporate consciousness in a business world where employees are being replaced and change jobs more rapidly than ever before. However, the current collective consciousness within a company does not necessarily change because employees are being replaced faster because it is usually much deeper engraved within the management and the remaining employees, depending on how aligned and shared it is among

both the management and the employees. Moreover, the current collective corporate consciousness is often handed over to the new employees by the old and the current employees and thus connects generations, as Durkheim states in section 3.1.

In the following sub-sections I will argue what the division of the collective corporate consciousness consists of.

4.1 Intended Collective Consciousness

The Intended Collective Consciousness consists of the tangible and visible elements and formal aspects such as e.g. the written mission, vision, values, purpose statement, strategy, goals, structure, leadership style, products, internal and external communication, reputation, PR, internal procedures, standards, and rules.

These elements are the more formal aspects of the collective corporate consciousness. This one part of the Actual is often formed by the top management team within a company and can be seen as the management's view of the organization and how it should be perceived by their stakeholders, including the employees. However, "Teams at the top are least likely to come up with something really new. Yet executives generally have a monopoly on strategy making." (Scharmer, p. 84).

The Intended is not necessarily a negative element as a top management should always have an intention with and direction for the company. An Intended guides employees on how to and what to work for in the company instead of leaving it entirely up to the individual. An element of the Intended such as a strong, clear and purposeful vision can give employees motivation if it is in line with their collective consciousness (Senge, 2006, p. 191). The Intended can provide a strong vision and scenario for the desired future of a company and thereby drive people to achieve this vision for the company if it is aligned with the Actual, which will be defined in the next section.

It can, however, have negative consequences if the Intended differs significantly from the employees' collective consciousness. Such instances often occur due to isolated management practices and differences in what the management and the employees value. A conflict often appears when the management just imposes the Intended upon the employees to comply with, as in mechanical solidarity. To avoid such situations and to address the Actual, the management can encourage the employees to suggest the values etc. for the company. Often

there will be conflicts between the values decided upon with shareholders in mind and values decided with stakeholders in mind.

If the management's Intended is not in line with the reality of the employees, differences and tension occur and this can lead to a mismanaged company and less value derived for stakeholders and shareholders. Therefore, the management team needs to be aware of the distinction between and differences of the three kinds of collective consciousness within a company.

A way to identify the Intended is to make discourse and content analyses of all the above mentioned examples of the content in one coherent integrated analysis.

It could be argued that the Intended is the mechanical solidarity part of the collective consciousness as it represents a more materialistic and top-down controlled part of the collective consciousness, especially if the management uses the Intended as a sort of religious law that cannot be deviated from by individual thought and initiative. However, if the Intended is aligned with the Actual, alignment and coherence exist within the company.

4.2 Actual Collective Consciousness

The second type of collective consciousness is the Actual. It consists of both the management's and the employees' collective consciousnesses within the company and represent the more informal aspects of the collective corporate consciousness such as their daily behavior. This needs to be looked into in order to grasp all the content of an organization's collective consciousness. It should be made clear from the beginning that the Actual is not a phenomenon which is able to be observed directly as such. Its factuality can be approached through isolating many different factors.

If it is assumed that the Intended is the expression of the management's collective consciousness the elements of the employees' should also be found. Indicators of these could e.g. be taken for granted and unquestioned beliefs, operational norms and work processes, how they perceive the Intended, employee satisfaction, helpfulness, strikes, salary demands, the level of stress, the intensity of autonomy among the employees etc., the learning and working environment, how long employees stay at the company, personnel quirks, lay-off procedures, the professional and personal goals and values of the employees, how competing and "doing business" is perceived. Labor unions can e.g. also influence the Actual. The

ideologies of the labor unions vary of the educational background of their members. Therefore parts of the Actual can be influenced differently through these unions.

One could also argue that the Actual can e.g. be differentiated among the educated and non-educated and geographically spread employees, which makes it even more complex. However, Durkheim states that geography does not necessarily have to differentiate the collective consciousness, as stated in section 3.2. By this he may mean that a social system, which contains collective consciousness, is not limited by geographical spread, but by the limits of that particular collective consciousness instead. People can be spread across a geographical area but still joined by a collective consciousness.

However, the Intended does not always necessarily represent the Actual as the employees may have an entirely different collective consciousness from which they navigate. In such instances tension and incoherence exist within a company between what the management intends its collective consciousness to be and how it actually is.

If the Actual and the Intended are shared, the Actual can be compared to the *Shared Vision*, one of MIT professor Peter Senge's Five Disciplines from his book *The Fifth Discipline* (1990) on organizational learning and systems thinking. He argues that a shared vision "... can bind people together a common identity and sense of destiny." (Senge, p. 9). However, if the alignment is to take place the vision needs to be genuine and authentic and something that truly appeals to the collective consciousness of the employees. It should be pictures of the future that ignites true commitment and passion from the employees, not because they are ordered to comply due to mechanical solidarity. A shared vision, i.e. an aligned Actual, is built on organic solidarity that respects people's individual consciousness and at the same time appeals to it. Senge writes that "what has been lacking is a discipline for translating individual vision into shared vision – not a "cook-book" but a set of principles and guiding practices." (Senge, p. 9). Many companies have not had the management skills to translate their ambitious visions and expressed intentions to the personal visions of the employees. Instead, companies should realize that a shared vision can spur motivation, innovation and passion among employees and in the end productivity and prosperity, which is especially important in times of crisis, be it financial or climatic.

The Actual is realistically impossible to measure completely accurate as it consists of many variables and some cannot be explained in words. The Actual is the substantial totality of the

present collective consciousness within a company if it could be measured completely accurate.

Some relevant information about the content of the Actual could be obtained by a mix between participant observation within a company and deep dialogue interviews with both the employees and the management.

4.3 Identified Collective Consciousness

The Identified is the one described by the observer of the company attempting to identify the content of its collective consciousness. The observer would for example be a consultant or a researcher, preferably with anthropological, psychological and business knowledge, as all these skills would be needed to fulfill the analysis. The Identified is not on the same level as the Intended and the Actual as it is a hypothesis and how it can be given existence is dependent on the way it is being identified. The collective consciousness can never be completely and accurately identified, therefore the observer has to draw generalizations and assumptions in order to create an analysis of it. Therefore, the Identified differs from the Actual and the Intended and thus functions as a guiding indication of how both are. It should, however, be obvious, that what I called the Actual would always be an Identified. The difference of the two concepts thus refers mainly to the fact, that the Identified is formed from without the organization, and has a theoretical context, while the Actual is a living part of everyday company practice.

4.4 Internal Collective consciousness

The Internal expresses the type of solidarity currently present within an organization be it mechanical or organic solidarity. It is the internal part of the Actual or Intended and represents the analysis of the management's and the employees' collective consciousnesses. It is in this thesis mostly used to underline that the External can differ from the Internal. A company's Internal ideally functions as an indicator of the company's External as companies often operate from their Internal in their external environment. They do this in order to be and appear coherent and authentic.

4.5 External Collective Consciousness

The External is to what extent a company shares its own Internal with its external stakeholders' collective consciousnesses. It is a hard complex task to map all the stakeholders of a company's collective consciousnesses as most companies today holds numerous and very

different stakeholders as e.g. local communities, governments, various NGOs, consumers, customers, the media, and the environment. See appendix 1 for a stakeholder map.

If the company does not share its Internal with its external stakeholders, the company and the stakeholders exist in tension with each other. The extent of how much a company's collective consciousness is shared or not by its external stakeholders indicates the company's legitimacy in society. Legitimacy has become an important part for companies in order for them to operate with minimum friction with society, however, many polluting and environmentally damaging companies have lost theirs (Porter and Kramer, p. 64). An External shared with the stakeholders legitimizes the company. The way a company handles its waste, emissions and stakeholders can be argued to be a strong indicator of how its legitimacy is. Such information can usually be found in different business media. However, it would be more representative to also survey and interview the exact stakeholders to collect a precise image and understanding of their perception of the company.

It should be made clear that because a company has a strong internal solidarity does not mean it necessarily has a strong shared collective consciousness with their external stakeholders. Likewise, some companies have a strong shared collective consciousness with their stakeholders but a misaligned internal collective consciousness.

5. Merging Organizational Theory and the Intended and Actual Collective Consciousness

A strong indicator for the content of the Intended and the Actual is provided by organizational theory and the so called *organizational metaphors* as they seek to encompass and be an expression of all the mentioned elements of the Intended and the Actual. Organizational metaphors are used to both "... understand and shape organizational life." (Morgan, 2006, p. xii) meaning that metaphors can both be used to analyze, i.e. understand, an already existing collective corporate consciousness or to create, i.e. shape, a proactive one. Metaphors imply a way of thinking and a way of seeing which indicate how we perceive the world in general (Morgan, p. 4). They are expressions of thinking about the nature of organizations. Therefore, organizational metaphors are great indicators for both the Actual and the Intended.

Several metaphors for the way organizations are organized, structured, managed and perceived by itself and others exist. Many scholars have contributed to the field of

organizational theory, however, Gareth Morgan's *Images of Organization* (2006) will be applied here as he provides an overview of many different metaphors throughout business history. However, as Morgan rightfully emphasizes "... metaphors only create partial ways of seeing, for in encouraging us to see and understand the world from one perspective they discourage us from seeing it from others." (Morgan, p. 27). This important *blind spot* will be addressed later when discussing how to change the collective corporate consciousness.

The classic well-known metaphors of the organization as a machine and organism are the two major schools of thought within organizational theory. Primarily building on and from these two, new and different approaches to organizations have also occurred. First, the machine and organism metaphors will be analyzed as expressions of collective corporate consciousness and then the relevant newer metaphors.

5.1 The metaphor of organizations as machines

With the Industrial Revolution occurring and spreading in the middle and late 1800s companies began to professionally form in organized and structured systems, as organization of labor and specialty functions was needed in order to adapt to this new revolution in society. The owners of companies had strict focus on efficiency, productivity and profitability, which generally made them perceive workers as bees working for a queen of a bee hive. Focus was placed upon how technology and machines could foster first survival and then profit for the typically few owners of a company (Morgan, p. 25).

Frederick Taylor's scientific management with its strict focus on mathematical efficiency of all processes and supervision and Henri Ford's embodiment of it, the assembly line, were the guiding principles of management. Therefore, workers were exploited to the full, working under horrible conditions and paid as little as possible to keep costs down. They were seen simply as parts of the machinery and thus strictly supervised and controlled. The mechanistic approach therefore often oversaw human needs in its pursuit for profit (Morgan, pp. 23-25).

These companies were designed as a machine and intended to operate as one. Every movement and possible question about the operational processes were standardized and put into boxes. Everything was planned, measured, weighted, calculated, systemized, structured, and controlled. It is this way of operating German sociologist Max Weber defined as bureaucracies. He noticed how companies at that time attempted to routinize processes the same way a machine produces products the same way each time. Companies operated by "... precision, speed, clarity, regularity, reliability, and efficiency..." (Morgan, p. 17). According

to classical management theory and e.g. Henri Fayol, everything was standardized in detailed written manuals and procedures. Hierarchical top-down structures, precisely defined ways of commands and communication, and centralization of power on the top of the hierarchy was present throughout the organizations.

Thus, all departments were divided into hierarchical, vertical and horizontal silos and worker roles were specialized and specified for the production line to become more efficient. Adam Smith advocated such a development because the division of labor and specialization worked to enhance efficiency of companies (Morgan, p. 16). Durkheim on the other hand saw the division of labor in the entire society, and not just in factories, as a liberator of the individual in the way it according to him made more room for individual consciousness and was a strong unifying force as the workers became more dependent on each other.

Both were somewhat right; the factories did become more efficient because of the specialization, but also demotivated employees and made them less productive as later studies of motivational theory showed and the authoritative management style took any what could have been vital innovative initiative away from employees. On the other hand people did get more dependent on each other in order for the whole to work. But as only few people, the owners, got wealthy from all the workers' hard work, the division of labor as such did not liberate the individual right away. Not much room was left for individual consciousness and independent thought in especially factories as managers were the only ones allowed to do all the thinking (Morgan, p. 23). Likeness, similarity and discipline between workers were demanded by the management and deviations from protocol lead to disciplinary actions, as in mechanical solidarity. However, the division of labor can be argued to have had a large and rather slow influence for liberating the individual as specialized jobs as e.g. IT experts later on has proven to be very well-paid and thus provide more individual freedom.

The machine metaphor is still present in many of today's companies. Focus is placed upon the bottom line and becoming ever more productive to deliver profit for the shareholders in the short term. The machine metaphor has been so dominating throughout human history but especially since the Industrial Revolution that it has become a fundamental part of our entire society and collective consciousness. It has thus "... left its mark on the imagination, thoughts, and feelings of humans throughout the ages." (Morgan, p. 12).

The machine metaphor has therefore strongly shaped our concept of organizations today. The word originates from the Greek *organ* which means a tool or instrument. Such are always

used to create something with an intention as e.g. a house or for the matter of owners of companies, profit. Organizations have therefore always been perceived as a medium through which to achieve an end. Much of the organization of companies as machines had been learned from the military and the vocabulary of e.g. “beating the competition” is an example of how embedded this line of thought is (Morgan, pp. 12-15). The classical and scientific organizational theorists were convinced they had found the defining principles for organizing. However, today the machine metaphor often proves to be the defining cause of many organizational problems as it is not democratic and flexible enough to respond and adapt to the rapidly changing external environment of the 21st century business world (Morgan, p. 27).

The attention of the shareholders has been on profits and not on the process to achieving it or what purpose it fulfilled. The sole purpose in machine organizations is to maximize profit. A mechanical company perceives itself as separate from nature and society and its most important assets are non-living capital assets, such machines and software technology (Bragdon, p. 31). As this is the case these companies need the latter to create the profit, it is believed. To invest heavily in capital assets these companies tend to indebt themselves, sometimes beyond their total asset value. This way of exaggerated lending puts the entire financial system at risk if companies are not able to pay the borrowed sum back to creditors (Bragdon, p. 34). Furthermore, mechanistic companies to a large extent view resources as finite, fixed and scarce. The prevailing line of thought is that the faster these companies can control the resources the more profit can they generate (Bragdon, p. 75). The mechanistic companies’ obsession with control limits them from viewing sustainability as an opportunity for innovation and in the end profit, as they mostly view CSR as a cost and an act of charity, not a competitive advantage (Bragdon, p. 77). As Milton Friedman famously stated “The social responsibility of business is to increase its profits.”²⁵.

5.2 Organizational mechanical solidarity

From this analysis it is clear that machine organizations have a collective consciousness consisting of mechanical solidarity. The management’s orders and written elements of the Intended are dominating the Actual within mechanical organizations. The workers are expected by the management to have a collective consciousness shared almost completely with the Intended and to almost religiously and blindly follow it. Questioning the capitalistic model and the company’s Intended will be frowned upon as a deviation from the Intended. The elements of the Intended can function as repressive laws set by the authoritative

²⁵ <http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html>, 23-09-2011

management upon the employees as in mechanical solidarity. Mechanistic organizations are to a large extent furthermore homogeneous as they have a high level of resemblance, conformity and likeness between its members. As mentioned in section 3.1.1 individuals in mechanical solidarity societies behave in a very aligned and repetitive manner which just creates the same results, as Durkheim argues.

As pointed out earlier in section 5 viewing organizations and reality from one metaphor hinders us from seeing it from others and “This is exactly what has happened in the course of developing mechanistic approaches to organization” as they have been blind to the fact that the challenges and changes influencing businesses today are “...often much more complex, uncertain and difficult than those that can be performed by most machines.” (Morgan, p. 27).

In the present business environment, which is changing faster than ever before, organizations need to be flexible and able to change and adapt fast to the emerging tendencies in society. Authoritative, hierarchical, bureaucratic, strict top-down managed companies where the Intended dominates the Actual leaves no space for questioning the operational norms and thus no space is allowed for employee innovation, which is vital for surviving in such a turbulent business environment where the only constant is change. It is critically important to allow and make employees comfortable with criticizing the operational norms and suggesting new initiatives as they sometimes have a better feeling of how things are conducted within the company and therefore can better see the blind spots in products, processes, communications, leadership styles, etc.

An example of mechanical solidarity is one of the investment bank Goldman Sachs' business principles; “Our goal is to provide superior returns to our shareholders.”²⁶. This sort of mechanical solidarity has been the prevailing one in business so far. It has resulted in an ego-driven, short-sighted, narrow-minded, isolationistic and greedy Intended but also Actual, within most companies since the Industrial Revolution. This type of collective consciousness will be called the Ego-consciousness in the following parts of the thesis as it is mainly driven by the primitive fundamental pursuit of satisfying egoistic basic needs of a top management and shareholders. The machine metaphor has fundamentally been based on and been an expression of the mentioned five elements of the Ego-consciousness.

However, the time of the Ego-consciousness as the dominating collective consciousness in business is running out. It simply cannot cope with the fast changes and challenges of a global

²⁶ <http://www2.goldmansachs.com/our-firm/our-people/business-principles.html>, 23-09-2011

world due to its inflexibility. Dominating trends such as climate change, water shortages, overpopulation, diseases, pollution, poverty, the internet etc. expose the limits and the blind spots of the Ego-consciousness.

5.2.1 The need for a new collective consciousness

A new consciousness to guide thinking and behavior is needed to meet and cope with these challenges. Those companies that do not change "...will surely die." (Bragdon, p. 324). Many leaders and employees all over the world have started to change their individual consciousness and several companies are apparently changing their, but they still hit a wall from the current structure of the capitalistic system and the dominating mechanistic companies. The mechanistic approach belongs to the Mechanical Age but a new age is forming, lead by the fast dominating trends (Morgan, p. 31). Therefore, the mechanistic companies basically need to change their fundamental collective consciousness from which they operate, in order to cope with especially climate change.

Member of the Society for Organizational Learning at MIT, Joseph H. Bragdon, argues that life comes before profit, meaning that companies need to nurture people and nature to create profit, as it is these living assets that generate profit in the end. This should be done by recognizing that living assets and not capital assets are the most important resources in companies. In fact living assets create capital assets. Without people or nature there would be no basics to generate monetary wealth. He argues that it would take a fundamental shift in thinking. Companies will need to come to a Copernican Revolution of its own by acknowledging that life comes before profit. Companies have to become aware of the fact that businesses are not the center of our society and instead realize that they exist for the sake and benefit of society, not the other way around (Bragdon, p. 2) .

Companies should instead of using the living asset resources to generate wealth only for themselves, apply these resources to generate general prosperity back to society and solving its problems while earning a profit (Porter and Kramer, p. 66). Companies will need to serve a higher purpose than profit maximization to profit in the future. This higher service should according to Bragdon serve life in some way or the other in order to be sustainable. This recognition and change in thinking away from an Ego-consciousness, I argue, would as the first and most important step require to change the collective corporate consciousness of especially mechanistic companies. Some would argue that employees do not care about their company's engagement with their stakeholders if it does not improve their conditions.

However, many employees regard working for a higher purpose than profit as an enormous motivation as Bragdon argues and this is the essence of organic solidarity according to Durkheim as stated in section 3.1.2.

In the next sections I will explore what the new Actual and Intended should consist of in order to be able to cope with especially climate change and how they should be changed and transformed. The metaphor of organizations as organisms will be used as a point of departure in this pursuit.

5.3 The metaphor of organizations as organisms

Organic organizations are another example of a company's collective consciousness in sharp contrast to the mechanistic.

As a counter reaction to the mechanistic approach's devastating impact on the environment and its inability and inflexible response time to an accelerating pace of change, companies have slowly begun to organize in a new way (Morgan, p. 46). Companies started to look into nature and biology instead of machines for inspiration to organize, as biological and ecological organisms are designed to adapt to changing environments, whereas machines are static. The step toward the organic way of organizing was laid by the now famous Hawthorne Studies conducted at the Hawthorne Plant of the Western Electric Company in the 1920s and 1930s. It was intended to analyze the correlation between conditions of work and boredom among employees.

However, during the research the attention of the study was turned toward the attitudes and preoccupations of the employees and the impact and influence of the social environment. It showed the importance of catering to the social needs in the workplace as a motivational factor that significantly improved employees' effectiveness and productiveness. This discovery led to a beginning acceptance of the human factors' major influence on organizations. The motivational rewards so far provided in mechanistic organizations was mainly financial extrinsic rewards but this study and the psychologist Abraham Maslow's Hierarchy of Needs, among several other developments such as the rising educational standard, directed focus onto intrinsic rewards as responsibility, inclusion, recognition, meaningful tasks, personal growth and development through igniting e.g. the passion and creativity of the employees (Brooks, p. 62). This turn of events resulted in more open organizations compared to the much authoritative controlled top-down management of machine organizations (Morgan, pp. 33-38).

At the same time the environmental movement had gotten a large share of voice in the media in the 1960s and put huge pressure on polluting companies that went all the way up to the political level who also started to put more pressure on these companies through regulation on e.g. emission and waste disposal procedures.

This new movement made to a large extent managers and employees question the mechanistic approach and started to experiment with new more flexible ways of organizing. The Ego-consciousness of mechanistic companies got exposed to more different angles on how to adapt to the pressure of climate change and other challenges. Many companies have thus come to the recognition that they are dependent on the wider external environment to survive and just a part of a much larger whole. It is this Copernican Revolution that Bragdon mentions that companies ventured upon when starting to come to this recognition. To adapt to it they turned to the organic organizational metaphor.

5.3.1 Systems theory

This metaphor seeks to monitor tendencies and stakeholders in the external environment and decide which will influence the company and how to adapt to it (Morgan, p. 39). In this way companies started to operate as living systems. More companies therefore started to adapt systems theory in its operational practices. In contrast to the mechanistic approach, systems theory acknowledges that companies exist in open fluctuating systems with the external environment. Therefore, companies using the systems approach include the consequences and impact on the external environment and stakeholders in whatever activity and decision it initiates as they are aware that they are interdependent and interconnected with everything else.

This may sound almost religious or spiritual to people operating from the Ego-consciousness, however, the world has become more intertwined due to globalization and the internet. The stock price e.g. depends on investors' expectations to the company and its industry. A company that pollutes or use an ingredient in its product that is poisonous risk a steep dive in the stock price because of such negative attention in the media and among customers.

Systems Theory was developed by Ludwig von Bertalanffy a theoretical biologist in the first half of the past century and recognized that organizations should be open to their surrounding environment and seek to find a balanced adaptation and relation to it (Morgan, p. 38). He thus used theory from biology about living organisms and applied it to organizations. This was an important starting part of the trend of companies directing their attention toward stakeholders

and not just shareholders. Companies must therefore be sensitive to what changes occur in their external environment. They must scan and “sense” the emerging tendencies in the external environment in order to adapt their organization to the present and the future conditions. Systems theory furthermore views the organization as a whole consisting of smaller subsystems which creates it, and regards the entire organization as a part of a bigger whole, i.e. society and nature (Morgan, p. 39).

Systems theory argues that one can only understand a system by analyzing the interrelated, interdependent and interconnected whole and not just the isolated individual parts of it. In this way it seeks to understand the underlying causes to phenomena such as e.g. the climate crisis to find the root causes of what created this phenomenon in order to make lasting and sustainable change to the problem at hand. As Senge states, the future consists of a constantly changing world which basically demands new ways of thinking and operating (Senge, p. xiv) as it is from here action in the end originates. The root cause of the phenomenon of climate change is our past and current thinking and the way we have applied the Ego-consciousness in the management of our organizations and society. Therefore, the prevailing Ego-consciousness needs to be changed (Senge, p. x). Systems theory seeks to track problems from their underlying causes all the way to their resulting phenomena, i.e. the consciousness with which the phenomena have been created and the consequences of the actions this consciousness has lead to.

Beside systems thinking Senge mentions mental models as one of his five disciplines. According to Senge, mental models are “... deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action.” (Senge, p. 8). Senge’s mental model is from this definition somewhat similar to this thesis’ guiding definition of consciousness. He argues that in order to address the deep big challenges as e.g. climate change we need to become aware of our mental model. This journey of awareness of our own consciousness and collective consciousness will be used in the next section which will address how to change such a deep level within us. Arie de Geus, Shell’s former longtime Head of Group Planning once stated that “continuous adaptation and growth in a changing businesses environment depends on “institutional learning, which is the process whereby management teams change their shared mental models of the company, their markets, and their competitors.” (Senge, p. 8).

The management and employees of companies need to expose their Intended and Actual and bring them to surface by looking within themselves and making the collective consciousness open toward influence from other new approaches to organizing and doing business (Senge, pp. 8-9). Systems thinking look at the structure of the systems within a company operates and how it influences behavior and what outcome it brings. The systemic structure of the field in which a company operates is always a reflection or a result of the thinking that created the structure. The systems thinker, biologist Gregory Bateson, once said “The source of all problems today comes from the gap between how we think and how nature works.” (Senge, p. 269). Therefore, systems theory addresses the need for changing the way we think first in order to change the systemic structure, the behavior and thus the results and consequences of how we do business. One can only do that by “seeing the forest *and* the trees” at the same time. Systems theory thus fits with the definition of consciousness from Oxford’s Dictionaries as “the state of being aware of and responsive to one’s surroundings” as presented in section 2.1.

5.3.2 Characteristics of the longest living companies

In his book *The Living Company* de Geus describes the outcome of a survey of the longest living companies in the world he conducted at his time at Shell. He intended to research what attributes and characteristics the longest living companies contained. The findings showed that the longest living company that could be found was Stora Enso, Sweden’s major sustainable paper manufacturing company with its over 700 years of existence. de Geus found that the longest living companies had four main characteristics:

- Sensitivity to the environment
- Cohesion and identity
- Tolerance
- Conservative financing

The first characteristic is a company’s ability to adapt to the external environment’s changes by constantly being attentive to learning from the experiences it generates from the changes. The company must constantly scan and monitor its environment for changes, tendencies, and trends that will influence the company and its stakeholders. Only by focusing on constantly learning from the external environment can companies be sensitive to change and thus thrive in a turbulent environment, as such companies seek to exist in balance and harmony with its

surroundings. In other words, these companies applied systems thinking in order to adapt to their environment.

The second characteristic correlates with Senge's discipline of building a shared vision and with the theory of an aligned Intended and Actual. The long-lived companies had a strong aligned identity that all employees bought into and were motivated by despite how diversified their employees were (de Geus, 1997, p. 6). This can be compared to organic solidarity as these companies made room for individuality at the same time they managed to organize the individuals around a common purpose, vision and collective consciousness. They thus had alignment between the Intended and the Actual. The survey showed that strong employee links to the organization's identity "... were essential for survival amid change." (de Geus, p. 6).

The third characteristic of the longest living companies was their willingness to experimenting and innovate. The companies used the lessons from the external environment to be inspired and to experiment with new products.

The last characteristic almost speaks for itself after the second dip of the financial crisis after the downgrading of USA's credit rating in 2011. To survive for decades and centuries companies must always have money in the bank for tough times and not indebt themselves for more than they own. The surveyed companies did not engage in high risks and high uncertainty investments. Conservative financing opens up for organic growth instead of the much more expensive growth strategy of mergers and acquisitions. A company such as Apple, who is the second most valuable company in the world, according to NASDAQ stock exchange²⁷, has been growing organically by using its capital on experimenting on generating new innovative products such as the iPad and the iPhone. Apple has not become this valuable by buying up competitors, as its now stumbling competitor Microsoft did. This observation can be an indicator of new times and rules in the business world – that money spent on innovation and experimenting is more profitable than mergers and acquisitions.

Companies that navigate from these four pillars are according to de Geus Living Companies. Interestingly, the conclusions of the survey included the observations that the ability to return on investment and profit was not a predictor or a determinant of corporate health but instead a result of corporate health (de Geus, p. 7). This means, in order to thrive in the long run

²⁷ <http://www.nasdaq.com/symbol/aapl>, 28-08-2011

companies must first fulfill a relevant need in society and then profit, not the other way around, as has been the dominant way of thought by Ego-consciousness companies.

The survey furthermore showed that the average life expectancy for the big, solid companies was only 40-50 years (de Geus, p. 2). Compared to Stora Enso who shows what is possible this finding is important. By applying the four characteristics companies can thrive and prosper for shareholders, stakeholders and society for much longer which in theory should be in both the company's and society's interest.

The survey thus opens up for the discussion of a company's purpose. Is it to deliver as much shareholder value here and now or continue to do deliver value over as long a period as possible? Is there in the future a choice between managing for profit or for longevity?

According to de Geus "Like all organisms, the living company exists primarily for its own survival and improvement: to fulfill its potential and to become as great as it can be. It does not exist solely to provide customers with goods, or to return investment to shareholders...". He continues to argue that returning investments to shareholders and delivering value to customers are not a goal in itself for a living company but means to an end of a higher purpose. Moreover, de Geus argues that the dichotomy between managing for profits or for longevity is no longer a trade off (de Geus, p. 15). In order to profit in the future companies must operate for existing in the long run because focusing merely on profits is devastating for the external environment, and thus in the end also for the company itself, as we have learned from systems theory that everything is connected just like an ecosystem.

It should be noted that the survey is not available to the general public, the sample size was only 30 companies and that the documentation was not always complete, according to the author (de Geus, p. 8). Furthermore, the four characteristics are the subjective choice of de Geus. Therefore, more characteristics could apply to the longest living companies than these four. For example could a trait such as managing for the long run be another characteristic. To plan for the future instead of just the next quarterly financial statement logically makes companies more aware of the future and reduces uncertainty about it. It can therefore more appropriately respond to and influence the changing environment around it.

The whole study came into being after Shell started to venture into scenario planning as they slowly discovered that the oil reserves would run out in 50 years or so. Therefore, they needed a tool to look into the long future to analyze its uncertainties and variables. That tool became

scenario planning which basically are stories of the futures of a company based on solid research in broad areas such as politics, economics, social issues, and technology. At the same time the uncertainties and variables are listed and it is discussed how they will influence the company and what the appropriate response should be in each scenario (de Geus, p. 45). It was from that on natural to analyze what the companies most successful at surviving the uncertainties had in common.

Despite the criticism the four characteristics are still highly relevant and applicable as they seek to serve companies to thrive and survive in a turbulent constantly changing business environment, which is the reality of most industries today. Some heavy industries such as steel and coal changes more slowly but not because they are not exposed to change but more because these industries are heavily governed by the Ego-consciousness and are thus slow to respond to changes.

de Geus argues that the four characteristics are still more relevant than ever due to Stanford University professors Jim Collins and Jerry Porras' bestseller books *Built to Last*, *Good to Great* and *How the Mighty Fall* based on large scale surveys of top executives of U.S. companies. Some of their surveys showed that the visionary companies did not place as much emphasis on pure shareholder value and profit maximization. Instead the visionary companies had strong abilities to adapt to change as an organic Living Company and at the same time did not compromise their core ideals and thus had a strong coherent identity (de Geus, p. 8).

If a company's success to a large extent depends on its ability to learn from and then adapt to the external environment, companies with an Intended and Actual based on the organic metaphor will prosper the most as only living beings can learn. Therefore, companies with an Intended and Actual based on the Ego-consciousness will face rough times, as seen with companies such as AIG, Lehman Brothers, Goldman Sachs and many other financial companies during the financial crisis.

5.3.3 Living Asset Stewardship

Bragdon highly agrees to this point. In his book *Profit for Life* (2006) he takes de Geus' survey further to examine the management practices of leading ethical and sustainable companies, that he termed Living Asset Stewards (LAS), within selected industries, and how they performed financially over a period of 10 years from 1996-2005, by analyzing the stock prices compared to their industry machine thinking peers. He found that companies who perceived themselves as a living system outperformed their more mechanistic linear thinking

peers in their industries by more than the double during the period (Bragdon, p. 89). The stock price was chosen as it is the best holistic measurement tool as the stock price quickly adapts to market changes as living organisms also do (Bragdon, p. 102). This does not, however, change the fact that the strong emphasis on stock prices is short-term focus.

Living Assets Stewardship is defined as “caring about people and the things people care about.” meaning to look into disciplined systemic caring of the general health of the larger world (Bragdon, p. xi). Bragdon selected 60 LAS companies for the Global LAMP (Living Asset Management Performance) Index and extracted 16 of them that performed significantly well into the Focus Group (FG) and compared the investment performance of the LAMP and FG companies with that of the Standard & Poor 500 and Morgan Stanley Capital International (MSCI) indexes. Most of the FG companies were from the heavy industries such as e.g. Nokia, Toyota, Novo Nordisk, Intel, the steel manufacturer Nucor, Johnson & Johnson, 3M and Royal Dutch/Shell. Heavy industry companies were chosen to strengthen the argument of LAS by showing that companies in heavy industries can be living, ethical and sustainable instead of operating from an Ego-consciousness, which is usually dominating heavy industries.

The most significant component in viewing companies as living systems is the aforementioned living assets, i.e. people and nature, as they are more important to productivity and longevity according to Bragdon (Bragdon, p. xi). Common to all the LAMP Index companies is their mental models. By mental models, it seems that Bragdon means what I define as the collective corporate consciousness, however, it is not more detailed defined than the way companies think (Bragdon, p.xiv). Here, my guiding definition of collective corporate consciousness is more detailed. Bragdon uses the LAMP companies’ corporate communication as e.g. mission, vision, values and corporate philosophy as the expression of the companies’ mental models and thus the main basis of his selection criteria for the LAMP Index. The selection criteria contain eight elements. They are presented here (Bragdon, p. 95):

- A commitment to “systems” or “holistic” thinking
- A commitment to human rights
- A clear sense of “why we exist” as a company
- Respect for employees
- Respect for Nature
- Respect for customers

- Respect for strategic partners
- Respect for host communities

These criteria are clearly an expression of systems thinking and an organic approach to organizing, as focus is placed on respecting stakeholders, a clear identity and a holistic collective corporate consciousness. These companies recognize that their economic success depends on the well-being of the living systems in which they operate and of their people within the companies. They regard profit as means to fulfilling and serving a higher need and purpose, view collaboration with stakeholders including competitors as a normal state, think and act long term, experiment, and seek to ignite employee passion to create an innovative learning culture by tapping into their values through a higher purpose (Bragdon, p. 76). In this way LAS companies connect the individual to the whole of the company and the living systems in which it operates. They attempt to be part of the larger society it influences throughout its value chain and beyond until customers dispose of its products.

Therefore, I wholeheartedly agree and recognize that these criteria describe important parts of the new collective corporate consciousness needed to adapt to climate change.

The problem with the criteria is, however, that Bragdon does not explain how he will measure and identify the eight criteria within companies beside from their corporate communications, commercial available research, academic research, case studies, business publications, and data available on the internet from NGOs (Bragdon, p. 91). Thereby he is only focusing on the Intended and it therefore seems as if he does not address the fact that not all companies follow their well-intended statements and that more aspects of companies' mental models exist as e.g. the Intended, the Actual and the Identified (Bragdon, p. xv). He assumes that companies do what they say and write and he does not address the fact that an Actual also do exist. It is as mentioned before important to be aware of misalignments between a company's Intended and Actual as incoherence thus exist because coherence is a characteristic of living companies. One cannot per se assume that the Intended and Actual are aligned even though the Intended is expressed clearly in different corporate communications.

It can for example be hard to determine whether a company really listens to their customers and whether a company "... treat suppliers and others who add value to the offers as strategic partners" (Bragdon, p. 96). It is not enough to take what the CEO of a company states in the press. The customers and suppliers should at least also be interviewed to identify potential misalignments. Numbers on how many customers return to the company and customer

satisfaction also provides an indication. Bragdon does not account for how this has been done precisely.

To add to the critique, the LAMP Index was done before the global financial crises in 2008. The numbers thus have changed since as many companies tend to save on CSR as one of the first areas in a time of crisis. However, according to a news update on the website of the LAMP Index, the index outperformed both the S&P 500 (+26, 46 %), the MSCI World Index (+28, 01%), and the FTSE World Index (+34, 4%) with a growth of 44, 56 % at year end 2009²⁸.

Furthermore, companies such as Nokia have proven not to be as innovative as Bragdon makes it in 2006, as they have fallen behind the latest development in mobile communications, the smart phone, which Apple leads now.

With that said the message and the conclusions of the LAMP Index are very much in line with the organic metaphor. It is a strong argument for that *going green is going black on the bottom line*. The numbers speak their clear language and the results have according to the website twice been approved by Northfield Information Services, a leading financial analysis company²⁹. Companies can perform twice as well financially as their mechanistic industry peers if they apply Living Asset Stewardship elements such as holistic and systems thinking, a long-view, and openness toward stakeholders.

5.3.4 Organizations as brains

In addition to LAS the metaphor of organizations as brains is relevant. This metaphor is highly applicable when discussing the collective consciousness of organizations. An enormous amount of information flows in, out and within companies every day and they need to be able to handle all this information and select what is useful and what is not in decision making, just as a brain selects in the massive sensory input we constantly gather to decide what is most appropriate to concentrate on at a given moment. The structure of organizations also create "... a structure of attention, information, interpretation, and decision making that exerts a crucial influence on an organization's daily operations" (Morgan, p. 77).

The dominant theory of the function of the brain is that the left hemisphere of the brain is more involved with the right side of the body and rational, analytical, and reductive thinking,

²⁸ <http://www.lampindex.com/>, see the section "Recent Developments", 10-09-2011

²⁹ *Ibid.*, 28-08-2011

whereas the right hemisphere of the brain is involved with creative, intuitive, and emotional thinking, in pattern recognition and controls the left side of the body.

Brain organizations have been criticized for a “left hemisphere bias” with overemphasis on control, numbers, structure, hierarchy, supervision etc. in line with the mechanical metaphor (Morgan, p. 78). In changing environments companies are also in need of just as much emphasis on creative, intuitive, innovative and holistic systems thinking where its members can recognize changing patterns in order to identify new trends, tendencies and movements to adapt to and to influence. The brain metaphor has also been criticized for applying the limited information processing capacities of a single individual to the same capacities of an entire organization consisting of several individuals (Morgan, p. 79). This criticism supports the theory of the corporate collective consciousness presented in this thesis, as it recognizes the existence of individual consciousnesses but also that some of it is shared with the members of an organization.

Just like brains constantly learn, organizations can as well, as we have seen when discussing systems theory, the Living Company and LAS. Organic organizations learn from feedback mechanisms from their environment. If companies steer too much in the wrong directions it will show as negative impact on the bottom line or as negative value generated for their stakeholders. In order to find the right path companies must adapt their approach to this negative feedback to obtain legitimacy in the society in which it operates and thereby to engage in self-regulating behavior. The brain system must then be able to perform four tasks taken from the study of cybernetics (Morgan, p. 83):

1. Sense, monitor, scan and thus better anticipate change and tendencies in the external environment
2. Challenge and questions the operating norms that guide organizational behavior on the basis of the new detected and identified changes and tendencies
3. Detect significant deviations from the operating norms
4. Adapt these changes when appropriate

The operating norms in this sense should according to the theory presented in this thesis be interpreted to be guided by the underlying collective corporate consciousness. Therefore, one of the biggest challenges for companies today is to become aware of what their collective consciousness consists of in order to be aware of how they actually operate and what guides this behavior, to change it if necessary. This is what is referred to as *double-loop learning*.

Single-loop detects and corrects errors according to the existing operating norms and there is therefore a risk that these errors will not be corrected or corrected in the wrong way, if the operating norms are fundamentally flawed (Morgan, p. 85). Therefore, companies need to question them at the same time as they detect gaps between the organization and the external environment.

Blind spots often occur within companies as a result of a strict mechanical solidarity as no one dares to question the operating norms. In these cases, employees, top managers or the board of directors do not have the freedom to bring attention to e.g. the amount of waste a company generates or how much emission it emits. This can be highly critical for survival as companies become blind for the influence of the external environment and will respond late to them, only when they actually begin to show impact. This is what happened when companies polluted for decades and first started to adapt to the consequences when consumers and governments started to demand so. In this way companies just complied to change and did not fully implement it in the collective corporate consciousness. They did not see it as an opportunity for innovation but merely as a hindrance to profit that they had to comply with by law.

To add to the critique of the brain metaphor it mainly views the brain from the physical materialistic point of view and does not concentrate on the phenomenological aspects of a brain, as the metaphor focuses on the organization as a rational thinking entity with focus on measureable elements. But if a company has the ability to process complex information and develop the capacity to double loop learning, it must therefore also have a consciousness as human brains do. The brain metaphor is fundamentally flawed if it does not acknowledge the existence of a collective consciousness within the organization alongside the physical traits. It is almost symbolic for the traditional management literature not to include the collective consciousness when discussing the organization as a brain. It underlines the traditional management literature's mechanical focus and could be extended by including a study of the collective corporate consciousness.

In order to develop the capacity to see reality more clearly and illuminate the fundamental blind spot of companies, which is to learn to become aware of their collective corporate consciousness, section 6 will focus on how to open their collective consciousness to better see the reality, or external environment, in which it operates and how to transform this collective consciousness.

5.4 Organizational organic solidarity

From the above analysis it is evident that companies that view themselves as a living organism seek to have an Intended and Actual that is based on organic solidarity. In order to adapt to changes and tendencies in society as climate change, companies need to shift from an Ego-consciousness to a collective consciousness that contains elements from the organic metaphor and thus from systems theory, Living Companies, LAS and organizations as brains.

The organic solidarity type leaves more space for the individual consciousness which is in line with Bragdon's point that companies should respect their employees. Leaving space for individual consciousness by empowering the employees in a decentralized division of autonomous labor and building an Intended and Actual on fewer but stronger collective values that ignites the passion of the employees can spur motivation, innovation and productivity instead of using a top-down mechanical solidarity approach and dictating an Intended upon the employees as a repressive law that they need to almost religiously comply with. When employees have more individual freedom they are freer to question operational norms and apply double-loop learning with the aim of staying on top by constantly innovating instead of blindly following an Intended that might not be in line with the Actual. Applying organic solidarity makes the chance for the Intended and the Actual being aligned larger, as organic solidarity leaves space for employees to incorporate their individual values in their work.

Double-loop learning opens up for questioning a company's impact on its external environment and stakeholders, to detect whether it can do something better and different by providing more value to them. As good strong relations to stakeholders verify a company's legitimacy in its society and in general strengthen its business, most companies seek to build long-term relationships with its stakeholders. Therefore they should also include the environment in this equation. If companies operate on the long-term they need to consider the well-being of the environment, as life in the end comes before and is a prerequisite for profit, as Bragdon argues. Furthermore, when organic solidarity exists members of the company view it as part of a whole that it needs to adapt to and exist in balance with, through constant innovation, in order to survive and prosper.

From the analysis it is derived that the new collective consciousness needed to adapt to the climate crisis and prosper at the same time should be holistic, systems thinking, long-termed,

and open. Systems theory, The Living Company, LAS, and organizations as brains all together represent these four elements of the new Eco-consciousness.

It should however be noted that mechanical solidarity elements are not necessarily negative, only in its extreme form. Nothing is black and white and especially not in a complex world such as the business world. Therefore nuances do exist. Many companies are in the transition phase from a mechanical Ego-consciousness to an organic Eco-consciousness but also vice versa because the financial crises forces many companies to save on CSR as one of the first things. However, the dichotomy can be used as a guiding framework and principle for categorizing companies in general.

Mechanical solidarity elements are still needed in order to seek a common path for the employees to work toward. The Intended should, however, be in line with the Actual. Companies should thus seek for a balanced mix between mechanical and organic solidarity and between the Intended and the Actual.

The Eco-consciousness is broad in its description so it can be adapted to by as many companies as possible. However, companies do not just adopt a new collective consciousness as such. They do not just change their worldview overnight. It is a long process and there must be an incentive to do so. The way to open companies' collective consciousness toward the advantages of the Eco-consciousness will be discussed and presented in the next section.

6. From Ego to Eco: Transforming the Ego-consciousness

The first step in all fundamental lasting change is to transform the consciousness because one cannot solve the problems of the future with the consciousness that created them, as Albert Einstein said (Scharmer, p. 168). Mechanical solidarity results in repetitive thought and behavior, according to Durkheim, as stated in section 3.1.1, and would therefore not be optimal for adapting to climate change.

It is a complex challenge to change such a fundamental element as the collective corporate consciousness. Since the Eco-consciousness challenges the common Ego-consciousness, many Ego-consciousness companies try to resist it as it challenges their worldview. However, many companies do have the written and spoken intention to become greener but have not yet become green. What might the reasons for that be? Cynic observers of this debate would

probably say that it is because it is all *green washing* - false intentions used for PR purposes by calculative CEOs only seeking to maximize profits and press coverage. However, that too would be a cynical and generalizing observation. There must be other barriers blocking the way for sustainable companies reaching their goals of becoming CO2 neutral and have zero waste as e.g. Wal-Mart³⁰.

6.1 Barriers to going green

Here are some barriers taken from a survey of the barriers to going green in the IT industry done by a leading provider of technology products, CDW, for the website Windows IT Pro from 2008³¹ that I would argue are generic and thus applicable to other industries as well. The surveyed IT professionals were asked to identify the biggest barriers to going green:

- Cost, 51 % perceived it as a big barrier
- Complexity of the task, 25 %
- Lack of expertise, 23 %
- Lack of management support, 14 %

From this survey it is clear that cost is the biggest barrier to going green and this could apply to almost all other industries, especially in a time of financial crisis. Implementing for example a new sustainable closed loop Cradle-to-Cradle sustainable manufacturing process, where one seeks to include as many either biodegradable or technical recyclable ingredients or materials in the products, will take a larger investment (McDonough and Braungart, 2009, pp. 105-115). However, it is costly to initiate any fundamental change of any company.

One could start with small and quick wins as e.g. exchanging the light bulbs in the company to energy efficient light bulbs. GE Industrial did so and saves 12, 8 million dollars a year because of this simple effort to prove the business rationale in going green and gain support within the company for the initiative (Senge et al., p. 111).

As changing a company's collective corporate consciousness is a long and tough process it could be split up into smaller steps and thus not appear as an instant revolution to be made, where everything needs to be changed at the same time, in order for the transformation not to seem too extensive and resource demanding.

³⁰http://walmartstores.com/sites/ResponsibilityReport/2011/environment_energy.aspx, 23-09-2011

³¹<http://www.windowsitpro.com/article/news2/the-biggest-barriers-to-going-green>, 23-09-2011

The world's largest modular carpet manufacturer Interface did just that in 1994, when their now deceased CEO Ray Anderson decided Interface should become "... the first company that, by its deeds, shows the entire industrial world what sustainability is in all its dimensions: People, process, product, place and profits — by 2020 — and in doing so we will become restorative through the power of influence."³². Interface set a long term goal and has created an online map of a steep mountain, named Mount Sustainability, where everyone can follow their progress to reach the top with the 2020 goals³³. They map the milestones and the hurdles and barriers they have overcome. There are three paths visualized on their way to the top; Footprint Reduction, Product Innovation and Culture Change³⁴. In the progress they admit whenever there were goals they did not achieve and why and how to achieve them in the future. In this way Interface demystifies the misinterpretation that whenever companies state their intention to become sustainable they must do it right away otherwise they can be held against it. So far, Interface has achieved to use 36 % biodegradable materials, reduced water use with 80 %, reduced waste to landfills with 77 %, reduced greenhouse gases with 44 %, use renewable energy for 30 % of their total energy consumption, and has reduced energy use per unit with 43 %, since 1994. This amounted to savings of 433 million dollars in avoided waste costs since 1995³⁵. Interface is a great example of how reducing environmental footprint saves cost and that this attempt is a long process, but they are still the world's largest modular carpet manufacturer.

Even if one could overcome the question of costs, the task of becoming a sustainable company is large, long and complex. One reason for this can be the lack of internal expertise to solve the task of going green. When employees need to be retrained or external consultants need to be employed the argument falls back on cost again, especially by companies operating from an Ego-consciousness, as they only operate for the short term. However, all changes within a company impose cost so I would argue it is a lack of support from the management in the end. If the management perceived sustainability as being significant for their companies it is likely that sufficient resources would be prioritized, as Ray Anderson did. However, for the management to prioritize sustainability there need to be a business case to defend such a large investment. In section 8 I will argue how sustainability can improve the competitiveness of companies.

³² <http://www.interfaceglobal.com/Sustainability.aspx>, 23-09-2011

³³ <http://www.interfaceglobal.com/Sustainability/Our-Progress.aspx>, 23-09-2011

³⁴ <http://www.interfaceglobal.com/deploy/index.html#/home>, 23-09-2011

³⁵ http://www.interfaceglobal.com/ZazzSustainabilityAssets/pdfs/Interface_pdf_summary_report.pdf, 23-09-2011

The CDW survey does not cover all relevant green barriers for businesses. Other barriers should be included as well. I would add following barriers to the list:

- Prejudice
- Fear
- Cynicism

Many other barriers could be formulated as e.g. ignorance about sustainability, slow implementation, new technology investments, and uncertain return on investment. However they can all more or less fit under the seven already listed. The last three listed are elements of the collective corporate consciousness that all companies - like individuals - hold and also navigate from. They are all limiting thoughts that can hinder organizations in seeing things more clearly from an Eco-consciousness. Suggesting to operate from an Eco-consciousness can ignite prejudice such as there are no profits in going green, that it is just a PR gimmick and that it is just an extra cost. Fear about getting the invested capital in going green in return can occur and cynicism as it is too late to do anything about climate change anyway, can all create a distance toward seeing reality more clearly without limiting thoughts. In the end, the collective corporate consciousness is the main problem in going green as "... I am optimistic that we can shift gears to a Green Economy. If humans can go to the Moon; submarines sent under the Arctic; liver and heart transplants perfected; the mysteries of the human genome deciphered and tiny nano-machines designed then managing a transition to a low carbon society must be within humanity's grasp and intellect." as Achim Steiner, UN Under-Secretary General and UNEP Executive Director says³⁶. It is all about the will in the end and thus how we think and act.

6.2 Theory U as a tool for change

The new change-, innovation- and leadership model Theory U by Professor Otto Scharmer from MIT basically addresses how to change the consciousness of individuals, organizations and nationally, to better meet the tendencies and changes within the external environment. This theory will be applied to analyze how to change the collective corporate consciousness from an Ego- to an Eco-consciousness as it is applicable to a collective level of consciousness and because it focuses on identifying blind spots within companies as systems theory and double loop learning likewise do (Scharmer, p. 30).

³⁶ http://www.solutions-site.org/artman/publish/article_384.shtml, 23-09-2011

Theory U is the process of becoming aware by identifying limiting thoughts such as what Michael Ray from Stanford University calls the Voice of Judgment, Fear, and Cynicism. The theory is very much inspired by the aforementioned neuroscientist Francisco Varela and his book *On Becoming Aware* (2003). In it Varela describes how he thinks one can become aware by *suspending*, *redirecting* and *letting-go*. By suspending he means putting away habitual patterns, redirecting attention from the exterior to the interior and then letting go of old identities to allow something new and creative to appear (Scharmer, p. 36). The challenge of our time is, according to Scharmer, to become aware of our own awareness and thus of how we perceive the world, because we are trying to solve future challenges with past mindsets.

This is the blind spot of our time. This blind spot can occur in individuals, groups, institutions, societies, and systems (Scharmer, p. 22). But we simply do not know enough about experience, as Varela proclaimed (Scharmer, p. 35). This opening of our minds by ceasing to “download” habitual patterns of the past, to become aware of when our limiting thoughts as judgments, fear and cynicism are limiting us in seeing reality more clearly, can help us sense the emerging tendencies in society that companies need to adapt and innovate to. Opening up can clarify who we really are underneath these limiting thoughts, i.e. our authentic Self.

This allows for better prototyping one’s ideas and intentions by bringing them into reality through experiments, which Scharmer calls for Crystallizing and Prototyping. Companies can thus better see emerging and arriving tendencies that will have effect on them and adapt their organization to these by innovation. It is a huge challenge for companies to see these tendencies in time because of their limiting thoughts.

The main message of Theory U applied to climate change and the argumentation in this thesis, could be that companies cannot respond and adapt to this new major challenge by operating from the old Ego-consciousness that created it. Therefore, companies need to shift their consciousness to an Eco-consciousness. As change management professors Robert Kegan and Lisa Lahey from Harvard University state on changing our consciousness in order to learn and adapt to the challenges of the 21st century in their book *Immunity to Change* (2009): “If we do not do that, we can learn and reflect as much as we want but the changes we seek to meet... will not be met because all this learning and reflecting will come from a place within our existing mindset.” (Keegan and Lahey, 2009, p. 24).

It should be noted that Scharmer tends to make an over-complex interpretation of an already complex subject by applying his own terms such as “field structure of attention” or “the inner

place from which we operate” instead of the more well-known term consciousness, which basically is the same as it is from our values, perception, beliefs etc. we create our worldview and actions (Scharmer, p. 13). Instead of using terms like the tendencies and trends in the external environment, he describes this as the vague and abstract term “the future that wants to emerge”. Seeing and acting from and on the tendencies in the external environment is what he terms as “Presencing” (Scharmer, p. 7). However, presencing also covers redirecting attention toward these tendencies and in the process of adapting to them, moving into the flow state of mind where one forgets about time, place and ego (Scharmer, pp. 76-77). Because of all this the theory can therefore be complex to understand and explain, which can hinder its otherwise important message to spread to especially companies.

With that criticism stated, companies can open their collective corporate consciousness up toward acting more holistic, systems thinking, and long-term by applying the thought behind Theory U. They can become aware of the competitive business advantages climate change opens up for businesses, by identifying their limiting thoughts such as prejudice, fear and cynicism toward sustainability. Removing them and having the courage to engage in adapting and innovating to become sustainable, companies can open up for entirely new business opportunities.

Companies’ prejudice and concerns about the cost of going green need to be addressed, so they will not be ignited and hinder the company in becoming green. Cost is the main green barrier for companies, as they can only exist and make a change in behavior if there is profit, or improved business performance, in doing so. Therefore, the social, moral and ethical arguments for going green only qualify so far as they can be justified economically.

Therefore, one must instead first and foremost argue that *going green is going black on the bottom line*. The change from an Ego-consciousness to an Eco-consciousness should therefore be argued to improve profits and competitiveness. Then companies should, in theory, change their consciousness from an Ego- to an Eco-consciousness.

6.3 Immunity to Change

However, immunity to change always happens whenever such a large transformation as changing the collective corporate consciousness takes place, as it is the worldview and belief systems of people and companies that are being challenged. Immunity to change can occur within individuals but also within a group of people such as a company (Kegan and Lahey, p.

101). In order to identify what this collective immunity consists of, the company needs to first decide and identify what it has committed itself to do (the Intended), then compare to what it really does that goes against this commitment (the Actual), and identify hidden collective competing commitments and identify the larger collective assumptions (the Identified and the Voices of Judgment, Fear and Cynicism) (Kegan and Lahey, p. 307). All of these intertwine and mutually influence each other.

The content of the Intended of a company can be the same as what it has committed to do. This could for example be the mission of Dow Chemicals, the large American chemicals manufacturer “To passionately innovate what is essential to human progress by providing sustainable solutions to our customers.”³⁷. In order to find out what goes against the Intended the company needs to identify its Actual as this represents the consciousness that governs actual behavior. This could be that most employees do not incorporate sustainability into their behavior as they do not know how to or are resistant to change their consciousness to an Eco, due to a strong mechanical solidarity. Collective competing commitments could be that Dow has committed itself to achieve specific profit and productivity goals for shareholders and cost cutting within the next fiscal year, which in their minds could be an excuse for lowering the sustainability standards and efforts if the profit goals cannot otherwise be achieved in the short run. The larger collective assumptions can in such a case be that sustainability is a cost and a luxury one can only afford when the company’s economy is good.

By making all members of the company first individually reflect over and formulate the content of these four tough and rough steps and then discussing them, the company can identify what elements within the company are limiting it to operate from an Eco-consciousness. However, it can be hard to get the real and deep assumptions within the company to the surface as many people might be hesitant toward criticizing its own company. To overcome that problem the formulation could be done anonymously and collected by third parties and then presented to the management or by creating a real room for real trust and openness by ensuring that no one will be e.g. fired or degraded for their comments in the collective discussion. On the contrary they should be rewarded for their courage and skillfulness to identify and formulate blind spots that can take the company in a new more prosperous direction.

³⁷ <http://www.dow.com/about/aboutdow/vision.htm>, 23-09-2011

To address the prejudice, fear and assumption that going green is only a cost and that there are no money to be made in pursuing to go green, I will in the next section argue economically that *going green is going black on the bottom line* by showing how sustainability improves the competitive advantage of companies. I will name this argumentation *The Aikido Trick* as it is inspired by the martial arts, where one seek to use the strength and energy of the opponent against himself. The strength of companies is their ability to organize toward a common purpose as e.g. the pursuit of profit. Therefore economic arguments for going green should, in theory, make companies pursue greening the company. When companies start to pursue the green path due to profit maximization the hope is that they gradually will discover how an Eco-consciousness can improve their competitive advantage and do good at the same time, thus making the Ego-consciousness' devastating consequences unnecessary.

7. Sustainability as a measurement of competitive advantage

In this section I will argue on what points sustainability improves the competitive advantage of companies to open the collective corporate consciousness for these business opportunities, in order to change the Ego-consciousness to an Eco-consciousness. To do that I will apply Harvard Business School professor Michael E. Porter's Diamond Model on the competitiveness of countries. First, I will present the theory, then its critique and extensions and then show how sustainability improves the Diamond Model.

7.1 The Diamond Model

In 1990 Porter published the groundbreaking book *The Competitive Advantage of Nations* with a clear reference to Adam Smith's revolutionizing *The Wealth of Nations* from 1776, which analyzed, theorized and structured the foundations of economics at that time. In his publication Porter attempted to establish a new school of thought in the field of comparative and competitive advantages by arguing that a nation's prosperity is not only evaluated on e.g. its currency, natural resources, labor pool or interest rates as Smith could be said to argue. Instead Porter suggests that national prosperity is created by innovation and productivity (Porter, 1990, p. 45). Porter named his theory *The Diamond Model*. It consists of four basic elements; *Factor Conditions*, *Demand Conditions*, *Firm Strategy, Structure and Rivalry*, and

Related and Supporting Industries and *government, chance and culture*, as seen in figure 1 below.

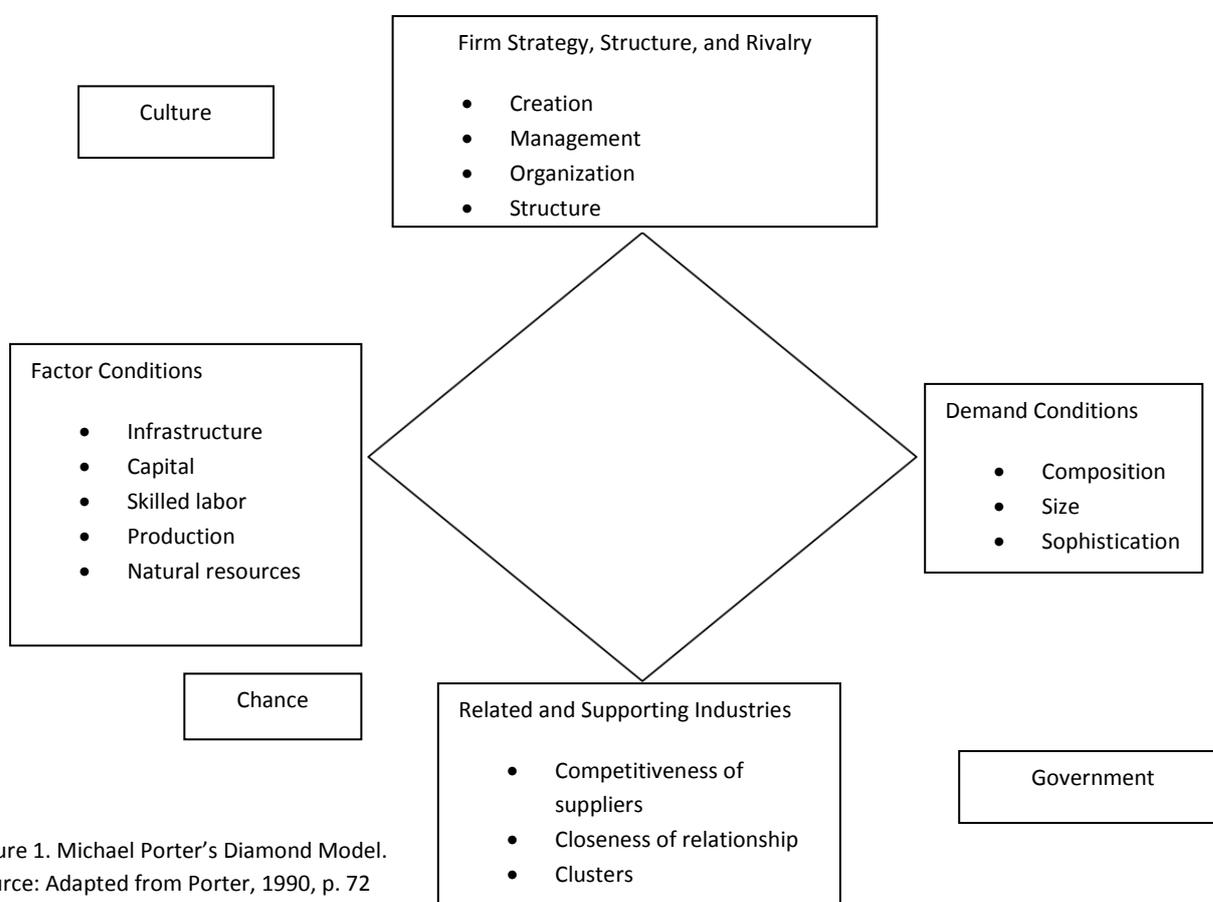


Figure 1. Michael Porter's Diamond Model.
Source: Adapted from Porter, 1990, p. 72

7.1.1 Factor conditions

The factor conditions are the factors of production in a nation. These include elements such as labor, land, capital, infrastructure and natural resources. Porter argues that the most important factor condition as a basis for creating prosperity is *created* by a nation and not inherited. This means that natural resources, i.e. finite resources, cannot create a lasting foundation for competitiveness. Instead, human capital is what creates innovation. A well-educated knowledgeable skilled labor force that is productive and efficient backed by a strong research and scientific base is a lasting crucial element for true competitive national advantage (Porter, p. 75). However, a good base for innovation requires capital, another factor condition. Japan is a great example of this correlation, as they have no natural resources but is still the world's third largest economy due to the country's strong emphasis on investing heavily in innovation and education throughout more than fifty years. Other factors have, however, influenced the Japanese economy, which is not striving at the moment.

7.1.2 Demand conditions

Demand conditions consist of the composition, size and sophistication of the domestic demand. By composition is meant the nature of buyer needs and how they make companies interpret and respond to them. By sophistication Porter means the specific characteristics of the consumers. Sophistication in this sense is how demanding the consumers in the nation are of e.g. quality. This puts pressure on companies to adapt to these quality demands (Porter, p.86). The sheer number of consumers in a market also influences the competitiveness.

7.1.3 Related and supporting industries

The third indicator is related and supporting industries, e.g. suppliers and their level of efficiency in delivering on time in a cost-effective way and how good and close the relationship between company and supplier is in relation to creating synergetic mutually beneficial relations through the exchange of knowledge and ideas. The closeness of the relationship between supplier and company is usually very strong and synergetic in clusters, such as e.g. Hollywood or Silicon Valley. Companies usually cluster because they are in the same line of business. When that is the case they can benefit from the physical closeness of clustering, which makes operating procedures faster and personal and networked relationships become stronger. Clustering among partners and suppliers also makes knowledge sharing faster and more convenient. Clustering among competitors enhances the competition on all business parameters and thus innovation, but it also inspires one another and encourages collaborations (Porter, pp. 100-107).

7.1.4 Firm strategy, structure and rivalry

This element creates competitive advantage by the way companies within a country is managed, organized and created. These elements influence the entire performance of a company; goals, vision, mission, manufacturing and productivity, research and development and thus innovation, and motivation, i.e. the efficiency of and ability to innovate through the human capital. It is important to motivate the employees to use their existing skills to their fullest potential, but also to make sure to improve their skills constantly, through continuous education.

A competitive environment forces companies to differentiate themselves through innovation. Porter argues that a strong domestic rivalry functions as a test for companies to toughen them up and preparing them for the strong global competition (Porter, pp. 107-124). However, Porter overlooks the companies that are “born global” here because his model is domestic-focused.

Porter further addresses the role of the government. Through regulations governments can limit but also ignite companies in their pursuit of competitiveness. Porter therefore argues that the government's role should be to encourage companies to pursue competitiveness by creating a business environment that enhances companies' possibilities to do so by regulating e.g. product and environmental standards and deregulating competition (Porter, p. 127).

The influence of chance must be acknowledged in the Diamond Model. As the globalized business context becomes more complex and the world more interconnected than ever before, the probability of coincidences happen is more likely, especially in a business context as such often has an extensive network from which chance can occur (Cho, Moon, Kim, 2007).

All the four quadrants are interdependent on one another and must function in correspondence to reach the highest form of synergy and potential for competitive advantage.

7.2 Critique and Extensions of Porter's Diamond Model

Porter's theory has been criticized by several scholars such as Rugman (1991), Rugman and D'Cruz (1993), Moon, Rugman Verbeke, (1998) and Dunning (2003) as stated by Cho et al. (2007). Due to limitations of this report I will only describe the Double Diamond Model and the Generalized Double Diamond Model. Thus e.g. The Nine Factor Model and The Dual Double Diamond are left out.

The critique is mainly concentrated on Porter's national domestic focus and the understated role of the government, as he overlooked the international influence on national competitiveness. Thus, the single Diamond Model is not sufficient to explain the complex nature of competitiveness in today's globalized economies (Cho et al., 2007). The Double Diamond Model developed by Rugman and D'Cruz in 1993 offers both a domestic view and an international view on competitiveness and recognizes the influence of multinational activities. Porter's model was not sufficient in describing e.g. Canada's multinational activities and could not explain the success of New Zealand's export-dependent and resource-based economy and Singapore's success (Moon et al., 1998). Moon et al. (1998) extended the Double Diamond Model to The Generalized Double Diamond Model, basically suggesting to measure competitiveness by combining both the national single Diamond Model with the global-focused Double Diamond model on the basis of proving Porter's single Diamond Model insufficient in explaining Korea's and Singapore's competitive edge, as both these economies are highly dependent on multinational activities. In recent years the cultural

aspects of especially Geert Hofstede's study from 1980 has been included and adapted as an important variable determinant for the success of national competitiveness (Hofstede, 1983).

7.3 Criticism and improvement of existing studies on competitiveness

In this section I will present my criticism of the existing studies described above on the subject of competitiveness, why my criticism is relevant and how sustainability improves the studies on competitiveness. I acknowledge the extensive in-depth studies done by the aforementioned scholars and agree on the point that Porter's single diamond should include an international aspect as well. From the arguments and data which will be put forward here I argue that environmental sustainability should be included in the Diamond Model on equal levels as the four elements and government, chance and culture.

Not much attention has been directed at including and acknowledging environmental sustainability as a factor of competitive advantage. This is perhaps due to the fact that the area of competitive advantage has been mostly focused on the direct measurable economic advantages of competitiveness and it has been hard for scholars to prove the correlation between being environmentally sustainable and economically healthy.

However, Porter has actually addressed this issue (Porter and van der Linde, 1999). He argues that environmental regulation and restriction by the government can spur innovation and productivity within companies as limitations often force companies to figure out an innovative way to use these constructively instead of trying to be protective and lobby against the regulations. Environmental regulations on e.g. waste output from manufacturing and dumping of waste can force companies to think of ways to decrease and avoid this waste and thus become more efficient in the manufacturing stages, which decrease costs and increase the output in relation to input, i.e. productivity. As Porter writes "When scrap, harmful substances or energy forms are discharged into the environment as pollution, it is a sign that resources have been used incompletely, inefficiently, or ineffectively." (Porter and van der Linde, p. 1). Environmental waste is thereby economic waste. Furthermore, costs are added whenever waste needs to be disposed off and handled. In their 2011 article Porter and Kramer further explored this topic. They argue that *creating shared value* and thus improving competitiveness by improving value for society is the solution to aligning business with society, i.e. the economy with the ecology (Porter and Kramer, p. 66).

However, reduced costs are only one advantage of optimizing a business' environmental footprint. Here are my six main economic arguments for companies to go green:

- Improved production apparatus: Cost savings and productivity
- Rising consumer demand for green products
- Enhanced innovation
- Improved brand, reputation and goodwill assets
- Attracting talent capital
- Attracting capital from social investors

All these arguments put together can result in improved competitive advantage if followed correctly and fully committed, which I will argue below by extending the studies of competitiveness.

8. A new model for economically and environmentally sustainable competitive advantage

In this section I will with secondary data containing some numerical data explain the six competitive advantages of sustainability and how they correlate to the Diamond Model.

8.1 Improved production apparatus – cost savings and productivity

As mentioned many companies have traditionally viewed going green as a cost just to achieve positive PR and as a legal imposed regulation by the government to comply with. The companies with this view are typically operating from an Ego-consciousness, limiting them in saving costs and increasing productivity. This is a fundamental conflict in the capitalistic system. Shareholders generally demand results here and now instead of investing in long-term projects such as going green. The short-term view blinds executives and board members from seeing the holistic picture (Porter and Kramer, p. 66).

However, major savings are to be achieved by investing in going green – in the long run. The chemical giant DuPont saved 3 billion dollars in 14 years due to its strong focus on reducing greenhouse gas emissions while they in the same period grew the business 30 per cent (Senge et al., p. 111). As cutting costs is something that can be proven in numbers and thus be understood by shareholders and executives, this was the first step for DuPont's CEO Chad

Holliday on his mission of going green, when they put the plan into action in 1990. DuPont was at that time the world's number one polluter (Senge et al., p. 124). Their goals were to reduce waste, air emissions and energy usage. By 2004 air carcinogens were decreased by 90 %, hazardous waste by 40 %, and greenhouse gas emissions by 70 % (Senge et al., p. 126). The 3 billion saved dollars and the improved sustainability, directly influenced the factor condition *production* of DuPont positively as the manufacturing reduced its waste and thereby, as stated by Porter and van der Linde, its inefficiency. Moreover, the other factor condition *capital* increases whenever money are saved, as the mark-up increases whenever costs are reduced.

Companies can furthermore become much more productive by thinking green by e.g. applying the mentioned theory Cradle-to-Cradle (McDonough and Braungart, 2009) as explained in section 6.1. The idea is that waste equals food for another system, as in nature. In this way companies come closer to eliminating waste and thus also eliminating the costs of getting rid of waste in e.g. landfills and the costs of regulated emissions.

The company TerraCycle is founded on the idea of eliminating waste. It encourages people and companies to send in waste by donating 2 cents pr. waste unit. They then reengineer the waste to e.g. loud speakers or bags, or clean the waste and resell it as the same material to manufacturing companies. So far it has 23 million people collecting trash, 2 billion units collected and donated 3 million dollars for charity and grows its revenue with 100 % pr. year³⁸.

Some companies can even sell their waste, as General Mills do with the oat hulls waste from their oat meal Cheerio's as biofuel, thus functioning as food for another system (Senge et al., p. 112). General Mills claims that companies can save up to 20-30 % of their fuel costs by this method³⁹ and that they recycle 86 % of their waste, earning more than they spend on disposal (Senge et al., p. 112).

In other words; *companies become more productive, gain more capital and saves costs on production from going green.*

8.2 Rising consumer demands for green products

The advantages of going green are not only internal in the company. There are many large opportunities to fulfill new undiscovered and unmet consumer needs. A survey from 2007 by

³⁸ <http://www.terracycle.net/>, 23-09-2011

³⁹ <http://www.sunpack.com/blog/2010/07/general-mills-to-use-cheerios-for-energy/>, 23-09-2011

the research company, Ipsos MORI, concluded that among 17,000 people in large global markets more than half responded they preferred products from companies with a good green reputation. Moreover, another survey from 2005 showed that *ethical consumption* was up 11 % compared with the year before, with an estimated worth of 30 billion sterling pounds. Ethical consumption is buying products that meet ethical standards. This figure is actually higher than retail sales of beer and cigarettes (Senge et al., p. 110).

Another large survey on green demand done since 2008 by National Geographic and GlobeScan, called the Greendex, shows an increase in green consumption in all but one of the 17 countries surveyed, with the top scorers being the growing BRIC countries – Brazil, Russia, India, and China, in 2010. Greendex surveys the environmentally friendly consumer behavior of 17,000 people. By this, they mean consumers' transportation pattern, household energy and resource use, consumption of food and everyday consumer goods, and what actions consumers take to minimize their behavior on the environment⁴⁰. It ranks average consumers according to the environmental impact of their consumption patterns. The survey showed that Indians, Brazilians and the Chinese had improved their environmentally friendly consumption behavior the most in that order, with Americans showing the worst performance⁴¹. It is significant that the demand for green products continue to increase even during a financial crisis, especially in the emerging markets. The survey does not, however, clearly disclose how much the demand has increased, which is critical.

The numbers and facts from these three surveys, however, clearly show how large a size of demand there is for offering environmentally friendly products. The numbers prove that the sophistication of the demand has changed drastically in recent years as many consumers now prefer green quality products. If companies can meet this large sophisticated demand it can increase its competitiveness. One of the reasons for the change in consumer demand for green products could be that it sends out a signal of caring for our planet. Another reason is the increased awareness of environmental issues in the general population and the demand of transparency consumers are imposing on companies. In a world of global competition the consumer holds the true power in the end.

Companies can tap into entirely new and growing demand markets by going green.

⁴⁰ <http://environment.nationalgeographic.com/environment/greendex/>, 23-09-2011

⁴¹ http://images.nationalgeographic.com/wpf/media-live/file/GS_NGS_2010GreendexHighlights-cb1275487974.pdf, 23-09-2011

8.3 Enhanced innovation

When the demand for green products increases an entirely new market for green products appears that companies need to innovate new products, and adapt their current products to. One could call it the *Green Ocean* with reference to the innovation book *Blue Ocean* by W. Chan Kim and Renée Mauborgne (2005) that divides markets into competitive overcrowded *Red Oceans* and unique niche *Blue Oceans*.

As governments continuously impose more regulation and economic punishment on waste and pollution, companies have to figure out a way to reduce waste and pollution if they want to avoid the fines and legal actions by the government. DuPont met these new regulations because it – beside the cost-cutting and legal issues- saw long term competitive innovative advantages and profit in doing so, by completely changing its course of action from focused on synthetic systems to focus on biotechnology and natural systems (Senge et al., p. 129). Since the company went green it has e.g. developed biobutanol, a biofuel better than ethanol, and AtticWrap to insulate buildings which saves huge amounts of energy costs (Senge et al. p. 130).

Climate change creates new market opportunities within e.g. developing natural sustainable energy sources which can make the world independent of fossil fuels. The one who deciphers this enigma and can make the technology affordable will become the new powerhouse of the future, as the demand for sustainable energy is growing almost exponentially parallel with the rising prices of oil. The innovation possibilities are numerous; wind, waves, solar, and geothermal energy sources are all being developed at the moment in the pursuit of the new “green oil”. To innovate on this issue DuPont brought in their suppliers and stakeholders from related industries such as Greenpeace and government officials to collaborate and innovate. By doing so companies can also come up with new ways of improving productivity as Coca-Cola did by transforming their manufacturing sites into recyclable closed-loop water plants in close collaboration with the World Wildlife Fund (Senge et al., pp. 77-94).

By going green companies can improve their competitiveness by innovating to new green markets.

8.4 Improved brand, reputation and goodwill assets

The Greendex states that 44 % of the surveyed claim that the largest reason for discouraging environmental friendly consumer behavior is that “Companies make false claims about the environmental impact of their products.”⁴².

In 2005 BusinessWeek ranked DuPont as number one in its list “The Top Green Companies”. DuPont has gone from the most polluting to the most sustainable company in 15 years. The impact of consumer perception of a company’s products is increasingly vital. 80 % of a company’s value is not reflected in the accounting system, which means that most of this percentage is to be found in brand, reputation and goodwill (Senge et al., p. 109). The statistics presented regarding green consumer demand support that these assets will be improved by going green. Combined with the knowledge that the majority of a company’s value is reputation and brand it gives direct value visible for shareholders and top management to go green in terms of increased market value of the company.

However, some companies have fallen to over-communicate its green initiatives, also called *green washing*. These companies have often been exposed and punished by the media and the consumers. This has lead to many green companies not communicating its green initiatives, in fear of ending in a scandal, i.e. *green hushing*. Companies need to know that communicating about green efforts should not be done in a way where they are saying that they have gone 100 % green. Instead, companies should be inspired by Interface and acknowledge and explain that it is a long and hard process and they will probably have set backs but they are determined to manifest their intentions and goals.

By going green companies can increase the value of their brand, reputation, and goodwill assets and thus in the end the accumulated value of their company.

8.5 Attracting talent capital

Going green provides the company’s assets with a large amount of goodwill from all stakeholders including current but also potential new employees. 92 per cent prefer to work for an environmentally friendly company (Senge et al., p. 111). Going green thus attracts the best talent and the brightest minds which will improve both the factor condition *skilled labor* and the entire *firm, strategy, structure and rivalry*. Strategy is strengthened as the company is enhanced overall by attracting the best talent as talent, or living assets, is what generates

⁴² http://images.nationalgeographic.com/wpf/media-live/file/GS_NGS_2010GreendexHighlights-cb1275487974.pdf, 23-09-2011

innovation and in the end profit, as Bragdon argues. Shell's former CEO Jeroen van der Veer likewise stated that "The best people want to do work that contributes to society..." (Senge et al., p. 111). McKinsey also identifies talent management as one of the five most important trends for companies in the future⁴³. Rivalry is furthermore improved as the competition for the best talent is increased by going green. Moreover, green companies can obtain goodwill from its suppliers and thus the relationship with them will become closer and thus the lower quadrant of the diamond also improves.

Companies can improve their living assets and thus innovation by going green and attracting the best talents.

8.6 Attracting capital from social investors

Investors and especially so-called venture capitalists are expressing an enormous interest in investing in green companies at the moment, especially clean tech companies that can solve the energy enigma. Investments in cleantech have been growing with 50 % annually, which is the highest growing investment category. Cleantech Group, former Cleantech Venture Network, has a portfolio of a staggering 6 trillion dollars worth of cleantech assets (Senge et al., p. 134). By going green companies can get hold of some of these trillions and thus potentially improve the factor conditions *capital*, which again can be used for further investment in innovation and productivity.

As green investment categories are the highest and fastest rising investment category, companies can improve their liquidity and ability to invest in innovation by going green.

8.7 Competitive sustainability

By operating from the Eco-consciousness companies can in these six ways improve their competitiveness significantly and thus obtain what I term as *competitive sustainability*. Some companies can be sustainable but not in a competitive way, if e.g. there is no demand for its green products, if the costs of the investment are too high compared to the time goal set for break-even, if they do not have the right skills employed to implement the transformation etc. Therefore, it is important to underline that all sustainability initiatives should be argued economically otherwise the management cannot defend it to the board of directors, shareholders and all the other stakeholders.

⁴³ http://www3.wfanet.org/documents/3/McKinsey_Quarterly_Article.pdf, 23-09-2011

With all these arguments in mind I have shown how sustainability can improve competitiveness and hereby suggest to include environmental sustainability in the Diamond as a new complimentary element of measuring competitiveness on the same level as the four quadrants and culture, government and chance. I have chosen to place sustainability “outside” the Diamond because sustainability is a factor that influences and enhances the four components “within” the Diamond. This Diamond should be applied both nationally and globally as the Generalized Double Diamond. With the environmental sustainability factor included The Environmental Sustainability Diamond Model will take the following form as seen figure 2 below:

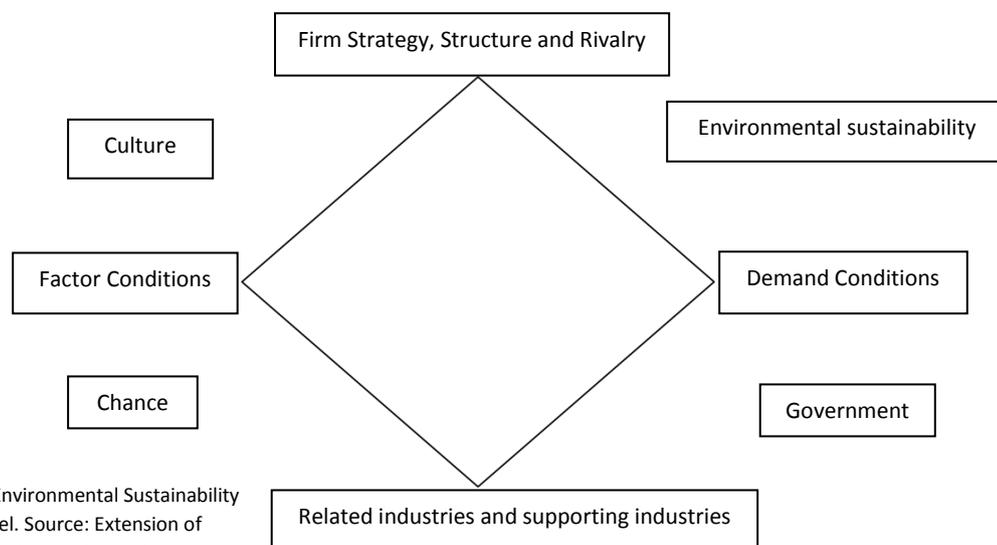


Figure 2. The Environmental Sustainability Diamond Model. Source: Extension of existing models, by Troels Kranker

9. Conclusion

In this thesis I have attempted to provide one possible answer to the research question of *how can companies adapt to climate change and simultaneously improve competitiveness and profits?* As the heavy pressures on going green from climate change and from stakeholders are becoming ever more apparent, they are forcing companies to address them. I have argued to better align the economy with the ecology by changing the deepest place from where companies navigate, i.e. their dominating short-termed, egoistic, greedy and narrow-minded Ego-consciousness to a holistic, systems thinking, open and long-termed Eco-consciousness not because it is social, moral, ethical or responsible but because the Eco-consciousness improves competitiveness and profits.

To initiate this fundamental change of companies' worldview, consciousness and collective consciousness studies was first analyzed to get a clear understanding of the two terms and to apply the latter term to organizations. It became clear that the collective corporate consciousness consisted of three levels, the Intended, the Actual and the Identified with Internal and External aspects of it. Collective consciousness was applied to organizations by combining it with organizational theory and metaphors. In that way it was possible to identify the dominating mechanical solidarity Ego-consciousness and the emerging organic solidarity Eco-consciousness within companies. To identify what hinders companies in shifting their collective consciousness, the most significant barriers of going green for companies were identified and discussed. It was apparent that cost and complexity were the two dominating green barriers. It was then possible to analyze how these barriers could be overcome by applying Theory U and overcoming immunity to change. The prejudice that going green is only a cost was addressed by arguing that *going green is going black on the bottom line*. This was done by arguing that sustainability improves Porter's Diamond Model on six points; improved production apparatus, rising consumer demand on green products, enhanced innovation, improved brand, reputation and goodwill assets, attracting talent capital, and by attracting capital from social investors thus extending existing competitiveness studies to The Environmental Sustainability Diamond Model.

By following this approach and argumentation, companies can, in theory, adapt to climate change and improve their competitiveness and profit significantly, as shown with the examples of Interface, DuPont, TerraCycle, General Mills and GE. The argumentation and data in this report show the connection between economic performance, environmental sustainability and competitive performance. From this report it is clear that sustainability influences all four quadrants of the Diamond Model heavily. Thus, DuPont improved its innovation and productivity significantly after implementing its new green strategy, making the company more competitive globally and resulting in growing business and prosperity.

It has become clear that the rising Eco-consciousness forces companies to evaluate their purpose. They must due to the pressures of climate change and stakeholders ask themselves whether their purpose is it to generate profits and dividends for its shareholders on the short term or to create prosperity for stakeholders including shareholders on the long term?

It is also very important to emphasize that becoming a green sustainable company is a long continuing ongoing process that constantly needs strategic prioritization and attention. It

should not happen through a revolution as the company still needs to operate within old short-term structures of the capitalistic system. If a company uses 100 % renewable energy, and have zero emissions and zero waste, they must continue to optimize their presence in the ecological cycle in order to stay competitive and sustainable, as the external environment constantly changes. In my opinion a company can never be too green. Some would argue that it will no more be a competitive advantage to be green once all companies have become green. I would save that discussion for when we get there as it will be a luxury problem and instead emphasize that the external environment always change and therefore companies must as well. It is therefore not certain we will ever get to that point where all companies are green. However, I would guess that companies then could begin to compete on generating the most positive growth impact on nature and society instead of merely reducing its environmental impact.

For further research on the ECO-nomics theory I will suggest to investigate the field of collective corporate consciousness more and how to concretely measure sustainability in companies to create worldwide generally accepted measurement standards. I likewise suggest more research to be done on how to practically implement the ECO-nomic theory in companies.

The issues of sustainability are more concerning than ever and cannot be overlooked in the present and in the future by individuals, companies or governments if they wish to survive and to prosper. The main message and argument in this thesis is that sustainable value equals competitive and stakeholder value, which eventually equals prosperity for all; companies, society and the environment.

It is my sincere hope that companies focus on the collective corporate consciousness and open it up to see the huge business possibilities that lies in going green. Not tomorrow, but today. Companies have the unique possibility to realign the human race, our way of life and our institutions with our ecological foundation if we are willing. It is up to our consciousness.

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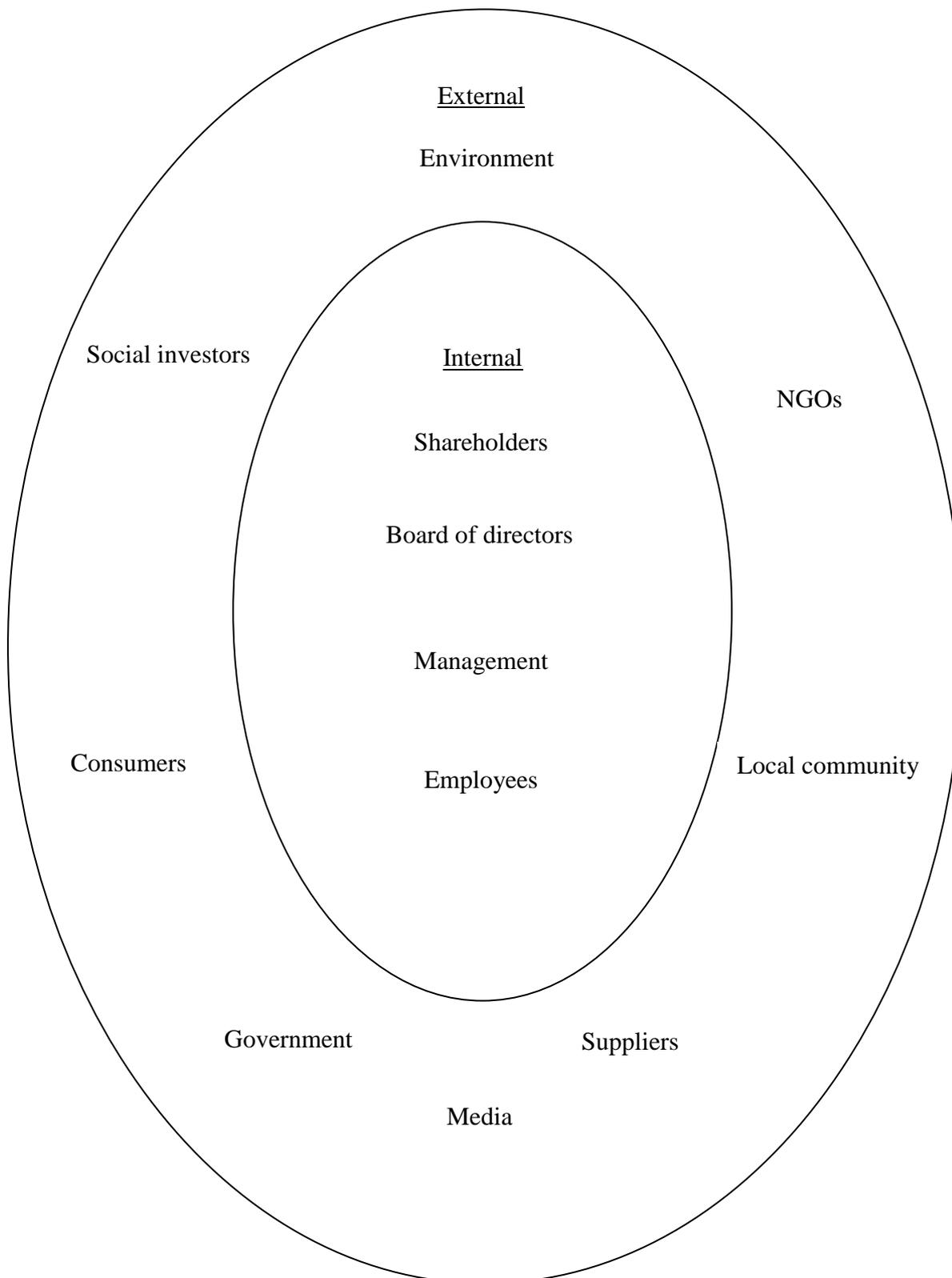
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11. Appendix 1 – Generic stakeholder map example



Source: Adapted from Tench and Yeomans, p. 241, who refer to Letza et al., 2004: 243