Coworking
A Creative Workspace

Bachelor Thesis within Business Administration
Author:  Anton Muhrbeck
         Richard Waller
         Martin Berglund

Tutor:  Veronica Gustafsson

Jönköping 23rd of May 2011
Acknowledgements

It has been a pleasure to write this bachelor thesis. It would, however, have been impossible without the help from some people. These individuals have provided us with advice, knowledge and support which have guided us throughout our work. We would, therefore, like to show our appreciation to them.

We would, first and foremost, like to acknowledge our tutor, Veronica Gustafsson, who has provided us with valuable insights, support and expertise during the semester.

Secondly, we would like to show our appreciation to Kent Edquist, manager at The Hub, who has sacrificed both time and resources. His help has been crucial during the process of writing this thesis as his commitment has enabled us to conduct our empirical research.

Thirdly, we would like to thank our six interviewees for their participation. They have provided us with the data that has laid the foundation for our research.

Thank you.

Anton Muhrbeck, Richard Waller, and Martin Berglund
Abstract

Coworking is a new type of work model that has been developing rapidly during the 21st century. However, no academic research has been conducted on the subject yet. We have, therefore, decided to study the subject in order to evaluate if and how Coworking has an effect on creativity. The problem with this thesis is that creativity is a broad subject that includes several variables. This has led us to study theories within the field of: innovation, motivation, personal traits, and environment in respect to the Creative Process by Sawyer (2006). These theories have laid the foundation of our theoretical framework and are used to study our purpose and answer the research questions.

This thesis is built upon data from individual case studies from semi-structured interviewees with coworkers from The Hub in Stockholm, Sweden. These interviews have then been transcribed and categorized by the Content Analysis in accordance with Hancock (1998). The data has then been analyzed in-depth by using Eisenhardt’s Cross-Case Pattern Analysis (1989) in order to evaluate the relevance and reliability of the data.

The results from our analysis are presented in unity with our method and theoretical framework, this part concludes with a reflection over our purpose and suggestions for future areas of research. The main finding from the results is that Coworking has a positive effect on creativity. But, this is mainly due to the mix of people participating in Coworking. The diverse group of coworkers creates a network of knowledge located in an open atmosphere that simplifies the creation of new ideas.

We believe that this thesis has contributed to the academic society as it currently is the only academic paper within the area of Coworking.
Table of Contents

1 Introduction .............................................................................................................. 5
  1.1 History ................................................................................................................. 6
  1.2 Problem ................................................................................................................ 6
  1.3 Purpose .................................................................................................................. 7
  1.4 Perspective ............................................................................................................. 7
  1.5 Delimitations ....................................................................................................... 8
  1.6 Definitions .......................................................................................................... 8
  1.7 Thesis Disposition ............................................................................................... 11

2 Frame of Reference .............................................................................................. 12
  2.1 Background: Creativity ....................................................................................... 12
    2.1.1 The Creative Process ..................................................................................... 14
    2.1.2 The Creative process: Unconscious Thinking ................................................. 14
  2.2 Stages of the Creative Process ........................................................................... 15
    2.2.1 Preparation Stage .......................................................................................... 15
    2.2.2 Incubation Stage ............................................................................................ 16
    2.2.3 Insight (Illumination) Stage ........................................................................... 18
    2.2.4 Verification Stage .......................................................................................... 18
  2.3 Analyzing: The Creative Process .......................................................... 19
    2.3.1 Limitations and Critique .............................................................................. 19
  2.4 Innovation ........................................................................................................... 20
    2.4.1 Open Vs. Closed- Innovation ....................................................................... 21
  2.5 Idea generation from Serendipity ..................................................................... 22
  2.6 Motivation ........................................................................................................... 23
    2.6.1 Intrinsic Motivation ..................................................................................... 24
  2.7 Work Environment ............................................................................................. 24
    2.7.1 Creative Environment .................................................................................. 28
  2.8 Personal Traits .................................................................................................. 28
  2.9 Summary: Theoretical Framework ............................................................ 31

3 Methodology ....................................................................................................... 32
  3.1 Scientific Approach ......................................................................................... 32
  3.2 Data Collection: The Interviews and the Subjects ........................................ 32
  3.3 Data Manipulation and Analysis: The Interview ............................................ 33
  3.4 Designing the Interview ................................................................................... 33
  3.5 Data Manipulation and Analysis: Theories ...................................................... 34
  3.6 Challenges with method and research ............................................................... 34
  3.7 Pilot Interview .................................................................................................... 35
  3.8 Transcribing the data ....................................................................................... 36
  3.9 Method for Analysis .......................................................................................... 36
  3.10 Validity .............................................................................................................. 37

4 Empirical Findings and Analysis .................................................................... 39
  4.1 Tor ....................................................................................................................... 39
  4.2 Loke ..................................................................................................................... 44
  4.3 Oden ..................................................................................................................... 50
  4.4 Idun ....................................................................................................................... 56
  4.5 Freja ...................................................................................................................... 63
5 Cross Comparison ......................................................... 69

6 Conclusions........................................................................ 73
  6.1 Discussion ....................................................................... 74
  6.2 Limitations ...................................................................... 75
  6.3 Future Studies................................................................. 76

References ............................................................................... 76

List of Figures
Figure 2-1 The Creative Process by Sawyer (2006) ................. 15
Figure 2-2 Model Preparation Stage ........................................ 15
Figure 2-3 Model Incubation Stage .......................................... 16
Figure 2-4 Model Insight Stage .............................................. 18
Figure 2-5 Model Verification Stage ........................................ 18
Figure 2-6 The Theoretical Framework, Internal Process .......... 20
Figure 2-7 The Organizational Environment’s Impact on Creativity  
  by Amabile (1997) ................................................................ 20
Figure 2-8 The Closed Innovation Paradigm for Managing Industrial  
  R&D by Chesbrough (2003) .................................................... 21
Figure 2-9 The Open Innovation Paradigm for Managing Industrial  
  R&D by Chesbrough (2003) .................................................... 22
Figure 2-10 The New Product Development (NPD) Process by  
  Kotler (2000) ...................................................................... 23
Figure 2-11 The Three Components of Creativity by Amabile (1998)  
......................................................................................... 25
Figure 2-12 The Theoretical Framework, Internal Process ........ 31
Figure 4-1 Model Preparation Stage, for respondent Tor .......... 42
Figure 4-2 Model Incubation Stage, for respondent Tor .......... 43
Figure 4-3 Model Insight Stage, for respondent Tor ............... 44
Figure 4-4 Model Verification Stage, for respondent Tor .......... 44
Figure 4-5 Model Preparation Stage, for respondent Loke ...... 47
Figure 4-6 Model Incubation Stage, for respondent Loke ........ 48
Figure 4-7 Model Insight Stage, for respondent Loke ........... 49
Figure 4-8 Model Verification Stage, for respondent Loke ..... 49
Figure 4-9 Model Preparation Stage, for respondent Oden ...... 54
Figure 4-10 Model Incubation Stage, for respondent Oden ...... 54
Figure 4-11 Model Insight Stage, for respondent Oden .......... 55
Figure 4-12 Model Verification Stage, for respondent Oden ...... 56
Figure 4-13 Model Preparation Stage, for respondent Idun ...... 60
Figure 4-14 Model Incubation Stage, for respondent Idun ...... 61
Figure 4-15 Model Insight Stage, for respondent Idun .......... 62
Figure 4-16 Model Verification Stage, for respondent Idun ...... 63
Figure 4-17 Model Preparation Stage, for respondent Freja ...... 66
Figure 4-18 Model Incubation Stage, for respondent Freja ...... 67
Figure 4-19 Model Insight Stage, for respondent Freja .......... 67
Figure 4-20 Model Verification Stage, for respondent Freja ...... 68

Appendix
Appendix 1: Interview Template ............................................. 79
Appendix 2: Information about The Hub .................................. 83
Appendix 3: Table’s................................................................. 84
1 Introduction

The introduction of this thesis will present the reason for the study and explain how changes in society have affected the demand for new workspaces. It will also include a reflection of the problem and introduce the reader to the purpose and perspective of the thesis.

The 21\textsuperscript{th} century has revolutionized the way we work. The industrial revolution took us from open-air agriculture labor into industrial city life. Today we can see how private offices are turned into office landscapes. The modern office and the way we operate are undergoing a major change. These transitions have created new types of employment practices and increased the demand for human resources structures (Forth, J., Bryson, A., Brown, W & Withfield, K., 2009). Globalization has created a world where information is overwhelming. Henceforth, information and ideas are shared and evaluated in order to invent and or improve new products or concepts (Chesbrough, 2003).

It is confirmed that there are a positive correlations between performance and information sharing (Ancona, D., Caldwell, D., 1992 and Brown, J., Utterback, J., 1985). The process of creation is built on knowledge and does, therefore, require an open community of collaboration where people are given the opportunity to elaborate and evaluate each other’s ideas. The access to human capital and knowledge-transfers within differentiated groups provides us with the ability to utilize networks, knowledge and experience to a greater extent than before (Argote, McEvily & Reagans, 2003).

This form of information exchange has changed the way we conduct business. Individual professionals have become more dependent upon the different networks among them. Technological advancements, in particular the Internet, have ‘shrunk’ the world, which has made geographical locations less significant as borders are beginning to fade (Dick- en, 2011). Social networks and communities have an essential affect our knowledge-creation since the most useful advice often comes about as a result of back-and-forth discussion. The different types and forms of information sharing have, therefore, progressively grown in correlation with globalization (Abrams, L., Cross, R., Lesser, E & Levin, D., 2003). This has created a new kind of problem as it is no longer the question of if you can gather information but rather if you can gather the right one (Toffler, 1970).

We have traced the origin of Coworking to the early open-source movement and café collaborations in the United States during the beginning of 21\textsuperscript{th} century (K. Edquist, personal communication, 2011-03-14). It was a time when people left the structured organizational offices, away from colleagues and water coolers, into independency. However, this has gone through a change once again, where people are coming back in search of a community with social interactions. The idea behind Coworking is that it provides people with combination of a workspace and a social meeting place without the boundaries of a ‘9 to 5 job.’ A Coworking space holds all the equipment and materials found at a regular office without being classified as one. Similar to a gym membership, a Coworking office is accessible at any time for an indefinite period. Coworking is a phenomenon that has urbanized from the demand of people in need of a new modern and flexible work environment, who are missing social interactions. It is created for individuals who are satisfied with their current workspace and has understood the benefits
of a community with a valuable network of knowledge. Coworking, therefore, attracts people who currently are working in a secluded, uninspiring and or inefficient environment, into a collective workspace. However, collectively does not necessarily mean working with the same tasks or towards the same goals. Nevertheless, it can lead to unpredictable collaborations or guidance, since it involves the process of unforced meetings and discussions. Different people with different backgrounds have the opportunity to meet, interact, and share knowledge. Coworking could serve as a tool for gathering, exchanging, and sharing this knowledge between groups and individuals. It also allows a chance for serendipity to take place (K. Edquist, personal communication, 2011-03-14).

The recent rapid growth of Coworking has led us to believe that it will be a recognized concept within a near future. We have, therefore, chosen to write about Coworking since we find it exciting and challenging to conduct our study in an area which is rapidly developing and is still somewhat unexplored, in terms of published academic papers. It will give us the possibility to study this concept and hopefully contribute with a specific research of the relationship between creativity and Coworking to the academic society.

1.1 History

The origin of Coworking can be traced from two different areas. Firstly, the open-source movement that had a major impact on the Internet community and the way we perceive knowledge sharing. Open source systems can be described as Internet communities where their members develop, create and share software. These communities are created by and for the users, with the purpose of a collective assistance in the development process. All information is shared throughout the community with a common goal for further improvement. The term open source is now well established in organizations and at universities. Members of these communities are actively participating in the joint process of new developments and are always searching for new competences (Hippler, E. 2005). The second origin descends from the café-like collaborations where people started to gather at coffeehouses to work together with each other, however, independently. This form of interaction came to be very popular. The increasing demand for simple things such as free Wi-Fi and long opening hours resulted in an outflow for instruction on ‘how to work from a coffee shop guides’. As a result of more people having left their homes in order to become more efficient or to get inspired has resulted in an increasing demand for places like Coworking. (K. Edquist, personal communication, 2011-03-14).

1.2 Problem

Coworking has been growing intensively for the last decade. The demand for open workspaces has evolved from the structural and technological changes in our modern society (Foertsch, 2011). This has enabled a new type of setting where people can interact without the boundaries of the physical office. This have now spread throughout the world with over 700 Coworking spaces divided over all the world’s continents (Bonnet, 2011). The spread of the concept has, on the other hand, not been accompanied by any published academic research. This has led to some confusion as no scholars, users or founders have taken the time to academically clarify the meaning or purpose with Coworking. This means that Coworking lack the proper definition to serve as a frame of reference when discussing the concept. We must, therefore, study the origin of Coworking to understand the fundamentals of the concept. Our contribution to the development
of the subject will, therefore, be a research on creativity and how it is affected by Coworking. This enables us to investigate if and how already existing theories, within in other subjects, can be applicable when studying the concept further.

Our research will therefore be aimed to determine if and how Coworking can foster creativity. We have chosen to study these aspects due to their importance for economic growth and development of the society at large (Florida 2002). Evidence of this can be seen throughout history, starting from the creation of the wheel to the birth of the Internet. These are ideas that have revolutionized the world and improved our living conditions remarkably. Therefore, we believe that it is crucial to distinguish which factors can help and stimulate creativity for the future development of our society. Our intent is to investigate if Coworking could be one of these factors.

Researching Coworking gives us an interesting and challenging opportunity, but leaves us with a predicament since Coworking is a new concept and still evolving. No existing research or definition has currently been published. We can, therefore, not refer to any previous research on Coworking. However, the rapid growth of the concept has given us the possibility to study Coworking spaces within our national vicinity. This will give us primary data through qualitative interviews, which will serve as the base for our research and suggestions for further analysis.

We have chosen to elaborate our thesis with a set of research questions. By presenting clear and explicit research questions it can further aid in fulfilling the purpose of this thesis. The frame of reference will serve as a guide in order for us to analyze the responses we will gain from our research questions. Our point of departure will be an introduction to a combination of theories and models with our answers. It will make the theoretical assumptions more understandable and it will illustrate the theoretical models in an explicit manner. The in-depth knowledge and complete coverage of the main purpose will provide further research with a basis to set out from.

- Can we define our respondents as creative individuals?
- How does the Coworking environment affect motivation?
- Does Coworking facilitate the Open Innovations?
- How does Coworking affect the respondents Creative Process?

1.3 Purpose

The purpose of this thesis is to explore if and how Coworking affects creativity.

1.4 Perspective

This thesis is written from an outside perspective with the primary intent to capture and understand the idea of how a Coworking space can stimulate creativity. Although our focus will be on creativity we must consider other potential factors of influence. We have, therefore, included other theories of relevance in relations to creativity in a Coworking space. The relevant theories are within: innovation, motivation, personality, environment. These will, however, be considered as important complements to the Creative Process, developed by Sawyer (2006). Our intention is to take our audience in consideration and guide them through the subject. That is, all possible stakeholder interested in the concept of coworking, ranging from active to potential member as well as
society at large. With this, we want to capture and distribute a study on Coworking in regards to creativity. Hopefully, that can provide the entrepreneurial research community with a base which they can continue build upon in the future.

1.5 Delimitations

Creativity and innovation are both broad subjects, this thesis will not attempt to research the entire field of the two. Instead, as stated in our purpose, we will limit ourselves to creativity in the context of the Coworking space. Emphasis will be put on the potential influence Coworking might have on the individual’s ability to be creative, not to be confused with measuring creativity. This thesis is intended to see how existing theories within frame of creativity can be linked together, in order to understand if and how creativity is influenced by Coworking.

We will limit this thesis by only investigate the pre determined attributes that we have selected as the most important in the context of the Coworking. Therefore, disregarding the affect Coworking might have on process unrelated to creativity. The focus will, instead, only be on how people participating in Coworking perceive their creative ability.

It is important to notice that our conclusion will be drawn by applying general accepted theories concerning creativity. However, our case study will only take place at The Hub in Stockholm, Sweden. The theoretical framework can be used on other Coworking spaces; however, it might need to be slightly modified as each Coworking space often has a unique character or niche.

1.6 Definitions

Creativity

“An important challenge for the next 50 years of creativity research is to develop a clearer definition of creativity and use a combination of research methodologies that will move the field from speculation to specification” (Sternberg, 1999, p. 459)

Stenberg illustrates the complexity of creating a universally accepted definition of Creativity. Despite of this we must underline the importance of clear definition as it will serve as base in terms of references for our research. We have, therefore, chosen Martens (2011) definition:

“New means unusual, unique, new point of view, varied, original, breaking from existing patterns and contributing something to the field which was not there before. Valuable indicates that the product meets a need or solves a problem; it is useful, effective, efficient, serves a purpose and contributes to society” (Martens, 2011, p. 65).

We think that this definition reflects the process of a creation in symbioses with the interactions encountered in a social network, similar to one found in a Coworking facility.

Innovation

There is a wide verity of definitions of the word innovation, each one of them applicable to different context. The Department of Innovation (2008) definition is short and precise: "Innovation is the successful exploitation of ideas." The Commission of the European Communities (2003) defines it as: "Innovation is the successful production, assimilation and exploitation of novelty in the economic and social spheres."
While Myers and Marquis (1969, p. 4) is more explicit: "Innovation is not a single action but a total process of interrelated sub processes. It is not just the conception of a new idea, not the invention of a new device, nor the development of a new market. The process is all these things acting in an integrated fashion."

Common to all definition of innovation is that they describe a person’s capability to come up with ideas and the ability to follow up on them, similar to the first and most important stage of the Creative Process developed by Sawyer (2006). This is what we want capture when defining innovation, the whole process from thought to finished product or service. We see it as the importance of having a creative mind in order to develop ideas and see connection that can serve as a future purpose. We have chosen a definition we believe to be most representative to our research. We want a definition that illustrates how innovation best can be reflected as being part of creativity. We have, therefore, chosen Myers and Marquis (1969) definition despite being over 40 years old, as most representative for our research. We think it is suitable because it illustrates the importance of innovation as process of interrelated sub process.

Co : Working
“Co”: with: together: joint: jointly <coexist> <coheir>
“Working”; the manner of functioning or operating, used in plural. (New Oxford American Dictionary, 2011)

Coworker
A person actively participating in Coworking

The Hub
The Hub is an incubator for social innovations. A collaborative work - and meeting space for entrepreneurs and people with imaginative ideas (K. Edquist, personal communication, 2011-03-14).

Open source
Is a term used to explain how knowledge, mostly IT related, is made available to the public. The purpose is to let the users freely share information and knowledge with the intention to improve the material trough collaboration.

Social Network
The term was created by J.A Barnes in the 1950s. It is used to describe a group of people joined together by a common interest. It contains both individuals and or organizations. It can be on or off-line.

Work environment
The physical spaces and colleagues surrounding an individual conducting his or hers work.

Idea generation
Idea generation is a part of both creativity and innovation. Kotler (2000) describes it as the most important part of the New Product Development Process, basically, the ability to give birth to a new idea.

Cross breading
The fusion of, at least, two different types of technologies and or services previously used individually. The cellular phone did for example bread with the digital camera, creating a camera-phone.
1.7 Thesis Disposition

Section 2
Frame of Reference

• The first part of the Frame of Reference starts with the definitions of the major theories and present review of existing research and literature. The second part will conclude with a presentation and the discussion of the chosen theoretical framework used when evaluating the empirical findings.

Section 3
Methodology

• The third section of this thesis will contain a detailed explanation of the reasoning behind our chosen method and a plan for how the study will be conducted and analyzed.

Section 4
Empirical Findings and Analysis

• The fourth section will provide the reader with an analysis and presentation of the empirical findings. It will also evaluate and discuss the application of the theoretical framework in order to reach final conclusions.

Section 5 and 6
Discussion and Conclusion

• The fifth and final section will conclude the thesis. It will discuss and evaluate the results from the previous section and provide the reader with the implication of these. As a final remark, this section will also make suggestions for further research.
2 Frame of Reference

The first part of this section will present the evolution and development of the theories on creativity. The second part will present the Creative Process, developed by Sawyer (2006) and relevant supplementary theories needed to fulfill our purpose and assist in examining our empirical findings. This section will enable us to validate our theoretical choices and give an understandable overview of creativity.

2.1 Background: Creativity

Ever since the beginning of time creativity has been a subject of great significance, people has wondered, where do creative thoughts come from and how do they occur.

Initially the belief was that the process of a creative novel thought came from extraordinary sources referred to as ‘the gods and madness’. Early scholars among them, Plato and Aristotle’s speculated that creativity was a gift from the Greek gods. This would imply that the creative thought did not only origin from outside the normal thinking process but actually outside the person. The person only served as a messenger from the gods.

The next theory regarding creativity has originated from the Freudian view of unconscious thinking. Here, unconscious needs and conflicts play an important role in order to determine how individuals deal and portray their creativity. The Freudian view of unresolved conflicts and early trauma is closely related to subconscious associations in problem solving. Poincaré (1913) carried on developing the theory and formed unconscious processing where the focus was on incubation (thinking about the problem unconsciously while consciously thinking about something else) and illumination (An ‘aha’ experiences of creative ideas that descent from your unconsciousness). Wallas (1929) continued from Poincaré’s unconscious process and created a four-stage model of creative thinking. This stage model has been of great interest and can still be found in modern theorizing Csikszentmihalyi (1996) and Sawyer (2006).

This latter model of unconscious processing developed by Sawyer, will be presented more thoroughly in the next part of the thesis, since we believe that this will be a good framework that will help us understand the process of creativity which will be essential in our analysis of the in-depth interviews.

Related to unconscious thinking is the Gestalt view, Leaps of insight. Similar to an ‘aha’ experiences, unconscious thinking problem-solving and creative ideas come about as a result of leaps of insight. New ideas seem to flash into our memory from nowhere. Solving a problem through this kind of insight has been characterized by three criteria’s. Firstly, the problem is solved suddenly very much like an ‘aha’ experience, secondly it is solved after a situation with no progress, and thirdly it could be a result of a new way of approaching the problem. The Gestalt view continued a cognitive way of analyzing creativity. This was followed by the theoretical view of Psychometric theories.

There was a significant change in the direction of research on creativity around the 1950’s. Guilford (1950) addressed the issue that not enough time was spent on examining the kind of thinking that went beyond the kind of thinking measured by IQ tests, which Guilford described as creative thinking. He reasoned that one important step in the creative process was to break away from the past, something he called divergent
thinking. Convergent thinking as opposed to divergent thinking involves a single solution of a problem. On the other hand, divergent thinking was the creation of many new ideas as a solution of a problem. This view was described in a two-step process. In the first step, divergent thinking enabled the individual to come up with many new ideas. The second step is where convergent thinking enables a person to sort the good ideas from the bad ideas.

Under the Psychometric theories, new matters such as creative personalities and creative environments became apparent. Amabile’s (1983) componential theory of creativity illustrates that creativity is the result of several components that are interlinked with each other: person, environment and social environment. Amabile was one of the first theorists to incorporate social-physiological factors in thinking about creativity. Stenberg and Lubart (1992) have proposed an analysis of creative thinking as well, but based on economic principles. They assume that creative thinkers ‘buy low and sell high’. Buying low would signify that creative thinkers suggest ideas that are disliked, but have the possibility to grow. The idea could over time overcome obstacles and become popular, but only if the individual can convince others about the value of the product. The person would give up working on popular ideas and find unpopular ideas and try to make them successful. Stenberg and Lubart (1995) stresses two main resources a person needs if he or she is going to carry out the creative process in this theory: firstly, a set of intellectual abilities (see new problems in new ways, go beyond the normal way of thinking and understand if certain ideas are worth pursuing), secondly, knowledge about the domain, thirdly independent thinking and finally he needs to be in an environment that supports and rewards creative ideas.

During the following decade, Evolutionary theories of creativity became a studied aspect of the field. Campbell (1960) presented the creative process based upon Darwin’s theory of natural selection. His theory was similar to Darwin’s theory as the initial part of the process is a random or blind creation of ideas as a response to a problem or issue. The creations or ideas that fit into the present needs will be retained, and the ones that do not will be rejected: survival of the fittest idea.

The Cognitive perspective has been under constant development during the last 60 years, and the study of creative and ordinary thinking has been given lots of attention ever since. A line of argument that has been piercing through most creativity research has been breaking away from the past, in order for something to be a product of innovation it can not only depend on what one knows, because true creativity is a process of something new. The cognitive perspective deals with the idea that ordinary conscious thinking is closely tied to the past, which would mean that it is not something new. ‘Out of the box’ thinking and the mental process is where the cognitive aspect keeps its focus.

To conclude, in this section we have presented the development of creativity, and the theoretical stream. The main theories that we discussed are: The Gods and Madness, Unconscious thinking, Leaps of Insight, Psychometric, Evolutionary, and Cognitive theories. Presenting a broad base of theory allows us to argue and compare why we have chosen a specific model and theories to assist us in our interpretation and analysis.
2.1.1 The Creative Process

A creative process is where the new is generated. By definition the new cannot be produced by the old, nor can it be created by a one-dimensional continuous logic. The new become apparent in a discontinuous irreversible manner. Therefore the process of creativity has always been interlinked with irreversibility and individual personalities. (Gustafsson, Howard & Niklasson, 1993)

We have chosen to employ the creative process presented by Sawyer (2006) as a base for our theoretical framework. It will serve as a tool and enable us to analyze and evaluate the process of creativity for people who are working in a Coworking environment. By using this stage model by Sawyer (2006) we can easier structure our data and involve other related theories in our analyze work.

2.1.2 The Creative process: Unconscious Thinking

This section will thoroughly explain the creative process and the different stages of the model. We will start with preparation stage, and then continue with incubation, insight and finally the verification stage. In this model specific topics such as associative thinking and cognitive thinking will be enlightened.

The mathematician Henri Poincare’s discovery of his own creative process is of specific importance to this model. He explains that the creative process starts with conscious work on a problem, followed by a period of unconscious work, which if done successfully, is followed by sudden illumination. Then a new period of conscious work begins. This conscious period require the creator to puzzle together and to begin to formalize the idea into reality (Lubart, 2000-2001). Based on these thoughts regarding unconscious thinking, Wallas (1926) created the four-step model of the creative process.

Two theories regarding the creative process are in dispute with each other: the action theory and the idealist theory.

Idealists believe that once you have a creative idea, the process is over. Regardless of if you have executed the idea or not. When the idea has been finalized in your head, the process is also final. However, the action theory argues that the process of creation is coherent with the process of executing something creative. Action theorists point out that creative ideas are often constructed when you are in the progress of working with your resources. Once you have begun to execute an idea you might adjust or change it in order for it to respond to current demand. The action theory is the only theory that can truly explain the creative process. The idealist theory cannot explain one very important aspect of the creative process, namely improvisation. Action theorists explain that creativity takes place over time, and nearly all creativity takes place while working with something else. (Sawyer 2006)
Figure 2-1 The Creative Process by Sawyer (2006)

2.2 Stages of the Creative Process

2.2.1 Preparation Stage

The preparation stage is the initial stage where the problem is analyzed and defined. A conscious preparation involves collecting data and information, the individual is continuously searching for similar ideas and taking part of others previous work (Lubart, 2000-2001). Sawyer (2006) explains, that without the knowledge of what has previously been accomplished and created, a person does not have access to the raw material it needs to create with. It is therefore why, education and experience is of great importance in order to become familiar with the specific domain. By combining existing elements with new ideas it can generate something new that initiates the Creative Process by Sawyer (2006).
2.2.2 Incubation Stage

Figure 2-3 Model Incubation Stage

The next stage that follows in the creative process is the Incubation stage. A stage where no deliberate work is devoted to the specific problem, discovered in the preparation stage. Instead focus lies on other issues and problems, the individual is consciously taking a break from the initial problem. However, unconsciously certain mental combinations emerge and without the awareness that the person is actually solving a problems, making associations or absorbs idea combinations (Lubart, 2000-2001). Many creative persons explain that most of their creative work is done when they are thinking or doing something completely different. Creative people often have many different projects ongoing at the same time. While they are consciously working on one specific project the other lies in the back of their mind getting fueled by experience and new insights (Sawyer, 2006). Most of the idea-combinations and problem-resolving associations are made during the Incubation stage (Lubart, 2000-2001).

The most important subcategory within the Incubation stage is association. The association base for creative thoughts created by Mednick (1962), explains creative thinking by how human beings associate one thing to another. The association base tries to describe the underlying factors of all creative thoughts. Many researchers have found interesting similarities in the process of how people describe their creative thoughts and the significance of playful combinations. Albert Einstein writes in his letter to Hadamard: “The combinatory play seems to be the essential feature in productive thought” (as cited in Sawyer 2006, p.142).

Mednick (1962) was one of the first psychologists who published a modern version of the association theory of creativity. He implied that there are several variables that determine the likelihood of having a new or extraordinary idea:

**Serendipity**

The associative elements may be brought to consciousness by exposing yourself to new environments. Serendipity is the event of fortunate discoveries while looking for something completely different. The x-ray and the penicillin was a cause of those previous explained, chance meetings with remarkable results.

**Similarity**

The similarity association is enlightened by events that are similar to the associative element or that have similarities to the stimulus of the element. It is often encountered
during creative writing since the exposure to homonymy, rhyme and similarities in structure. Similarity is the combined idea of relating one thing to another by stimulating your previous knowledge.

**Mediation**
The element can be made conscious by indirect common encounters. The individual is bringing different elements together.

**Associative hierarchy**
Mednick’s (1962) association theory also describe that a creative person has a more flat association hierarchy, then a less creative person. This means that, a person develops more ideas that are stronger and more distant, in contrast to a person with a steep association hierarchy which has fewer associations that are much stronger. The benefit of a flat association hierarchy is that more unrelated ideas are connected. This results in a more dynamic mind that is able to create new extraordinaire combinations.

It can also be illustrated by Poincare’s quote “Ideas rose in crowds; I felt them collide until pairs interlocked so to speak, making a stable combination...to create consists of making new combinations of associative elements” (as cited in Mednick, 1962, p.220)

**Cross-Fertilization**
“All decisive advances in history of scientific thought can be described in terms of mental cross-fertilization between different disciplines” (as cited in Sawyer, 2006 from Arthur Koestler, 1964, p.230). Most creative people have several different projects ongoing during the same time. Focus is weighted on one specific project while others are in the back of their mind. Although these additional projects are thought of as idle, the incubation stage can bring these projects together, an unintended action resulting in the creation of something new. Sawyer (2006) states that some researchers believe that cross-switches: people who are working with a wide rage of things have a competitive edge. Since they are not bound by a specific domain they have a much larger pool of knowledge.

**Cognitive structures**
Cognitive structures are a process where individuals are able to make conceptual combinations, metaphors and analogies, like for example ‘Hungry like a wolf’. The creativeness is taking two different concepts and combines them together. A process of generating an idea first filters different ideas to finally explore a possible result. The creative cognition approach allows for concepts change to form a sort of creativity. This implies that it is not a process of simple additive but rather a process of an emergence. The two components in combination create something new, a more meaningful concept than the two parts would have been if they were separated.
2.2.3 Insight (Illumination) Stage

The third stage occurs when the specific idea that has been developed in the second step of the process becomes evident. Hence, it is no longer an unconscious thought. An ‘eureka’ moment is created by a complex mental structure where a sudden enlightenment brings the thought from being incubated to becoming illuminated. This building block is somewhat delicate since it can easily be disturbed. People around you can encourage or discourage ideas to breakthrough, collapse or interruption (Lubart 2000-2001).

2.2.4 Verification Stage

The idea is now at the final stage of the process and awaits its evaluation. This stage tries to determine if the actual idea would succeed. Based upon the knowledge the creator has, he or she will scrutinize the idea in order to develop it further, refine details or completely drop the idea. The verification stage is completely conscious and the creator need to understand if the idea is timely and if it would fit in the current body of work. After the evaluation comes elaboration and the creator uses its insight and pool of knowledge to complete the idea into a final product. Elaboration often goes together with evaluation, since without trying or testing your idea, you would not know if it works. Insight is only sparks and rough outlines. It is not until the person has experimented and actively gone through a continuous cycle of smaller insights he or she will have the final product or concept within reach.
2.3 Analyzing: The Creative Process

The Creative Process is a comprehensive model that captures the creative thought from the unconscious beginning to the very conscious evaluation and elaboration stage. The preparation stage will give us insight of a person’s experience and pool of knowledge and how the preparatory work will portray itself when faced with a problem. The incubation stage sparks the unconscious assimilation and externally nothing seems to be happening. We will use this stage to understand how individuals who are engaging in Coworking experience this unconscious creativity. Following, we will be analyzing the illumination stage to understand when the creative idea moves from preconscious into a state of conscious awareness. How does Coworkers experience and cope with this process. Finally, the verification stage, where the idea is closely evaluated and elaborated before executed. The two subcategories facilitate us to categorize and analyze the final part of the stage theory. We believe that these stages are a good way to explain a creative process and that it will provide us with a guideline and clear directions.

This process intent to understand if and how people become more creative in a Coworking context. We will interlink our other theories into the creative process in order for us to fully understand our purpose.

2.3.1 Limitations and Critique

However, we conclude that the limitations with this model are that it is too static and linear. Sawyer (2006) confirms this by emphasizing that the creative model is in reality more cyclical. Creativity and creative thoughts are an example of hard work over a long period of time rather than a single moment of insight. Incubation, for example, can take place during any period of time, it is not optimal for the incubation to function only as a specific stage between two other. It is the mini-insights that pave the way for the final result, “Jackson Pollock´s paintings are now known to have emerged from a long process of careful deliberation, and not from a sudden insight in the middle of the night followed by a binge painting pouring” (Sawyer 2006, p.71). Sawyer (2006) also affirms that, if you would document a creative process you would be able to trace their mini-insights and clearly see the result of the accumulated insight as a final result.

To summarize, the model has a tendency to become too static and does not take into account that the different stages are more flexible than illustrated. That is why we are going to give our own interpretation of the model. The following theories in the frame of reference will be supplements to the Creative Process. We believe that this could easier explain the process of creativity in a Coworking context and provide an even more detailed base of knowledge for the interpretation of our findings. We have, therefore, created a model of our theoretical frame work in order to illustrate the structure of the theories used:
2.4 Innovation

There is a thin line between innovation and creativity; the difference can sometimes be vague and hard to understand. We have during our literature review stumbled over innovation theories suitable for our study as we research creativity in a Coworking context. These innovation theories will be used due to their similarity to creativity in a Coworking environment. We see them as good supplements in additions to the Creative Process. The interrelationship between the two can be illustrated in the research made by Amabile (1997).
Environment can affect the individual’s ability to be innovative. From this, we draw the conclusion that one must understand how improved innovation can increase creativity. We have, therefore, chosen to apply Chesbrough’s (2003) theories on innovation. These theories are particularly suitable for our research as it studies how innovation is influenced by group thinking and sharing. Two factors that are most present in the concept of Coworking.

“In today's world, where the only constant is change, the task of managing innovation is vital to sustain and advance companies’ current businesses; it is crucial to growing new business. It is also a very difficult process to manage” (Chesbrough, 2003, p.24)

2.4.1 Open Vs. Closed- Innovation

Chesbrough (2003) states, that the process of innovation is undergoing a fundamental paradigm shift in terms of how companies commercialize their industrial knowledge. He divides innovation into two new concepts: Closed Innovation (old paradigm) and Open Innovation (new paradigm). We will apply his innovation theory on Coworking in order to illustrate the potential effect Coworking can have on a person’s capability to be innovative, which according to Amabile (1997), feeds creativity. We believe that the theory is most applicable for the interpretation of our empirical observation as it reflects the difference between groups and individuals ability to be innovative. Chesbrough (2003) explains closed innovation with the ‘boundaries of the firm’ as it requires the user to be independent since he or she cannot verify the availability, capability or quality of someone else’s idea. Ideas must therefore be generated, developed, built, financed, serviced, marketed, distributed and supported within the company in order to be successful.

![Figure 2-8 The Closed Innovation Paradigm for Managing Industrial R&D by Chesbrough (2003)](image)

“If you want something done right, you've got to do it yourself” (Chesbrough, 2003, p.20).
Chesbrough (2003) assumes that companies instead of being locked in by the ‘boundaries of the firm’ can and should use both internal and external ideas. Open innovation can therefore be seen as hybrid business model. It utilizes both the existing knowledge within the firm and external channels outside their main business area, all with the intention to add extra value to the innovation process.

![Figure 2-9 The Open Innovation Paradigm for Managing Industrial R&D by Chesbrough (2003)](image)

“If we make the best of use of our internal and external idea, we will win” (Chesbrough, 2003, p.24)

The open innovation theory is aimed towards explaining the innovation process within firms, not individuals. However, we believe that it can be used to explain the innovation process among self-employed participating in Coworking. We see a coworker as a firm in the Open Innovation process and a self-employed not involved in Coworking as someone limited to Closed Innovation. The theory of Open – Closed Innovation can therefore find common grounds in both the Preparation and Incubation stage in the Creative Process.

In summary, innovation is a part of creativity (Amabile, 1997). Open Innovation can be used to explain how Coworking can increase innovation, as the fundamental idea behind Coworking is that one should make the best of both internal and external knowledge. We will, therefore, use Chesbrough’s (2003) theory on Open Innovation to study how Coworking affects innovation and in turn creativity.

### 2.5 Idea generation from Serendipity

Both creativity and innovation has the same origin: the birth of an idea. It is the first step towards developing a new product or service. Research made by Conway and Steward (2009) reflects on the creation of successful innovation from serendipity, mean-
ing that the origin of innovative ideas is attributed by fate, like a random meeting, an unintended connection or chance conversation, basically all events that would link together information that would otherwise have been separated. “A somewhat mysterious process, little short of alchemy” (Conway et al. 2009, p.289). This thesis will, therefore, not neglect the importance of idea generation within Coworking. The structure of a Coworking space increases the probability of an unintended connection from a chance conversation. We must, therefore, consider the impact of idea generation from serendipity on creativity, that a Coworking space can be an ideal environment for that attribute of fate. The relevance of this theory in our thesis can therefore be found in our ability to examine if and how Coworking has a positive effect on idea generation due to the structural settings in a Coworking space.

The importance of idea generation can be reflected by Kotler (2000) in the New Product Development Process (NPD). He states, that idea generation is the most crucial step of the whole process, it lays the foundation for all subsequent stages.

Figure 2-10 The New Product Development (NPD) Process by Kotler (2000)

The first stage of the NPD process is where ideas are being generated, it is called Idea generation or brainstorming. Many ideas are being tried and implemented, but the real object with this phase is to eliminate the unfruitful ideas. The creator has the opportunity to open the idea to criticisms from other in order to consider abolishment or future development (Kotler, 2000).

In summary, Idea generation is a part of both creativity and innovation. Kotler (2000) describes it as the most important part of the NDP process. Coworking might serve as the ideal place for Idea generation from serendipity. We will, therefore, study how this theory can be used to explain how Coworkers process their ideas.

2.6 Motivation

Motivation is another important aspect to consider when studying Coworking. Amabile (1998) describes motivation as the driving force which helps us to achieve our goals. By the end, motivation determines what we actually do.

Motivation is a vital supplement to the intellectual requirements for any given type of work. Even though someone possess the right expertise and the required recourses for a job, if that person lacks motivation the job will not be done and the creative expertise will be lost or applied at something else (Amabile, 1998). Her research concludes that the creative result is influenced by motivation. We have, therefore, included motivation in the context of Coworking and creativity.

Motivation can be either intrinsic or extrinsic, where intrinsic motivation refers to “doing something because it is inherently interesting or enjoyable” (Ryan, 2000, p.55), whereas extrinsic motivation “refers to doing something because it leads to a separable
outcome” (Ryan, 2000, p.55). Since it is the intrinsic motivation that results in creativity (Ryan, 2000), it is important to highlight the factors and forces that can influence it, both positively and negatively. Furthermore, many scholars have come to the conclusion that extrinsic driven motivation undermines creativity, saying that people who work for a reward show less creativity than people who do not expect a reward (Amabile, 1985). Hence, we have chosen to focus our research entirely on the intrinsic motivation. Furthermore, we must determine how motivation is present among our interviewees and what factors that can give them intrinsic motivation.

2.6.1 Intrinsic Motivation

Intrinsic motivation is all about a person’s passion and interests, the internal desire to do something. People who are intrinsically motivated will engage in their work because the challenge and enjoyment of it. They get motivated by the work itself. Amabile (1998) has found an extensive amount of evidence that favors intrinsic motivation and has expressed it in what she calls the Intrinsic Motivation Principle of Creativity: “People will be most creative when they feel motivated primarily by the interest, satisfaction, and challenge of their work itself and not by external pressures” Amabile (1998, p.79). Her research also explains different factors in the work environment that can influence the intrinsic motivation and creativity. This research underlines four important factors that will influence intrinsic motivation, which can be found in a Coworking space: Freedom, Resources, Work Group Features, and Organizational Support.

Amabile (1998) explains that people should share excitement over work and a willingness to help and learn from each other. The diversity in the group should be reflected in the individuals’ unique knowledge and expertise that they can assist other group members with. This diversity can then be combined with the freedom of choice. People should be able to decide for themselves how they would like to approach their work. This combination can then be assembled in a setting with a strong organizational support. The research by Amabile (1998) shows how people’s intrinsic motivation increase when they are aware that people around them are excited about their work.

To summarize, intrinsic motivation affects creativity. The research made by Amabile (1998) underlines four important factors that can influence the intrinsic motivation: Freedom, Resources, Work Group Features and Organizational Support. We believe that these factors are fundamental parts of Coworking and will, therefore, use them to study how and if they can affect creativity.

2.7 Work Environment

The work environment is an important factor which includes several dimensions which can affect the creative result. We believe that it is crucial to determine how the work environment should be structured to increase creativity. Amabile, Conti, Coon, Lazenby & Herron (1996) states, that creativity can be improved by cognitively and perceptually stimulating the physical work environment. This is also confirmed by Haner (2005) who says, that a physical work environment that people perceive as attractive can have an inspirational and motivational effect, which in turn can symbolize innovation and signal creativity. Furthermore, many scholars agree that creativity is best served in environments that are open and supporting to new ideas (Sutton, 2001 and Csikszentmihalyi, 1996). We believe that coworking spaces are virtuous in applying work environment theory in their daily activities. We are also curious whether it is intentional or not, if
there are additional benefits that stimulate creativity and what improvements that could be done.

According to Amabile’s (1998) model, The Three Components of Creativity states that every individual has three components of creativity within themselves. These components are expertise, creative thinking skills, and motivation. Expertise can in its core be described as the knowledge and expertise a person possess. The creative thinking skills determine how people approach different problems in terms of flexibility and imagination, whereas motivation, can be described as the inner passion a person has to solve a problem. All three components of creativity can be influenced by the environment. We have included this model since the research made by Amabile (1998) proves that creativity can be stimulated by changes in the work environment. We believe that it does not matter whether it is a company manager, coworking manager or individual coworker that promotes these changes. Even though Coworking spaces endorses many of the coming factors naturally, some of them cannot be implemented in the same reach without managerial interaction. However, we have decided to approach the theory from a Coworking perspective.

Figure 2-11 The Three Components of Creativity by Amabile (1998)

Amabile (1998) have studied the link between the work environment and creativity for nearly two decades and found that the following six managerial activities affect creativity: challenge, freedom, resources, work group features, supervisory encouragement and organizational support. We will continue to discuss the factors that can stimulate creativity and the practices that should be avoided.

**Challenge**

Of all the things managers can do to enhance creativity, challenging their employees is perhaps the easiest. However, to do it properly requires that managers can access rich and detailed information about the employees and the task at hand. Managers should match employees with tasks that call for their expertise and skills in creative thinking,
since it will ignite their intrinsic motivation. It is important that the task is not too easy, since it will bore the employee. However, tasks that are too challenging might be overwhelming and might result in a feeling of lost control. It is therefore important to find the right balance. Amabile (1998) stated that the assigned challenges are, however, not an overwhelming feature in the Coworking context but it will be considered as Coworkers can be challenged by themselves or colleagues.

**Freedom**

When it comes to freedom, the most important matter is to let the employee be self-containment about the process. To give the employee freedom to decide how to climb a specific mountain is important, but it does not necessarily entail that he or she should decide which mountain to climb. In fact, clearly specified goals often enhance creativity. To let the employees be self-government about the process fosters creativity since it heightens their intrinsic motivation. Furthermore, when the employees have control over the process they can make use of their expertise and creative thinking skills to a much greater extent. A common mistake that happens frequently is that managers keep changing the goals. To have freedom over the process is pointless if the goals keep changing (Amabile, 1998). Freedom is one of the most fundamental factors for Coworkers. They usually distribute their workload and hours after their own preferences.

**Resources**

Resources are a dimension that often comes up when talking about creativity, since new and valuable ideas do not usually come out of thin air, they to be pursued. Time and money are important resources which can affect creativity. Managers must consider the amount of these spent on a project carefully, since it can either support or kill creativity. Time is also a relevant factor, a short deadline can increase an employee’s motivation, when for example the company rushes to reach a goal before another company, the challenge itself will increase the intrinsic motivation. At the same time organizations often kill creativity by setting fake deadlines or impossible short ones. The first can create mistrust whereas the latter will cause burnout. Another mistake that managers often make is that they keep resources too tight, which results in that employees will channel their creativity to find additional resources instead of focusing on the task itself. (Amabile, 1998)

The physical space is another resource that is very important for the creative result. An atmosphere with open and comfortable offices will definitely not hurt creativity, but it is not as important as other initiatives managers can take, such as matching people with the right assignments and give people freedom around the work process (Amabile, 1998). Sutton (2001) states that resources which benefit creativity can come in different shapes. He considers time, money and physical space as the most important resources together with information. Factors like motivation, determination, and creativity are ways to deal with a lack of resources (Sutton, 2001). The connection from resources to Coworking is somewhat clear. Coworkers can as regular employees get triggered by challenging deadlines and rival companies.

**Work group features**

Teams that will come up with creative ideas will most likely consist of a diverse set of people with different perspectives and backgrounds. When people with different expertise and creative thinking styles work together they often combine ideas in new, differ-
ent and exciting ways. However, diversity is only a start, managers must also make sure that the group shares three important features. Firstly, it is significant that they all share the same excitement over the project and the team’s goal. Secondly, members must show a willingness to help each other out during tough periods and setbacks. The third important feature is that every team member must acknowledge the specific knowledge and perspective that the others possess. These factors will not only increase the intrinsic motivation, but also the expertise and creative thinking skills (Amabile, 1998).

A common mistake that kills creativity is that managers put together very homogeneous teams. This is often done since homogeneous teams works with less friction and often reaches solutions more quickly. These teams also have a high morale. However, when everyone comes to the table with a similar mindset, they usually also leave with the same. Hence, homogeneous teams have a hard time to enhance expertise and creative thinking skills (Amabile, 1998).

Coworking spaces in general contains diverse people from various areas of work. The Hub has a screening process that all new members must pass to get a membership. Through this process, The Hub can make sure that their members have different areas of expertise and personalities.

**Supervisory encouragement**
To be able to produce creative work, most people need to get the feeling that their work matters to the organization they work for. If not, the excitement and interest they have for their work will disappear in the long run. Managers in successful creative organizations will recognize creative work by individuals, often before the commercial impact of their efforts has been acknowledged. In contrast, organizations that kill creativity often meet innovative efforts with skepticism. New ideas are often met by harsh criticism and time consuming evaluations. All new ideas might not be worthy consideration, but organizations often react in ways that damages creativity by looking for reasons not to use ideas instead of meeting them with open minds. This sort of negative attitude can serve as a obstacle where people are afraid to share their creative thoughts (Amabile, 1998).

It is hard to relate supervisory encouragement with Coworking since there are no managers in coworking spaces. However, we will interpret it from a Coworking perspective and strongly believe that it is applicable in this type setting.

**Organizational support**
Management encouragement can foster creativity, but creativity is truly heightened when the entire organization supports it. For an organization to be more creative it is important that its leaders adopt systems or procedures that make it clear that creative efforts are central and should be valued.

Information sharing and collaborations within the organization is the most important practice that will support all three components of creativity. If more people are working together and exchange ideas and information, more knowledge could be gathered and expertise would be improved. Similar to creative thinking, increased collaboration and information sharing will enhance people’s enjoyment of work and the intrinsic motivation will also be improved.
Research by Amabile (1998) has shown that people’s creativity improves when they are interested in their jobs. That is why it is important not to let political issues, gossip and fights gnaw in an organizational setting. These things are particularly harmful since this might draw people’s attention away from work.

We believe that organizational support could be of great importance for a Coworking space. With more interaction between Coworkers the three levels of creativity would probably increase. We also believe that managers for Coworking spaces need to promote a good work environment and prevent frustration.

2.7.1 Creative Environment
We have discussed six work environment factors that are important for creativity. Although, we already touched upon what can be done in the physical office, we will now discuss it in more detail. Office lay-out is an important factor for creativity because it impacts the frequency, intervals and duration that colleagues communicate with each other (Boutellier, Ullman, Schreiber & Naef, 2008). According to Allen and Henn (2007) co-workers within the same vicinity are more likely to communicate with each other, but after 30 meters face to face interaction declines rapidly. This would suggest that communication between departments is lower in companies that have clearly defined walls between their departments. Further, to have special designated places for informal communication have been proved to have a positive effect on team communication (Haner, 2005). Wyon (1996) enlighten the importance to take action against loud noises in the office, since it has negative effect on creativity. Furthermore, anxiety and hunger will also affect creativity negatively, whereas increased temperatures and the absence of noise have a positive impact on creativity (Wyon, 1996). This is also discussed by Florida (2002), who states that, when people have the flow of their creative work interrupted it usually takes them about 20 to 30 minutes to refocus.

Csikszentmihalyi (1996) interviewed with over 100 creative people on a Nobel-price-level and found that having creative people in your presence is one of the most important factors for the creative performance. However, this does not imply that one have to be present in the office at all times and interact continuously, just to have the possibility to communicate, to reflect on work and to share knowledge is important.

To summarize the work and creative environment we have discussed The Three Components of Creativity model by Amabile (1998). We have also discussed the six factors that can increase creativity in the workplace and the practices that can kill creativity. We have then tied them to the different levels of creativity and explained how they can affect creativity. Furthermore, we have discussed office layout theory and the importance to have an environment that promotes employee interactions. We believe that it could be interesting to compare this theory with the reality that will meet us at The Hub, to see how much of the theory that can be applied.

2.8 Personal Traits
The ability to be creative differs among individuals, some might say that creativity comes natural, others that it can be trained and developed. We must, therefore, include if and how creative personalities traits are more common among the members of The Hub. All current coworkers at The Hub have gone through a screening process (K. Edquist, personal communication, 2011-03-14). The purpose with the process is to scru-
tinize the applicants to see if they are appropriate candidates in terms of their intention with coming to a coworking facility. K. Edquist (2011) further explains, that his goal is to gather people with the same mind set, people who are sharing, open, helpful and respectful, not to be confused with creativity, but people who are working with something that can be beneficial for society. Basically, outgoing individuals that easily can adapt to a differentiated community and who has a generous attitude towards knowledge sharing. We must, therefore, consider that this screening process have sorted out a special kind of people. Our intention is to research if these individuals possess any of the creative characteristics that Csikszentmihalyi (1996) has developed.

Csikszentmihalyi (1996) spent over 30 years on researching how creative people live and work in order to explain their ability to create new ideas. His study has outlined the ten most common characteristics among creative people. The list will, however, to some extent be arbitrary as it can be argued that other characteristics that are of importance for creativity have been left out. Therefore, we must consider that the following traits might not all be found in the same person or be the only measure of creativity traits. Instead we use them to reflect the most common characteristic of a creative personality. The creative personality will then be used to compare how and if these different characteristic are present among the individuals working at The Hub.

The ten most common characteristics among creative people are according to Csikszentmihalyi (1996) the following:

**Energy**
Creative people have an internal generated energy. They can work for long hours, while being highly concentrated, fresh and enthusiastic. The research does not verify that this come from a genetic advantage, but instead an internal control of energy which increases their ability to focus their minds. The creative people are able to shift their focus depending on the situation. They are not only able to stay particularly focused when necessary, but also able to ‘switch off’ immediately and ‘recharge’ their batteries when able to. They will, therefore, find the rhythm and tempo of the work previous to a finished project to be important as it was learned from trial and error, not inherent from their genes.

**Cognitive thinking**
Creative people are smart, but at the same time naive. It is hard to define how smart one has to be in order to be creative. This can be illustrated in two opposing ways of thinking: divergent and convergent. Divergent thinking results into no agreed-upon solutions while Convergent thinking is the classic way to measure IQ, rational problems with only one correct answer. Creative people are required to be a mixture of both divergent and convergent thinking. The divergent thinking enables them to generate new ideas and convergent thinking picks out the good idea from the bad ones.

**Attitude**
A creative person might appear to have a multitude of personalities, but common to them all is playfulness with a mixture of: persistence, perseverance and endurance. The combination and ability to shift between responsibility/discipline and irresponsibility/playfulness when needed signifies the attitude of a creative person.

**Reality vs. Imagination**
Creative people possess the ability to move between reality and imagination. They are able to go beyond the social accepted reality into their own new reality, commonly known as daydreaming while still possessing a rooted sense of reality.

**Social Skills**
Creative people can like all others be extrovert and or introvert. Normally, you are one or the other, a participant or an observer. However, creative people differ here. They can often exhibit both traits simultaneously instead of showing a consistency towards one side in particular.

**Consideration**
A creative person can be both proud and humble at the same time. They are aware of their achievements and accomplishments in comparison to others which provide them with sense of pride and security. However, they have respect for the area they contributed to, and consider luck to be part of the achievement. They are also oriented to present and future projects, which make passed success less interesting to them.

**Androgyny**
Creative individuals are able to avoid the typical gender stereotype. Creative women can be perceived to be more dominant and less feminine compared to the ‘normal’ woman, while creative men are perceived to be less masculine, meaning more sensitive and less aggressive. However, the androgyny does not imply any deviations in sexuality, but can often be mistaken with homosexuality. Creative individuals are only androgyny in addition to the normal gender stereotype and can therefore be perceived as perfectly masculine or feminine.

**Traditionalist**
Creative people are seen to be independent and rebellious. However, their creativity has been developed from a strong internalized domain of culture. A person cannot neglect what has been valued in the past as it seldom lead to something that can be seen as development. The creative person has learnt the importance of the domain rules and can therefore be creative without being neither conservative and or traditional while simultaneously being rebellious.

**Attachment vs. Detachment**
Creative persons can shift from being objective towards showing great passion towards their work. This creates a conflict between attachment and detachment as the passion helps to focus while the objectivity strives for credibility. This process of alternation of the two extremes is called the yin-yang alternation.

**Openness and Sensitivity**
The sensitivity of the creative mind exposes them to pain and suffer. The commitment to their work might be unrewarded and or ridiculed but it can also be praised and admired. This can be traced to the creative individual’s ability to think divergent, which often can be seen as abnormal. The creative individual can therefore feel isolated and misunderstood which in turn can be perceived as sensitivity.

In summary, Csikszentmihalyi (1996) points to complexity as one of the main features of a creative personality. His research has shown how creative persons possess an extraordinary ability to adapt to different situations and that they have an ability to use
whatever tools they can find in order to reach their goal. Our research will be aimed to see how these traits are present among the coworkers at The Hub and how this might affect the Creative Process.

2.9 Summary: Theoretical Framework

Creativity is broad subject with countless variables. The intention with the Theoretical Framework is to summarize the main creativity theories and explain why we have chosen them and how they can be used. We have built the foundation of our research on the Creative Process. Moreover, we have divided the process into four main components: innovation, motivation, personal traits, and environment. Each one of them have then been scrutinized, subcategorized, and applied to Coworking in order to meet the purpose of this thesis and to answer our research questions. The theories will assist us to gather the conceptual understanding needed to construct and analyze our interviews and empirical findings respectively. This will in turn lead to a broader perceptive of both Coworking and creativity, it will also increase the validity and reliability of our thesis as it gives a subjective view to the context. We have named this model the Internal Process. The intention with the Internal Process is to illustrate how the different components of the framework have been assembled, and hopefully it will increase the understanding for the reasoning behind the application of creativity in the Coworking context.

Figure 2-12 The Theoretical Framework, Internal Process
3 Methodology

This part will present the scientific approach and the methodology of this thesis. It will explain the structure of the study and the tools used for the analysis of our empirical findings. The chapter will also cover the challenges, strengths and weaknesses with the chosen method.

3.1 Scientific Approach

The first objective with our thesis is to explore if and how Coworking affects creativity, our purpose. Secondly, we aim to answer our research questions and suggest areas for future research. We have used a case study approach where interviews comprise our primary data. The reason we chose a case study originates in the desire to understand a complex social phenomenon (Yin, 1994), which we believe Coworking combined with creativity is. Evidence of the complexity can be found in existing information about Coworking. Large amounts of information can be found in the constantly expanding open community movements like Wiki and Google –groups; however no published information exists in the academic society. This drives us to gather relevant data ourselves. Yin (1994) suggests that an exploratory case study is preferred when the knowledgebase is low or somewhat poor. Since the theoretical framework does not enable us to tests or develop new theories. The researcher should instead choose an exploratory study were the relevance of the data is evaluated. Where it is important to determine how and why data are of significance. However, Yin (2003) also states that a clear purpose, statement and criteria for the study under line the most fundamental and important aspects in a successful exploratory study. We have therefore formed our thesis in regards to these criteria and intend to evaluate and reflect on them in the upcoming chapters.

3.2 Data Collection: The Interviews and the Subjects

We intend to gather qualitative data about: if and how individuals who are working in a Coworking space have become more creative. We have chosen to contact ‘The Hub’ in Stockholm for our interviewees in order to conduct face-to-face interviews. The benefits of using in-depth interviews lies within the possibility to get a deeper insight in a phenomenon and to obtain richer quality of data (Hancock, 1998).

As mentioned above, we will conduct all our interviews at The Hub in Stockholm. This is due to several reasons. Firstly, The Hub is the only Coworking space in the region that meets our requirements, which are going to be presented in the next paragraph. The Hub is well established and has many members with a diverse professional background. We determined to find at least six people who are members at The Hub to conduct in-depth interview, however, one will served as a pilot interview. According to Eisenhardt (1989) it is recommended to include between four to ten cases in a case-study even though there are no ideal number. However, because of the high amount of data collected through interviews, more than ten cases might be overwhelming and hard to cope with (Eisenhardt, 1989). We will, therefore, interview six different members at The Hub.
3.3 Data Manipulation and Analysis: The Interview

Since we wanted to find coworkers in an established Coworking space not too far away we have chosen to focus on The Hub’s members alone. The next step was to screen the Hub’s more than 80 members to find the individuals that would be right for our purpose. To make the screening process easier and more accurate we have decided on a few variables that we are looking for. Kent Edquist, The Hub’s manager, will provide us with a sample set we can chose from, based on the requirements we give him. When we decided on interview prospects we looked for several different things: Amount of time as active member, diverse backgrounds, male/female mix, age difference and a diverse field of work. In order to be an attractive prospect one should be familiar with the concept of Coworking. Furthermore, it is important that the persons are in the same line of work as before they came to The Hub so that the physical work arrangement is the only variable that has changed. We have chosen to conduct these interviews face-to-face with only a tape recorder in a familiar surrounding, in order for the interview-subject to provide us with honest and well-reasoned answers.

3.4 Designing the Interview

We have gathered data using a qualitative approach by conducting semi-structured interviews, also referred to as focused interviews. This option provides the opportunity to have open-ended questions. This gives us the ability to guide, encourage and probe the interviewee by using prompts, which should enable further discussion of some topics in more detail (Hancock, 1998).

We have chosen to conduct our interview in accordance with Yin (2003) as it can provide us with the necessary guidance to how one constructs and conducts a proper interview. This enables us to use open-ended question, which is the most common interview model when conducting case studies. Yin (2003) states, that an interviewer serves two purposes. First, he or she must follow the predetermined model of inquiry with appropriate questions in line with the interview model. Secondly, the interviewer should also ask the questions in a way that fits the model of inquiry (See interview template in appendix). Hancock (1998) describes this process further, the interviewer should ask questions regarding the facts as well as the interviewee’s personal opinions. This type of communication opens up for the interviewee to add personal reflections and insight to the subject that could later be used for future research (Yin, 2003).

Other relevant interview methods have also been considered. In addition to semi-structured interviews there are also focus groups, structured and unstructured interviews. However, these tools do not fulfill the requirements for our type of research. Yin (2003) explains, how focus groups can be very time consuming and can limit the interviewee’s willingness to share their feelings and thoughts in front of other people. A structured interview is also unsuitable for our research as it is too fixed and can limit the range of the responses, comparable to a questionnaire (Hancock, 1998).

We have chosen to tape record our conversation, rather than taking notes, also in accordance with Hancock (1998). He states that recording is preferable for several of reasons. The interviewer can relax as his or hers full attention can focus solely on what is being said. If taking notes, the interviewer can easily lose focus on the conversation. The notes can often be perceived as biased as the interviewer might only take notes on what is understandable at the moment. Taking notes also affect the interviewee. He or
she may unconsciously be concerned with what the interviewer is scribbling down. Recording the interview, on the other hand, enables for free a conversation without interference or halt. In accordance to Hancock (1998), states that it captures the whole conversation, which gives the researcher the opportunity to recapture what was said and, therefore, avoid missing any potential important information. Furthermore, we have chosen to keep our respondents anonymous, the following five names: Tor, Loke, Oden, Idun and Freja are substitutes for their real names.

3.5 Data Manipulation and Analysis: Theories

Since creativity is such a broad subject, we have had to read through an extensive amount of material to make sure that we only used the most relevant information and sources. We have spent plenty of time discussing and evaluating theories and models, how they could be applied, and their significance for our thesis. Yin (2003) stresses the importance of asking challenging questions about the matter that is being studied, and to reflect on what one aim to learn from the study. By doing so, the researcher can overcome barriers to theory development (Yin, 2003). It is important for us to be critical and objective since Coworking is a relatively new phenomenon, and many of its key building blocks can be related to creativity. It is essential that we choose theories that are applicable and fundamentally related to Coworking. As inferred, creativity is the main theory, but we believe that creativity is interlinked with: innovation, motivation, personal traits, and the work environment and therefore they are inevitable to include. All information that we have gathered must be narrowed down to the most appropriate theories, models, relationships and connections. Theories will be defined so that we can apply them on our data, collected through the interviews at The Hub. It is important to have an overview of all relevant theories for the study before one start the data collection phase (Yin, 2003). Furthermore, to be flexible during the study is of great importance in order to benefit from the uniqueness of each case, and by doing so, opportunities to develop or discover new topics may arise (Eisenhardt, 1989).

A common criticism of case study research is that the cases are not ‘sampling units’ and are not usually applicable in real life. However, Yin (2003, p.32) refuted that criticism by explaining the difference between ‘analytic generalization’ and ‘statistical generalization’: “In analytic generalization, previously developed theory is used as a template against which to compare the empirical results of the case study” Yin (2003, p.32). One can claim replication when two or more cases point to that the results are equal to one of the applied theories. An even stronger empirical finding appears if two or more cases support one theory but not another rival theory (Yin, 2003). If a relationship can be disconfirmed by at least one of the cases it can provide an opportunity to refine and extend theories presented in the theoretical framework (Eisenhardt, 1989). As inferred we will use theories in our research as a base and apply it in the context of coworking. Except from claiming replication, we will compare and build on existing theories.

3.6 Challenges with method and research

The major challenge with our research was that there was no previous research aimed towards Coworking in general. We must, therefore, assume that people would have different ideas of what Coworking actually is. We could, therefore, not use or compare any theories or previous work on Coworking per se. Instead we had to use the Coworking
members at The Hub as base of representatives for Coworking as a concept. We must also consider the fact that Coworking is perceived differently in different countries and communities.

Three other challenges with the method lie with the interviewees. Firstly, we have not been able to choose the participants freely. They have been assigned to us by Kent Edquist, manager at The Hub. We have requested participants from the following criteria: Active Coworker at The Hub and Self-employed. Additionally, we specifically asked for a diverse group of participants. We wanted diversity in form of age, gender, member type and field of work. We must, however, consider that some of the participants might not possess all the criteria requested. The potential lack of any criteria must then be adjusted when analyzing the results.

Secondly, these participants have also made an active choice to join a Coworking facility and have, therefore, most likely seen some benefits with the concept. The participants might therefore be regarded as positively biased to Coworking as a concept. This is however unavoidable when conducting these types of interviews, but it can be counteracted. We can through the interview let the participants make own reflections and comparisons between their current and previous work environment and analyze their answers.

Thirdly, the interviewees might also demonstrate non-compliance to certain situations:

- Some questions might be seen as interpretative and lead to irrelevant data.
- The interviewee cannot be able to answer all questions.
- The interviewee might not have enough time to stay throughout all questions.
- Some questions might generate a strong internal reaction and therefore, limit the interviewee’s willingness to answer the question.
- The interviewee does not feel comfortable being recorded or worse, not approve to be recorded.

We have developed a strategy to counteract the non-compliance. The first counteract measure was to let all interviewees participate freely, whenever suitable for them. This reduced any time pressure and or stress that a more forced interview might have had. The second counteract was to assure the interviewees anonymity, none of their personal information would be published in the thesis. This led to a more open, relaxed and trustworthy interview environment. The participants were able to speak freely about personal issues without limitations. The third counter-measure strived to minimize the amount of irrelevant data. This was done by actively linking the interviewee back to actual question. All participants were given the opportunity to ask question during the interview, but off-topic conversation were postponed to after all interview question had been answered and the recording was turned off.

3.7 Pilot Interview

We conducted one pilot interview prior to the interviews we used in our thesis. We conducted this interview at The Hub, Stockholm prior to the other interviews we made. We had two main objectives, firstly to gain proper experience how to conduct the forthcoming interviews, and secondly to get feedback of the actual content. The pilot interview is according to Yin (2003) an important step to refine the data collective process. Eisenhardt (1989) continues to explain that one can adjust and change the questionnaire or
questions during the collection process in order to try to capture as deep knowledge as possible. However, we did not change the questions during the data collection process since the pilot provided us with sufficient help to adjust and modify the interview structure. The outcome of the pilot interview was that we understood the importance of well-constructed questions that fit into the theoretical framework. Some questions were removed and a few questions were as mentioned restructured. Separate from the content of the questions we learned that our behavior during the interview and our interview-role had an important function. We change our interview style so that only one person asked the questions and the other one was responsible for recording and assisting the interviewer with follow-up questions in the event of something unexpected. Additionally, we made sure not to interrupt the interviewee and deliberately give him or her all sufficient time to think through and structure their answers. We have mentioned earlier that we would not take notes or scribble during our interviews, something that became evident when we tried to take notes during the pilot interview.

We are very pleased with the pilot interview since it provided us with helpful insight in order to conduct our data collective interview at The Hub.

3.8 Transcribing the data

We will manage the raw data collected in accordance with Yin (2003). He suggests that interviews should be recorded in order to capture all relevant findings. Research made by Hancock (1998) suggests that recorded data then should be transcribed in order to capture useful data for analysis. All our interviews were, therefore, tape recorded with their permission, and lastly transcribed. Hancock (1998) does, however, describe transcribing as a time consuming process. He states, that it is not crucial to transcribe every single interview into a full script. Instead, the research can use a technique called tape analysis. This means taking keynotes from the recorded interviews. A tape analysis enables the researcher to focus on the sections that contains the most valuable and relevant information to the purpose. Hancock (1998) does, however, mention that inexperienced researchers might suffer from problems of biased while conducting tape analysis. We have, therefore, in accordance with both Yin (2003) and Hancock (1998) transcribed all interviews, as this method prevents biased interpretations of the data.

To summarize, all interviews at the Hub will be tape recorded, transcribed, translated summarized, analyzed, and cross-compared.

3.9 Method for Analysis

Eisenhardt (1989) describes the analysis of data as the foundation from which a theory is built on. There are several different ways to analyze data collected from qualitative interviews. However, an analysis of qualitative research requires a summary of all data collected. The summarized data should then present the most important features so the reader can get ‘the big picture’ of the main findings. Some data might be measurable similar to a quantitative study, however, a qualitative study is used to describe, understand and articulate a phenomenon (Hancock, 1998).

We will use the ten-step model of Content Analysis (Higher Level) developed by Hancock (1998) to summarize our data, since our study contains verbal data and is designed to be interpretative. It will be used for identification and classification in order to categorize the relevant data from our transcripts. Content Analysis requires the researcher to
revisit data until the categorization gives an honest and accurate reflection of the data (Hancock, 1998).

The Content Analysis does not, however, give the opportunity to search for cross-case patterns in the data. Eisenhardt (1989) underlines the importance of these patterns. He states, that people are naturally bad at processing information. This can result in false and premature conclusions based on limited data. Eisenhardt (1989) therefore suggest cross-case pattern as tool to reduce this information biased by handling the data in divergent ways. This can be done by, comparing cases in order to find differences and similarities between them. The results of the comparison could then lead to new and unexpected patterns, categories and an overall deeper understanding of the research study (Eisenhardt, 1989). This type of analysis should improve the probability and likelihood of capturing the most relevant and accurate data, resulting in a reliable foundation for the theory to build upon (Eisenhardt, 1989). However, we will not build or test a theory, rather investigate the role of creativity in Coworking, which hopefully can serve as a base for future research and discussion.

In summary, our method for analysis of the data will therefore be a combination of the theories developed by Hancock (1998) and Eisenhardt (1989). Firstly, to sort and categorize the data, we will then apply the Content Analysis by Hancock (1998). Secondly, we use Eisenhardt’s Cross-Case Pattern Analysis (1989) to evaluate the relevance and reliability of our findings.

3.10 Validity

This section aims to measure the validity of the method used when collecting our data. We have conducted a qualitative research in a case study approach in order understand a complex social phenomenon in accordance with Yin (1994). We have conducted six interviews with members at The Hub in Stockholm, and as mentioned previously, one of these was a pilot interview. We chose 5+1 interviews as Eisenhardt (1989) recommends that this type of research should include four to ten respondents, however, he also states that there is no ideal number. The first interview we conducted was a pilot interview, this was done in order to test and improve our interview template.

We looked for several different requirements before choosing our interview prospects. The candidates had to form a diverse group of people. We looked for differences in sex, age, occupation and membership length. This was done with the intention to reduce any sample biased. Our initial research intended to cover interview candidates from three different countries across northern Europe in order to reduce any potential biased inflicted by a particular geographical location. Our budget did, unfortunately, limit us to only study Coworking in Sweden. It is therefore important to consider the impact this has had on our data in any form of replication of our study. The Hub has for example, a screening process on all new members. This screening does not follow a list of specific criterias. Instead, they screen the applicants in order to determine their fit with the other members. The Hub strives for a diverse group of people that are conducting something that contributes to society (Kent Edquist, personal communications, 2011-03-14).

Our interview questions are linked to the theories from our frame of reference (see appendix 1). These questions were created in accordance with the acknowledge case study design developed by Yin (2003) and have been used to answer our research questions and purpose. All of our interviews have been transcribed in order to create transparency.
and insight of how we conducted the interpretation of the data. This was done to verify our statements, capture useful information and minimize errors and misinterpretations in accordance with Hancock’s (1998) ten step Content Analysis. This was followed by an analysis of cross case patterns in accordance with Eisenhardt (1989) as he states, that people are naturally bad at processing information which can result in false and premature conclusions based on limited data.

All of these actions were taken to study Coworking in the most valid, accurate and objective perspective as possible. Hopefully reducing any form of biased interpretations, results or conclusions.
4  Empirical Findings and Analysis

In this section we will present the empirical data combined with the analysis. Based upon the method which supports the theoretical framework we intend to provide clear evidence of our study. Extracts from the transcribed interviews are presented and used to support our argument. Moreover, this section is divided into four categories: creative personality, innovation, motivation and environment. Each of the respondents will be analyzed from this perspective, and we will close this section with a cross comparison of our respondents.

4.1  Tor

Creative Personality

Tor indicates that he does not have problem to shift focus between different projects. He works long hours, and does not usually rest until late afternoon, when he deliberately takes a break to recharge his energy. He also states that he has no problem to remain focused during long working shifts. This would confirm the personality trait of Energy according to Csikszentmihalyi (1996).

“I am most alert during the mornings and in the beginning of the day, and I am the most tired at four o clock, at that point I need to relax and do something else” (Tor, personal communication, 2011-04-26).

Our analysis tells us that Tor can be categorized as a person with both divergent and convergent thinking, which could indicate a person with a high IQ. He has the ability to combine these two ways of thinking. Tor does not only state that he has no problem to generate many different ideas or solutions but he also clarifies that he possesses the ability to analyze and solve an independent problem or issue. Csikszentmihalyi (1996) says that it is not much use generating new ideas if you cannot separate the good ideas from the bad ones which is another evidence of creative thinking.

(Question regarding Tor’s ability to understand which ideas to develop further.)

“No, not really but it is very important to obtain some kind of focus so they (the ideas) actually become developed. It is not enough having an idea, you need to find one that is suitable, timely and an idea that fit into the right context with the right sort of partners” (Tor, personal communication, 2011-04-26).

Tor does only partially fit into the section of responsibility and seriousness as he has only showed one side of the combination between seriousness and a more playful attitude.

“I have always delivered what I have promised and I never take an opportunity for granted” (Tor, personal communication, 2011-04-26).

We do not find any indication that could provide us with evidence that he uses a playful attitude or a more irresponsible manner in combination with the already confirmed serious attitude during this analysis. Therefore, we cannot suggest that he would fit into this trait of a creative person. Moreover, our interpretation of Tor is that he possesses a good fundamental view of reality. This can be confirmed from Tor’s long professional background and experience together with his tendencies of daydreaming during work. This would validate Csikszentmihalyi (1996) research on creativity, which states that a person should go beyond what is real in order to create something new.
Tor perceives himself to be both outgoing and extrovert simultaneously. He continues to explain that he is outgoing in all situations which could imply that he fits into one section of this category. We cannot be more precise since it impossible to determine if he can be introvert and handle situations where he is more like an observer as well. We can, therefore not confirm this trait to fit with Tor’s personality. Especially when evaluating how Tor cooperates with pride and humble, he indicates that he usually tell others about his successes trough social medias and forums. Our interpretation cannot support Csikszentmihalyi (1996) paradoxical declaration of Tor being proud and humble at the same time.

“...that depends what you implies by saying proud, I am using all the social media to inform people what I am up to” (Tor, personal communication, 2011-04-26).

Tor states that he fits well into the male gender role and does, therefore, not fit into this category. Creative men should according to Csikszentmihalyi (1996) be seen as more sensitive and less aggressive then what is considered as normal. Tor also answers the question regarding if he think people perceive him as emotional and explains that he consider himself to be very stable and in control, which again gives us no indication that he is more sensitive or that he falls outside the typical gender role, which yet again implies that he is not in line with this characteristic trait.

Tor continues to answer questions concerning his personal characteristics and he does not seem to fit into the trait of being both traditionalistic and conservative, since it would imply that the he is being well internalized with he’s own area of culture and that the past is a vital attribute of the creation of something new (Csikszentmihalyi, 1996). He identifies himself as being rebellious and independent, but not traditionalistic and conservative. Even though, our observation tells us that Tor is actually well aware of the past and what has been created from this. He is trying to be innovative at the same time. We base this observation on the explanation Tor gave us about what he is currently doing.

“...helping other companies develop digital services especially within digital media but also within other areas and business development that are concerning online solutions. In short, almost everything, since most of business is now online...forecasting what is going to happen in the future with businesses with the help of IT and media” (Tor, personal communication, 2011-04-26).

Tor states that he is a good pedagogue as he can adapt his presentations to fit the audience. He states that he sometimes can explain things to fast, but usually notices this by observing his audience. He does not seem to be a person who is deviant from the majority, he does not portray a picture of an isolated or misunderstood individual. Instead he describes himself as an inspirer, a person with a lot of ideas.

Innovation
Tor is a very good example of a person who is engaged in the process of open innovation. The theory implies that import of external knowledge has a positive effect on the generation of innovations. Tor has through collaborations with others complemented his capabilities in order to succeed with specific projects. This exchange of information is a good reflection of what the Open Innovation model by Chesbrough (2003) wants to portray. He is combines his own knowledge with external competences in order to create a competitive advantage.
“...In the previous work [Coworking] space I found a gentlemen who were engaged in politics for several years, he had a good knowledge about the public sector. We are now discussing a future project where we want to generate solutions for the public sector, where our competences in fact complement each other very well” (Tor, personal communication, 2011-04-26).

The open innovation model enables Tor to verify the quality, potential capabilities or quality of an idea or a project, something that you cannot do if you are stuck in a Closed Innovation process as you are limited by the ‘boundaries of the firm’ Chesbrough (2003). Implying that sharing knowledge in order to surpass obstacles is not the only important factor; the idea generation process is also affected.

“...one of the greatest advantages of a place like this is that you are not alone, you are constantly meeting and talking with people both formal and informal, this happens all the time; you are exchanging ideas with each other which has the potential to strike root” (Tor, personal communication, 2011-04-26).

This also reflects how Tor is unconsciously affected by idea generation from serendipity. Tor describes how he, several times, met people in a Coworking environment which has resulted in unforeseen collaborations.

**Motivation**

Tor’s main source of motivation can be found in the structure and atmosphere at The Hub. He states that the combination of a relaxed environment and diverse background of the other members increases his motivation. Another important aspect for Tor is the fact that there are no internal conflicts among the members of The Hub compared to a corporate setting where there might be conflicts as people are competing against each other.

“...that is not the case here; there are no reasons for anyone here to compete in the same corporate sense. This type of internal conflicts does not exist here” (Tor, personal communication, 2011-04-26).

**Environment**

Tor explains that the simple fact of having people around him enables him to reflect and share knowledge. The presence of others in this environment provides him with both energy and inspiration. This is in line with the research conducted by Csikszentmihalyi (1996) on how creativity gets affected by the presence of others. An informal setting at The Hub exposes Tor to the opportunities of several dialogues per day. Tor states that these dialogues shift from both business related topics to basic small talk. Conversations at The Hub are important for Tor in order for him to sustain and increase his pool of knowledge.

“...most of the conversations here are very short, but this varies of course, I am trying to start business with some of the people here, which means that we engage in meetings from time to time, in a normal day maybe between five or six people” (Tor, personal communication, 2011-04-26).

There are also several important physical resources that Tor highlights, the conference-rooms, kitchen area, adjustable tables and internet are important for him to conduct his work.
The Creative Process

- Conscious process where a problem is defined
- Exploring data and information within the domain
- Influenced by previous knowledge and experience
- Planting a seed for the future

Figure 4-1 Model Preparation Stage, for respondent Tor

Tor has a long history of participating in different Coworking facilities; prior to The Hub he was active in other Coworking spaces. This participation in Coworking spaces indicates that this type of setting is appealing to Tor, in fact, it has a positive impact on his ability to constantly gain a larger pool of knowledge. This will also simplify his ability to gather information and become more familiar with a specific problem, which is something that is very essential in this initial stage of the creative process.

"No, I am good with formulating the problem so that it becomes clear and I intend to identify what sort of information, foundation and expertise one would need in order to solve the problem and organize information for the project and compile it" (Tor, personal communication, 2011-04-26).

Tor also states that his curiosity and his ability to quickly learn new things are the driving forces that led him to where he is today. The Coworking atmosphere is a very suitable setting for Tor. This is reflected in his answer concerning the question about what Tor would do if he becomes stuck with a problem or a project. He states that he would try to reach out to his fellow Coworking colleagues in search for advice and ideas.

“Then I will turn to my network and ask for help” (Tor, personal communication, 2011-04-26).

Reaching out to people in his network is a great example of how Tor can make use of Open Innovation developed by Chesbrough (2003), as he can absorb external knowledge. Tor also states that he is most responsive to new ideas in the initiating stage of the process, during a time when he is researching a lot and tries to come up with new ideas. This confirms that Tor is precisely in line with the actions of the preparation stage.

[Question concerning when Tor is open to new ideas] “...theoretically speaking all time, but I would say in the beginning of projects when I am in one of those research and analytic phases” (Tor, personal communication, 2011-04-26).

Other inputs and building blocks for his ability to obtain a large knowledgebase and understanding can also be found here, without any correlation to The Hub. Nevertheless our analysis provides strong incentives that The Hub improve Tor’s ‘preparation-stage’ skills.
The incubation stage allows a person to switch the center of attention for a while and let the possible solutions to suddenly arise. Tor states that he always has several different projects running at the same time, which allows him to change focus when he desires. Tor explains that he wants to get out of a problem as fast as possible, similar to the preparation stage, where he reaches out to his network in search for help. Depending on the outcome, Tor is in the position where he already has solved a problem or he is still searching for a solution. However, The Hub facilitates him with skilled people who are specialized in what they do, and since Tor states that he has both engaged in collaboration, idea sharing and simple advice giving. This could indicate that Tor has a better foundation to start from then he would have without Coworking.

“…one of the greatest advantages of a place like this is that you are not alone, you are constantly meeting and talking to people, both formal and informal. This happens all the time, you are exchanging ideas with each other which has the potential to strike root” (Tor, personal communication, 2011-04-26).

This information-sharing environment in combination with Tor’s well-developed ability to make independent association in fact increases his chances of convergent thinking, which would in turn generate a variety of possible solutions to a specific problem. Coworking also facilitates the process of ideas generated from serendipity. This means that a lot of his inspiration comes from discussions with others which would imply that Coworking have an affect on his incubation stage.

“I take part of all sort of media and I communicate a lot with people online, I engage in a lot of discussions with other very niche type people, both in real life but also online” (Tor, personal communication, 2011-04-26).
Figure 4-3 Model Insight Stage, for respondent Tor

This stage of awareness results in the creation of one or several ideas. Tor would experience this stage as a developed process, since he is so active in the preparation stage where he intends to collect all relevant information and experience. This enables him to organize the project and understand the process. Sometimes ideas come up from nowhere but, even though, it is important for Tor to quickly concretize and understand what sort of importance they have. The Hub can, similar, to the other stages of the process provide Tor with people who can help him understand if it is worth pursuing the idea or project. Tor states that he often evaluates potential ideas with other people, not only with other coworkers but also with business partners at The Hub. Coworking is a good example of where Tor finds support and business partners, but also skilled niche people who can help him value ideas.

“Then I want to start concertize it, I don’t like generating idea’s and write them down and then leaving them there, I want them to develop into something real. The difficult part is to take those exceptional ideas and transform them into something; a product, service or some kind of effect, that is often much more difficult than actually generating the idea” (Tor, personal communication, 2011-04-26).

• Conscious final stage
• Testing the idea
• Develop idea further

Figure 4-4 Model Verification Stage, for respondent Tor

Tor has now proceeded to the final stage of the creative process, a stage where he needs to evaluate if his ideas and then choose if he wants to elaborate on them further. Tor explains that he does not find it particularly difficult to extract the ideas he wants to proceed with. As mentioned earlier, the difficulties lies in finding the right context for the idea, making sure that it is timely and that you are working with the right partners. This is not something we can prove that The Hub or Coworking does directly. However, in the line of argument, which has previously been presented, having a supportive and skilled group of people around you will allow for these factors (finding the right context, being timely and finding the right partners) to run much more smoothly. Even though we do not have strong evidence that Tor evaluates and elaborates his ideas or concept further because the assistance of Coworking, we can say that Coworking could simplify and save Tor money and time in this process.

4.2 Loke

Creative Personality
Loke is well aware of his energy levels. He states that he is currently trying to improve his energy with different experiments. He has recently started to use sleep or "power
naps’ during the day as way to recharge his energy. He also states that he has minor problems to shift focus between work and private life. Csikszentmihalyi (1996) states, that creative people are in touch with their energy and that they can ‘switch off’ immediately and ‘recharge’ their batteries when able to. Loke also states that he often find himself daydreaming, which he sees as problem. He shows a deep insight into this phenomenon and is trying to learn how he can control it. This makes Loke a realistic person with ability to be imaginative.

“I try isolating myself while listening to fast and high music in headphones. I am also trying to sleep for 15 to 20 minutes every day” (Loke, personal communication 2011-04-26).

Loke knows that he has a deep insight about his ability to generate new ideas. He does not only find it easy to come up with new ideas and solutions to problems but also finds it easy to sort the good ideas from the bad ones. This is according Csikszentmihalyi (1996) a sign of creativity as it points to a person with an ability to think both convergent and divergent. Loke does, however, not show any playfulness towards work in general. Instead he describes himself as structured and objective which contradicts a trait of a creative person (Csikszentmihalyi, 1996).

Our interviewee is ambivalent in his answers about his social skills. He implies that he can be the better of two worlds and that he normally would be considered as an outgoing person. However, a personality test that he took previously proved him to be more introvert. He means that he can adapt to the situation and it is therefore hard to classify him to be either extrovert or introvert. Csikszentmihalyi’s (1996) research shows that this feature is common among creative individuals. They can often exhibit both traits simultaneously instead of showing a consistency towards one side in particular.

“I am mostly extrovert, even though I actually am introvert. I have conducted personality tests before, but my personality started to shift after high school. It depends on the situation in the end” (Loke, personal communication 2011-04-26).

We can see that Loke’s mind is two-folded when we ask about how he handles any type of success. He says that success is something he keeps for himself, but that he sometimes likes to brag. This implies a creative personality according to Csikszentmihalyi (1996). Loke does however have high ambitions and will therefore not find himself in a position where he is satisfied enough to brag often.

“I set my standards high, which is both good and bad. But I will off course take pride if I have done something good” (Loke, personal communication 2011-04-26).

Another interesting finding about Loke is how he positions himself against the gender roles. He sees himself as disrespectful against gender roles in general, but he still argues that he is metrosexual. Csikszentmihalyi (1996) says that this is common trait among creative people. He states that creative individuals are able to avoid the typical gender stereotype and that creative men are perceived to be less masculine, meaning more sensitive and less aggressive. A confirmation of this is that he defines himself to be both independent and rebellious while he opposes himself to conservative or traditional.
"Absolutely, I would say that I am more metrosexual than butch" (Loke, personal communication 2011-04-26).

Innovation
The major reason for Loke to come to The Hub was to take part of the diverse pool of knowledge found among the different Coworkers.

“We are collaborating on a couple of projects. It is so easy to concretize, help and push each other. Maybe a recommendation of a site or the mediation of a contact that enables you to create something” (Loke, personal communication 2011-04-26).

This can, as Loke said, be a trivial thing. But he implies the external help he uses has as positive effect on his own work. This can be seen as the hybrid business model that Chesbrough (2003) explained in his theory on Open Innovation. Loke is not locked in by the ‘boundaries of the firm’. He is self-employed but is trading his knowledge in order to develop his own ideas and skills.

“I am currently working with XXX, a person who I have worked with before... through him I went on a conference to Goa in India” (Loke, personal communication 2011-04-26).

Loke is currently overwhelmed by ideas that he has received from The Hub lately. He actually has to say no to most new ideas since he means that he has gotten enough inspiration. This really illustrates the power of Idea Generation from Serendipity. Conway (2009) says that the origin of a successful idea is usually attributed from this type of exchange. A random meeting, an unintended connection or chance conversation, basically all events that would link together information that would otherwise have been separated.

“Yes I have gotten so many of them [Ideas], but I am in a phase of my life were I have to say no to everything, I don’t want more inspiration” (Loke, personal communication 2011-04-26).

Motivation
Loke sees The Hub as a secure and stable point in his life. Amabile (1998) states that people need to be calm and separated from external pressure, in order to increase their motivation. Loke says that he is relieved by the separation that The Hub can give him from his home. That it is nice to be surrounded by structure, order and pleasant people. He lists factors that can enable freedom of choice as the structure of The Hub minimizes his commitment to trivially responsibilities.

Environment
The environment at The Hub is very beneficial for Loke. He states that it is a source of inspiration, a place where he can get new ideas. He says that the opportunity to meet new people has created an environment that is supportive for his own development. Loke’s reflection is in line with Amabile (1998), who states that diversity is crucial among information trader in order to create.

“To have a big funnel and give someone all my ideas that are spinning in my head, on the condition that is an embryo” (Loke, personal communication 2011-04-26).
This can also be linked to how Loke meets people. An average day at The Hub gives him about three random conversations. Half of these are usually business related.

“It is probably the time when I am facing idea generators and I get to serve as a catalyst of what other people are saying and doing” (Loke, personal communication 2011-04-26).

Loke does, however, reflect on the negative aspects on these conversations. He means it can be time consuming and indicates that it can draw attention away from work. This is also discussed by Florida (2002), who states that it usually takes about 20 to 30 minutes to refocus after getting your creative flow interrupted. Despite this, Loke still lists the network at The Hub as the most important feature of the environment.

“It can be both positive and negative. Inspiration is always good, it can happen in a hundred ways. You can enter into new ideas, and there are plenty of those. The negative sides are obvious, you often go for a coffee with someone, you give and take” (Loke, personal communication 2011-04-26).

The Creative Process

- Conscious process where a problem is defined
- Exploring data and information within the domain
- Influenced by previous knowledge and experience
- Planting a seed for the future

**Figure 4-5 Model Preparation Stage, for respondent Loke**

The preparation stage can help Loke begin the process of gathering relevant knowledge that he needs to solve specific problems and to identify new opportunities. Loke states the he finds it important to be exposed to new people and environments, which in turn gives him access to new knowledge and experience. This is useful for him in this stage, especially when he wants to explore his domain further. Coworking can help Loke through this stage as he gains access to a competent network of knowledge. Loke can work actively to solve problems that he encounters by gathering data and information from this network. The quality of the network is guaranteed by the screening process that The Hub conducts on new members.

“The Hub provides me…with ideas, inspiration and concrete suggestions that point towards the right direction” (Loke, personal communication 2011-04-26).

This gives Loke more knowledge since he is constantly learning from himself and other coworkers. This will then increase his pool of knowledge. The learning process will add extra value and insight into his domain of work which can help him to move through the preparation stage faster next time. He does, however, sometime realize that the problem might be impossible to solve at the moment, this moves him to next stage of the creative process.
“It takes time to switch focus over to another project, but eventually you come to point where it is impossible to proceed” (Loke, personal communication 2011-04-26).

Figure 4-6 Model Incubation Stage, for respondent Loke

This is an unconscious stage of the process. Loke is not working actively to solve the problem generated in the preparation stage. Instead he might get triggered by something unexpected which can help him to find a solution to the problem. This means that Loke needs to combine his associative ability with his own experience and the knowledge around him. We believe that Coworking can assist Loke to find these unexpected triggers. The diverse knowledge pool found at The Hub can serve as a source of information. It can increase the chance of an idea generated from serendipity. Evidence of this can be seen in several of his statements:

“The meeting with different cultures and people makes me realize that there is a demand, or creates a new concept. If you put that together something new is created” (Loke, personal communication 2011-04-26).

“It is probably the time when I am facing idea generators and I get to serve as a catalyst of what other people are saying and doing” (Loke, personal communication 2011-04-26).

“I am definitely not perfect when it comes to presenting ideas. Even if I was, it would be hard to find persons with the analytic ability to process and sort them” (Loke, personal communication 2011-04-26).

This implies that Loke’s ability to generate new ideas comes from other people’s thoughts and knowledge, and that Coworking is structured in a way that can influence this positively. This effect can also be linked to Chesbrough’s (2003) theory of Open Innovation, which states that you should use external knowledge in order to pursue new markets and ideas. He does not get finished ideas from other coworkers, but Coworking facilitates him with a knowledge pool that can simplify his associative ability.
This is one of the most mysterious parts of the Creative Process, the idea emerge in a ‘flash’. It can be a singular idea or a rush of several different insights. It is when a person moves from preconscious awareness to conscious. Loke confirms this partially, he states that it can happen this way sometimes, but not always. He means that he only wants to create ideas that are demanded by the market.

“I prefer that there is a demand for it (the idea) on the market, instead of me creating the demand” (Loke, personal communication 2011-04-26).

However, this is a delicate stage of the process, as the idea needs to be confirmed before it can be accepted. Loke is aware of this. He is, therefore, searching for ideas with low ‘time to market’. He wants an idea that can have fast interaction with the market. This implies that he is required to pick out ‘the low hanging fruits’ and use a ‘fast lane’ to potential customers to validate his idea. We think that Coworking can simplify this stage. It can assist him to confirm the idea as he can use the network at The Hub in search of criticism and feedback.

"If I realize that this is crap (the idea) after just a week…then fine, at least I didn’t spend six months working on it” (Loke, personal communication 2011-04-26).

Here, it is important, that the creator can understand if the idea will work. The creator is, therefore, in a sensitive state where it is crucial that the surroundings are supportive of
new ideas. This could help the creator to elaborate on the initial idea, making it even better through assistant and collaboration.

“Yes, definitely...that is what is most important (The supportive environment at The Hub)” (Loke, personal communication 2011-04-26).

Loke can use the diverse pool of knowledge found at The Hub to verify his ideas. This impels that Coworking can assist him in this process. Amabile (1998) support this in her theories on motivation. She states that people should share excitement over work by having a willingness to help and learn from each other.

“It is probably the time when I am facing idea generators and I get to serve as a catalyst of what other people are saying and doing” (Loke, personal communication 2011-04-26).

4.3 Oden

Creative Personality

Oden concludes that he has a very even and strong energetic level throughout the day. He says that he rarely experiences lack of focus or dips in his energy level. He is often focused and he is not bothered by other people making noise.

“No, it is constant, I have the ability to really focus on something for a long period of time without listening in on other conversations, but still I feel much more effective when there are other people around me who also are working” (Oden, personal communication, 2011-04-26).

Oden positions himself well within this trait and strongly indicates that his high energetic level in combination with his focus result in this creative characteristic. Oden then reflects upon the issue if he has the ability to complement divergent thinking with convergent thinking, which Csikszentmihalyi (1996) uses as an indicator to reflect if someone possesses a high IQ or not. Oden states that he does not have any problems to come up with new ideas and that he does not find it difficult to understand which ideas is important. He continues by saying that he often helps others to determine if an idea is feasible or not.

(Question regarding Oden’s ability of idea generation) “That’s my job! And that’s why I do what I do” (Oden, personal communication, 2011-04-26).

(Question regarding Oden’s ability to find the ‘right’ ideas) “No, not really, that is my job too. People often use me to ask which of these ideas that would work. So, that’s what I do” (Oden, personal communication, 2011-04-26).

Oden states that other people believe that he is more disciplined than he actually is. He can maintain a high focus throughout the day while at the same spend time doing other things such as surfing the web in a sort of day-dreaming manner. However, he refers on it as a form of ‘active day dreaming’ where his purpose is to gather information at the same time. This implies that his attitude towards work is a combination of both high discipline and playfulness.

"Not daydream per se but more in the sense of that I actually know why I am doing it, I look around the web for example. It is actually because I want to relax, but I also do it because I want to find new ideas and get inspiration to new articles which could lead to
that I come up with new things as well, it is like a channel of creativity. I feel that I am working even though I don’t feel especially effective at the moment, but I know that it is good in order to be effective or creative” (Oden, personal communication, 2011-04-26).

Regarding whether or not Oden is both introvert and extrovert he states that he has the most impact on people and feel most comfortable in smaller crowds. He says that groups from five to ten people are not within his comfort-zone and he believes that his ability to convey a message is poorer in larger settings. This would entail that Oden only fill the criteria for the introvert section of this trait and it can therefore not be used in favor for Oden, in terms of, the creative characteristics developed by Csikszentmihalyi (1996).

"I am more introvert, I am best when it is one-to-one meetings, when it is few people but not in large crowds... I feel most efficient when I am talking to people individually rather than a meeting with five, seven or ten people. I am not the best convincing people but that is also because it is more time consuming and not as efficient” (Oden, personal communication, 2011-04-26).

Oden consider himself to be more ‘low key’ when it comes to how he portray his successes or accomplishments. Although we do not have a statement saying that he is proud over what he has accomplished, our observation tells us that he is a successful person with a lot of responsibility, which would imply that he is in fact both proud and humble at the same time. Oden states that he does not think that he falls under the typi-cal categorization of a stereotypical male. We have no clear indication saying that Oden perceives himself as more sensitive or less aggressive which would be a trait for this category. However, Oden states that he does not think that he fits within the typical gender role, and uses examples such as the unwillingness to settle down, and that he has no urge for buying or having a lot of assets.

“...I try to travel to those countries that do not have a lot of money, in order to observe and understand how they are living and what things that makes them happy. What are they doing to obtain a meaningful life, and try to focus on how, and that is very difficult, the most important is to find their core-values and try to bring those back to the western-world, or somewhere else, and use it in a project or something else. That is another reason why I am traveling, in order to understand what is important and disregard what is not. And then try to implement it in my work” (Oden, personal communication, 2011-04-26).
Innovation

With reference to Oden’s ability to engage in open or closed innovation the analysis is more complex. Oden has not been an active Coworker at The Hub for that long which limits his possibility to actually try some aspects of open innovation, however, he argues for the potential positive impact it could have on him.

Oden consider him to be very independent when it comes to his work as a self-employed consultant. Oden states that he has not yet conducted actual exchange of labor or help. However, he has spoken to other Coworkers at The Hub and has discussed possible ideas or collaborations.

“...it is too early, but actually XXX is stationed here and they are doing the same thing as XXX but towards Great Britain, so maybe that is a start, we could discuss if there were possible resources or business aspects we could share, but for now it’s too early” (Oden, personal communication, 2011-04-26).

“Yes, I have already spoken to them about helping them with developing their membership site” (Oden, personal communication, 2011-04-26).

Oden’s attitude towards idea sharing is similar to his attitude towards helping people at The Hub. He states that he likes the idea of in-house support by using members at The Hub as a verification base for new ideas. On the other hand, Oden states that his screening process or verification stage often starts internally and that it only occasionally gets exposed to others during his evaluation process.

One aspect of the Open Innovation model is that you can step ‘outside the boundaries of the firm’ and get new influences Chesbrough (2003). This would work like a channel of input he says. Oden has a very interesting view on how he gather external knowledge, not only does he reach out to other people but he also uses media and other information sharing channels to gather more knowledge in order broaden his views.

“Not daydream per se, but more in the sense that I actually know why I am doing it; I look around the web and such. It is actually because I want to relax, but I also do it because I want to find new ideas and get inspiration to new articles which could lead to that I come up with other things as well, it is like a channel of creativity. I feel that I am working even though I don’t feel especially effective at the moment, but I know that it is good in order to be effective or creative” (Oden, personal communication, 2011-04-26).

Motivation

There are several different statements and interpretations that we have discovered during our analysis of Oden that would suggest that his motivation is in fact influenced by different aspects of The Hub. Accordingly to Amabile (1998) there are several factors of motivation such as freedom, resources, work group features and organizational support that should be considered. Oden states that one of the main reasons why he chooses to work at The Hub was because he could be in-charge of his own time planning and that it is his choice to meet with people when he needs it. This would be a typical example of how specific freedom-factors such as self-control over the process could increase a person’s intrinsic motivation.

“...there are things that are going on around you but you don’t have to talk to people all the time, it is not like you are sitting in an office with other people where you often have meetings and hear people gossip all the time. I try to avoid those things, but I still
want the positive effect from the possibility to ask for help or help other people without having to sit in meetings all the time” (Oden, personal communication, 2011-04-26).

Oden really points out the importance of having a flexible workplace where freedom and self-control are essential factors. Moreover, another very important aspect of Oden’s motivation is the result it has on his ability to conduct his work. Several times during the interview Oden states that the most dominate positive feature of working at The Hub is the way it affected his effectiveness.

"I actually focus less at home, I still do things there but one reason why I am here (The Hub) is that I am more effective, because here I am surrounded by other efficient people. I do not know why but it just works” (Oden, personal communication, 2011-04-26).

Environment
The environment at The Hub has had positive effects on Oden. Most prominent is the affect it has had on his effectiveness. According to Amabile (1998) you become more creative when working with creative people in your proximity. This is something Oden seems to be in line with. Oden also stressed the importance of physical things such as the kitchen area and the adjustable tables, one of the most important aspect of the environment of The Hub is the Global Environment he states. He likes the fact that The Hub exists in many countries around the world and that he has the possibility to work and visit them when he is traveling.

“Relatively calm and good, people here are working efficiently, there are good aspects like kitchen, office-environment like the tables that can be moved up and down, they are very comfortable, I have only been here for two weeks now but I am very content. But one thing that is very important, and I don’t know if you are going to ask me this question later, it is not only because of Coworking, it is also the network, and for example when I was working in Cairo The Hub did not exist, but now there is a Hub there, so I have the possibility to travel to London and also work, so to conclude, it is not only the other people, I like that there is other places as well” (Oden, personal communication, 2011-04-26).
The Creative Process

- Conscious process where a problem is defined
- Exploring data and information within the domain
- Influenced by previous knowledge and experience
- Planting a seed for the future

Figure 4-9 Model Preparation Stage, for respondent Oden

When Oden encounters a problem and he does not find a direct solution for, he takes an active decision to proceed with something else.

“No, I try to avoid it, I start working with other things, and I get back to it later” (Oden, personal communication, 2011-04-26).

However, we want to understand what specific aspects of The Hub that is of significance for Oden in this stage. In order to become familiar with a problem and to gain a deeper understanding of the domain, the preparation stage tells us that the subject needs to gather information, study other solutions, and understand what has been valued in the past. The Hub provides Oden with a specific and very proximal network. Creative people inspire other creative people, Amabile (1998). Moreover, it does not only generate new ideas for Oden but also affects aspects like help and information sharing. Expanding Oden’s pool of knowledge would imply that The Hub is in fact increasing Oden possibilities to come up with a solution.

(Question regarding sharing knowledge with Coworkers) “Yes, I have already spoken to them, for example I will help with the development of their new membership website” (Oden, personal communication, 2011-04-26).

Moreover, the benefits of the network for Oden does not stop there, since The Hub is a global network with facilities all over the world, the possibilities for information and idea sharing is extraordinary.

Figure 4-10 Model Incubation Stage, for respondent Oden

- Unconscious process
- No deliberate work is devoted to the initial problem
- Facilitates the individual’s ability to make mental combinations (Association base)
- Ability to generate ideas or potential solutions
Oden states that he always has several projects running at the same time, a very important feature of the process since it enables him to move from one project to another. As mentioned earlier, when he encounters a halt in the process, which he cannot overcome, he puts that to rest for a while and moves on with something else. The Hub can, to some extent, facilitate these unintended mental combinations, which this stage concerns. This is mainly because it can place him in an environment where knowledge is available. Similar to the preparation stage, it positions Oden together with people that are very familiar within a specific domain, a greater diversity would equal more specific knowledge. Oden states that he particularly embraces that people at The Hub have gone through some sort of screening process where he is assured about the quality of the people. This also provides Oden with a larger incentive to engage in discussions or collaborations with people at The Hub. The confidence in his coworkers could indirectly help him to generate associations that could lead to a possible solution of a problem.

“…If I would be working on a project and I need someone who are going to edit a text, perhaps I could find him here, another thing that is important is the imbedded reference system that exists here. You know that they are skilled, it is much easier to know whether someone is skilled or not here, you have more information about the people here” (Oden, personal communication, 2011-04-26).

Engaging in this form of Open Innovation where the reach is further than what Oden can generate by himself is very important. Even though Oden does not recognize that he gains knowledge from a sporadic discussion, or even if he does, his ability to randomly create novelty from independent events i.e. making associations will increase during his time as a Coworker.

However, this is the only area where Coworking is increasing Oden’s chances of moving faster into the Insight stage. Since Oden concludes that traveling and exploring new cultures generates most of his inspiration and the fact that he has not been an active coworker for a long time implicates that Oden’s unconscious incubation stage is mainly influenced by other events.

**Figure 4-11 Model Insight Stage, for respondent Oden**

During this stage Oden shows very little evidence that Coworking would assist him in reaching the final stage, he possesses a good ability of convergent thinking but does not provide any evidence that The Hub that helps him with this. However, the aspect of how Coworking can facilitate Oden, in this stage comes from the close proximity of skilled people that Oden can reach out to. Other Coworkers could help him get a quick understanding about if he is moving in the right direction. Nevertheless, Oden is very inde-
pendent in the process and says that if he is in charge of the screening process of ideas, he can go back and forth with the idea until he feels that the idea is good enough to be tested further.

“...If I do the ‘creative process’, then I can move back and do it again or change it to something that works. For me that sort of editing function is very important. If you are a perfectionist then you want something to be as good as possible...” (Oden, personal communication, 2011-04-26).

This explanation would then support our interpretation that Oden wants to be quite independent when it comes to which ideas to proceed with. This observation would also fall in line with his occupation as an independent consultant.

![Figure 4-12 Model Verification Stage, for respondent Oden](image)

- Conscious final stage
- Testing the idea
- Develop idea further

In the verification stage Oden needs to determine if he wants to develop his idea further until it is a final concept. Our observation and interpretation is that Oden perceives this stage similar to the insight stage, quite independent. As stated in the insight stages he wants to control the filtering process himself. This stage requires an open environment, which we believe that The Hub can provide him with.

“Supporting, supporting mine? Yes, I believe that there are people working here within technique and resources, I feel, how do you say, independent, so that section of The Hub is not the most important one for me” (Oden, personal communication, 2011-04-26).

When it comes to how The Hub affects Oden elaboration stage we can conclude it as minimal. Oden explains that he is a perfectionist and that he wants to manage this part by himself. However Oden says that the editing process should be similar to a peer group, which could indicate that he might consider bringing other people in his proximity into the process. But there is no evidence saying that Oden would not take any ones advice if they were speaking about something that he recently has developed.

[Concerning if an idea or concept is worth pursuing] “The editing process should be like a feedback group, which, well it should be finished or not finished, and if it is not final you would redo the process and try again. Only those ideas or concept that are good enough should go pass this editing process” (Oden, personal communication, 2011-04-26).

4.4 Idun

Creative Personality
Csikszentmihalyi (1996) theory of personal traits, says that creative persons can work for long hours while still being highly concentrated, fresh and enthusiastic. Idun claims that she successfully used to work very long hours and that she used to alter between two different projects.

“I do not know if you have noticed, but I have a lot of energy...” (Idun, personal communication, 2011-04-26).

Idun explains that she has a dip of energy in the afternoon and that she tries all kinds of tricks to get the energy back at that point. According to Idun she used to have a hard time to shift focus between work and leisure, but that is something that she has learned to master.

“I am quite picky about when to work and not work” (Idun, personal communication, 2011-04-26).

She continues to explain how she easily can turn off the thoughts of job. According to Csikszentmihalyi (1996) creative persons are not only able to stay particularly focused when necessary, they are also able to ‘switch off’ immediately and ‘recharge’ their batteries when able to.

“We do all kinds of tricks to get the energy back; I use to sit down in the launch with the armchairs for a while in the afternoon to recharge. If not, I use to be the one who laughs and play around a lot” (Idun, personal communication, 2011-04-26).

Idun states that she easily comes up with new ideas but also states that she has a hard time judging if an idea is good or not. It can, therefore, be said that she has more of the divergent thinking that generates new ideas and less of the convergent thinking which enables one to pick out the ideas that are good (Csikszentmihalyi, 1996). Idun claims that whenever she has an idea, she uses her surrounding to get an indication whether the idea is good or not.

“I can probably come up with a few business ideas each week” (Idun, personal communication, 2011-04-26).

“I once started a company with some friends with an idea that showed to be pretty bad in the end; it was one that we should have screened out” (Idun, personal communication, 2011-04-26).

According to Csikszentmihalyi (1996) a creative person can appear to have a multitude of personalities. But common to them all is playfulness with a mixture of persistence, perseverance and endurance. Idun comes across as very playful to us which she also indicates herself. She also states that she has a high moral towards work and she thereby confirms Csikszentmihalyi (1996) attitude-theory of a creative person.

“I have a high work moral which I believe is noticed my boss...she trust that I will do what I am set out to, but I do not take work as serious as I used to” (Idun, personal communication, 2011-04-26).

Idun claims that she is use to be focused and that she does not daydream during work, she therefore disconfirms the theory of reality versus imagination since she does not claim to be imaginative. Creative people can differ compared to other people in the sense that they can be both introvert and extrovert at the same time instead of one or the
other (Csikszentmihalyi, 1996). Idun confirms this theory since she says that her friends perceive her as extrovert, but in reality she is introvert.

"I am not very extrovert myself; I am pretty deep and enjoy to be by myself, which you cannot believe if you are among my friends when I am more party and forward...it is a big difference" (Idun, personal communication, 2011-04-26).

"I believe that my friends perceive me as extrovert, and when you know me a little better it might not be as much..." (Idun, personal communication, 2011-04-26).

Idun is a humble person that usually holds back a little when she talks about successes. At the same time she claims that she likes when others talk about their successes and do not dislike what others might perceive as bragging. This implies that Idun has a creative personality in this matter according to Csikszentmihalyi’s (1996) theory.

"I have nothing against what people use to call bragging. I think it is nice when others are doing well and I think that it is nice that they want to share it too" (Idun, personal communication, 2011-04-26).

"I use to hold back a little when I talk about successes, because people may perceive it as bragging, but I like when others are bragging. Why should you not be able share when you have done something good" (Idun, personal communication, 2011-04-26).

We asked Idun how she would compare herself with the stereotyped gender role of a woman. Her answer seen below clearly confirms the theory that creative persons can avoid the typical gender stereotype.

"Seen from the outside I believe it corresponds quite well, it is dresses, barrettes and lipstick...but as my friends use to say, they use to ask: Are you sure you are not a man? It is small things like the Olympics which is sacred, you should be free from work...which I do not believe is very normal...and I have used snuff since I was 16...I think that reflects my personality quite well, and I have given it a lot of thoughts; during high school people use to say: you are walking with the lipstick in one hand and the snuffbox in the other...which represent me very good, I can be very girly, watch the Eurovision Song Contest...I am pretty extreme both ways, I mean there is not that many girls that use snuff and ride quad bikes" (Idun, personal communication, 2011-04-26).

Csikszentmihalyi (1996) says that creative people are both independent and rebellious. Idun claims that she is not rebellious and therefore we cannot link her to this trait.

Idun states that she sometimes has problems to mediate her thoughts. She also believes that people regard her as more sensitive than what she really is. According to Csikszentmihalyi (1996), creative individuals often think divergent which can result in that they sometimes feel isolated and misunderstood and they can therefore be perceived as sensitive.

**Innovation**

It is clear that Idun is engaged in the process of open innovation. She explains that she often discusses matters with other members at the Hub, and that the help is usually free from charges. Smaller meetings are also usually for free whereas a bigger project comes at a cost even though it is reduced. She brings up the term ‘karma account’ meaning that it is all about give and take. The exchange of information that occurs is a good example that reflects what the Open Innovation model by Chesbrough (2003) is all about. Since
she is strengthening her own knowledge with external competences she can create a competitive advantage.

"We work pretty much with other members out there. We were in a phase when we were recruiting; it is very hard to recruit, to get the right persons at the right spot...so I have discussed a lot with the guys that work with recruitment in here, received help and advice about what you should consider and so on" (Idun, personal communication, 2011-04-26).

"We also have a good relationship with XXX...the girls that are graphic designers...they have done our site and they do all of our graphic material" (Idun, personal communication, 2011-04-26).

"The Hub is really good for networking, the social aspect, to get a nice and familiar feeling and so on...” (Idun, personal communication, 2011-04-26).

Motivation
There are several factors that suggest that Idun feels motivated towards working at the Hub. Ryan (2000) states that someone is intrinsic motivated when they do something because they feel that it is inherently interesting or enjoyable. This can be linked to Idun who says:

"I feel motivated by coming here. I use to ask myself: is this something that I want or is it something that I have to do? And when I go here in the morning it is because I want to…” (Idun, personal communication, 2011-04-26).

This quote can also be linked to Haner's (2005) theory which states that an environment that people perceive as attractive can have an inspirational and motivational effect.

The Environment
In our interview with Idun we ask if she gets inspired by other members whereas she answers:

"Oh yes, I light up when I think about them, I found so many good friends that I would say inspire me so much in all kinds of different areas…” (Idun, personal communication, 2011-04-26).

That could be related to Sutton’s (2001) statement that creativity is best served in environments that are open and supporting to new ideas. However, this can also be related to Csikszentmihalyi’s (1996) theory that having creative people in your presence is one of the most important factors that will influence the creative result.

One of Amabile’s (1998) six activities that can affect creativity is freedom, that people have the opportunity to schedule and decide over their own work. The interview with Idun indicates that she has big influence over her own work and that she can work when she wants to.

"I work when my brain wants to work, if it wants to work very late sometimes, then it does; I don’t believe that the brain works between 9 to 5 and in between its dead…I can work very intense when I have a flow, if I notice that it is too much, then I don’t care right then…and I wait until the solution comes to me, and it does, like they say in the four B’s, that’s where the solution comes, Bars, Beds, Bathrooms...and Busses…” (Idun, personal communication, 2011-04-26).
Resources or the absence of resources are an important factor. Amabile (1998) states that the absence of sufficient resources can take focus and energy away from work since the person needs to use his or her creativity to gather resources instead of applying them at work. Idun talks about some important resources that The Hub can provide, which she would be without if she had her own office.

"The meeting rooms are very...I use them very, very much, and the phone booths are really important...It is the flexibility in the room itself, we can be everything from 70 persons one day and we can then rent the whole place...in another meeting we are only two persons and a small room is enough...so that [The Hub’s space] is the biggest resource that I could not live without" (Idun, personal communication, 2011-04-26).

The physical space is also an important resource for the creative result. An atmosphere which is open and comfortable. However, Florida (2000) states that noise can have a negative effect on creativity. Idun seems to thrive in this setting and do not state that the noise that may arise would be any problem:

"I like this environment a lot and I like to work in it, to focus, and if the level of noise is too high...and I need to concentrate...then I use one of the small rooms” (Idun, personal communication, 2011-04-26).

“Actually, I am not very good at working anywhere else; I have tried with coffee shops and so on, but that is mostly because it is fun” (Idun, personal communication, 2011-04-26).

The Creative Process

- Conscious process where a problem is defined
- Exploring data and information within the domain
- Influenced by previous knowledge and experience
- Planting a seed for the future

Figure 4-13 Model Preparation Stage, for respondent Idun

When Idun encounters a problem that she cannot solve, she leaves it at the moment. She is then taking an active decision to continue with something else or leave it and go home.

(Question regarding what she does when she is stuck with an idea) "I go home...I have spent too much time to sit around with things that does not take me anywhere, it is stuck in your head...” (Idun, personal communication, 2011-04-26).

We want to identify the aspects of the Hub that is important for Idun in the preparation stage. This stage indicates that the Idun needs to gather information, study other solutions and understand things that have been valued in the past in order to understand the domain and to become familiar with the specific problem. Idun states that the Hub is
good for networking, which means sharing information and services. She discusses matters with her fellow coworkers a few times every day.

"The Hub is really good for networking, the social aspect, to get a nice and familiar feeling and so on…” (Idun, personal communication, 2011-04-26).

“I would say that is about five times each day, except greetings like: hey, good morning. I am probably one of those who talk the most with many in here” (Idun, personal communication, 2011-04-26).

Idun also states that she often asks questions and receives help from other coworkers at The Hub. Because of that we could suggest that her pool of knowledge expands and it can then be said that the Coworking increases her possibilities to come up with different solutions.

"We work pretty much with other members out there. We were in a phase when we were recruiting: it is very hard to recruit, to get the right persons at the right spot…so I have discussed a lot with the guys that work with recruitment in here, received help and advice about what you should consider and so on” (Idun, personal communication, 2011-04-26).

Figure 4-14 Model Incubation Stage, for respondent Idun

The incubation stage is an unconscious process. Idun is not actively trying to solve a problem, but lies latent in the back of her mind. Something unexpected in her surrounding might get her triggered and can help her to find a solution to the problem, which means that she needs to combine her associative ability with the experience and knowledge she has around her.

We believe that the diverse knowledge pool that exists at the Hub can help Idun to find the unexpected trigger. It can serve as a source of information and can increase the chance to generate an idea from serendipity. Idun ability to solve problems is not affect by stress, she works on several projects at the same time and wait for the solution to come to her.

“…and I wait until the solution comes to me, and it does, like they say in the four B’s, that’s where the solution comes, Bars, Beds, Bathrooms…and Busses…” (Idun, personal communication, 2011-04-26).
Question regarding where she retrieves her inspiration] ”It sounds like a cliché, but it is in meetings with other people, of course if I meet someone and come up with something” (Idun, personal communication, 2011-04-26).

(Question regarding where she is the most receptive towards new ideas) ”Exactly, it is on the country side, absolutely, when there are no other distractions” (Idun, personal communication, 2011-04-26).

Idun claims that she usually works on several projects at the same time. That is a supposition for the incubation stage since one has to leave a problem or issue before it can be latent in the back of the mind.

- Conscious state
- Ideas are under consideration
- Rush of insight
- Delicate state

Figure 4-15 Model Insight Stage, for respondent Idun

The specific idea is developed in the incubation stage. However, it is in the insight stage that the process becomes evident, when sudden enlightenments creates a “eureka” moment. The evidence of insight is obvious in Idun’s case since she do not even know where the ideas come from.

(Idun explains how ideas appear] ”They come as a bolt from the blue, I have no idea where they come from...I often think: who told me about this? Where have I seen this? Have I seen it on TV? Have I seen it in a movie? It is really a flash” (Idun, personal communication, 2011-04-26).

When Idun gets an idea she tests it on people in her surrounding to get feedback before she decides whether the idea is good enough to proceed with.

”I have learned that there is not much that you should keep to yourself with your ideas, because then nothing ever happens…” (Idun, personal communication, 2011-04-26).

Question regarding how she evaluates an idea, if it has meaning and if it will work] ”It is probably when I ask people, I can think that it is good, actually, my ideas can be spread in different industries...so they can be unrealistic and I believe that many tell me that when I come…and then I get back down on earth” (Idun, personal communication, 2011-04-26).
The verification stage is a conscious process where the idea are scrutinized, tested and developed further. Idun claims that she is not afraid of testing her ideas on other people. Quite the opposite she values the response and uses it as a judgment-call to go further and launch the idea or to terminate it and then move back to the insight stage.

"I am not afraid that anyone would steal my idea, instead I think that you should just get it out there, tell as many as possible, look at the response, if it is something good then you should start right away, be the first one and do it the best..." (Idun, personal communication, 2011-04-26).

We would say that the Hub has a great influence on Idun in this stage of the Creative Process, since she discusses many of her ideas with the people around her. She has close access to a lot of people with knowledge that could give her valuable insights and provide guidance.

### 4.5 Freja

**Creative personality**

Freja says that she is not an energetic person. She states that her energy level is connected with the seasons. But she contradicts herself when she says that her energy is lowest around lunch, but does not mention any other time as particularly difficult. Freja actually states that her energy level usually goes up during the afternoon. Csikszentmihalyi (1996) means that creative individual has internal generated energy while remaining concentrated. Freja also possess the ability to shift her focus between work and leisure which according to Csikszentmihalyi (1996) means she can recharge her energy when needed, another trait of a creative person.

She describes herself as fertile in ideas and says that she possess the ability to sort out the good ideas from the bad ones. She does, however, not portray any confidence in her statements. She continuous to explain that she usually only picks an idea without really knowing if it is good or not. This does not point an ability to think divergent which would contradict her creative capacity.

"You have to test basically, just chose one [idea] without really knowing" (Freja, personal communication, 2011-04-26).

Freja believes that other sees her as thorough and thoughtful in her professional life. We do find ant evidence of playfulness. She does, however, state that she often daydreams. Sometimes it is related to the work she is conducting at the moment and sometimes
about something completely different. These facts are concretionary to how she thinks that she is perceived socially. Freja sees herself as an extrovert person, but she implies that this might vary due to the situation. This implies that she has a complex personality in terms of social skills, which according to Csikszentmihalyi (1996) points to a creative personality.

“I am generally outgoing...or maybe more complex, it is usually that way” (Freja, personal communication, 2011-04-26).

This complexity is once more reflected in how she positions herself against the gender roles. She reflects insecurity in her answer but implies that she might be hard to define. She finds similarities with herself in both sides of the gender roles and says that she fits better as a female but only superficially. Freja cannot be positioned in any specific gender role as she shifts roles to blend into the surroundings

“Well, it can be both ways. It depends on how I fell at the time. I am sure that I could fit in to the gender role, tough only superficially” (Freja, personal communication, 2011-04-26).

She seems to have developed a strong internalized domain of culture. She is independent and rebellious but at the same time state the she is neither a conservative nor a traditionalist. But once again she contradicts herself when she says that others probably perceive her sensitive while she finds it easy to present her thoughts and ideas in an understandable way. These answers make it hard to categorize Freja. Csikszentmihalyi’s (1996) research does, however, say that complexity is of the most fundamental trait of the creative individual.

Innovation

“I get input from other branches, companies and people” (Freja, personal communication, 2011-04-26).

Freja describes The Hub as an ideal place for Open Innovation. She says the knowledge exchange mostly is trivial and jovial but can sometimes take form as concrete paid for services. Freja is, however, in different position than others at The Hub for two reasons. Firstly, she is hired by another company. Secondly, she has been working at this company in the same building before it became The Hub. She has, therefore, not actively searched for a Coworking facility. This could mean that she is not there for the same reasons as the other members, but she has still realized the benefits of knowledge exchange as she is actively participating in it. She sees the potential and benefits in the use of external knowledge, she is not limited by the ‘boundaries of the firm’ by Chesbrough (2003) as she uses both internal and external ideas which in turn adds value to her own innovation process.

“There are a lot of designers here at The Hub. They have helped me with my work on a numerous occasions” (Freja, personal communication, 2011-04-26).

“It happens [idea exchange]. There are discussions at lunch table sometimes, what we do, informally. It happens spontaneously, this raises curiosity and I get interested by what the others are doing” (Freja, personal communication, 2011-04-26).

Conway’s (2009) research shows the importance of the creation of ideas. The exchange of ideas is present in Freja’s daily work. She states, that The Hub is a good place to nat-
urally meet and discuss different issues, both business and private life. She understands the value of these conversations and even says that she would like to see more of it.

“It could be more of it [exchange of ideas], but people does not always have the time to talk which means that nothing happens” (Freja, personal communication, 2011-04-26).

Environment
Freja is positive about the environment at The Hub, that people are independent but still together. She likes to have colleagues as it providea her with a professional realations. This again reflects Freja’s personality. She had previously described herself as an independent, and does later imply that the most positive part of The Hub is her independency from the other coworkers. We can see how she is combining collaboration and independency. This implies the she likes going to work. She can remain by herself when needed and shift to the role as a colleague when required. Amabile (1998) says that intrinsic motivation is created when a person is doing something that is inherently interesting or enjoyable.

“People are independent in the same environment. They are your colleagues but you do not work together with them. You will still have the privilege to socialize but you are cleared form any tension of work.”

She does, however, contradict herself when she later states that the she has not gotten more motivated since the start of The Hub despite her description of the positive environment. On the other hand, she says that The Hub has had a positive effect on her inspiration and on her own work. Haner (2005) research shows how people become more inspired and motivate if they think that their work environment is attractive to them, which in turn would trigger creativity.

“It affects me positively [the environment at The Hub]. It is the combination independency and openness that actually matters” (Freja, personal communication, 2011-04-26).

Motivation
She states that the structure of The Hub enables these types of meetings and conversations, which often take place around the lunch table or on the terrace. She sees these as key factors and highlights the importance of their functionality which reflects her underlying value of these conversations. Amabile (1998) confirms this in her research which states that people will gather knowledge and expertise if they exchange ideas.

“It [The Hub] releases tensions and makes you think of something different. Starring at screen all daily is not a good way to think creatively. It makes you work better as it is a positive atmosphere that makes you excited which is something I can use in my work” (Freja, personal communication, 2011-04-26).
The Creative Process

- Conscious process where a problem is defined
- Exploring data and information within the domain
- Influenced by previous knowledge and experience
- Planting a seed for the future

Figure 4-17 Model Preparation Stage, for respondent Freja

Freja has always been interested in literature and culture, she is explorative and is constantly looking for new challenges and opportunities for development. She is trying to expose herself to new environments and people she finds interesting, with the intention to gain new knowledge. Freja is developing her domain constantly which implies that she is increasing her chances for a successful preparation stage. Coworking can provide Freja with this knowledge, the diversity among the different coworkers gives her access to a wide pool of knowledge. She explains how the other coworkers gives her inspiration:

“Yes, it happens, absolutely. It is that way, we talked about it before. In concerns the time factor tough. People takes the time to sit down to talk and they explaining what they are doing, both private and work” (Freja, personal communication, 2011-04-26).

She is, however, concerned about time and implies that the exchange could be greater if people were to have more time. This implies that she has understood the value of the network at The Hub but is only engaging in events that is within her domain. This implies that she is selective in her exposure to new knowledge.

“Yes, [I try to expose myself to new environments and people] with a varied degree of awareness depending on energy, occasion and opportunity. I would not put any energy on something that I don’t think is interesting” (Freja, personal communication, 2011-04-26).

The selective thinking might be a strategy the limits the input of knowledge in regular office due to the lack of diversity and event. The Hub can, on the other hand, provide Freja with great diversity of knowledge and increase the magnitude of different events, which in turn would raise the odds of Freja finding something interesting to her. This could be interpreted as factors that would increase her pool of knowledge which might increase her ability to understand problems and opportunities.
Freja states that she is working on several different projects at the same time and that she usually switch projects in she gets stuck and then gets back to the problem later. This implies that she going through a unconscious part of the process, she is not allocated any time to solve the problem directly.

“I often change tasks when I get stuck and let it process a bit before I get back to it” (Freja, personal communication, 2011-04-26).

This implies, that she is using her associative ability to find an solution unconsciously. We believe that The Hub can facilitate the process, as this solution can be triggered by chance meeting or conversation, an idea generated from serendipity. She can use the external knowledge found within the Coworking space and escape the ‘bouderis of the firm’ in search for new ideas, opportunity and solutions.

“I do it quite often... I find connections in things that has been seperated previously” (Freja, personal communication, 2011-04-26).

Insight is when someone goes preconscious awareness to conscious. Freja is aware of this, she believe that ideas are generated because you have realized a problem that you want to solve. To process the problem subconsciously in search of trigger that would connect previously separated data.

“I don’t believe that I would get an idea in flash if wasn’t searching for it. You can think about stuff that is latent in your mind and then it might feel like the idea comes from nowhere. However, the truth is that you actually have processed the thought in some way” (Freja, personal communication, 2011-04-26).
The Hub can, therefore, be interoperated as a space that can facilitate these unexpected triggers. Freja can here associate new information to her problem which can guide her through the delicate confirmation of the idea, as she can get feedback and criticism from the other coworkers.

“It exists here somewhere, the openness and diversity probably improves my ability to creative” (Freja, personal communication, 2011-04-26).

![Diagram](image)

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Incubation</th>
<th>Insight</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscious state</td>
<td>Ideas are under consideration</td>
<td>Rush of insight</td>
<td>Delicate state</td>
</tr>
</tbody>
</table>

**Figure 4-20 Model Verification Stage, for respondent Freja**

This is a conscious stage where the idea gets scrutinized, this stage is crucial for the survival of the idea. Freja can either drop or refine the idea further. She will, therefore, need to get her idea verified in order to understand if it will work. The open and idea supportive environment found The Hub increases the chances for a random meeting, conversation or event that could help Freja through this stage.

“Yes, it affects me positively. The feeling of a combination of independence and openness actually matters” (Freja, personal communication, 2011-04-26).

This implies that the social network within the Thu Hub can provide her with a sense of security that can push her to be open with her thoughts and feelings towards others. This implies that she knows which people she can ask. She can use the other coworker’s knowledge to both evaluate and elaborate her own ideas. Basically, testing the idea by using external knowledge similar to the Open Innovation by Chesbrough (2003) were she combines her own knowledge with external expertise.

"You get input from other branches and companies. You know what the other is working with” (Freja, personal communication, 2011-04-26).
5 Cross Comparison

This section is a cross comparison between the different individuals case analysis in order to understand different patterns and potential deviations. Furthermore, we intend to answer all our research questions in a chronological order.

- Can we define our respondents as creative individuals?

It is complex to determine if someone is creative or not. However, by using Csikszentmihalyi’s (1996) framework on our empirical data we have come up with some interesting results:

All of our respondents have a significantly high energy level and possess the ability to ‘recharge their batteries’ whenever they recognize that their energy level has fallen. They are always trying to maintain a high energy level in order to keep their focus. The next trait where all respondents are unanimous is that they all have an objective attitude towards their occupation while at the same time being very passionate about their work. This implies that they all possess the ability to step outside their work-bubble and study their work without being influenced by their emotions.

Moreover, the traits where only one of the respondents deviates from the rest were, firstly, the ability to contain a rooted sense of reality but at the same time contain the ability to use imagination to think outside the box. We found clear evidence that all of the respondents contain a well-rooted sense of reality and most of them (See appendix 3: Table 1) have an imaginative way on influencing their creativity. The same result was obtained when we analyzed if they had the capacity of being humble in their attitude and at the same time also show or feel a sense of pride towards what they do. Furthermore, the trait where the respondents were to answer ‘yes’ or ‘no’ when faced with four different statements, in order for us to understand if they found value in the past but also felt an urge of novelty. Evidence point out that almost all of the interviewee’s contains the ability to value the past and also search for novelty.

More than half, three out of five, (See appendix 3: Table 1) did fall within the boundaries of the following traits: Three of our respondents could use both convergent and divergent thinking. The ability to generate many different ideas/solutions (divergent) were unanimously very positive, however, a few respondents explained that the ability to come up with the ‘right’ idea or solution (convergent) were more difficult. Results also showed that only two respondents fell outside the trait of being both extrovert and introvert depending on the situation, the other said that they could manage it as well.

On the other hand there were some differences that we managed to overcome during the process of comparing the results. The most divergent characteristic of the group was that only one person showed evidence of the attitude towards using playfulness and irresponsibility as a complement to discipline and responsibility. The same result was found when we examined if the characteristic of being open and exposed to others opinions could lead to that you are being regarded as sensitive.

Therefore, this analysis would support the research question ‘if we define our respondents as creative individuals’, based upon Csikszentmihalyi (1996) traits of a creative individual and our interpretation during the process (See appendix 3: Table 1). Since four out of five of our respondents fulfilled at least seven out of Csikszentmihalyi’s (1996) ten creative traits (See appendix 3: Table 1) we consider them to be creative individuals.
• How does the Coworking environment affect motivation?

We have evidence that several specific factors in The Hub’s environment have positive effects on the respondent’s motivation.

By using Amabile’s (1998) model, three components of creativity, where motivation (especially intrinsic motivation) is an important building-block we were able to discover four main aspects of this section where all respondents have experienced a positive effect from the Coworking space on their motivation.

All our respondents clearly indicate that intrinsic motivation generated from The Hub, have increased their motivation. Their internal desire to work at The Hub is an active conscious choice from most of them. All our respondents also share the excitement of the possibility to learn and gain knowledge from other Coworkers at The Hub. The subject of freedom is also an important factor for our respondents, since all of them states that self-control in some form is very significant and provides them with an incentive to work in this setting. By organizing and planning their own time they feel more efficient and can allocate their resources better. They are not forced to participate in something they do not want to. Most of our respondents are also pleased with the optional events and gatherings that The Hub arranges in both formal and informal settings.

The next significant factor is the organizational support The Hub can provide. As stated in the theoretical framework, ‘organizational support’ is aimed for a more corporate setting. However, we have interpreted it in the Coworking setting. The respondents strongly suggest that the organizational support at The Hub comes from the people and the atmosphere. They all state that The Hub’s environment is supportive for new ideas which also serve as a quick validation forum. Sutton (2001) and Csikszentmihalyi (1996) confirm that a supportive environment with the possibility to share information and knowledge is beneficial for motivation.

Work group features are interpreted in a similar way as organizational support where we intend to interpret it in a Coworking environment. All our respondents strongly suggest that the diversity of other ‘colleagues’ and fact that they are aware about their skills affects them positively since they can feed of each other.

Finally, the last aspect of Coworking that can increase motivation is the structure of the space. They perceive it as a conflict-free environment where time is not consumed by in-house arguments or false appearances.

• Does Coworking facilitate the Open Innovations?

As stated in frame of reference, Chesbrough (2003) has divided innovation into two new concepts, Open and Closed Innovation. His research has concluded that firms should combine internal and external knowledge in order to reach new ideas and solutions. We aim to study if our findings from our interviewees can be applied and confirmed by this theory.

It is evident that all our respondents are engaged in the Chesbrough’s (2003) concept of Open Innovation. A verification of this can be found in our data (See appendix 3: Table 2) which unanimously points to an overall exchange of help, ideas and collaboration between the coworkers, some more than others. The most common form of Open Innovation found at The Hub is the exchange of knowledge. Our respondents all state that The
Hub is a high quality network with a diverse pool of knowledge and expertise, which can be used to develop their individual work. This exchange can be paid for services or business collaborations, but does mostly take form as advice or favors, which Idun calls your ‘karma account’. This means that you are expected to return any favors or advice when asked for which is the key factor for an open and sharing network. The value of this network becomes recurrently evident in our data when the respondents all state that they are presently involved or have recently been in some form of collaboration with another coworker. Loke even states that he is overwhelmed with ideas which have forced him to turn down numerous opportunities. We can, however, see that this exchange can be limited by time, the coworkers does not have enough of it. The members at The Hub must first and foremost focus on their own work and might therefore, not be able to allocate the required amount of time needed to participate in the exchange.

So the answer to our research question if Coworking facilitates Open Innovation is: Yes, it does. We consider The Hub (Coworking) is an ideal environment for the process of Open Innovations by Chesbrough (2003). The coworkers at The Hub have formed a diverse and high quality network of knowledge. The network is assembled in environment that can simplify the exchange of favors, help and services. It will also increase the likelihood of an idea generated from serendipity. We believe that Coworking can serve as a complementary source of knowledge for self-employed individuals. They can get access to information outside their domain, which can enable them to be more effective and Innovative. This in turn gives them opportunity to reach new markets that were previously seen as unreachable.

- How does Coworking affect the respondent’s Creative process?

**Preparation Stage**
All our respondents have similar opinions about this stage. We have found two factors that are constantly reoccurring as most important for our respondents. That is, the access to high quality network with a diverse knowledge. The Hub can give the members the opportunity of a direct interaction into a differentiated source of expertise, which increases the probability of finding information that can be beneficial to their individual work. This has had an inspirational effect on all our respondents which can help them to further develop their domain of knowledge. Consequently, improve the opportunities to go through the Preparation stage more successfully in the future.

**Incubation Stage**
The Coworking structure found at The Hub provides their members with a possibility to switch focus when stuck in a project. Mainly due to their line of occupation but it can also increase the chance for random meeting or conversation, which in turn can lead to idea generated trough serendipity. The members at The Hub can trough these conversations, gain access to other people’s opinions and ideas that is linked to something different then what they are working on at the moment. This increases the possibility of cross fertilization of their work, both individually or combined with others. The members can, therefore, break the rigid ‘boundaries of the firm’. This enables them to use the other member’s knowledge which can be both, a complement and or support to any lack of knowledge or experience.

**Insight Stage**
There are several aspects in the Insight stage that all of our respondents agree upon, but the most noticeable one was the importance of a supportive environment. We believe this is because this stage is delicate and ideas can easily be interrupted, allowing someone to speak their mind freely is in this stage, therefore, essential. Moreover, having people with an imbedded reference-system around you provides you with a larger incentive to engage in validation processes, something all of our respondents felt was important. Another closely related topic is the proximity to experienced people. You might be able to obtain advice from your desk member instead of searching for it externally.

Verification Stage
The next stage is somewhat similar to the previous one, but the individual has now chosen a specific idea or opportunity to pursue. The similarities from the insight stage are that the members highlight the importance of a supportive environment, again a key issue for our respondents. The difference here is the need for specific input and knowledge. This provides us with evidence that the most important features of this stage for our respondents are the diverse knowledge and expertise among the members at The Hub. All our interviewees have used or realized the potential of this pool of knowledge. The ability to use someone else to evaluate and elaborate your ideas saves both time and resources. However, a minority of our respondents explains that they are currently not engaged in this form of external assistance, mainly due to a lack of time.
6 Conclusions

The first part of this section will introduce the reader to the conclusion and discussions. Here, we will present our major findings very briefly and also explain how we navigated through our research. Furthermore, the second part of this section is dedicated to a discussion where we present limitations and touch upon interesting coworking-related topics. Finally, the last section presents our suggestions for future studies.

The purpose of this thesis has been to investigate ‘if and how Coworking affects creativity’. We approached this problem by conducting a fundamental research within the subject- groups of: creativity, innovation, motivation and creative environment. The theoretical research was combined with a thorough investigation of the Coworking society, both on and offline. When the base of our theoretical framework was set and we had gained a fundamental understanding of the subject. We embarked on creating a methodology that could support this framework and facilitate our analysis of the empirical data. We chose to carry out a ‘within case’ analysis and combined it with a cross comparison to obtain as much information as possible from our semi-structured in-depth interviews.

It was very important that the methodology was in line with our theoretical framework so that our objective to understand the purpose of the thesis would be obtained. We also created an illustrative tables to guide the reader through the thesis, making the thesis more comprehensible. Henceforth, we believe that we have targeted our objective and comprehensively understood ‘if and how Coworking affects creativity’. Through a short and precise summery of the evidence to our research questions we will now proceed this conclusion.

Can we define our respondents as creative individuals?

We have strong evidence that suggest that four out of five respondents are creative individuals. By using Csikszentmihalyi (1996) theory of the creative traits in combination with our research interpretations, we were able to confirm or reject the respondent’s suitability of the different characteristics.

How does the Coworking environment effect motivation?

Several factors concerning the link between the Coworking environment has become evident from our research. All of our respondents state the environment at The Hub has a positive effect on their intrinsic motivation. The most common reasons behind these statements are the access to a diverse high quality network and an open social setting combined with a sense of freedom.

Does Coworking facilitate the Open Innovations?

Our study confirms that Coworking can facilitate the process of Open Innovation developed by Chesbrough (2003). This is due to the diverse pool of knowledge found at The Hub, which can simplify the exchange of favors, help and services. The members are using external knowledge to break ‘the boundaries of the firm’.

How does Coworking affect the respondents Creative Process?

Our cross comparison suggests that Coworking to some extent has a positive effect on the respondent’s progression through the Creative Process. The Hub provides the
Coworkers with an atmosphere of diverse, skilled and open people. It serves as a broad knowledge pool where information and ideas are shared and tested.

We conclude that the most reasonable interpretation of these answers in regard to our purpose is that Coworking has a positive effect on creativity. But, this is mainly influenced by the mix of people participating, which creates a network of knowledge located in an open atmosphere that simplifies the creation of new ideas.

The study we have conducted is currently the only academic paper within the area of Coworking and creativity and has, therefore, contributed to the academic society.

6.1 Discussion

We have discovered some implications during the process of this thesis that we would like to discuss further. We would like to start by reflecting on matters that are very interesting in retro respect, matters that probably would have changed the way we perceived Coworking from the beginning. Henceforth, we will discuss relevant aspects of the development of Coworking and how we perceive it to cooperate with society in the forthcoming.

Many of our coworkers see the potential benefits of having an external source of network and support. However, factors such as time and capital hinder them from utilizing The Hub’s network to its full potential. During our research of Coworking and other alternative ways of working, we did not weight (what we perceive now as one of the most important aspects) enough attention to the fact that each and every individual actually have a job to carry out. Coworkers need to, first and foremost prioritize their own occupation in order to benefit from anything else. Most Coworkers are today self-employed and with that comes responsibility. The members could spend more time on new projects if The Hub can facilitate the way Coworkers conduct their work. We have brought up several factors where The Hub helps Coworkers in their everyday work-life but the aim of this thesis was not to investigate that purpose.

Another very relevant topic, which we have not been able to confer, is Coworking's impact on society. With creativity comes entrepreneurship which is one of the foundations of our society today. We would, therefore, find it interesting to understand if and how society could be developed from a Coworking perspective. We firmly believe that this way of working has the potential to grow in the future, both for self-employed individuals and larger corporations and that it is beneficial to the society at large.

We all know how important external knowledge and input is for corporations today. Billions is spent on new solutions where companies can take part of different value chains: customers, suppliers, off and online communities and so forth, all in the favor of increasing their knowledge and awareness. Our inquiry to this would be to understand if and how companies should engage in Coworking. How they could allocate some of their employees within Coworking facilities or even create a ‘Corporate Coworking Community’. A community of a diverse set of companies would provide them with an opportunity to share knowledge and ideas. Implication such as company confidentiality, competitiveness and greed set aside. If the desperation for knowledge in this extremely fast paced work is really that immense, Coworking could be a solution.

During the process of writing this thesis we came over some facts stating that one large Swedish bank is already engaging in a form of ‘in-house’ – Coworking. Different de-
departments and hierarchy-levels of employees are currently working in a shared space with the intention to increase knowledge and to become more effective with the use of diversity and a fresh set of eyes.

6.2 Limitations

Our research field is new to the academic society. We have seen this as an opportunity, but it does, unfortunately, also include some limitations. We have not been able to reflect on any previous work concerning Coworking, which would have been beneficial as a guidance tool when planning our study. Our research has, therefore, included an extensive background research on the origin of Coworking which, initially, limited our ability to focus on our purpose. We must also consider Coworking as a relatively new and developing concept. This means that it can be difficult to understand if The Hub can be seen as representative for Coworking in the future as it might evolve into something different. This can now, however, serve as a ground for future research.

Another limitation can be found in our research sample as we gathered all of our data from the same location, The Hub in Stockholm, Sweden. The respondents from The Hub has also been screened before given membership, this means that all our data concerns individuals that has been selected to fit The Hub’s standards. This implies that our interviewees posses similarities in factors that is valued by The Hub. The respondents can, therefore, be considered as a homogenous group of people which could mean that our data could be considered as biased. However, The Hub is at the same time striving for a diverse group of people in terms of sex, education, occupation, experience, nationality and objectivity. This would instead imply a factor that reduces any homogenous. But, we must consider these as factors of influence as The Hub can do more then to only provide the coworkers with an office space. Our research did neither study how creative the individuals was before starting at The Hub, this have limited our possibility to compare if Coworking has increased or decreased the respondent’s ability to be creative.

We must also consider the subjectivity of creativity, innovation, motivation and work environment. People have different knowledge and opinions of their meaning. It would have been preferable to present the respondents with definitions of the subjects in order to collect a more defined set of data.

6.3 Future Studies

This research in the field of creativity and entrepreneurship has provided us with several interesting results and patterns. Since we have strong evidence that Coworking, or more precise The Hub, has had a positive effect in the respondent’s creative process. This is mainly due to the proximity of a diverse pool of knowledge.

We would then suggest that future colleagues from the academic society would study if other self-employed entrepreneurs not participating in Coworking are less efficient or creative then self-employed entrepreneurs working from a Coworking facility.

This type of research could then evaluate the hypothesis of: if and how Coworking can provide their users with a competitive advantage. Furthermore, the interview transcriptions and the interview summaries are available upon request.
References


Hancock, B. (1998). Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research. Trent Focus.


Appendix 1: Interview Template

In order to understand if these coworkers have become more creative we have chosen to formulate an in depth interview by relating questions to The Creative Process and supplementary theories.

1) Har du någon gång under din tid på The Hub fått hjälp med ditt arbete av en annan coworkare?
   A) Bad du om hjälp?
   B) Händer detta ofta?
   C) Innebar detta gratis hjälp?

   Have you, while Coworking, received help with your work from another coworker?
   A) Did you ask for help?
   B) Does it happen often?
   C) Was the help free of charge?

2) Har du någon gång under din tid på The Hub hjälpt en annan coworkare med sitt arbete?
   A) Bad han eller hon om hjälp?
   B) Vad blev resultatet?
   C) Innebar detta gratis häjlp?

   Have you, while Coworking, helped another coworker with their work?
   A) Did he or she ask for help?
   B) Does it happen often?
   C) Was the help free of charge?

3) Har du någon gång fått en idea (direkt eller indirekt) från någon annan coworkare som har gynnat ditt arbete?
   A) Om ja, ge exempel.

   Have you ever gotten an idée from another coworker (direct or indirect) that has helped your work?
   A) If yes, please give examples.

4) Har du någon gång fått en idea som har gynnat en annan coworkares arbete?
   A) Om ja, ge exempel.

   Have you given an idée to another coworker (direct or indirect) that has helped his or hers work?
   A) If yes, please give example.

5) Hur skulle du beskriva din energie under en arbetsdag arbete?
   How would you describe your energy during a work day?
6) Har du lätt att skifta focus mellan fritid och arbetstid?
   *Du you find it easy to shift focus between work and leisure?*

7) Har du lätt för att komma på nya ideär och lösningar?
   *Du you find it easy to come up with new ideas and solutions?*

8) Har du svårt för att välja ut vilka idéer som faktiskt är bra?
   *Du you find it difficult to choose which ideas are actually good?*

9) Hur tror du att andra skulle beskriva din attityd emot arbetsuppgifter?
   *How do you believe that others would describe your attitude towards work?*

10) Händer det att dagdrömmar under arbetstid?
    *Do you daydream during work hours?*

11) Beskriv hur du tror att andra upplever dina sociala egenskaper? (Utåtriktad/Inåtriktad).
    *Describe how you think other people experience your social skills? (Extravert/Introvert)*

12) Beskriv själv hur du känner att din sociala förmåga är.
    *Describe how you perceive your social skill is.*

13) Hur hanterar du om dina framgångar för andra?
    *How do you handle success in front of other?*

14) Hur skulle du jämföra dig själv mot den stereotypiska könsbilden (In Sweden)?
    *How would you compare yourself against the gender stereotype (In Sweden)?*

15) Vilka av följande egenskaper kan du referera till själv till?
    *Independent, Rebellious, Traditionalist, Conservative*
    *Which of the following attributes can you refer yourself with?*

16) Blir dina tankar och ideér ofta missförstådda av andra?
    *Do your thoughts and ideas often get misunderstood by other?*
    - *If yes: How do you handle that?*

17) Tror du att andra uppfattar dig som känslig?
    *Du you believe that other perceive you as sensitive?*

18) Vilken tidigare erfarenhet, förutom från arbetslivet, skulle du vilja säga har påverkat dig till att nå dit du är idag?
    *What previous experience, besides from work, would you state as significant in order for you to explain where you are today?*

19) Undviker du avsiktligt att arbeta med specifika problem och projekt när du har "kört fast"?
    *Do you deliberately avoid working with specific problems or projects when you come to halt?*

20) Har du flera projekt pågående samtidigt?
Do you have several projects or sub-projects ongoing under the same period of time?

21) Försöker du att exponera dig själv för nya miljöer med avsikt att träffa/uppleva nya människor och saker?
   Do you try to expose yourself to new environments with the intent to meet or experience new people/things?

22) Hur skulle du beskriva dig förmåga att sammankoppla separat händelser?
   How would you describe your ability to connect separate events?

23) Varifrån hämtar du sin inspiration?
   Where do you gain your inspiration?

24) När känner du dig mest mottaglig för nya idéer?
   When do you feel most responsive for new ideas?

25) Beskriv hur en idé uppstår inom dig.
   Describe how an idea is created within you.

26) Hur utvärderar du om en idé är av betydelse?
   How do you evaluate if the idea is of importance?

27) När du upptäcker en ny spännande idé, hur fortsätter du?
   When discovering a new exiting thought/idea, how do you proceed?

28) Hur upplever du arbetsmiljön ni har här på the Hub?
   How to you experience the work environment here at The Hub?

29) Hur kommer det sig att du sökte dig till the Hub?
   Why did you start at The Hub?

30) Känner du att din personliga motivation gentemot ditt arbete har förändrats efter att du började arbeta här?
   Do you feel that you personal motivation towards your work has changed since you started at The Hub.

31) Hur och varför tror du det är så?
   What is the reason behind that?

32) Blir du ofta inspirerad av övriga medarbetare här?
   Do you often get inspired by the other members here?

33) På vilket sätt känner du att det påverkar ditt eget resultat?
   In what way does that affect your results?

34) Känner du att omgivningen på the Hub är öppen och stöttande för nya idéer? På vilket sätt?
   Do you feel that the environment at The Hub is open and supportive for new ideas? In what way?

35) Detta är en ganska unik arbetsmiljö, hur påverkar det ditt arbete?
   This is a rather unique workplace, how does that affect your work?
36) Känner du att arbetsmiljön påverkar din kreativa förmåga positivt eller negativt? Hur?
   Do you feel that this work environment effect you creative ability positively or negatively? In what way?

37) Ungefär hur ofta pratar och diskuterar du med andra här på the Hub under en arbetsdag?
   Approximately, how often do you communicate with other coworkers during a workday?

38) Handlar diskussionerna oftast om arbets- eller fritidsrelaterade ämnen?
   Are the conversation related to work of leisure?

39) Vart sker konversationerna? Oftast?
   Where do these conversations take place most frequently?

40) Vad har den största påverkan på din kreativitet av det som finns att tillgå här på the Hub?
   What part of The Hub has the biggest impact on your creativity?

41) Vilka resurser som påverkar ditt arbete/kreativa resultat positivt kan du identifiera här?
   What resources effects your work/creative result positively can you identify here?
Appendix 2: Information about The Hub

The Hub is a global network that inspires thousands of enterprising individuals to become more innovative and use creative solutions with a shared purpose of generating a better world. They offer complete equipped meeting/working facilities around the globe where entrepreneurs can work, find colleagues, get support, and gain inspiration. The Hub’s most prominent feature is the flexibility they offer to their members. The Hub is a constellation of inspired people with diverse professional occupations in a fully equipped, creative open-plan office. It is a symbiosis of the best parts from a office-hotel, network, meeting-spot, innovation-arena and a cozy café. The Hub offers both stationary and flexible work spots in combination with everything you would expect from a modern day office; Wi-Fi, high-speed internet, copy machines, laser print, conference rooms and private phone spaces

The members only pay for the time you work or spend at The Hub, similar to a gym membership. It is open all year around every hour of the day. The Hub consist of many different spaces all over the world, their network consist of more than 2000 entrepreneurial members and companies. The members are also offered the opportunity to gain access to the global intranet where they can search for competences and collaboration-partners with the organization. And if you are a member of one ‘Hub’ then you have access to all the different Hub’s around the globe. Ensuring you of a diverse and global network. To facilitate this The Hub offers you a contact a person who can assist and guide you in your domestic and global network.

Apart from facilitating a workspace, The Hub also arrange membership activities during their working hours. A diverse and broad set of activities, anything from debates, seminars, lectures, workshops to yoga. The Hub aims to gather and introduce different people and to challenge and lead their members to new initiatives which could lead to novelty. Beyond these activities The Hub wants to include members in informal settings such as pub-nights with a purpose of increasing the atmosphere and enlarging the networks at these different spaces.

The Hub’s members comes from all sections of the spectra. You could find architects, investors, entrepreneurs, coaches, organizational-consultants, mentors, recruitment firms, ad-specialists, designers to mention a few.
Appendix 3: Table’s

Table 1: Summary and Categorization of Personal Traits

<table>
<thead>
<tr>
<th>Olden</th>
<th>Freja</th>
<th>Tor</th>
<th>Lake</th>
<th>Idun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Masculine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
<td>Proud</td>
<td>Humble</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Tradition</th>
<th>Authenticity</th>
<th>Cognition</th>
<th>Energy</th>
<th>Reality vs. Imagination</th>
<th>Social Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Openness vs. Sensitivity</th>
<th>Attachment vs. Detachment</th>
<th>Daydreams vs. Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination of organizations, employees and collaboration</td>
<td>The positive effect of this activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creation is continuous</td>
<td>Independence in the process, self-control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom to act can be in charge of his own</td>
<td>independence process but likes others input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses many different sources of innovation knowledge and ideas</td>
<td>Knowledge exchange is mostly internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of freedom and autonomy</td>
<td>The idea of exchange between businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of autonomy</td>
<td>Exchange and sharing information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of belonging to a community but in a personalized structure</td>
<td>The importance of knowledge exchange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hub provides them with opportunities to connect</td>
<td>The importance of knowledge exchange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The stress makes the hub more</td>
<td>Exchange in the process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hub creates a network of people</td>
<td>No formal responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hub provides them with opportunities to connect</td>
<td>Exchange and sharing information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Summary and Categorization of Innovation, Motivation and Environment
<table>
<thead>
<tr>
<th>People matter</th>
<th>OPEN SHIT</th>
<th>TABLE 3</th>
<th>Summary and Categorization of the Creative Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept</td>
<td>Inspire</td>
<td>Improve</td>
<td>Network</td>
</tr>
<tr>
<td>Quality</td>
<td>Diversity</td>
<td>Openness</td>
<td>Proximity</td>
</tr>
<tr>
<td>Innovation</td>
<td>Ability</td>
<td>Openness</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Network</td>
<td>Ability</td>
<td>Openness</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Ability</td>
<td>Openness</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Creative</td>
<td>Ability</td>
<td>Openness</td>
<td>Opportunity</td>
</tr>
<tr>
<td>Process</td>
<td>Ability</td>
<td>Openness</td>
<td>Opportunity</td>
</tr>
</tbody>
</table>

**Table 3:** Summary and Categorization of the Creative Process

- **People matter:** Inspire, Improve, Network, Explore, Incubate
- **Concept:** Quality, Diversity, Openness, Proximity, Knowledge, Innovation
- **Network:** Ability, Openness, Opportunity, Exchange, Preparation
- **Knowledge:** Ability, Openness, Opportunity, Exchange, Preparation
- **Creative:** Ability, Openness, Opportunity, Exchange, Preparation
- **Process:** Ability, Openness, Opportunity, Exchange, Preparation

**Table 3:** Summary and Categorization of the Creative Process

- **People matter:** Inspire, Improve, Network, Explore, Incubate
- **Concept:** Quality, Diversity, Openness, Proximity, Knowledge, Innovation
- **Network:** Ability, Openness, Opportunity, Exchange, Preparation
- **Knowledge:** Ability, Openness, Opportunity, Exchange, Preparation
- **Creative:** Ability, Openness, Opportunity, Exchange, Preparation
- **Process:** Ability, Openness, Opportunity, Exchange, Preparation
<table>
<thead>
<tr>
<th>Process</th>
<th>Open</th>
<th>Network</th>
<th>Supportive Environment</th>
<th>Creative Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Take care of your health like a boss</td>
<td>Possibility for validation</td>
<td>Provides ideas with people that can validate his ideas</td>
<td>Source of subconscious insights</td>
<td>Brainstorming and diversity improves creativity</td>
</tr>
<tr>
<td>2. Supporting and securing environment</td>
<td>Can combine his ideas</td>
<td>Other ways to elaborate on ideas</td>
<td>Get him to pick down low hanging fruit</td>
<td></td>
</tr>
<tr>
<td>3. Miscellaneous = save time and resources</td>
<td>Open mind towards sharing ideas</td>
<td>Get feedback — feel response and advice</td>
<td>Help to make decisions to continue or shift</td>
<td></td>
</tr>
<tr>
<td>4. Possibility to test ideas on environment</td>
<td>Insight</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>