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Creative Climate a Prerequisite for Supporting an Innovation Culture

A single case study at CEVT

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Abstract

Innovation is a widely used concept, which is considered as an important factor to remain competitive in an everchanging business environment. Research suggest that creativity is a prerequisite for innovation to occur. Creativity relates to the generation of new and useful ideas, whereas innovation is considered the implementation of those ideas. Meaning that companies must first create or develop an environment that promotes creativity in order for innovation to occur at a later stage. CEVT, that is the research subject for this exploratory case study, has the vision to become 'World Leading Innovation and Research Centre, Developing cars for a different tomorrow'. Through a qualitative research method performing semi-structured interviews, the research aims to assess the current creative climate at CEVT in order to give recommendations on how the company can support the development of a successful innovation culture. A framework was therefore developed by the authors, which includes seven categories containing different success factors and activities for developing an innovation culture. The findings show that the categories organizational structure and processes, management support and resources have the greatest impact on the current creative climate at CEVT among the categories in the framework. The company demonstrates great potential in fostering a creative climate through its management support. To improve it further, findings suggest that the company should focus on the communication of the strategic direction and alignment of resources for creative activities, to support the innovation culture.

Keywords: *Innovation, Innovation Culture, Organizational Culture, Creative Climate, Climate, Creativity, Automotive Industry*

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Göteborg, 22nd of May 2018

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CVF	Competing Values Framework
HR	Human Resources
OC	Organizational Culture
IC	Innovation Culture

1. Introduction

This opening chapter aims to provide the reader with a background to the thesis. It introduces the reader to the concept of innovation and how a company can create a culture that supports innovation. Furthermore, it informs the reader about the research objectives, research question, delimitations and the disposition of the thesis.

1.1 Background

"It is an extraordinary time for innovation. Technological change and industry disruption seem to be accelerating" /Dr. Waguih Ishak (McKinsey, 2017)

This is how innovation can be described when reading about it today. Considering the highly competitive environment companies face, with the effects of globalization, interconnectivity and digitalization, the role of innovation becomes increasingly more important. However, the concept of innovation has according to research been acknowledged during a long period of time both in a figurative and literal sense (Amabile, 1988). Despite that the concept is not new, it is perhaps as stated above, an extraordinary time for innovation. The companies operating in today's business environment face challenges, and are affected by external factors, but perhaps in a faster pace than before. The changing business environment pressures companies to stay highly innovative in order to remain competitive (Amit and Schoemaker, 1993; Prahalad and Hamel, 1990).

How companies' innovativeness relates to business performance has been widely addressed in the literature. Therefore, it is argued that there is a need to understand the concept of innovation. However, the definition of innovation varies between different researchers, but generally regards the adoption or implementation of something new. Innovation can be described as a means of change in an organization, as a way to deal with changes in the internal and external environment (Damanpour, 1991). Such changes resulting from innovation could for example regard products, services and processes. Innovation can thus be explained as the generation, acceptance and implementation of new ideas in the organization. Ranging from incremental to radical changes, needed to increase or create value for the organization and other relevant stakeholders (Kanter, 1983; West and Farr, 1990).

In order for a company to be innovative, researchers argue that organizational innovation and creativity are two interlinked concepts. Even though they are closely connected, the literature makes a distinction between the terms. Where creativity refers to the generation of new ideas, whilst innovation rather concerns the implementation of them (McAdam & McClelland, 2002). Since developing new ideas is a major part of the innovation process, creativity can thus be considered an important enabler for innovation (Isaksen & Ekvall, 2010). According to Amabile (1988) creativity at the individual level, is to organizational innovation, one of the most crucial elements.

Thus, in order to stay innovative, it is of major importance for businesses to capture creativity by establishing or sustaining a climate where creativity fosters innovation (Hurley & Hult, 1998).

1.2 Problem description

The fast paced, dynamic business environment that globalization creates, makes the challenge for companies to stay competitive a complex task. The role of management then becomes of major importance in creating and sustaining a competitive advantage that is needed. Innovation can further be a crucial factor to achieve such a competitive advantage, since a company's ability to provide something new and better compared to competitors, is what determines their competitiveness (Dodgson et al., 2008). As a result, more companies and managers recognize the need for their employees to proactively work with innovation. More specifically, to engage in the generation and development of new business approaches, including products, services and processes (Çekmecelioğlu & Günsel, 2013).

Whilst the importance of innovation in today's business environment has been widely accepted for a long time (Amabile, 1988; Schumpeter, 1934), the true nature of the term, as well as what drives innovation, is still difficult to understand. Why this matter is because it will be difficult, or impossible even, to manage innovation effectively if the meaning of the term cannot be grasped (Christensen et al., 2015). Researchers have found that creativity is an enabler for innovation, as creativity is seen as the activity of generating new ideas, whereas innovation concerns the implementation of those new ideas (Amabile, 1988; Ekvall, 1999; West, 2002). A creative idea turns into innovation if and when value can be appropriated from it (Isaksen & Akkermans, 2011; Mathisen et al., 2012; Schumpeter, 1934). The process from idea generation to implementation needs proper management. Foremost, it needs a congenial environment that fosters such creative activities for innovation to occur. The level of creative, and innovative activities within an organization depends on its context, where the organizational culture, climate, and individual factors determine a firm's innovativeness (Amabile, 1997). Consequently, it becomes relevant for managers to know what management principles are needed to build a creative climate that fosters innovation in the organization. Therefore, the scope of this thesis will remain within the concept of Innovation Management, with a focus on Innovation Culture in particular.

1.3 Empirical Setting

1.3.1 The Automotive Industry

The automotive industry is not an exception when it comes to the need of coping with changes in the business environment. It is an industry known for rapid technological changes, large R&D investments, intense competition, and change in customer demand. Thus, it is argued that automotive companies operate in an industry dependent on innovation.

Where there is ultimately a need to manage the company's innovation processes, and innovation culture, in order to stay competitive (Jung et al., 2003; Tierney et al., 1999). It is therefore of utmost importance to understand what these companies need to build a culture that supports innovation.

1.3.2 Company Background

1.3.2.1 China Euro Vehicle Technology, CEVT

CEVT is an innovation center within the Geely Group. The company has since it was founded in 2013, grown to employ a number of 2000 people that are located in the automotive cluster in Lindholmen, Gothenburg. Geely's founder Li Shufu ventured out in the Chinese automotive industry in 1997 to start making cars. By 2020, Geely aims to be one of the top ten largest automotive companies in the world. By starting CEVT, Li Shufu and his Geely wanted to secure a common modular development though advanced virtual engineering that would benefit and permeate all the Geely Group brands. This, in order to face the challenges of a fast-moving global market and to deliver world class technology. As per today, CEVT develops the common platform that is used for both Volvo, Lynk & Co and the Geely cars. CEVT is a company that is in constant change. Historically there has been no sales internally within the Geely Group, although CEVT is in certain cases patent owners to important assets to the whole Geely Group (CEVT, 2018).

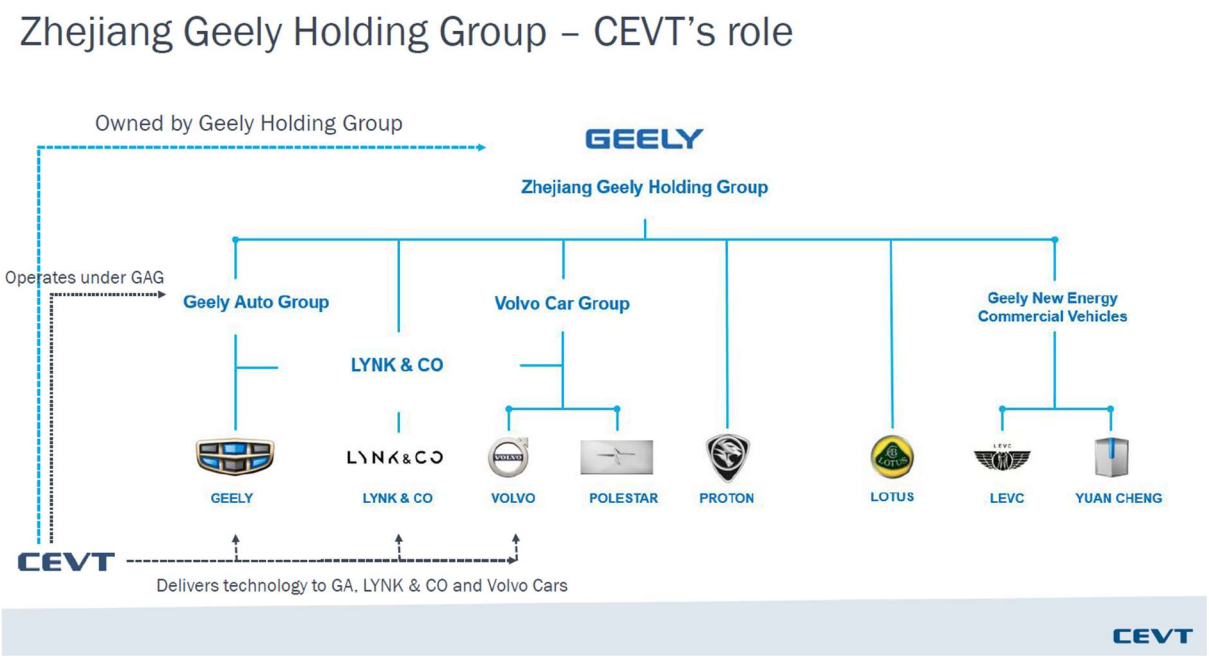

Figure 1 Geely Holding group and CEVTS role with the group (CEVT, 2018)

1.3.2.2 Mission & Vision

CEVT's vision is to be: "World Leading Innovation and Research Centre, Developing cars for a different tomorrow". To be able to keep up and maintain this vision, the company aims at bringing together first-rate talents from all over the world. As the company has Chinese owners, CEVT pioneers in a Chinese- Swedish cooperative culture that enables diverse interactions that enrich the company with new and interesting perspectives. As part of the vision, the values are considered important for the success of building an innovative company.

1.3.2.3 Values

In order to navigate through a multicultural setting within an industry that is dynamic and fast paced, CEVT has three different core values that permeates the organization:

Figure 2 CEVT's three core company values

1.4 Research Objective

The objective for this thesis is to help CEVT in their work towards improving their creative climate to support an innovation culture. CEVT operates in the automotive industry which is characterized by rapid changes in technology and high competition, where innovation becomes a crucial factor. Hence, it can be of interest for actors in this industry, such as CEVT, to understand what type of factors in the daily work climate that supports a culture which emphasizes innovation.

Through onsite interviews, a survey and observations the authors aim at gaining an understanding of what factors that influence the company's' climate today. Understanding the company's current climate, will enable the authors to provide CEVT with valuable knowledge on how to successfully form their culture to further promote innovation.

1.5 Research Question

Given the objective of this research, the following research question has been formulated:

How can CEVT improve the creative climate to support an innovation culture?

To answer the stated research question, an assessment of the current creative climate at CEVT will be conducted. This to identify potential implications on creativity and gain valuable knowledge of how the current climate can be improved to support an innovation culture.

1.6 Delimitations

When writing, talking or discussing about the concept innovation it is not unlikely that intellectual property rights such as patents are associated to the term of innovation. As mentioned earlier in the background, innovation is a concept that is difficult to define. When something is difficult to define, it is often even more difficult to measure. As research struggle with measuring how innovative companies are, one common and easy way of measuring it today, is to review the intellectual property rights. A simple logic would be for example, that the more granted patents or registered trademarks a company has, the more innovative it is. However, researchers criticize this type of logic as well as this type of measurement only incorporates one dimension. Also, there is a trend in the automotive industry among actors to disclose innovations and patents to competitors in order to speed up the development and for the creation of standards. For these several reasons, it has been decided to exclude the scope of intellectual property rights from this research as it is cannot be considered to be the ultimate measurement instrument in determining the innovativeness of a firm.

1.7 Thesis Disposition

The thesis proceeds with a theoretical section which seeks to define and understand the concept of innovation and innovation culture. Thereafter, the thesis continues with an outline of the applied methodology in order to answer the stated research question. After the methodology, empirical findings are presented, followed by an analysis. Finally, conclusion, recommendations and suggestions for future research are presented.

The figure below contains a summarized outline which includes relevant content for each section.

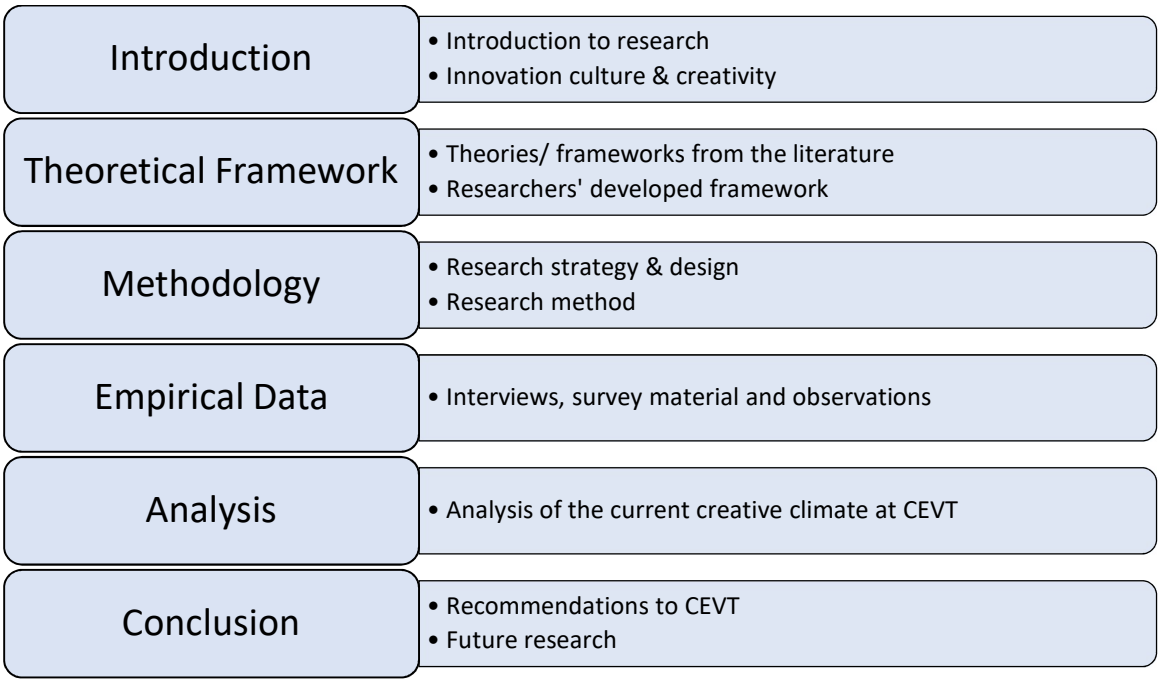

Figure 3 Authors' Thesis Disposition

2. Theoretical Framework

After conducting a systematic literature review on the theories of innovation culture, certain blocks of innovation drivers have been identified to answer the research question. The chapter presents two major blocks identified to be important to understand how to support an innovation culture. The first main block concerns the concept of innovation and creativity as a prerequisite for innovative activities. The other major block explains what the role of organizational culture is for innovation, and what defines different types of organizational culture. More specifically, the second block will describe what the difference is between climate and organizational culture, and the relationship between them. This to better understand the linkage between the role of climate and organizational culture in fostering creativity that is needed for an innovation culture. Followingly, the chapter will present how to evaluate climate, including identified success factors and activities that promote creative behavior, which can lead to innovative outcomes. Finally, the chapter will conclude with the authors' own framework for evaluating creativity to support an innovation culture.

Figure 4 Outline of the Theoretical Framework

2.1 Innovation and Creativity

Culture can have a large impact on members of an organization, and thus their work performance. For an organization to be innovative, it therefore needs a culture which supports its members to be innovative. The following two blocks will further describe the relationship between the members of an organization and organizational culture, how this affects innovation and what activities an organization needs to focus on to support an innovation culture.

Research has found that creativity is a prerequisite for innovation. The concept of innovation and creativity will thus be explained in more detail to understand the difference between them and how they are connected. This to allow a deeper knowledge of what factors are considered important to successfully achieve innovation in an organization.

2.1.1 Innovation

Innovation is a concept that is widely used by organizations to describe many different things. The term innovation therefore tends to become somewhat generic, and unclear even, as to what it means to describe. Performing a literature review on the topic, it can be determined that innovation is a concept that incorporates various aspects, where the definition of what constitutes as innovative, depends on the context (Dobni, 2008). To get a better overview of the various aspects on what classifies as innovation, the literature presents different definitions. Some quite broad, while others are more specific. According to West and Farr (1990), innovation can be explained as an introduction, as well as the adoption, of an idea, process or product within a role, group or organization. Something which is new to the relevant subject in question, and designed to benefit the individual, group, organization, or society (West and Farr, 1990). Other definitions describe innovation as a different way of working that departures from traditional management practices (Hamel, 2006). Learning and knowledge are further aspects mentioned in the literature to grasp the concept, where the degree of innovativeness can be reflected by the measure of new knowledge embedded in an innovation (Dewar and Dutton, 1986; Ettlie, 1983). Herkema (2003), describe innovation as a knowledge process, where the main goal is to create new knowledge with the purpose of finding commercially, viable solutions. Moreover, he describes innovation as the adoption of new behavior and ideas within the organization (Herkema, 2003). This similar to West and Farr's (1990) description of innovation as the introduction and adoption of new ideas and processes, mentioned above.

The literature presents several aspects needed to be taken into consideration when trying to define the concept of innovation. The term is extensively used by various parties, with different meanings. A need to find a mutual definition of innovation within an organization can hence be argued to arise. A common understanding in the literature regarding the concept of innovation is that it can still be considered dependent on the organizational context (RTM, 2011; Dobni, 2008), dealing with the generation and implementation of new ideas that create value (Mathisen et al., 2012; Kanter, 1983; West and Farr, 1990). Hence, innovation will further in this report be referred to as the implementation of a new idea that can create value.

And from an organization's perspective, the degree to which the organization can be considered as innovative, is in the end determined by its culture (Dobni, 2008).

2.1.2 Creativity for Innovation

Research suggest that creativity is a concept that can be defined as the development of new ideas to create something new. In the workplace creativity can be described as the generation of novel, valuable ideas (Amabile, 1988; Oldham & Cummings, 1996; Shalley, 1991; Zhou & George, 2001). In order for an idea to be classified as creative it has to fulfill two conditions, it has to be novel and useful. Hence, ideas that are novel but provide no potential value is not considered as useful and thus not creative. This suggests that not only workers with a creative job description in a traditional sense, such as artists, engineers or scientists, can be creative. Instead, creativity in the workplace can be achieved in any department as long as the ideas introduced are novel and useful (Zhou & George, 2003).

Reviewing the concepts of creativity and innovation, the definitions tend to appear similar, making them difficult to distinct. The reason for this can be explained by the fact that both terms concern idea generation and implementation of useful solutions (Mathisen et al., 2012). To clarify, creativity is distinguished as the generation process of new and useful ideas, whilst innovation deals with the implementation of those ideas. Hence, creativity can be seen as a prerequisite condition for innovation (Ekvall, 1999; West, 2002).

It has been acknowledged how innovation is necessary for organizations to cope with change, and to gain or sustain a competitive advantage. Amabile (1997) suggests that organizations must be creative in order to become truly innovative. Therefore, it is of highest importance for companies to capture employees' full potential and creativity (Amabile, 1988; Woodman, Sawyer & Griffin, 1993).

From this perspective on innovation and creativity it can be pointed out that in order for organizations to be successful and competitive, they need to understand the importance of forming a culture that promotes creativity and thus supports innovative activities (Moghimi & Subramaniam, 2013). It has further been argued within the innovation and culture literature that climate is what mediates the individual's willingness to innovate (Mumford & Gustafson, 1988). The role of climate within organizational culture, and how this affects creativity and innovation, will be described in the following section.

2.2 The Role of Organizational Culture and Climate for Innovation

The following section will present the concepts of organizational culture and climate. More specifically, the section will describe how these concepts interact, the difference between them, and what roles they play in supporting an innovation culture. Further, these concepts will be described with consideration to creativity and innovation. This in order to find what factors and activities are needed for innovation, which will be presented at the end of the chapter.

2.2.1 Organizational Culture

Organizational culture (OC) is something that exists in all types of organizations, where some have stronger OC than others. It can be difficult to know what it is, or how to build an organizational culture. Several authors refer to OC as the shared assumptions, rules, norms, values and artifacts that forms the behaviors, beliefs and attitudes within the organization (Schein, 1985:1990; Furnham and Gunter, 1993; Colquitt et al., 2009). Assumptions are described as the underlying subjective belief that is unspoken and taken for granted. Values on the other hand refer to rules and beliefs that governs behavior and attitudes of employees (Rokeach, 1973). Whereas artifacts concern behavior, language and material symbols that are visible throughout the organization.

Reviewing different definitions of OC, values are considered to play a central role in the understanding of the concept. Given this information, values can be a good way of defining OC. Quinn (1988) provides a framework to help define the culture in an organization, using different value measures. Namely the Competing Values Framework (CVF). The framework shows four major culture types, each in one quadrant consisting of a certain set of values typical for each culture type, as illustrated below:

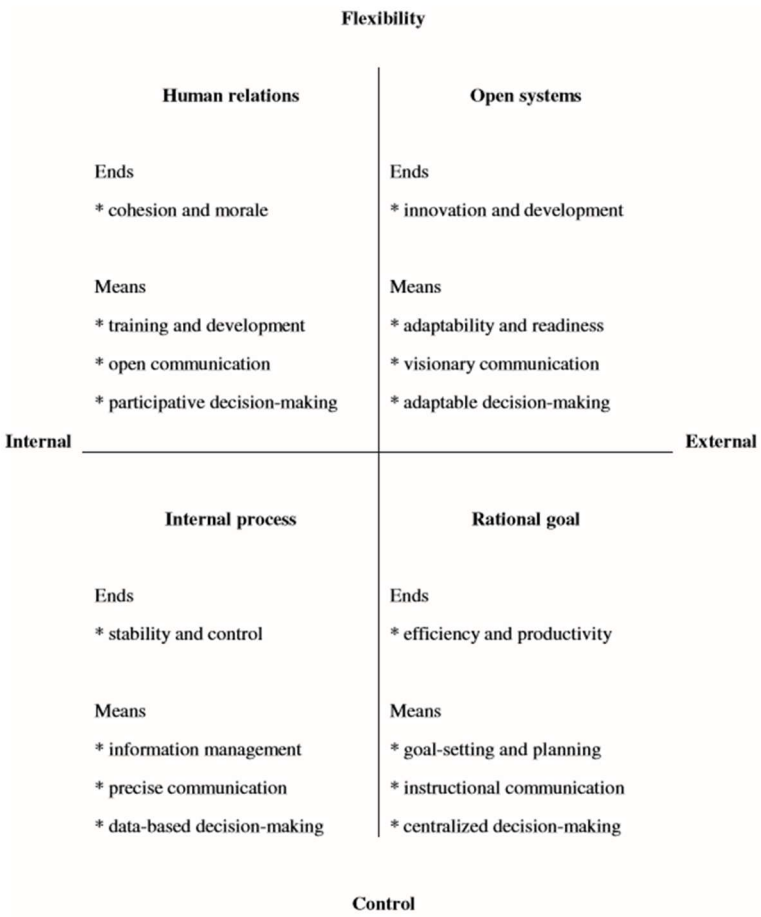

Figure 5 The Competing Values Framework (Quinn, 1988)

Every quadrant of values represents to what extent an organization promotes human relations, open system, internal process, or rational goal orientation. Moreover, it illustrates whether there is an internal versus external focus, as well as if the emphasis is on control versus flexibility.

An organization that values human relations encourages an OC represented by a high morale standard and a united mindset. This is achieved through training and development, open communication and participative decision-making. An open system culture, similar to a focus on human relations, values high morale. Although, this type of culture emphasizes innovation and development. To achieve this, the focus is on adaptability and readiness for change, visionary communication and adaptable decision-making. When it comes to internal process, the organization aims for control and stability. This is obtained through information management, precise communication and data-based decision-making. A rational goal orientation however, encourages productivity and efficiency. This by planning, instructional communication, goal setting and centralized decision-making. Using this framework can indicate what type of culture that exists in an organization. However, it is important to note that the culture types are not mutually exclusive. Instead, all culture types can exist within the same organization, where some values are likely to be stronger than others (Quinn, 1988; Jones et al., 2005).

When looking deeper into the concept of OC, there is an emphasis on values to be the core of the OC. Values of adaptability, involvement and mission support an innovation culture specifically (Sharifirad & Ataei, 2012). As one can see in the CVF framework, so does the values of Open system and Human relation (Quinn, 1988; Jones et al., 2005). This shows that Organizational Culture (OC) and Innovation Culture (IC) are two interconnected concepts that cannot be studied independently. The IC is according to research dependent on OC, and OC is the heart of innovation (Tushman and O'Reilly,1997). It is believed that innovation and creativity are affected by culture, as OC impacts to what degree creative ideas are supported and adopted in an organization (Kenny & Reedy, 2006).

2.2.2 Innovation Culture

In different companies and organizations, the concept of innovation has recently been in focus. Practitioners and researchers estimate that it is innovation that will enable companies to gain competitive advantage (Amit and Schoemaker, 1993; Prahalad and Hamel, 1990). Innovation experts such as Laffley and Chesbrough both share convictions on that truly innovative companies are developed and fed by a culture of innovation (RTM, 2011). One must therefore understand innovation culture (IC) as a phenomenon which considers various parts of what culture is. Culture is a wide concept which can be stated to incorporate various aspects into the infinite. Defining innovation culture specifically, Dobni (2008) states innovation culture to be "*a multi-dimensional context which includes the intention to be innovative, the infrastructure to support innovation, operational level behaviors necessary to influence a market and value orientation, and the environment to implement innovation*" (p. 540).

Martin-de Gastro et. al, (2013) present in their research a more generalized definition of innovation culture that builds upon the concept of culture: *"innovation culture refers to the shared common values, beliefs and assumptions of organizational members that could facilitate the product innovation process. When an organizational culture or climate encourages the employees' innovation capacity, tolerates risk, and supports personal growth and development, the organizational culture may be labelled as an 'innovation culture'"* (p. 353). Hurley & Hult (1998) have further found that the level of innovativeness in an organization relates to cultures which empowers learning developments and participative decision making.

The literature provides a strong link and emphasizes the relationship between culture and innovativeness. Different definitions of IC show that innovation culture indeed is a phenomenon or state that is very much contextualized, meaning that it is different for different industries and companies. However, according to Dobni (2008) and Zaltman et al., (1973) the critical part to innovativeness of a firm is the cultural openness to innovation. Cultural openness is central to innovation, as it deals with the organization's attention towards innovation, and understanding of the need for it (Van de Ven, 1986).

Mutual factors included in the concept can thereby be determined to be: an attitude open to innovation, shared values focused on innovation, and the empowerment of employees to support innovative activities. Going back to the definition of innovation, the innovativeness of a firm can be defined by the degree of useful ideas generated and implemented in the organization. The definition of IC used in this report will thereby be as follows: IC is an organizational culture that allows for the generation and implementation of new and useful ideas.

2.2.3 The Role of Climate for Innovation

To form a desired culture that is open towards innovation, organizations must not only look into organizational culture, but also what type of climate that will support the culture. Defining climate, it can according to Ekvall (1991), be stated as *"recurrent patterns of behaviour, attitudes and feelings that characterize life in the organization"* (p. 403). Compared with culture, which reflects the values and the deeper foundations of the organization, climate is what employees experience or perceive in their everyday work life. The climate can vary between departments and teams in the organization, even if cultural values exist on an overall firm level. It is the confrontation between the individual's perception and the organization's values and structure, including rules, procedures, policies, physical environment and routines, that shape the climate (Ekvall, 1999; Sandvik, Espedal & Selart, 2015).

The power of climate to impact organizational and psychological processes is something Ekvall (1999) highlights in his research. Organizational processes comprise of coordination, controlling, communication, problem-solving and decision-making. Psychological processes refer to motivation, commitment, learning and creating.

How climate affects an organization is illustrated in the figure below:

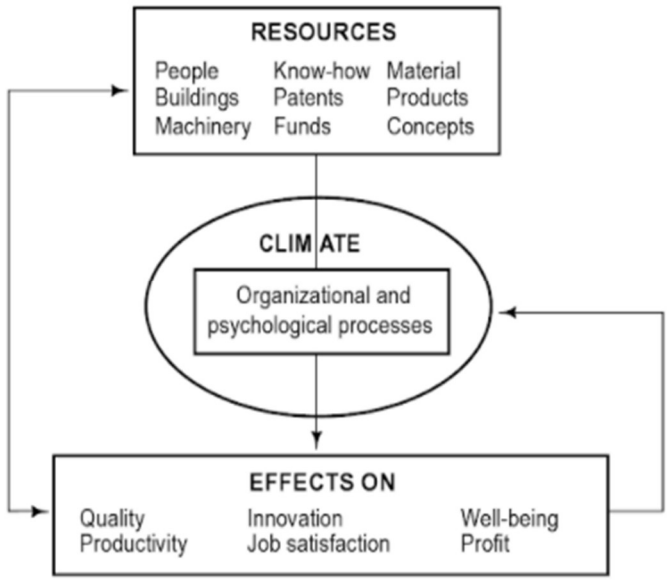

Figure 6 Ekvall's Framework (1999)

An organization has a set of resources, for example people, products and the company know-how, which are used for the organizational processes mentioned above. With those resources, everyday operations have certain effects such as innovation, profit and productivity. These are strongly influenced by the climate. In turn, the effects influence the climate and the resources in the organization.

What constitutes the climate can be affected by various factors, both internal and external. The degree of centralization and influence from leadership could be factors that play a major role in influencing the climate. The current literature emphasizes the complexity of climate. This framework (Ekvall, 1999) highlights the foundation of climate and its impact on the organization. It can therefore be useful for organizations to better understand how climate is an underlying factor which has a potential to highly influence innovation.

2.2.4 Fostering a Creative Climate for an Innovation Culture

Climate has been acknowledged as an important part of OC, and an enabler for innovation. Meanwhile, creativity is considered a prerequisite for innovation. Hence, it can be argued that a creative climate in the organization is needed to support an innovation culture. Therefore, a deeper knowledge needs to be gained about the individual, the organization, and the relationship between them. Understanding the interplay between the organization and the people in it, will shed light on what factors influence creativity and innovation.

Amabile (1997) presents a theory illustrating this relationship specifically, which provides a better understanding of what factors influence creativity for the individual, and thus the innovative outcomes in the organization.

The model is called The Componential Theory of Organizational Creativity and Innovation, where Amabile (1997) suggests how creativity will happen when people's skills are combined with intrinsic motivation, and that innovation will be a result of the individual's creative behavior. According to this model all people are creative to some extent, where the work environment can impact both to what degree and frequency creative behavior occurs. The model is divided in two parts. First the individual and team creativity. Second, the work environment. There are three factors for each part that lead to creative behavior and innovation. For the individual they are comprised of expertise, creativity skills and task motivation. For the work environment, it consists of resources, management practices and organizational motivation. These two parts and what characterizes them will be further explained below.

Individual/Team Creativity:

Expertise
Expertise is the basis for creativity. It is understood as the factual and practical knowledge within a specific field. Although it is an important skill for creativity, it is not enough with expertise. Creativity is not likely to occur if creativity skills and task motivation are lacking.

Creativity Skills
Being creative is here defined as a personal characteristic which relates to a cognitive style, where one has the aptitude to problem-solving and to take on new perspectives. It is that something "extra". A creative thinker is most likely someone self-disciplined, independent, tolerant towards ambiguity and risk-taking. It is worth noting, that even if not everyone possesses the personal characteristics mentioned for creativity. These skills can be improved by practice.

Task Motivation
Expertise and creativity skills determine what the individual in the organization is capable of doing. However, what the person will actually do depends on task motivation. There are two types of motivation, intrinsic and extrinsic. Extrinsic motivation is goal-driven with expectations of receiving rewards of some kind. This implies that extrinsic motivation is not rooted in the work itself. Intrinsic motivation on the other hand is driven by engagement in work through a personal strong interest, enjoyment and curiosity. The individual's intrinsic motivation strongly influences their creative behavior, to the extent that it can even make up for a lack in expertise and creative thinking. Studies have shown that intrinsic motivation leads to higher creativity compared to extrinsic motivation. Although a combination of the two is common within organizations.

Combining these three factors is what creates the condition for individual or team creativity.

Work Environment:

Resources
Consist of all types of assets the organization has, that are used to innovate. It includes people with the right expertise, relevant information, learning environment, material etc.

Management Practices
This component highlights the importance for management on all levels of the organization to allow autonomy and freedom of work. Further to match skills and interests, and create a sense of positive challenge in the workplace. Another important management practice concerns supervision. Supervision can promote creativity by good communication, support and by providing clear planning and feedback to both individuals and teams.

Organizational Motivation
The highest management levels need to provide a clear strategic direction towards innovation, to support creativity and innovative work. Moreover, lower levels of management are important to communicate and execute the vision. Organizational motivation relates strongly to values. In order to implement a culture with a clear strategic focus towards innovation, values emphasizing creativity and innovation must be formulated and communicated. Furthermore, to increase innovative activities, the organization needs to be open towards taking risk, show pride and enthusiasm about the people in the organization, and having an offensive strategy towards the future.

How the factors of the work environment intersect with each other creates the condition for organizational innovation.

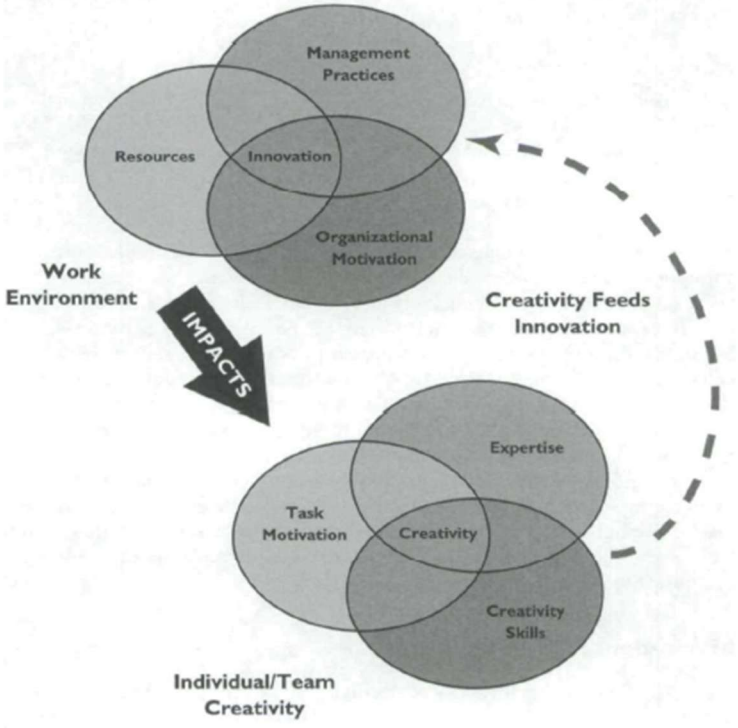

Figure 7 The Componential Theory of Organizational Creativity and Innovation (Amabile, 1997)

The componential theory presented above illustrates the relationship between how individuals and the work environment influence creativity and innovation in the organization. The work environment influence individual/team creativity, which in turn fosters innovation. Even though the work environment can impact both an individual's expertise and creative skills, it has a more direct impact on task motivation. Task motivation can fluctuate and change within a single moment, whilst expertise and creativity skills can be more stable. Since intrinsic motivation is seen as the more vital component for individual creativity, it becomes important for organizations to sustain a work environment that increases employee creativity and engagement, thus leading to innovation.

2.3 Mapping the Relationship Between Culture and Innovation

After performing a literature review on the concepts of organizational culture, climate, creativity and innovation, individually, it becomes clearer how the concepts interact and impact each other. The figure below shows the authors' compilation of how the different key concepts are related for innovation to occur in an organization. Creativity has been found to be a prerequisite for innovation. Thus, in order to be innovative, members of an organization need to create a climate, or work environment, that promotes creative activities. The development of such a climate is much dependent on the organizational culture and vice versa. Innovation culture occurs when the organization acknowledges and actively promotes innovation, in all levels of the organization, to allow for the generation and implementation of new and useful ideas.

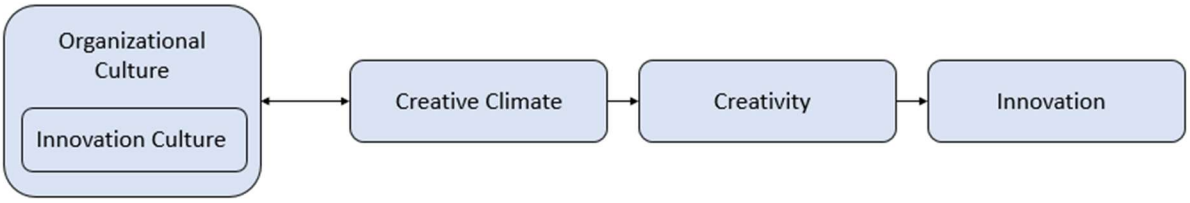

Figure 8 The Relationships between Key Concepts of Culture and Innovation. Compiled by authors

2.4 Evaluating the Creative Climate for an Innovation Culture

After understanding the relationship between the key concepts that are important for innovation in an organization, the following section will present in more detail what factors and activities that are needed to promote a creative climate which supports an innovation culture. Moreover, the section will include a description of how to assess the current climate in an organization. Firstly, two frameworks that have been used in previous research to assess the creative climate in organizations will be presented. Namely, the KEYS framework (Amabile et al., 1996) and the Situational Outlook Questionnaire, SOQ, a framework of ten creative dimensions (Ekvall, 1996). This to give clarity on how they have been used in the development process of the authors' own framework to assess creative climate that will be used for this research.

Followingly, seven creative climate attributes will be presented, which have been categorized by the authors based on findings from the literature review, in relation to the definitions of the key concepts. Finally, the chapter will conclude with the authors' own framework including the categories, success factors and activities identified as important to foster a creative climate and an innovation culture. The authors' framework will be used to assess the current state of the research subject and help to answer the research question.

2.4.1 Frameworks for Evaluating Creative Climate

In this section, two frameworks that have been frequently used when assessing climate will be described. Namely SOQ (Situational Outlook Questionnaire) and KEYS. Both methods are used to assess climate for creativity and change. These methods are described since they were used as inspiration for developing the framework and questionnaire used in this research.

2.4.1.1 KEYS Framework

KEYS is a framework that was developed in order to provide organizations with reliable information in regards of how the perceived organizational work environment influences creativity and development of novel ideas. The other intention with KEYS, was for practitioners to use it as a tool in order to be able to determine or diagnose to which certain degree, the work environment in an organization enables creativity. The framework is a questionnaire that is built upon eight scales, where six of them are stimulant and two of them are considered as obstacle scales. The scales are the following; Organizational Encouragement, Supervisory Encouragement, Work Group Support, Freedom, Sufficient Resources, Challenging Work, Workload Pressure and Organizational Impediments. It consists in total of 78 items, which are responded to of a 4-point response scale by the respondent. The framework is one of the most used in its field, however it also has some setbacks. According to Mathiesen and Einarsen (2004) one area of improvement is that the categories are too wide, which implies that many of the items belongs to one climate attribute.

KEYS
Organizational Encouragement
Supervisory Encouragement
Work Group Support
Freedom
Sufficient Resources
Challenging Work
Workload Pressure
Organizational Impediments

Table 1 Framework of the Eight Climate Scales, (Amabile et al., 1996)

2.4.1.2 Situational Outlook Questionnaire

Situational Outlook Questionnaire, hereafter addressed as SOQ, is a tool used to assess the organizational climate for creativity and change (Isaksen, Lauer & Ekvall, 1999). The tool contains 50 different items made to assess how much a specific climate supports creativity and change. The 50 items represent nine different dimensions of climate: Challenge/Involvement, Freedom, Trust/Openness, Idea Time, Playfulness/Humor, Conflict, Idea Support, Debate and Risk-taking. Each dimension connects to certain characteristics of climate which impact creativity and change, both at an individual, team, and organizational level. Every dimension includes three to seven items each. Eight out of the nine dimensions in the SOQ are found to have a positive relationship with creativity and change. The one dimension that does not is conflict, which has been found to have a negative relationship to creativity and change. SOQ is based on Ekvall's original framework on assessing climate for creativity, called Creative Climate Questionnaire (CCQ) (Isaksen, Lauer & Ekvall, 1999). Critique against the method of SOQ includes the notion that there is a high positive correlation between the dimensions and their influence on creativity. This is something which might indicate that the dimensions are not clearly distinguished and therefore need to be improved to better understand the difference between the dimensions and their potential effects on creativity. Therefore, it is difficult to precisely assess as to what extent a climate is creative or not by only using SOQ (Mathiesen and Einarsen, 2004).

SOQ 10 Dimensions
Challenge/ Involvement
Freedom
Trust/ Openness
Idea Time
Playfulness/ Humor
Conflict
Idea Support
Debate
Risk taking

Table 2 Framework of the Ten Creative Dimensions (Ekvall, 1996)

These two frameworks have been used as inspiration for the authors' own developed framework, which is further presented in section 2.5 and 2.6.

2.5 Creative Climate Categories

The creative climate categories presented below have been found to be necessary to improve the creative climate needed for supporting an innovation culture. They have been categorized by the authors based on reoccurring themes in the literature review.

2.5.1 Organizational Structure and Processes

Cultural openness to innovation is argued to be a crucial part of an organization's ability to be innovative (Dobni, 2008; Zaltman et al., 1973). Amabile (1988) presents in her research how the management of an organization impacts the creativity of the individual, and subsequently the innovativeness of an organization. She divides this into two parts by reviewing it from top management and middle management. From a top management perspective, she acknowledges the importance of recognizing a climate in the organization which emphasizes creativity and innovation. This is achieved through the creation of evaluation and reward systems, while providing the organization with resources for creative efforts. To promote creative behavior, it can be essential to implement a system which properly evaluates and recognizes employees' creative performance. An unsuitable system for rewards and recognition, that focuses more on extrinsic motivation instead of intrinsic motivation, could have a negative impact on creativity (Amabile, 1997).

Organizational structures in terms of its systems and processes greatly influence how employees perform their work and thus their creative behavior. When Amabile (1997) describes how the work environment influences individual intrinsic motivation, she puts an emphasis on organizations to implement systems and processes that promote creativity specifically. For example, Cummings (1965) suggests how a flat organizational structure is to prefer compared to a more hierarchical structure when speaking of creativity. The benefits being less control and strict direction from management. Attributes such as control and micro management would impede on the individual's freedom on how to accomplish their work, which could therefore be considered likely to inhibit the creative process.

Subsequently, Quinn (1988) advocates the importance of having a clear vision and mission to guide the organization's strategic direction in order to be innovative. For employees to be able to act innovatively they need to understand the gap between the current situation and how it deviates from the vision and mission (Martins & Terblanche, 2003). A vision that supports innovation can provide the organizational encouragement needed for individual creative behavior (Amabile, 1997). In addition, an organization with a clear direction and strong corporate values are more likely to have the ability to reach agreement on the course of action when abruptions in the market occur (Yilmaz and Ergun, 2008).

Organizational ability to be adaptable to change is also advocated to be an important factor for innovation. Since innovation is considered to be the implementation of an idea, the dimension of adaptability becomes important to create an OC that supports innovation.

Considering this, a rigid environment and routines may limit the ability to implement and appropriate the value of new ideas. Thus, hindering the development of an innovation culture (Sharifirad & Ataei, 2012).

Further, an organization that is marked by cooperation between different divisions and levels throughout the organization is more likely to be innovative. It is thus important for the organization to communicate the importance of collaboration, to avoid employees and divisions looking only at their own interests instead of the well-being of the organization as a whole (Amabile, 1997).

To summarize, inhibitors for creativity in this category could be if it is marked by too much bureaucracy and strict rules, if there is a lack of collaboration in the organization, if the vision is not clearly communicated and if it does not emphasize innovation, if the organization is not adaptable to change, or if the leadership does not have a proper system for rewards and recognition.

2.5.2 Management Support

This category is very broad since it includes all types of activities that managers conduct in order to influence the creative climate in the organization.

One of the success factors of which a creative climate is built upon, according to Amabile's research (1998), is specifically related to leadership in management, named supervisory encouragement. Related to this category, Amabile has found that the majority of the managers in an organization are very busy, leading to that they during longer periods, do not have time to maintain a supportive attitude towards employees in the organization. Studies have also shown that the more team leaders and team members interact, the better they perceive the innovative climate to be (Isaksen & Akkermans, 2011). However, in order to sustain the intrinsic motivation which is a key factor for creativity at the individual level, it is of importance for managers to continuously recognize the employees and their efforts. This is agreed upon by Williams (2001) in his research, where he concludes that the employees' creativity is dependent on the managers' ability to support and encourage their subordinates. Although this might sound as something obvious, it is seldom fully followed or implemented (Anderson, 1992).

Supervisory encouragement, according to Amabile, can be performed in other ways than the perhaps traditional methods of using punishments and rewards. One other example being that managers can act as role models, demonstrating behavior which has a positive influence on the creativity for employees.

Other researchers such as Oldham & Cummings (1996), Shalley, Zhou & Oldham, (2004) agrees upon Willian (2001) and Amabile (1998) in terms of that the managers plays a key role in supporting the creativity among employees. George and Zhou (2007) have in their research identified three ways in which managers support creativity. This by providing developmental feedback, through displaying interactional justice and through being trustworthy. Developmental feedback concerns supervisors' processes in providing employees with valuable information that is useful and which is focused on development, learning and performance improvement (Zhou and George, 2003). Interactional justice on the other hand concerns how managers communicate decisions out to employees by motivating why the decision was taken etc. It also includes how sensible managers are towards the employees in terms of understanding their needs and treating the employees with respect, dignity and kindness (George and Zhou, 2007). Trust or trustworthiness is the notion of the willingness to be vulnerable to another party. There exist many ways in which trust can be conceptualized. However, when employees trust their managers and management, they will gain confidence in that the managers will be responsive and susceptible to their creative ideas. Leading to that they trust their managers in having the right skills and knowledge to evaluate the idea in order to take a further decision. Research suggests that supportive and non-controlling supervision is a way for managers to increase creativity among employees. When managers are supportive towards their employees in terms of caring for the employees' needs, feelings and encouraging them to voice their concerns, it will increase the level of creativity as the interest in work activities increases. In contrast to management of employees that is built upon control. For example, pressuring employees to think or act in a certain way, take decision without employee involvement or tightly supervise employees has the opposite effect, resulting in decreased creativity (Amabile, 1988; George and Zhou, 2007; Oldham and Cummings, 1996).

Research has found a significant positive relationship between transformational leadership and creativity. Transformational leadership is a style where the leader creates a vision that will drive changes through inspirational guidance. The leader also identifies where there is a need for change and then execute the changes together with committed team members of a group. This as this type of leadership style increases the intrinsic motivation in a good manner which in turn supports creativity (Isaksen and Akkerman, 2011; Oldham and Cummings, 1996).

As a final remark to this category, Quinn (1985) has in his research identified two phenomenon that inhibits creativity from a management perspective. The first one concerns top management isolation, meaning that top managers have no or very little contact with other workers and potentially customers, which could influence the organizations' development. Another possible obstacle according to Quinn (1985) is the sometimes short perspective goals that management set. Short-term actions and goals are sometimes favored over long term investments such as innovation that will yield more in the long run.

2.5.3 Work Group Design

An organization which encourages collaboration is likely to increase information sharing which can enable the generation of new ideas and be seen as a promoter for creative activities (Sharifirad and Ataei, 2012; Thompson, 1965). Teams including people with different backgrounds, expertise and creative thinking styles are more likely to compose a collective knowledge helpful for problem solving and creative thinking. Therefore, it becomes important to create dynamic teams that includes different backgrounds and skill sets as creative and useful ideas tend to arise when people with different knowledge and personalities come together (Amabile 1998). Further, Cummings (1965) point out the importance of diversity of opinion. Or debates which Ekvall (1996) describes as different viewpoint between people. Diversity of opinion can facilitate idea generation, and diverse groups are probably more prone to encourage members' different opinions in a team (Cummings, 1965). Hence, one can imagine that it is more likely to have diversity of opinion in how to work or come up with alternative solutions to a problem in a heterogeneous group, compared to a homogenous group consisting of similar skill sets and personalities.

An obstacle to diversity and the idea generation it may bring, would be intolerance of differences. Organizations that become homogenous might develop a limited focus and potentially hindering those who challenge the organization's or team's way of thinking. It is something that can inhibit innovative solutions. Despite the positive effects that could be derived from diversity, the literature for this category also presents views on how diversity is not necessarily beneficial for creativity. A study conducted by Kurtzberg (2005) suggested that diversity could be beneficial for operations, but that it might also decrease team satisfaction, create social divisions, and negative performance (Mannix and Neale, 2005; Kurtzberg, 2005). From these different perspectives team diversity could have negative implications, just as easily as it could lead to positive outcomes (Amabile and Hennessey, 2010).

2.5.4 Co-Worker Support

Co- worker support regards the willingness of co- workers to work together and help each other instead of promoting a secrecy climate. Cummings and Oldham (1997) highlight in their research the importance of stimulation of co-workers. Employees that are creative and positive have a mindset which can lead to that other employees feel satisfied and excited about their work. This type of engagement will allow employees to stay more focused on their tasks as well instead of getting distracted by other things. This type of development occurs when employees can motivate each other and complexity in tasks are added.

This is not far from what Amabile (1988) states on how co-workers within the organization also influence the individual creativity by different skill sets such as experience, social skills and technical expertise. Moreover, Ekvall (1996) suggests that idea support is an important factor to consider when increasing creativity in an organization. According to Ekvall, idea support refers to the type of climate in which co-workers listen and support each other's ideas and provide constructive feedback.

What could inhibit creativity in this category is secrecy (Cummings and Oldham, 1997). A climate marked by secrecy could impede on information sharing, whilst making employees and individual teams avoid collaboration in order to look out for their own interests. A secrecy climate is considered to have a possible negative effect in innovation.

2.5.5 Work Characteristics

Work characteristics refer to attributes in the work environment that increase or inhibit the possibility of creative and innovative contributions to the organization. Looking at what work characteristics are important for creativity, studies have shown how empowerment can lead to increased participation. Moreover, that participative decision-making enhances engagement to innovate (Damanpour, 1991; Thompson, 1965). Creating a sense of ownership and responsibility through delegating power to employees and sharing important information, is a way of empowerment that can enhance their perceived freedom to act on ideas and implement innovation (Sharifirad and Ataei, 2012; Thompson, 1965). Effective organizations create engagement through empowerment. Empowerment stresses the participation by employees which increases their freedom to innovate (Yilmaz and Ergun, 2008). Further, researchers emphasize how delegation of power can enable collaboration and teamwork, which is argued to impact the innovation process and implementation of new ideas. Empowerment is in other words considered to be a key factor in structuring a creative and innovative environment (Sharifirad & Ataei, 2012).

To match the right people with the right work assignments can be another successful way to enhance creativity (Amabile, 1988). According to Amabile, people should combine their expertise, creative thinking skills and intrinsic motivation to achieve a maximum level of creativity. The higher the level of expertise and creative thinking skills the employees get to exploit, the higher the degree of challenge they have in their work. Challenge is one component in Amabile's (1988) and Ekvall's (1996) model over what impacts creativity. It should be noted that even though challenge is an important component, too challenging work might be overwhelming to the individual, leading to a potential decrease in control and creativity as a result. Oldham and Cummings (1996) instead discuss job complexity as a contributor to intrinsic motivation and creativity. Complex, or challenging, jobs in terms of autonomy, skill variety needed, relevance etc., support creativity to a higher degree compared to jobs characterized by more simple, routine tasks. A complex and challenging job is argued to make employees more excited to perform and put more time into the work**.** Further, a complex job design might encourage employees to focus on several aspects of their work simultaneously, which a routine job probably would not. Such a varied focus derived from a complex job could be one success factor for creativity.

The literature further emphasizes how challenging, complex jobs, also need to be characterized by autonomy. Job autonomy is defined as to what extent a job provides enough freedom and independence for an individual to determine the time and procedures for how they carry out their work (Hackman and Oldham, 1976).

Amabile (1997), Ekvall (1996) and Oldham and Cummings (1996), all advocate autonomy, or freedom, as significant for constructing work which motivates individuals to perform. Not to mention how employees' freedom to decide how to execute their work is valued in order not to constrain their creativity. Amabile (1997) further suggests that goal setting is necessary for employees' creative achievements, as long as they have the freedom to decide for themselves how to reach the goals. Job autonomy is thus a weighting factor for job satisfaction and intrinsic motivation, which influences creativity (Humphrey, Nahrgang, and Morgeson, 2007). It can therefore be said that an enabler for creativity is to provide individuals with substantial job autonomy, as this could encourage task motivation. Leaders and managers play an important role here since they have the power to influence autonomy by designing jobs that are exciting to the individuals in the organization, which in turn impacts creativity and innovation outcomes (Amabile, 1997; Sandvik, Espedal, and Selart, 2015).

Intrinsic motivation is mentioned by several researchers as an important work characteristic within the concept of creativity and innovation. The term is defined as performing an activity with a personal interest and where satisfaction is derived from engaging in the activity itself, without any other perceivable reward (Amabile, 1997; Deci, and Lancetta, 1971). Contrary to intrinsic motivation, extrinsic motivation and rewards can be prejudicial to creativity (Zhang and Bartol, 2010). Related to challenging, complex jobs, leaders can facilitate an innovation culture by promoting employees' creativity through constructing interesting work activities that enhance their intrinsic motivation (Sandvik, Espedal, and Selart, 2015).

To conclude this category, it can be noted that just as knowing what fosters creativity, one can benefit from considering what might inhibit it or have a negative effect on creativity. One particular work characteristic that could provide an obstacle towards a creative innovation culture is control. In the uncertain and competitive environment in which organizations operate, it is not unusual to want to implement elements of control as a way to handle these uncertainties. However, job autonomy and freedom in the work environment has been described as important, positive influencers to creativity. Hence, control could have a direct negative and limiting impact in developing an innovation culture (Oldham and Cummings, 1996).

2.5.6 Resources

Resources in this type of setting, refers to money and time that is needed in order to create a creative climate (Amabile, 1988). Resources include all assets the organization possesses to enable work activities, for example facilities, information, equipment, people and funds. The perhaps most recognized resource in an organization is the people or the human capital. Amabile (1998) suggests in her research that time is a variable that is complex for innovative firms. Too tight deadlines and pressure can inhibit creativity and the generation of useful ideas that lead to innovation. Meanwhile, it can also be stated to be the opposite as some sort of time pressure that is reasonable is stated to nourish creativity as it becomes more of a challenge. Therefore, a balance between having time limits and slack should be promoted. This to encourage positive challenge and allow for explorations to develop new ideas.

When it comes to facilities, it is a resource which is commonly misunderstood. Managers can put too much emphasis on creating "the right physical space" to encourage innovation. An open and comfortable office will not hurt the creativity, but managers should instead focus on granting freedom in work for employees, by making sure that the employees have enough resources (Amabile, 1998).

Ekvall (1996) presents in his framework ten creative dimensions, where idea time is one of them. By this he means that ideas need to be developed and discussed with colleagues to obtain input and valuable feedback from others. This requires the firm to have a set routine or standard for planned discussions of initial ideas.

Another important resource concerns funds or financial resources. When the funding is tight, researcher as Amabile (1998) states that employees' creativity is inhibited due to that the focus is shifted towards finding more funds instead to exploring novel ideas. Thus, it is important for organizations that are innovative, to recognize that creativity needs financial support in order to transform into innovations that the company can appropriate from.

In summary, this category describes how a lack of different resources can impede on innovation processes.

2.5.7 Psychological Safety

Climate concerns both organizational and individual processes that affect the overall innovation and health of an organization. When it comes to individual creativity attributes, another important enabler for innovation is safety. Ekvall (1999) discusses psychological, or emotional, safety as part of the climate dimensions in an organization. When members of an organization feel safe to express their ideas and take initiatives is argued necessary to develop an innovation culture. To feel safe requires trust and openness among employees. If people do not feel safe to make mistakes, question current practices, or if they are ridiculed because of their ideas, then they are unlikely to share the knowledge and ideas they have. Idea generation and collaboration will thus suffer, and as will the innovation outcomes. Moreover, if employees are afraid of making mistakes and do not feel safe in their work environment, they are unlikely to take the risks necessary for innovation to occur. Ekvall further presents the attributes of humor and playfulness related to safety. He suggests that a creative climate should be reflected by a work environment consisting of jokes and laughter. This opposed to a work environment represented by a more serious atmosphere where humor is considered inappropriate, which could hinder the creative process.

Zhou and Pan (2015) researched the social process in climate where they also recognize the need for a work environment to emphasize psychological safety as an attribute that will lead to increased creativity engagement. A work environment that employees perceive as psychologically safe is one that tolerates difference of opinion, accepts mistakes, promotes helping colleagues and provides support.

Transformational leadership is mentioned as a key factor in shaping the work environment and employee's perceived experience of psychological safety. In that sense, leadership is an attribute that fosters a safe climate and has an indirect impact on intrinsic motivation and creative behavior via its influence on psychological safety. Prerequisites for psychological safety includes team leaders' coaching, supervisory support, availability to all members of the team, and their behavioral integrity. If team leaders fulfil these requirements they will be able to develop a safe work environment as the perceived psychological safety among team members is likely to be enhanced. Overall, the importance of psychological safety in the work environment relates to open information sharing and the freedom of questioning both decisions and current processes to enhance creativity in the workplace.

Finally, what concludes this category are the potential obstacles for psychological safety. In relation to what attributes enhance psychological safety and creativity, it is essential to consider what might impede it. Such inhibiting factors could be improper criticism or judgements. As previously mentioned, employees are unlikely to share their knowledge and ideas with each other if they fear being negatively criticized or ridiculed, which could hurt the idea generation process. Conflicts between employees is another inhibitor that Ekvall (1999) describes. If there lies emotional tension between people, who potentially dislike each other, the climate will be negatively affected, moving employees' attention from their work thus impeding on the creative process. Cummings (1965) followingly emphasize the importance of information sharing and open communication, including being open to constructive criticism. However, an open communication will be difficult to achieve if the employees perceive the work environment as threatening.

2.6 Creativity Framework for Developing an Innovation Culture

After reviewing existing theories and models, the authors have developed a framework that will be used in this research to assess the creative climate at CEVT, as presented below:

Categories	Success factors	Activities	Authors
Organizational Structures and Processes	Evaluation and reward system	Create a reward system for creativity	Amabile, 1997
	Organisational structure	Maintain a flat organizational structure	Cummings, 1965; Amabile, 1997; Dobni, 2008
		Avoid bureaucracy and strict rules	
	Strategic direction	Communicate clear mission and vision that incorporates innovation	Quinn, 1988; Amabile, 1997; Sharifirad & Ataei, 2012; Hamel & Pahalad, 1994; Jones et al., 2005; Dobni, 2008; Zaltman et al., 1973
		Organizational ability to be adaptable to change	
		Openness to innovation	
	Collaboration	Promote collaboration between teams and departments	Amabile, 1997
Management Support	Supervisory Encouragement/ Transformational leadership	Recognize employees efforts	Amabile, 1988;1998; Isaksen & Akkermans, 2011; Williams, 2001; Anderson, 1992; Oldham & Cummings, 1996; Shalley, Zhou & Oldham, 2004; George & Zhou, 2007; Sharifirad & Ataei, 2012; Hurley & Hult, 1998
		Participative decision-making	
		Provide support and encouragement	
		Provide developmental feedback to employees	
		Being trustworthy	
		Frequent Interaction between leaders and team members	
		Attitude towards change	
		Communication of decisions	
	Top Management alignment	Avoid Top Management isolation	Quinn, 1985
		Do not favour short term goals over long term goals	
Work group design	Diversity	Promote different backgrounds and skill sets	Sharifirad & Ataei, 2012; Thompson, 1965; Amabile, 1998; Ekvall, 1996; Cummings, 1965; Kurtzberg, 2005; Mannix and Neale, 2005; Amabile & Hennessy, 2010
		Promote diversity of opinions	
		Avoid intolerance of differences	
Co-Worker Support	Team Climate	Avoid a secrecy climate	Amabile, 1988; Cummings & Oldham, 1997; Ekvall, 1996
		Encourage teamwork and collaboration	
		Discuss, listen and supportive feedback for each others ideas	
Work Characteristics	Empowerment of employees	Participative decision making	Damanpour, 1991; Thompson, 1965; Sharifirad & Ataei, 2012
		Create a sense of ownership/ responsibility	
		Delegate power	
		Share important information	
	Job Complexity	Create a challenging job	Amabile, 1988; Ekvall, 1996; Oldham & Cummings, 1996
	Job Autonomy	Give freedom for employees on how to carry out work	Amabile, 1997; Ekvall, 1996; Hackman & Oldham, 1976; Oldham & Cummings, 1996
		Do not pursue too much control over work processes	
	Motivation	Focus of recognition of creative work instead of rewarding with non work related items.	Amabile, 1997; Deci & Lancetta 1971; Sandvik, Espedal & Selart, 2015; Zhang & Bartol, 2010
Resources	Time	Balance between time limits and slack	Amabile, 1988;1998; Ekvall, 1996
		Allow employees to have planned time for discussions	
	Money	Assure stable funding to avoid that the creative process is disturbed	Amabile, 1998
Psychological Safety	Create a safe climate for the individual	Promote Transformational leadership	Ekvall, 1999; Cummings, 1965; Zhou & Pan, 2015
		Allow playfulness and humour	
		Show trust and openness	
		Express and share ideas	
		Avoid conflicts by not giving improper judgements	

Table 3 Creativity Framework for Developing an Innovation Culture, compiled by authors

3. Methodology

This chapter describes how the research was conducted in terms of which type of research strategy and research design that has been used. It also contains a description on how the empirical data was collected and analyzed in order to answer the stated research question.

3.1 Research Strategy

CEVT stated at an early stage that they wanted to know more about what it is that forms an innovation culture and understand how the current innovation culture is at CEVT. To help the company with this task, more knowledge about innovation culture and other related concepts was needed. To achieve this, an extensive literature review and analysis was performed in order to understand the different elements that together create an innovation culture.

To investigate how the current innovation culture is and how it is perceived by the employees, it was found useful to perform an exploratory study using a mixed method approach which emphasis the qualitative part. This approach included semi-structured interviews and a survey, which enabled to collect and obtain as much data as possible. The survey fulfilled the purpose of enabling triangulation, to verify and complement the results. The combination of the two methods has helped the authors to gain a deeper understanding in order to answer the stated research questions.

The benefits with a qualitative approach and performing semi-structured interviews, is that it allows the authors to collect rich data and information about the creative climate to deeply understand how the employees perceive it, in order to evaluate the current innovation culture at CEVT. The qualitative methodology is suitable in this case as it favors flexibility, since it allows for questions to be adapted to the situation and aligned with discoveries made during the interviews. One potential disadvantage with this type of research strategy is that it develops a subjectivity due to that the researchers interpret the collected material and can have an unsystematic view on what is significant. Hence, generalizability becomes a concern (Bryman and Bell, 2011). In the case of this report, it is not the intention to apply any research findings to other companies, as this study is designed as an exploratory study of the innovation culture on a company specific level. Thus, it can be argued that the concern regarding generalizability is mitigated.

It was discovered during the literature review that several studies within the concepts of innovation culture and creative climate mentioned in the report, was found to have a quantitative characteristic. These studies aimed to measure certain factors to indicate what can affect these concepts. Inspired by the nature of the quantitative research in the field as mentioned above, and the possibility to obtain information that is difficult to obtain through interviews, it was decided to include an element of this type of research strategy in this thesis. A short survey was distributed at the end of the interview. This type of data collection was found valuable as it triangulates information that was collected from the interviews.

Benefits with including a survey in the research, is that it provides the researcher with information of which the researcher can perform different analysis to form conclusions. This type of method is also useful as one can compare the results between departments as it can indicate the current state of the research subject. The disadvantage is that it is more static in its nature. Using a survey only, it is not possible for the researcher to ask any follow up questions, thus it is difficult to gain a deeper understanding of the research subject. Moreover, the survey does not provide answers to why the respondents have answered accordingly (Bryman and Bell, 2011).

By using a mixed method, combining survey and interviews, it enables the authors to benefit from the advantages of the two different approaches. The survey contains statements that validates questions asked during interviews. Furthermore, it also complements the interview material as the survey contained questions that was not touched upon during the interviews. By including this element, it was possible to gain a deeper insight of the climate and culture as it indicates how individuals perceive or experience the innovation culture at the moment.

3.2 Research Design

In this thesis, a single case study is used as research design. It is a single case study of the innovation culture at the company CEVT, which is studied as a phenomenon in its natural setting. Case studies are a common and popular research design used within business economics. A case study can study an organization, a specific place, person or a specific event. Hence, the opportunities within this type of research designs are multi folded (Bryman & Bell, 2011). In this case, this type of research design was suitable since the report will investigate and seek to understand how CEVT can improve the creative climate to support an innovation culture. Thus, the research will fully focus on one company and not be a comparison between companies as in the case of a multiple case study. The advantage of performing a single case study is that the researchers can fully focus on the subject and company that is being studied. Hence, it can lead to a deeper understanding of the subject compared to a multiple case study. Even though a multiple case study might be more covering, it may also lack in depth.

3.3 Research Methods

To answer to the research question of this report, both secondary and primary data will be used.

3.3.1 Primary Data Collection

As a part of the mixed research approach, primary data has been collected through interviews, survey and observations. Since this study is of exploratory nature, qualitative interviews were the preferred way of obtaining data. It was decided to perform the interviews with semi-structured questions considering the advantage of its flexibility and the opportunity to gain a deeper understanding of the context.

This technique allows the interviewer to guide the respondent into specific areas and subjects with help from an interview guide, which contains subjects of pre-defined open-ended questions. The respondents can therefore freely elaborate, and in a flexible way answer the questions, having an open dialogue with the interviewer. Since the respondents have different positions, working in different departments of the company, this kind of flexibility and adaptability of the interviews becomes important. Semi-structured interviews were chosen in favor of structured interviews as it gives the interviewer more flexibility. Furthermore, semi-structured interviews can contribute to a more holistic, complete picture, compared to unstructured or structured interviews (Bryman and Bell, 2011). In addition, the survey allows the researchers to further increase the richness of the data collected. The survey results were interpreted in a qualitative manner in accordance with the chosen research approach. This was considered to be beneficial for the researchers to validate and complement the interview material.

During the whole research period, the authors were hosted by the Human Resource department at CEVT. To be on- site at the company during the whole research period, enabled the authors to obtain valuable in-depth knowledge and understanding of the company and how it is operated. Furthermore, to be on-site can also be seen as beneficial when studying culture, as it is perhaps best examined through observations. However, due to the rapid growth of the company, CEVT with its 2000 employees are located in 20 different locations at Lindholmen. This type of diffuseness made it challenging to draw conclusions from observations, as the climate and the culture can vary between different departments and buildings. Since the authors were hosted by the HR department, it was possible to make observations from that department and their work activities. These observations are included in the empirical data, chapter 4.

3.3.2 Secondary Data Collection

To understand what an innovation culture is and which factors that impacts the culture, an extensive literature review was performed. This type of data in the thesis, is mainly based upon articles and books within the field of innovation, creativity, organizational culture and climate. The databases that were used to obtain relevant material were LIBRIS, GUPEA, GUNDA, Business Source Premier, Emerald, ScienceDirect, SpringerLink and JStor.
It has been an important criterion to use articles that have been cited and peer- reviewed, apart from that the content should be relevant for the thesis.

Other type of secondary data used in the thesis include internal documents and information available on the company's intranet. The data includes company background, strategic objectives and organizational charts. This information was used to understand the company better in terms of CEVT’s role within the Geely group, the company history and future direction. Moreover, the organizational charts were used to understand the existing structure and to help determine suitable interview subjects.

3.3.3 Selection of Respondents

In terms of selecting respondents, the authors wanted to gain a holistic picture of the current innovation culture at CEVT. In order to reach this objective, the authors wanted to interview employees from all different departments of the organization. It was therefore decided to interview two employees (one manager and one team member) from all departments (Architecture, Vehicle, Innovation and Powertrain). This to obtain a representative sample. All the support functions were excluded in this scope except for the HR department, as that department plays a central role in developing the innovation culture. The HR department currently works with culture related questions at CEVT. The other support functions were not interviewed due to time constraints. To find representatives from the targeted departments, the two supervisors from CEVT assisted the authors in creating a list of people to contact for interviews.

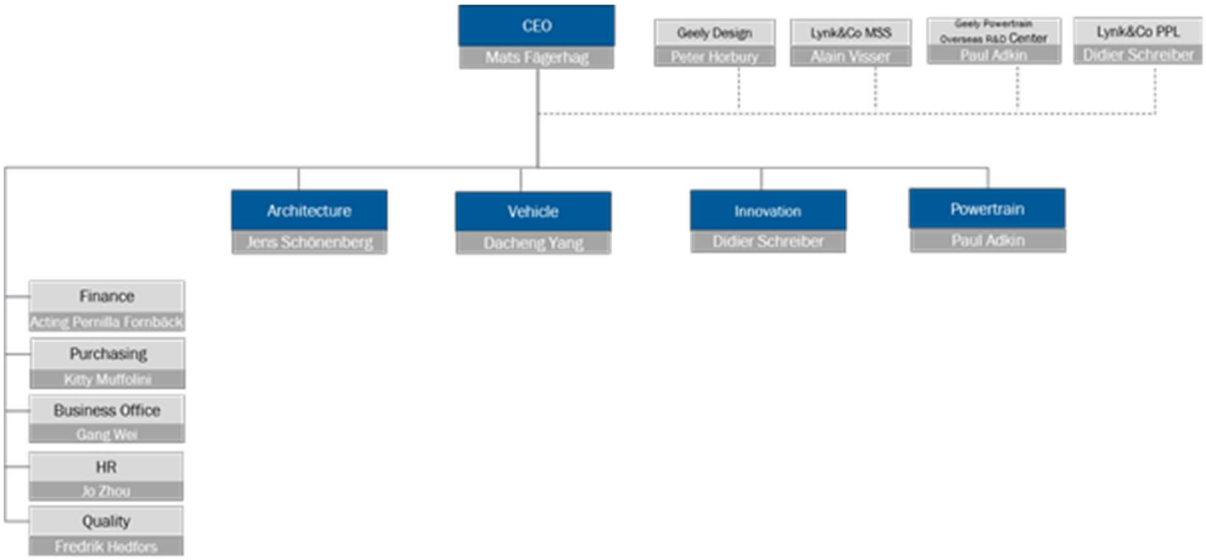

Figure 9 CEVT's Organizational Chart (CEVT, 2018)

The type of sample used for this thesis is according to the literature considered as a stratified purposive sample. It is stratified since it was decided to interview two employees from each department of Architecture, Vehicle, Innovation, Powertrain and HR. This, as it was found relevant in order to answer the stated research question. Advantages with a stratified sample is that it ensures that the sample is equally distributed over the given population.
One disadvantage with this type of sample is that it cannot be used in every study, this as the strata needs to be collectively exhaustive, as all populations need to be included (Bryman and Bell, 2011).

To be able to interview two employees from each department or stratum, a purposive sampling technique was used. The authors chose, in collaboration with the supervisors, the most relevant employees that would be suitable for interviews. This type of sampling is according to the literature a technique where the researcher is highly dependent on his/her judgement to choose members of a population to study. It is a non- probability sampling method since the sample is decided by the researcher based on judgement.

The benefits with this type of sample is that researchers can often obtain a representative sample by judgement, hence it is a time- and cost-effective sampling method. However, one disadvantage with this method is that reliability can be considered as lower due to the potential of high level of bias (Bryman and Bell, 2011).

The authors are aware of the risks and implications with this type of sampling, however it was considered as the most suitable way to obtain a sample as representative for the company as possible. The authors have full confidence for the supervisors in their judgement for suggesting different respondents suitable for interviewing. The risk of biased sample was discussed with the supervisors in order to gain a representative sample meanwhile mitigating the risk of a bias.

Twelve employees were asked to participate and they all agreed on participating. Below is a list of all the employees interviewed:

Respondent	Department	Title	Role	Date	Duration	Survey	Type	Language
A	Architecture	System Manager	Team Member	2018-03-20	60 Min	Yes	Face-to Face	Swedish
B	Vehicle	Senior Manager	Team Member	2018-03-20	45 min	Yes	Face-to Face	Swedish
C	Architecture	Module Team Director	Manager	2018-03-21	60 Min	Yes	Face-to Face	Swedish
D	Innovation	Innovation Strategy & Ideation	Team Member	2018-03-21	60 Min	Yes	Face-to Face	Swedish
E	Vehicle	Module Team director	Manager	2018-03-22	60 Min	Yes	Face-to Face	Swedish
F	Powertrain	Designer	Team Member	2018-03-23	60 Min	Yes	Face-to Face	Swedish
G	Architecture	Attribute Leader	Team Member	2018-03-27	60 Min	No	Face-to Face	Swedish
H	HR	Director	Manager	2018-04-04	60 Min	Yes	Face-to Face	Swedish
I	HR	Coordinator	Team Member	2018-04-05	60 Min	Yes	Face-to Face	Swedish
J	Powertrain	Director Electric Drive	Manager	2018-04-05	60 Min	Yes	Face-to Face	Swedish
K	Innovation	Strategy and Business Dev.	Manager	2018-04-10	60 Min	Yes	Face-to Face	Swedish
L	Architecture	Senior manager CAE	Manager	2018-04-12	60 Min	Yes	Face-to Face	Swedish

Table 4 Table of Respondents

3.3.4 Practicalities

The interview guide was created with the authors theoretical framework, 'Creativity Framework for Developing an Innovation Culture' (found in section 2.6) as the major foundation to be able to collect information that would help to answer the stated research question. The interview guide served as a guidance for the authors when conducting the interviews. Meaning that the questions together with different relevant sub questions were asked differently in each interview in order to adapt to the different interview situations as the interviews went along. Furthermore, the benefits of having an interview guide as well is that leading questions can be avoided. The interview guide is found in appendix 1.

All interviews were performed in CEVTs facilities at Lindholmen. They were all performed face-to-face. To be able to capture everything that was said during the interviews, all the interviews were recorded with the permission from the respondents. All interviews and survey results were agreed to remain anonymous. The interview guide was printed out before each interview to allow the authors to take quick notes during the interviews as well. In that way, the two authors could both actively participate in the interviews, asking questions and taking notes.

It was decided to not fully transcribe all interviews considering the tradeoff between the time it takes and the value it gives. Instead extensive notes were taken during the interviews and immediately after the interview, the authors went through the material, which was either partially or fully transcribed depending on the richness of the answers. The partial transcription entailed writing down quotes from the interviews which could be directly related to the authors' developed framework (see table 3 in section 2.6).

Regarding the survey, the statements in the survey are based on the authors' developed framework and the reviewed literature. The survey was created electronically through the platform Webropol. A total of 32 statements were included in the survey where all the respondents ranked the statements according to the following options: strongly disagree, disagree, undecided, agree and strongly agree. The survey was never published for the public or other employees at CEVT. At the completion of an interview, a computer with the survey open, was handed over to the respondent. The advantage of distributing the survey once after the interview was that it was possible to make sure that it was filled in, and to answer any potential questions. By presenting the survey to the respondents in this way, it was possible to obtain a response rate of 90%. One of the respondents did not complete the survey at the end of the interview due to time constraints. The survey containing the statements and answers is available in appendix 2.

3.4 Data Analysis

In terms of analyzing the data, a thematic structure has been used. To identify patterns and similarities from the empirical material will help to code the data in order to group the data accordingly and categorize the findings into different themes. Furthermore, the developed framework (see chapter 2.6) was used when categorizing the themes identified. Every activity related to the different success factors within each category have been assessed one by one. Activities are considered as non-satisfactory if the majority of the respondents do not perceive that the activity is performed at the company, which is visualized with a red cross. Activities marked with a blue circle are considered as partly satisfactory, indicating that elements of this activity exist but need further improvement. Finally, activities that are marked in green show that the majority of the respondents experience this activity to be satisfactory.

The assessment of the creative climate will be presented with the mentioned criteria for each activity in the analysis, as demonstrated below. The analysis is based on a total assessment of the interviews, survey results and observations.

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Figure 10 The Authors' Assessment Criteria when Analyzing the Creative Climate

3.5 Quality of the Study

3.5.1 Validity

Validity is perhaps the most important indicator or criteria in research. Validity is about an assessment of the conclusions generated from a study, if they are linked together or not. High external validity shows that the results from the research can be generalized and therefore it can be applied to other studies. Therefore, this has a great impact in terms of credibility. In qualitative research strategy, validity is often a shortcoming since the sample size is normally small and not necessarily representative.

In this case, for this report, the results are not meant to be generalized since the conclusion that will be drawn upon are specific for the company. To mitigate the risk of low validity, one could do a multiple case study to obtain a result that is comparable between companies. However as mentioned, this report will only have the scope of CEVT, thus the validity for this report depends on the respondents for the interviews. The selection of relevant and accurate respondents increases the possibilities to obtain data that will help to answer the stated research question and enhance the validity of this report. Since the selection of respondents included representatives for both team members and managers from all departments at the company, it is argued to strengthen the validity of the report. This as the authors were able to gain a holistic view of the creative climate at the company, according to the purpose of this thesis.

3.5.2 Reliability

Reliability concerns if the results from the research are repeatable, which means if the results can be replicated by other researchers (Bryman & Bell, 2011). Reliability is highly connected to the consistency of the research. For example, if data is collected several times, or on more than one occasion, reliability indicates the possibility of having the same type of data collected. In terms of reliability in qualitative research, it can be problematic since performing two interviews will probably lead to different outcomes. To overcome this problem, and to increase the possibility of replicability, an interview guide containing semi- structured questions, is available in appendix 1. This interview guide, will allow other researchers to improve their chances of obtaining the same or similar results.

Furthermore, a table of the respondents, who remain anonymous, is available in table 4 section 3.3.3. In the table, information regarding department, title, role, date of interview, duration, type, and language used is available. In addition, the survey conducted after the interviews, is available in appendix 2. All of this to assure replicability and reliability.

4. Empirical Data

This chapter presents the collected data from interviews, observations and survey. The chapter holds the same structure as in the theoretical framework mentioned in chapter two. All categories hold the same internal structure where findings from the interviews are the major source of empirical data, with in some cases included observations. Each category ends with a short presentation of the survey results for the given category.

4.1 Organizational Structure and Processes

This category concerns how employees at CEVT perceive or experience the organization in terms of the success factors: Strategic Direction, Organizational Structure, Collaboration, Evaluation and Reward System (see table 3). The respondents were asked to share their opinions about the company's' core values, decision-making and company structure, collaborations within the company etc.

4.1.1 Strategic Direction

CEVT has a stated vision which is the following; "World Leading Innovation and Research Centre, Developing cars for a different tomorrow". Apart from this vision, the company has three values: think big, find a way and get inspired.

When performing the interviews, all respondents mentioned the different values. All are aware of and knows the values, however they describe them differently. For example, two interviewees mentioned how they 'get inspired' by colleagues and the dynamic way of working at CEVT. Three respondents also refer to the value 'think big', where two of them explain the value in terms of thinking globally. Respondent B describes it as how CEVT is a small automotive company, where the vision is for them to operate all over the world, and to reach that objective they need to 'think big'. However, the value most referred to, by every single interviewee, is 'find a way'. It is addressed in both positive and negative ways. 'Find a way' is described as a very Chinese approach, where they find a solution and go with it, it is fast paced. A few talks about it as a problem. Respondent G exemplifies how the value has transformed into an expression. Meaning that one could for example be expected to solve things that are outside one's responsibilities by someone saying, 'find a way'. Respondent F describes it as how colleagues interpret the value as a possibility to take shortcuts. Generally, all respondents state that the values are being communicated and everyone has heard about them. Although, everyone mentions how the values are vague and that more examples as to what they mean could be helpful in understanding them.

When it comes to the vision and mission, all respondents said that they are being communicated. Mostly managers express how they think that the strategic direction is clear, but also that it might not be clear to everyone. Moreover, that there is doubt about it in the organization. Meanwhile, most of the team members state that they do not think it is clear at all and that transparency could be better.

More specifically, that the communication regarding what is going on in the company and decisions made could be better. As mentioned, a majority of managers interviewed say that they perceive the strategic direction as clear, but that they do not think it is clear by others in the organization, including other managers[1]. One manager expresses the following: *"I am afraid of that CEVT is losing its passion and employee engagement, I think that certain people know and see that we have something to be passionate for. I have to believe that someone higher up in the organization knows which path we should go and think it is clear what to be passionate about, but I do not see it and I know my team definitely does not see it…. I am working with finding small glimpses for my team, but it is hard when there is no clear strategy communicated to us"* (Respondent L).

The majority of the team members state that they do not understand the strategic direction. Respondent A further describes that there is a gap between the vision and the strategy, compared to how they actually work. It is expressed by the majority of the respondents that the connection between how they work and the vision to focus on innovation needs to become better. One example mentioned, is how difficult it is for the teams to focus only on quantitative measures and goals as it becomes too narrow and static when working with innovation. When talking about the company strategy, the connection between Geely and CEVT, China and Sweden, is often brought up. This as Geely is an active owner, where some teams work very closely with Geely and their Chinese colleagues. During the interviews, it was said by many how the vision to be innovative sounds exciting, but that CEVT's role within Geely and what they are supposed to contribute with, is unclear. One manager specifically describes that there exists a discrepancy within the Geely group, an internal power struggle between CEVT and the parent company, Geely. CEVT's role within the group can often be challenged, which is mentioned as both positive and negative. However, a mutual understanding among the majority of respondents is that Geely rules over CEVT, and that the strategic governance lies in China.

Regarding the organization's ability to be adaptable to change, the information gained from the interviews convey that there are a lot of changes in the daily work at the company. Everyone agrees that things happen fast and change just as rapidly. Some things can change in the middle of a project, resulting in a need to change the course of action or kill the project entirely. Things can be different or change from day to day, week to week, you never know what will happen. CEVT is described by all respondents as a dynamic company that is constantly growing and moving. A lot of changes lead to that people become used to rapid changes. Although, a few respondents mention that this can also have the downside of people grasping limited information as they know things will probably change soon again. Rapid changes can also mean that projects which people have worked on for a long time might be dropped suddenly, which can be challenging for the employees involved to reconcile with. The changing environment can in some cases be perceived as on the verge to extreme. However, the organization's ability to cope with change is described by all as one of the exciting parts about working there.

[1] Unclarity in the strategic direction was mentioned by all the respondents to be one reason for why they do not experience CEVT to be as innovative as it has the potential for.

The question of whether CEVT is open to innovation or not is perceived somewhat differently by the interviewees. Everyone knows that there is a shift of focus from production to innovation in the company. The opinion on this matter is twofold, where some describe the company as innovative, whilst others do not. However, everyone says clearly how strongly project driven the company is. The work is very focused on delivery, and the perception is that there is no time to be innovative. All respondents express their wish for the work climate to be more permitting and open to work outside the projects and try new things.

4.1.2 Organizational Structure

When performing the interviews, all of the respondents commonly agreed on that the best thing with working at CEVT is the freedom that everyone is given to perform their job. This as the company is not ruled by many processes and there are no rigid structures on how the work at CEVT should be carried out. The respondents state that there is a freedom to do things, bring new things forward and to take a bigger responsibility. The expression, freedom with responsibility is commonly used among the respondents.

4.1.3 Collaboration

The interview guide did not explicitly include questions about collaboration, but the subject was brought up during a handful of interviews. Respondent C and E share that there is a good collaboration between different teams and departments. Meanwhile the others stated that it can be difficult to coordinate and to find time to meet other teams or departments. It was also said that it takes time to understand others in different teams and to establish a good collaboration. Furthermore, respondent F describes that many handshakes are needed in order to establish and maintain a collaboration.

Respondent C highlights the importance of collaboration between teams and departments as it is the only way to try something new. For example, when someone in the team has a new idea, the team leader or manager has to find a project where the idea can be incorporated or tested, as it needs a sponsor. Respondent G mentioned that the departments and teams can be very segregated. For example, it was described that people do not say hello to each other when they walk by to take a coffee. The reason being that some people do not think it necessary if they do not work directly together. The respondent also mentioned that there are several colleagues that do not know the name of other people in the team.

4.1.4 Evaluation and Reward System

Most interviewees were not specifically aware of any particular reward systems, but a few of the interviewees speak of it. Respondent D and L mentioned that there exists a reward process when it comes to generation of new ideas and grants of patents. The focus for the moment is mainly on patents, which they believe to be too limited as other types of inventions should also be recognized.

In relation to this, respondent L explained that the financial reward is given at the point when the patent is granted, which normally occurs several years after filing. The same respondent suggested to increase the rewards by rewarding people and the teams with 'fika' or other experiences such as team activities, more continuously when good ideas have been filed to the innovation department. This type of small and relatively cheap gestures would encourage people to take the time to come up with new ideas. Further, it has been observed from the HR department, that a reward system exists, not only for patents. During last year's Christmas party for example, monetary rewards were given out to employees that had been nominated for living the company values. Moreover, there are funds which managers or team leaders can apply for from HR, however few people apply for these funds and one reason may be that not everyone is aware they exist. Finally, employees can receive a financial reward in terms of salary increase after the yearly salary review.

4.1.5 Survey Results

The survey results regarding organizational structure and processes reveals the following:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Organisational structure	I experience that the company holds a flat company structure	1	2	3	5	0	11	3.09
	I experience that the company has many rules and procedures	1	3	4	2	1	11	2.91
Strategic direction	I know the companys vision, mission and values	0	0	2	7	2	11	4
	I experience that the companys values are being followed	0	2	2	7	0	11	3.45
Collaboration	I collaborate with other teams or departments	0	0	0	7	4	11	4.36

Table 5 Survey results for the category; Organizational Structure and Processes

What can be said from the survey regarding the organizational structure is that almost half of the respondents consider the company to have a flat organizational structure, whilst six out of eleven respond otherwise. Moreover, three out of eleven considers the company to have many rules and procedures, while the rest are either undecided or do not agree. When it comes to collaboration everybody agrees or strongly agrees with that they collaborate with other teams or departments. Regarding the strategic direction, nine respondents are familiar with the company's vision, mission and values. However, seven respondents agree with that the values are being followed.

4.2 Management Support

This category reflects both managers' and team members' perspective about the leadership in the organization. How managers both want and try to execute their leadership, as well as how their team members experience that leadership. Moreover, both managers and team members were asked about how they experience the top management. It identifies the following success factors found in table 3: Supervisory Encouragement/ Transformational Leadership and Top Management Alignment.

4.2.1 Supervisory Encouragement/ Transformational Leadership

From the literature review, the influence of supervisory encouragement and transformational leadership was identified as a crucial part for intrinsic motivation and creativity in an organization. The interviews revealed that the majority of team members experience their managers to be supportive, available for them and trustworthy. Further that their managers have an open attitude towards change and encourage them to participate in the decision-making process. This was expressed by the majority of team members, who said that their managers listen to them, make them feel heard, and a few described that their manager asks for their opinion and feedback. Respondent A described this with an example of how the manager in question "coaches" the team in their work, instead of "recommending" them and telling them how to do things. Moreover, most team members experience that their managers support them, encourage them to take responsibility and make them feel included. Respondent A provides an example to point out that the manager stands up for the team in a supportive way. The challenges of being a young female working in a male dominated industry, such as the automotive industry, was described. In situations when colleagues would treat younger, female colleagues in an unsuitable way, their manager would stand up for them and provide good support. Respondent F mentions manager encouragement by saying how their manager promotes "pep talks" and makes sure that everyone in the team is feeling well.

To conclude the remarks from the team members' perspective, the majority mention that they have bi-weekly team meetings and most also have continuous individual meetings with their manager. Even though above mentioned is the generally shared view from the team members about their managers' leadership, respondent G does not experience this at all. Instead a perception is mentioned of how the manager is invisible, not available and does not provide regular team -or individual meetings. It is explained that it is possible to approach the manager, but it is challenged by the fact that they do not sit in the same building. All in all, team members say that they have a good relationship with their managers and most of them are located in the same office or building. However, this varies between different teams and there are exceptions.

From the managers' perspective, the most part describe their leadership experience to be good. Many of them say that their teams are very independent and easy to lead. A few mention challenges in terms of having very large teams to lead in addition to that those teams work with different things. Respondent L states that it can be difficult to create a strongly united team and to get to know each other in such large teams. Their leadership styles are described in different ways, where most say that they try to make themselves superfluous and that their job is to be an enabler for the team to work autonomously. Some, around half of the respondents, highlight that they try to make sure their team members are feeling well, as well as to make them feel important and involved. Respondent J and L mention specifically that they have fun with their team and plan team activities outside work hours. Three of the managers use the word presence as an important quality in their leadership and all managers agree on that they do not want to micro manage their teams. Around half of them mention that they actively try to give feedback, and a few say that an effort is made to also ask for it back. The majority of them say that they try to have regular team meetings and one-on-one meetings.

Many managers talk about how they try to empower their employees through giving them assignments outside of their usual comfort zone at work, whilst ensuring that their teams know they will still be available if help is needed. They all say that they experience an open dialogue with their teams, and that team members come to them if they need anything. One manager explicitly states that efforts are made to explain why changes occur to the team, and the others accordingly say that they try to share all important information with their teams. However, it is mentioned from a few managers that information sharing is difficult. The strategic direction is one example where most managers explained that they feel the strategic direction to be clear, but some experience it difficult to downscale it further. It was described during the interview with respondent E that, even though the information is shared with team members, it is still perhaps not understood because of the challenge in downscaling information.

4.2.2 Top Management Alignment

Top management was mentioned during all interviews. According to the majority of respondents, the top management of CEVT is visible to them in different ways. Respondent J states for example that the CEO is very nice and easy to get in touch with. Meanwhile, respondent I says that the CEO is an experienced entrepreneur that has many ideas for the future. It is also perceived by many respondents, on both a team member and manager level, that the CEO is someone with a lot of technical competence who is very aware of what is happening in the company. Another example of how top management is visible in the organization, provided by respondent F and L, is through so called "town hall meetings". A town hall meeting is described as when top management visits different departments for company announcements. When it comes to goals in terms of short and long-term perspective, all of the respondents state that a focus on short-terms goals is how the organization operates. All describe how the organization works in a fast pace with an emphasize to deliver products and finalize projects, with a short-term perspective. As one employee states: *"We need to have a seven-year plan instead of what we should do next week. Maybe the top management has one, but if so I don't know about it"* (Respondent A).

4.2.3 Survey Results

The results from the statements in the survey regarding management support are as follows:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Supervisory Encouragement/ Transformational leadership	I get recognized for my work achievments	1	0	1	5	4	11	4
	I experience that my manager supports and encourage me in my role	0	1	0	4	6	11	4.36
	I experience that my manager provides me with feedback	0	2	1	7	1	11	3.64
	I experience that my manger is available for me	0	1	2	5	3	11	3.91
	I trust my manager	0	2	0	4	5	11	4.09
	My manager communicates well	0	0	2	6	3	11	4.09
	I experience that my manager has an open attitute towards change	0	0	2	4	5	11	4.27
Top Management alignment	I experience that short term goals are favourised over long term goals	0	0	2	8	1	11	3.91

Table 6 Survey results for the category, Management support

As can be seen in the chart above, the majority of the respondent's experience that they get recognized for the work achievements and that the manager supports and encourages them. Moreover, eight out of eleven respond that they receive feedback from their manager, and that the manager is available for them. Further, a majority respond that their manager communicates well, that they trust their manager and experience that their manager has an open attitude towards change. Finally, nine out of eleven experience that short-term goals are favored over long term goals.

4.3 Work Group Design

The category Work Group Design deals with how CEVT works with diversity. The employees were asked questions during the interview which regarded if they think CEVT consist of people with different backgrounds, ethnicities, skill sets and tolerance of opinions. The success factor identified in this category is Diversity (see table 3).

4.3.1 Diversity

All respondents agreed upon that they consider CEVT to be a diverse company. People have different skills, backgrounds and nationalities. However, they all mention that it can be further developed and improved. Respondent A and G stated that one has to be aware of that the automotive industry is traditionally seen as a male dominated industry. This could be seen as an underlying reason why the company has a majority of male workers to begin with. Respondent C and E mentioned the importance of being aware of this and to work actively to try to increase the diversity within the company. The perception of that there are too few women at CEVT and within the industry is agreed upon by all female respondents that were interviewed. They all state that there are not enough of women in this company or industry. One observation made during the time at CEVT, is that the company was very involved in the 'IGE day', Introduce a Girl to Engineering. During this event, girls between 12-19 years old was invited to CEVT to meet 25 of CEVT engineers and designers, this to inspire them to choose a technical path.

As mentioned in the company background and by many of the respondents, is the fact that a lot of workers at CEVT have 'traditional' automotive skills. Nine out of twelve respondents have previous experience within the industry working for other automotive companies such as Volvo or SAAB. However, three respondents highlighted the importance of diversity in skill sets. In order for the company to be or become innovative, it is very important to have different skills within the organization. Respondent K concluded by stating that in the future, when the CEVT innovation center is up and running, new skills are needed in the company. Skills that does not exists currently.

4.3.2 Survey Results

The results from the statements in the survey regarding diversity are the following:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Diversity	I experience that employees have different backgrounds and skillset	0	0	0	4	7	11	4.64
	I think that CEVT promotes diversity of oppinions	0	0	2	4	5	11	4.27

Table 7 Survey results for the category, Work Group Design

As can be seen in the chart above, all of the respondents agree or strongly agree on that employees at CEVT have different backgrounds and skill sets. Furthermore, nine out of eleven thinks that CEVT promotes a diversity of opinion, while two are undecided.

4.4 Co- Worker Support

This category concerns how the team climate is perceived by the employees. Here, both managers and team members were asked to describe the team atmosphere and to elaborate around this topic. Team Climate is according to the framework a success factor identified that is available in table 3.

4.4.1 Team Climate

This category is described in a similar manner by both team members and managers alike. Team members and managers from the same teams have resembling views of their team climate as well. Many managers use phrases such as: good climate in the team, knowledge and ideas are shared, everyone can express their opinion etc. to describe the team climate. A majority of team members used expressions along the lines of: the team thinks new and challenges old mindsets, there is low prestige, everyone can share their opinions and come with new ideas, we have a good team spirit etc. The majority of interviewees experience that their team climate is open to discuss ideas, that people listen and support each other. A few mentions that they have team activities sometimes outside of work, where managers from those same teams have stated that they try to actively plan team activities as they believe it to be important for the team climate. The majority of interviewees experience their team climate to be good in a work context. However, non-work-related factors is not mentioned to the same degree. Again, there are a few who say that they have team activities, such a playing pool or having dinner together. But most do not mention such activities, and few use the word fun to describe their work- and team climate. There are a few, both team members and managers, who express a wish for more team activities to get to know each other better, including suggestions of activities outside work, as well as more time for ‘fika’ at work.

A smaller part of interviewees speaks of team climate, or team culture, in a more negative sense. A few interviewees express their wish to have more activities outside of work because they rarely do things together. Furthermore, that they wish there were more time at work to have ‘fika’ together and talk in a more relaxed manner.

Moreover, one interviewee explains that the team climate can improve. The experience is that colleagues are too occupied with their own business and their own tasks, and do not see the whole picture. Respondent A further describes that it can be difficult to discuss with, or give suggestions, to older colleagues whom have worked a longer time in the automotive industry. The respondent can receive comments like: *"this is how we have done it before, it probably works here as well"* (Respondent A). This is explained as something which impedes on suggestions presented and the possibility to create new ideas. Further, respondent J and K mentioned that there exists a secrecy climate in the company. Respondent J describes how they now have the guideline to work with "competition". This is a common approach within Geely in China according to the respondent. Furthermore, it is explained by the same respondent that competition can be something positive if two teams get the same task to solve and can collaborate to achieve the goal. However, when the teams are competing against each other, where there can only be one winner, then they will not collaborate. Instead they will probably keep knowledge and ideas to themselves, leading to that a secrecy climate arises. Respondent K says how the personally experienced climate differs from what is heard from others. The respondent continues to describe how things heard from other parts of the organization has included that there exists a punishment culture, a blame culture, and a climate where you are not supposed to question the status quo. Even though this is not the respondent's own perception, there are concerns that these problems might exist in the organization.

4.4.2 Survey Results

This category has the following survey results:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Team Climate	I feel support from my team members	1	0	0	2	8	11	4.45
	We have a good collaboration within my team	1	0	0	3	7	11	4.36

Table 8 Survey results for the category, Co- Worker Support

The survey revealed that ten out of eleven feels that they get support from their team members and that they have good collaboration within the team.

4.5 Work Characteristics

This category concerns how the employees experience their work and the characteristics of it. The respondents were asked if they feel challenged at work, what it is that motivates the employees both from a professional and personal perspective and if they can influence how the work is performed. The success factors identified in the framework, according to table 3 are the following: Empowerment of Employees, Job Complexity, Job Autonomy and Motivation.

4.5.1 Empowerment of Employees

All managers that were interviewed stated that they experience a lot of freedom in their work and that they have the mandate from their managers in turn to exercise their work as they want to. The managers that was interviewed, stated during the interviews that they try to delegate as much information and decisions as possible to their team members. As one manager stated *"If I do not delegate, nobody wants to work with me…I believe in delegation because it gives the mandate to employees in the organization to perform a job with responsibility."* (Respondent C). Another manager shares the same philosophy*: "I give people very much responsibility themselves. It's empowerment, I'm always there if they need help"* (Respondent J).

The interviewees that do not have a leader role, also stated that they feel that they have mandate to take decisions and that they are given a lot of responsibility and ownership from their managers. When it comes to the sharing of important information, the majority of the respondents think that important information is shared with them. The information is mainly shared from manager to team members through one-on-one- or group meetings.

4.5.2 Job Complexity and Job Autonomy

In terms of job complexity, all the respondents agree on that the they are challenged in their jobs. Their jobs are challenging in different ways, a handful of respondents find it very challenging to work with the Chinese and the relationship to the Chinese organization, this as the two organizations and cultures have different values and opinions on things. The respondents also state another reason for the job to be challenging is due to the constant changes in daily work that occurs at CEVT. The company is described to be very dynamic, leading to that the direction changes the whole time meaning that respondents have to be able to like to cope with changes. Some teams at the company also use an agile work style, which is also described as challenging as that work style includes an iterative process. Among the managers that were interviewed, several agreed upon that they perceive their job to be challenging, despite that they are very satisfied with their teams and that they are easy to lead. Related to the challenging parts of the teams, respondent L found it challenging with the team size, finding time for all team members.

Concerning the job autonomy, all the respondents interviewed shares the same opinion. They are all given freedom to carry out the work in the way they want to. This is described by the respondents to be one of the best parts of working at CEVT. Several respondents state that one day is not alike another.

4.5.3 Motivation

In regards of motivation and what motivates the different respondents, the respondents answered differently depending on if they have a managerial or team member position. The interviewed managers responded that they are motivated by leading people, helping the team to overcome problems, building a team spirit in the team, seeing that the team makes progress and developing the individuals within the team. Other respondents that are not managers revealed that they are motivated by the technical work itself, for example of problem solving characteristics. Furthermore, they are also motivated by the challenging work and that they get to try many new things and get out of their comfort zone at CEVT. Another motivational factor to them is CEVTs mission and vision. Several of the respondents state that they are motivated by sharing the same vision as the company and being in an environment that is dynamic where things happens fast.

4.5.4 Survey Results

The answers about success factors regarding work characteristics are presented in the table below:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Empowerment of employees	I experience that important information is shared with me	0	1	2	8	0	11	3.64
	I experience that i get full ownership over my work	0	1	0	7	3	11	4.09
	I am allowed to take decisions without consulting my manager	0	0	3	6	2	11	3.91
Job Complexity	I feel that my job challenges me	1	0	0	4	6	11	4.27
Job Autonomy	I am given freedom to carry out the work the way i want to	0	1	1	7	2	11	3.91
	I experience in my role that there are formal procedures i have to follow	0	1	1	8	1	11	3.82
Motivation	I am interested in the automotive industry	0	0	4	4	3	11	3.91
	I feel motivated at work	1	0	0	6	4	11	4.09

Table 9 Survey results for the category, Work Characteristics

Regarding empowerment of employees as a success factor, eight out of eleven respond that they perceive important information to be shared with them, and that they are allowed to take decisions without consulting their manager. Ten out of eleven say that they get full ownership over their work. When it comes to job complexity, a majority of ten respond that they have a job that challenges them. Regarding job autonomy, eight respondents state that they have they are given freedom to carry out the work the way they want to. Whilst nine out of eleven answers that there are formal procedures which they have to follow. Seven out of eleven agree, or strongly agree that they are interested in the automotive industry, where four answered that they are undecided. Finally, a majority of ten respondents answered that they feel motivated at work, where one respondent strongly disagrees.

4.6 Resources

Within this category, all of the respondents were asked if they feel that they have enough of resources. In terms of resources, Time and Money was mentioned in particular as these are considered to be success factors for this category, found in table 3.

4.6.1 Time

When it comes to resources, time is a resource described by everyone to be lacking. A majority of the interviewees state that there is not enough time to be innovative. It is expressed that more time is needed to do research, instead of only focusing on car production. That there is a shortage of time to have the chance to think and to be creative, as all time spent is related to projects. In addition, many respondents said that there has not been time so far for anyone to think about innovation as there has been a car to deliver[2]. One manager describes how approximately 90% of the team's time is allocated towards projects, and the other 10% can potentially be devoted to other activities with a more future scope.

There is no difference between what is said amongst team members or managers regarding this success factor. They all touch upon the topics of time being a scarce resource, that they are extremely project focused and do not have time to think or work outside project delivery. That the clear focus so far has been on car production. From the team members' point of view, they say that the project budgets are very tight, that no one is looking, or working forward. That they wish for more time to conduct research and explore outside the projects (respondent E and G). Instead the focus is on what needs to happen right now. To deliver the projects as planned, and to work on the cars that currently exist. There is only one exception, where respondent I does not mention to have experienced any lack in resources. This team member describes that projects are postponed to some extent, which could reflect time issues, but otherwise the team has enough resources.

From the managers' point of view, it is stated accordingly, that they are very project driven. It is described as challenging to make time for anything else under such circumstances. Specially, to ask the team for more. One manager says that even if one would try to encourage the team to make more time for idea generation or other innovative activities, it is difficult as they are already pressured by the projects. Followingly a respondent says that it all comes down to budget and resources in the end. The respondent continues to describe how there is a situation where 15 people in a team are 100% dedicated to a project, and it is challenging to make time for more than that. Due to that they are so project driven, there has been a need to let people go. People who could be very innovative, but did not fit into the description of what was needed for that project delivery. A few respondents perceive that they had more budget for that "little extra" before, but not anymore. Around half of the managers accordingly state that headcount is strict, that they are not enough people. Scarcity in personnel relates to the lack of time and that they cannot do anything besides project work. Many of the managers express their wish for there to be more acceptance and time for slack.

[2] Concerns the development of the common platform and the Lynk & Co car.

4.6.2 Money

Regarding money, most team members and managers do not experience money to be lacking. They say that money is not an issue in the company, and a few say that there is a balance of financial resources in the team. Money is however not mentioned so much in that sense during the interviews. Instead, the majority speak of the budget. Then, the majority agree that there are budget constraints. A few say that budget constraints probably is the reason for why some ideas are not realized. One manager expresses it in relation to the values. That they do not have the resources to think big anymore as they did in the beginning, since there is more budgetary control now. Another manager describes how resources are moved to projects where they are considered to be needed the most at the moment, with focus on what will go out in production. This is from the respondent's point of view perceived as a good thing, since that is where their main source of income is. However, it also means that innovation is not prioritized. It is further explained that when resources are moved, they are always taken from the innovation projects. That the innovation projects have lowest priority. The respondent suggests that a key for innovation would be to stand up to higher management and say that the innovations projects need to remain intact and cannot be touched.

4.6.3 Survey Results

The results from the survey are shown in the table below:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Time	I feel pressured by time to deliver or do my job	0	2	3	4	2	11	3.55
	I experience that we have time to discuss new ideas	1	3	1	5	1	11	3.18
Money	I experience budget constraints	1	2	2	3	3	11	3.45

Table 10 Survey results for the category, Resources

Six out of eleven agree or strongly agrees that they feel pressured by time to deliver or do their job. Three respondents are undecided, whilst two disagree with the statement. Six respondents state that they have time to discuss new ideas, whereas three disagree and one strongly disagrees. When it comes to money, six out of eleven respondents experience budget constraints, two are undecided and three disagree or strongly disagree with the statement.

4.7 Psychological Safety

This category concerns how safe the climate is perceived by the individuals within the organization. The empirical material related to this category will present both how team members perceive their work climate, as well as what work climate managers try to create within their teams and their perception of the current state. The success factor for this category is Create a Safe Climate for the Individual, which is found in the framework in table 3.

4.7.1 Create a Safe Climate for the Individual

Beginning with what team members reveal about the work climate, and more specifically about the leadership in the team, a few specifically say that their manager is good at coaching and that they receive feedback. For example, respondent F says that their manager gives the team “pep talks”. Although, most do not mention the word coaching or feedback during the interviews. However, a majority speak of frequent individual meetings and team meetings and in general that their manager is there for them. The majority of team members experience their manager to be available and easy to approach. Especially if they need help or if problems occur. Many mention that they experience their manager to be available, but one suggests that colleagues in the team do not seem to have the same view. Most express a trust for their manager and that they receive support. No one feels that their manager micro manages them and some mention how they are asked for feedback and suggestions from their manager. A few team members express that they feel heard and most describe that they frequently meet with their manager. It was said during one interview with a team member that the manager is the one who creates the atmosphere in the team, and that the team atmosphere is good. Followingly, that the manager is inspiring, acknowledges people and cares for the well-being of everyone in the team. Moreover, that the manager cares about their motivation, and encourages sharing thoughts and ideas. There are also a few examples with team members who do not share the same experience. One interview revealed how the manager in that team is completely invisible, that they do not sit in the same building, that they do not have regular meetings, and that feedback never occurs.

During a few of the interviews it was made clear by the team members that the work climate and leadership has been different depending on what team they have been in. As for now, most of the respondents state that their teams are easy going, that they have new ideas, and that they can express themselves and share their ideas with each other in the teams. One interviewee specifically described that they can brainstorm in the team without being judged for what they say. It has been brought up that there is a lack of women in the organization, which is perceived as an issue by some, especially the female respondents. Further it was said that there is a disrespect towards younger women in one team. A majority expressed that the work climate in general is very good, but some wish they had more team activities together, inside and outside of work. It was one team member that mentioned having fun, and making jokes at work. Others mostly referred to a professional context when speaking of team climate. One team member said that their team eats breakfast or ‘fika’ together almost every morning. A few say they do not have that at all. Many thought it would be good for the team if they had more opportunities to talk, discuss, and to get to know each other. Other examples of having non- work-related activities was also brought up by a few respondents.

When interviewing the managers, a majority describe how they try to create a work climate by being available, coaching the team, and to trust them with the responsibility to perform their work. Some managers use the word presence as important in their leadership style. In one interview it was described how that manager tries to make time to talk with everyone, to approach them instead of waiting for them to come to the manager. Moreover, to ask the team how they are feeling, and let them show what they are working on.

This manager thought this would contribute to the so called human need of feeling seen. Moreover, it can be a way to create trust so that employees reach out if they ever feel the need to, or if they have problems. About half of the managers talk about how they try to empower and challenge their teams for the sake of their team members' individual development. One manager describes making an active effort to encourage people in the team to go outside of their comfort zone, and create the trust to feel that it is okay to fail. This is achieved when it has been made sure that the employees know that they are not alone in their work. But that the manager is there and will take responsibility if something goes wrong. The acceptance of failure in the organization is something mentioned by several managers as an important trait.

All managers express that they make sure their team knows that they are always there if the team needs help with anything. However, a few struggles with it. One manager mentions challenges due to culture differences in the team. This manager explains that the Swedish people in the team have no problem to reach out if they need help, but people from other cultures do not seem to be used to working that way. So even though the manager expresses a wish for them to reach out, they do not necessarily do so. Actions are taken to improve this in the team as the manager believes it to be important. Many managers describe their teams to be very easy to lead and to work with, as the teams are very independent and thanks to good communication. The fact that they sit together with their team is expressed as a contributing factor to the good work climate as well. One manager specifically mentions how efforts were made to ensure that the team would sit together after the reorganization that occurred, since this was believed to be important for the work climate and the team atmosphere.

Two of the managers mention that they try to arrange team activities outside of work. This was said to help create the trust needed to encourage teamwork and sharing thoughts and ideas. A few mentions that they actively try to give feedback and ask for it back. Further, a few said that face to face meetings helps to avoid misunderstandings, and to provide a space that allows more personal matters to come up. There is one manager who specifically says that they explain why changes occur in the organization. It was mentioned by a few that they perceive challenges in downscaling information. Even if information was shared with their teams, they are still not certain that the information is clearly understood. A few of these challenges were also described to occur due to unclarity in the company strategy. A majority of managers describe how they proactively try to create a good work climate. Most perceive the team climate to be good and open. Moreover, that they have a good relationship with their team members.

4.7.2 Survey Results

The survey results from this category are as follows:

Succes factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Create a safe climate for the individual	I can share my ideas with my colleagues	0	0	0	2	9	11	4.82
	I have fun at work	1	0	0	5	5	11	4.18
	I can be myself at work	1	0	0	4	6	11	4.27
	I experience conflicts at work	1	2	4	3	1	11	3.09

Table 11 Survey results for the category, Psychological Safety

The results presented demonstrate how nine respondents strongly agree with that they can share ideas with colleagues. Ten answered that they have fun at work, while one respondent strongly disagrees. Similarly, ten respondents feel that they can be themselves at work, while one person strongly disagrees. Regarding conflicts, four people agree or strongly agree that they experience conflicts at work. Four respondents are undecided and three respondents do not experience conflicts at work.

5. Analysis

This part of the thesis aims to bring the theoretical framework together with the empirical findings. The categories from the developed framework are analyzed one by one. Each section ends with a table including the assessed creative climate success factors and activities for that category. The chapter ends with a summarizing analysis of the creative climate and innovation culture at CEVT.

5.1 Organizational Structure and Processes

5.1.1 Strategic Direction

To communicate a clear vision and mission that supports innovation is defined by the literature as an important factor to promote creative behavior and innovative activities in an organization (Amabile, 1997; Quinn, 1988). From the interviews it can be said that all respondents are aware of the vision and mission. Moreover, everyone speaks of the company values. However, many state that they do not think the vision and mission is clear. Everyone knows the strategic focus concerns innovation, but most do not know what this means. There is a difference between managers and team members in this regard, where team members share that they do not understand the strategic direction, whilst most managers think they do. A few managers also say that they do not believe the strategic direction to be clear. In addition, all managers perceive that a confusion about the strategy seem to permeate the company. Considering this information, it is possible to say that the strategy is being frequently communicated in the organization. Subsequently, one can say that the vision and mission clearly incorporates innovation. Not only because innovation is specifically written in the vision, but since all respondents speak of innovation when asked about strategy.

Even though a corporate strategy focusing on innovation is communicated throughout the organization, a large part of the respondents still do not understand it. Furthermore, a perception is that a large part of the organization does not understand it. Therefore, it can be argued that a clear vision and mission is not being communicated. The vision and mission is communicated, but it is not clear. This can be validated from the survey. It has thus been confirmed in both the interviews and the survey that awareness exists. However, knowing about the vision, mission and values does not necessarily equal understanding them. Moreover, the argument can be further enhanced considering how many of the respondents said that the vision to be innovative sounds exciting, but that their role within the group and what they are supposed to do is undefined. In order to increase the Organizational Motivation to support creativity and innovative work, the authors argue that the highest management levels at the company need to provide a clear strategic direction towards innovation (Amabile, 1997).

The literature highlights organizational ability to be adaptable to change as a strategically important element for innovation (Sharifirad & Ataei, 2012). Respondents from all interviews described CEVT as a dynamic company which is constantly moving and growing. Employees are used to a changing environment in their everyday work life and this is described by everyone as one of the exciting aspects about working there. Hence, the company's ability to adapt to change is confirmed by the interviewees. Something that was revealed during the interviews, which was not discovered in the literature review and that the authors did not expect to find, was the potential negative aspects of the changing environment attested to. A few respondents spoke of the potential risk that people might grasp only limited information due to the habit of knowing that things probably will change soon. Moreover, that the risk of projects suddenly being dropped or changed can be difficult for the employees involved to reconcile with. Therefore, it might be valuable to consider the risk of employees feeling frustrated because of rapid changes. Frustrations which could impede on individual motivation. However, even though there are signs of this being a risk in the organization, the majority still speaks of the changing environment on a positive note. Finally, the mutual agreement is that the organization is open towards change and able to implement rapid changes. Thus, the authors argue that the company is open towards, and has the capability to adapt to change (Sharifirad and Ataei, 2012; Quinn, 1988).

Part of the definition of innovation culture (IC) used in this report reads that IC is an organizational culture that is open to innovation (Dobni, 2008; Zaltman et al., 1973) with a cultural openness that deals with the organization's attention towards innovation and understanding of the need for it (Van de Ven, 1986). On an organizational level, the focus and the need for innovation is both visible through the strategy communicated, and actions made in alignment with the strategy of becoming an innovation center. Creating the innovation team being one example of such actions. In this regard, the company could be considered to be open to innovation. Although, there are more factors to consider. All interviews confirm that their work depends on project delivery, where employees on both a manager and team member level experienced having no time outside explicit project related work. Thus, not having enough time for innovative activities. Therefore, it is argued that there might exist a gap between the strategy to be innovative and the resources allocated for it.

All managers testify to that there is no time to be innovative, and most team members experience the same. Furthermore, many managers speak of strict restrictions in headcount and that they do not have enough people to perform the projects. This relates back to the lack of time to be innovative. A climate which would be more open to work outside projects and allow more time for slack is something all respondents ask for. In other words, the results strongly suggest that the company wants to be innovative, but that resources perhaps are not allocated for innovative activities specifically. This potential misalignment in resource allocation could influence the creative climate and further development of the innovation culture (Amabile, 1988;1997; Ekvall, 1999). Amabile (1998) suggests time to be a variable that is complex for innovative firms since a pressure of deadlines can inhibit creativity and the generation of useful ideas which would lead to innovation. With this in mind, it could be considered that the company is not as open to innovation as it could be with more resources focused on innovative activities and time in particular. This despite the strategy and the desire to be innovative, or the results showing that the company is adaptable to change. The gap identified still suggests that the company could be more open to innovation than it appears today.

5.1.2 Organizational Structure

When it comes to organizational structure, the literature suggests that a flat organizational structure without bureaucracy and with few strict rules is to prefer, in order to support the creative climate characterized for an innovation culture (Amabile, 1997; Cummings, 1965; Dobni, 2008). Listening to the interviewees, everyone talked about freedom in their work. Moreover, that this was one of the best parts about working at CEVT. A majority of managers spoke of how their job did not include micro managing their teams, and both team members and managers experienced that they did not need to frequently seek approval from their managers. Moreover, the CEO was described by a few, managers in particular, as easy to approach. Considering this information, one could argue that the company maintains a flat organizational structure. However, the survey suggests otherwise. After the interviews, the expectation would be for all respondents to agree with the statement that the company holds a flat structure. However, a slight majority do not experience the company structure to be flat according to the survey. What could explain this gap in the perception between interviews and survey results might be related to the Chinese parent company's' governance, or a difference in experience between managers and team members. However, no clear connection could be made as to whether certain teams, managers or team members shared similar opinions about the hierarchy in the company. Meaning that no clear distinction could be made between teams who work in closer collaboration with China, compared to those who do not. Similarly, no clear distinction could be made between managers' and team members' experience regarding organizational structure.

Related to organizational structure and whether employees experience that there are many rules and procedures in the company, the survey results are also contradictory to interview material to some extent. Reasons for this discrepancy could relate to the categories: work characteristics or resources.

During the interviews it was brought up by several managers in particular that there are more budget constraints and administrative work now to adhere to, in comparison to before. However, the majority of interviews still focus on the freedom in work processes where people do not speak of CEVT as bureaucratic. The hierarchical aspects which are brought up during the interviews regards how China works differently and that strategic governance lies there, which could explain the discrepancy in the results. Therefore, it is argued that CEVT headquarters in Gothenburg is viewed as a flat organization that does not have strict rules and processes to a large extent. Although, it has been noted that the perception regarding the strategic involvement from the parent company might implicate the results to some degree. Nonetheless, the flat organizational structure could be beneficial for future innovative activities at the company (Cummings, 1965; Quinn, 1988).

The somewhat strained relationship with China and the parent company could be argued to be connected to the unclarity in strategic direction. Which further highlights the need for the company to have an articulated purpose within the corporate group of Geely (Martins & Terblanche, 2003; Quinn, 1988). Thenceforth, the results indicate that the company might be operating in a decentralized manner right now, but is perhaps moving towards implementing more standardized procedures and rules to govern operations. Moving towards a more rigid structure could impede on the creative process for innovation (Cummings, 1965). Moreover, a rigid environment and routines hinder the development of an innovation culture as it may limit the ability to implement and appropriate the value of new ideas (Sharifirad & Ataei, 2012). It can therefore become vital for CEVT to look over their processes as the company grows and new routines are installed so these risks can be avoided.

5.1.3 Collaboration

Another success factor that could be related to scarcity in time resources is collaboration between teams and departments. Collaboration as well as reward systems, were not addressed as much during the interviews as the other success factors for this category. What can be stated regarding collaboration, is that people in general would like to collaborate. However, employees find it difficult as people do not feel that they have the time, and are focused on their own projects. The people who do collaborate with other teams do so on their own initiative to a large extent. As it is the only way to try new things as one interviewee described it. Ultimately, collaboration between teams or departments does not appear to be promoted from an organizational stand or from a top management level, but rather from the individual employee (Amabile, 1997). Again, it is suggested that resources in terms of time can be connected to this factor as a possible obstacle for collaboration between teams.

5.1.4 Evaluation and Reward System

Reward systems is another factor which did not receive any particular attention during the interviews. From a few respondents, together with some observations, it has been understood that some reward systems exist. One type of reward focuses on financial rewards for patents, and one that focuses on the company's core values which most do not seem to be as aware of. There lies a potential risk that the focus on financial rewards for patents results in the kind of extrinsic motivation which could have a negative impact on creativity. However, it is difficult to say as not enough information was gained to confirm this. Moreover, other rewards, such as the one focusing on values which employees are not necessarily aware of could contribute to the kind of intrinsic motivation which would recognize and encourage creative performance (Amabile, 1997). The impression is that this success factor could be further developed in the company to focus on more frequent recognition for creative behavior. Although, a suggestion is to investigate this further in future research.

5.1.5 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Organizational Structures And Processes	Evaluation and reward system	Create a reward system for creativity		○		Amabile, 1997
	Organisational structure	Maintain a flat organizational structure			✓	Cummings, 1965; Amabile, 1997; Dobni, 2008
		Avoid bureaucracy and strict rules			✓	
	Strategic direction	Communicate clear mission and vision that incorporates innovation	✗			Quinn, 1988; Amabile, 1997; Sharifirad & Ataei, 2012; Hamel & Pahalad, 1994; Jones et al., 2005; Dobni, 2008; Zaltman et al., 1973
		Organizational ability to be adaptable to change			✓	
		Openness to innovation		○		
	Collaboration	Promote collaboration between teams and departments		○		Amabile, 1997

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 12 Authors' analysis of the category, Organizational Structure and Processes

5.2 Management Support

5.2.1 Supervisory Encouragement/ Transformational Leadership

This category highlights the importance for management on all levels of the organization. Success factors in management include supervisory encouragement and transformational leadership. When it comes to support and encouragement, the majority of team members describe that their managers listen, makes them feel heard and makes them feel included. Accordingly, the majority of managers say how they make themselves available if their teams need them. Whilst around half of the managers highlight that they try to make sure their team members are feeling well, make them feel important and involved. These results suggest that team members and managers alike share a mutual agreement of either experiencing or actively trying to execute supportive leadership and encouragement (Williams, 2001).

Furthermore, both team members and managers alike describe feeling, or giving, support through a non-controlling environment where all employees interviewed experience freedom in their work. In addition, an organization that values flexibility versus control indicates having a culture more beneficial for innovation (Quinn, 1988). Hence, it can be argued that the employees' individual creativity is encouraged through the supportive and non-controlling leadership style in the organization (Amabile, 1988; George and Zhou, 2007; Oldham and Cummings, 1996; Williams, 2001). The survey results further validate this argument.

Henceforth, both team members and managers alike all say that they meet with their manager in continuous meetings on a weekly or bi-weekly basis, together with the teams or individually. Furthermore, all team members except for one, experience their manager to be available. The majority of managers confirm their availability by saying how they actively try to communicate to their teams that they are always available if needed. Moreover, most managers and team members work together in the same office or building which can enhance the opportunity for frequent interaction and availability towards managers. These results potentially contradict the literature which suggests that a majority of managers in an organization are very busy, and often do not have time to maintain a supportive attitude towards employees in the organization (Amabile, 1998). Time has been discovered to be a scarce source in general in the organization. However, it does not seem to have affected the perception amongst team members regarding managers availability. Instead, managers and team members meet and interact frequently, which the survey results can confirm. The literature further proposes the following, that the more team leaders and team members interact, the better they perceive the innovative climate to be (Isaksen & Akkermans, 2011). Considering the results presented, one would then imagine the perception about the innovative climate in the company to be good. Although, this does not appear to be the case in this situation since a majority of the respondents answered no when asked about whether the company is innovative or not. An analysis of the situation is that this relates back to the unclarity in strategic direction and its disconnection towards the actual operations. Despite frequent interaction between managers and team members, it is argued that the climate is not innovative as it is difficult for managers to, in some cases understand the strategic directions themselves, but also to downscale it further (Amabile, 1997; Quinn, 1988).

The literature suggests how in order to sustain the intrinsic motivation, which is a key factor for creativity at the individual level, it is of importance for managers to continuously recognize the employees and their efforts (Anderson, 1992; Williams, 2001). This factor was not well reflected during the interviews, as the respondents did not mention it themselves and it never became natural to ask in the context of the interview situation. Due to the lack of material from the interviews it is thus difficult to say whether employees experience recognition for their efforts or not. There is only one example of one manager who describes that they wish the team would receive more recognition when they suggest innovative ideas or files a patent. Although this could suggest that there is a lack of recognition for employee efforts which could lead to the consequence of decreasing employees' intrinsic motivation and creativity, more research would be needed. Nevertheless, the survey results could complement these findings, where a majority agree with the statement that they get recognized for their work achievements (Anderson, 1992; Williams, 2001).

Even though this success factor will not be most significant compared to others for the analysis of this report, the empirical material that was collected still implies that employees are recognized for their efforts.

When it comes to feedback, this is another topic not specifically mentioned in most interviews. There are a few who say that they receive feedback or ask for it. Perhaps this is related to the lack of examples regarding recognition. Feedback and recognition for efforts are activities which can be closely connected. Since both are not particularly spoken of, it could be a sign of lack of feedback and recognition for work efforts in the organization. Although, it is difficult to say for certain. Noteworthy is that the survey data regarding feedback show rather similar results as for the statement regarding recognition for work efforts. Despite the low mention of feedback during the interviews, the survey complements the data to suggest that employees receive feedback. It can thus be argued that the company promotes management practices to support a creative climate and an innovation culture through feedback and recognition to some degree (Amabile, 1997; Ekvall, 1996; Zhou and George, 2007). Nevertheless, the results would require further looking into which suggest that activities related to giving feedback and recognizing work achievements, is something which could probably be improved to enhance the intrinsic motivation and creative climate at the company (Amabile, 1997).

Further reviewing management support, all team members experience that they are part of the decision-making process in their teams. Managers as well share that they try to include the members in their team as much as possible. The results suggest that employees at CEVT are empowered through participative decision-making. This reflects CEVT's culture to value a more flexible mindset that enables the level of innovativeness in the organization (Damanpour, 1991; Hurley & Hult, 1998; Thompson, 1965; Quinn, 1988). Connecting this to non-controlling environment in the organizational structure likely contributes to the results showing that employees in all levels of the organization are empowered to be part of decision-making processes. This kind of structure has been found to be beneficial for creativity and innovative activities, which is suggested to be the case here as well (Amabile, 1997; Cummings, 1965; Dobni, 2008). Hence, an argument is that the management at CEVT supports individual creativity and innovation through its flexible structure which empowers employees partly through participative decision-making (Hurley & Hult, 1998; Quinn, 1988). In addition, it is suggested that this can enhance the engagement to innovate in the organization (Damanpour, 1991; Thompson, 1965). Furthermore, this kind of empowerment of employees is found to be a key factor in structuring a creative and innovative environment in the company (Sharifirad & Ataei, 2012).

Communication from managers and throughout the organization is somewhat twofold looking at the results. On the one hand, all respondents often have meetings with their team and their manager, managers are described as available, most managers feel that their team members approach them if they need anything, and team members alike describe that their managers are approachable. Moreover, top management included have so called "town hall meetings" with the intention to communicate important news in the company.

From this perspective, there is nothing that would indicate a climate characterized by poor communication (Cummings, 1965). However, related to George and Zhou's (2007) concept of interactional justice, there is empirical evidence to suggest that transparency could be better and the reason behind why important decisions are made could be clearer.

The results from the survey are not completely aligned with this argument. The discrepancy could be explained by a gap in the downscaling of information from top management to team members. Both the material from the interviews and the survey indicate a good communication between team members and managers. However, both managers and team members perceive there to be confusion in the organization regarding the vision and strategic direction. Managers have shared that they do not necessarily understand the vision, and if they do it is still difficult do communicate further. Therefore, it is possible that implications may originate further up in the organization, where employees wish for better transparency from top management. At least for the communication to be clearer. Thus, it is argued that communication of decisions between team members and managers at CEVT is generally perceived as open and good. Nevertheless, related to the organizational structure and processes, it is suggested that information and decisions from top management might need to be communicated better in order to promote creativity and develop the innovation culture articulated in the company strategy (Amabile, 1997; Ekvall, 1999; Quinn, 1988).

Interactional justice also includes how sensible managers are towards the employees in terms of understanding their needs and treating the employees with respect, and kindness (George and Zhou, 2007). This can establish trust between members within a team and their manager. Trust is something the majority of team members feel towards their manager, which they describe in different ways, including support they feel from them, their availability etc. The survey shows similar results. From this perspective it can be argued that the company provides the kind of management support which reflects trust that can help to avoid conflicts. Moreover, that this trust can sustain a positive climate which can focus on work and creative activities (Ekvall, 1999). Furthermore, it has been found that there is a general trust in colleagues' skill expertise since many respondents speak of the company having experienced, professional employees. Also related to the work in freedom described. The majority of managers describe how they do not micro manage their teams, and since they have hired highly skilled workers they can delegate power and promote autonomous teams. In other words, the managers trust their teams. The kind of trust is needed to establish a flat organization which empowers employees and allows for freedom in work. Factors regarding management support which all are argued to be likely to enhance intrinsic motivation, creativity and in the end innovation at CEVT (Amabile, 1997).

Cultural openness to innovation, and towards change specifically, was discussed in the previous section 5.1. Only focusing on the managers' attitude towards change, the interviews all revealed both team members and the managers themselves as being open towards change. The survey data can validate that managers are believed to have an open attitude towards change. Furthermore, several managers describe that they are used to a changing environment in their everyday work life.

The changing work environment is described as one of the fun and challenging parts about working there. From these results it can be argued that the management at CEVT has an attitude which supports change, hence suggesting that the company climate supports creativity and is open for innovation (Isaksen and Akkerman, 2011). However, the majority of managers also indicate that the changing environment might be causing frustrations in the organization, both for team members and other managers. That too many changes occur. This in combination with the argued lack of a clear strategic direction, and a discrepancy between the vision and actual operations, suggest that the company is not open towards change even though the managers interviewed are open towards change. This might have complications for the intrinsic motivation which influence creativity and innovative activities in the organization (Amabile, 1997; Dobni 2008; Isaksen and Akkerman, 2011; Zaltman et al., 1973; Van de Ven, 1986; Quinn, 1988).

5.2.2 Top Management Alignment

Quinn (1985) suggests that companies that are growing rapidly can encounter problems if top management has a great external focus whilst a rapid development occurs internally. This could lead to that the top management loses control and knowledge of the company's competences. CEVT has a seen a fast-organizational growth and experience rapid internal development. Despite this, problems regarding management visibility and awareness is not reflected in the empirical findings. During the interviews all the respondents agreed on that the top management is visible to them to some extent. This is argued to enable organizational incentives for innovation at the company to some degree.

Another potential obstacle according to Quinn (1985) in creating an innovation culture regards the management's prioritization of goals where top management tend to favor short-term goals instead of long time investments. This however is something that is visible in CEVT's organization. All the employees interviewed state that short-term targets are a priority. This can be linked to the company's structure which at the moment is highly project driven with focus on delivery. From this type of focus it appears that the management might not prioritize long term investment projects. The short-term project focus can be related to the strategic direction and suggests that creativity might be inhibited from a top management perspective.

5.2.3 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Management Support	Supervisory Encouragement/ Transformational leadership	Recognize employees efforts		○		Amabile, 1988;1998; Isaksen & Akkermans, 2011; Williams, 2001; Anderson, 1992; Oldham & Cummings, 1996; Shalley, Zhou & Oldham, 2004; George & Zhou, 2007; Sharifirad & Ataei, 2012; Hurley & Hult, 1998
		Participative decision-making			✓	
		Provide support and encouragement			✓	
		Provide developmental feedback to employees		○		
		Being trustworthy			✓	
		Frequent Interaction between leaders and team members			✓	
		Attitude towards change			✓	
		Communication of decisions		○		
	Top Management alignment	Avoid Top Management isolation			✓	Quinn, 1985
		Do not favour short term goals over long term goals	✗			

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 13 Authors' analysis of the category, Management Support

5.3 Work Group Design

5.3.1 Diversity

CEVT is argued to be a diverse company in skill sets, backgrounds, as well as in terms of diversity of opinion. This based on empirical findings from both the interviews and the survey (Amabile 1998; Cummings, 1965; Ekvall, 1996). All respondents defined CEVT to be a diverse company in the interviews, referring to different skill sets and nationalities in the company. The survey data validates this information. Furthermore, a majority think that CEVT promotes a diversity of opinion. In this regard the company appears to have a diverse work group design. However, all interviewees mention that there are many colleagues (including themselves sometimes) who have a traditional automotive background from companies like Volvo or Saab. These companies are described by the respondents as typically structured, standardized and traditional automotive companies. Henceforth, several respondents particularly but not excluded to female respondents, experience a lack of female colleagues in the company. It could indicate that the company might consist of homogenous groups to some extent. This could potentially result in intolerance of differences, hindering those who challenge the team's way of thinking according to Ekvall (1996). Thus, potentially inhibiting innovative solutions. It is not possible to make any further arguments on this point without more information. Nonetheless, many respondents do agree that it would be good with more female co-workers. Therefore, it could be worth looking further into the matter considering diversity in work group designs as a way to promote idea generation and implementation of innovation (Amabile 1998; Sharifirad and Ataei, 2012; Cummings, 1965; Ekvall, 1996; Thompson, 1965).

The literature argues that diversity is not necessarily beneficial for creativity since it might decrease team satisfaction and lead to social divisions (Mannix and Neale, 2005; Kurtzberg, 2005). During the interviews it arises how many of those who work closely with China experience challenges in the collaboration.

Most interviewees agree that communication can be difficult, cause frustration and lead to dissatisfaction in some projects (Mannix and Neale, 2005; Kurtzberg, 2005). In addition, an observation made at the HR department revealed that some teams might struggle with the collaboration between Swedish and Chinese colleagues (with reservation to other nationalities also represented at the company). Including challenges in communication, different opinions in ways of working etc. These challenges seem to create frustrations and possibly dividing the company to some extent, which can impede on the creative climate. What could be interpreted from this is that it might not only be frustrations caused by cultural differences. Instead it may be related to the unclarity in the strategic direction as well. It has been argued how the vision and the company's role within the group is unclear. To run a project consisting of people who report to different managers can impede on collaboration and become confusing if not everyone in the project are clear on what role they play in the larger context. Put differently, it will probably be easier for a diverse team with different backgrounds to exist in a collaborative, creative climate if they share the same understanding of the company vision, mission, and values (Amabile, 1997; Cummings, 1965; Ekvall, 1999; Sandvik, Espedal & Selart, 2015; Rokeach, 1973; Quinn, 1988). Downscaling the vision has appeared to be a challenge for the company.

The analysis of work group design, where diversity is the success factor, is thus that the company is diverse to a large extent. However, all interviews mention that it can be further developed and improved. The authors have a further interpretation of their own from what was found in the empirical material. When looking deeper into frustrations believed to be caused by cultural differences, a suggestion is that there might be a potential connection between diversity and the organizational structure and processes category. More specifically, that unclarity in strategic direction can lead to confusion in role division and cause frustration within or between teams. Division which could influence creativity in a negative way (Mannix and Neale, 2005; Kurtzberg, 2005).

5.3.2 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✕	○	✓	Authors
Work group design	Diversity	Promote different backgrounds and skill sets		○		Sharifirad & Ataei, 2012; Thompson, 1965; Amabile, 1998; Ekvall, 1996; Cummings, 1965; Kurtzberg, 2005; Mannix and Neale, 2005; Amabile & Hennessy, 2010
		Promote diversity of opinions			✓	
		Avoid intolerance of differences			✓	

✕	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 14 Authors' analysis of the category, Work Group Design

5.4 Co-Worker Support

5.4.1 Team Climate

Having a climate at work where colleagues support, help each and inspire each other, is something that is taken for granted by many. Cummings and Oldham (1997) highlights in their research the importance of stimulation of employees. People with a positive and creative mindset affects other people in turn leading to that a more allowing climate is created. This type of positive vibration leads to increased engagement and that people motivates each other. Ekvall (1996) states in his research that it is furthermore important as well in innovative organizations to encourage idea support. This is according to Ekvall when there exists a climate in the organization when there is room for employees to meet, discuss and share ideas so that co-workers can support the ideas and come with constructive feedback. In alignment with the literature it is argued that the team climate at CEVT is good for innovative activities. It was often mentioned during the interviews how good the team climate is at CEVT and that everyone can bring up new ideas to discuss them. That there is a low prestige and that ideas can be shared in order to obtain feedback. The survey validates this argument.

What was also mentioned by the respondents when interviewed on this topic, regarded team activities. A few team members and managers expressed that they would like to have more team activities, including 'fika' or doing things outside work for example. Even though the effects of team building, team activities or coffee breaks have not been in the scope for the research per say, it was found as something important to consider enhancing the creative climate as it relates to the category of psychological safety. This type of activities should not be underestimated as it seems to increase the team spirit, which in turn can enhance the creative climate. Leading to that people know each other better and increase trust. When people trust and respect each other (George and Zhou, 2007) it can lead to a climate where people support each other more and feel safe to share and express ideas. Resulting in psychological safety which can positively influence intrinsic motivation and the individual's creativity (Amabile, 1997; Ekvall, 1999; Zhou and Pan, 2015). Therefore, it is suggested that the company would benefit to put more emphasis on these activities as part of developing an innovation culture.

A factor for this category which could have a potentially negative influence on the creative climate is the mention of how an internal competition on development projects exists. This has to some degree lead to a climate where ideas or solutions are not commonly shared. Literature that examines the benefits and disadvantages of this type of method with internal competition has not been in the scope of this thesis. However, from what has been found it can be said that this type of internal competition can lead to a secrecy climate. A secrecy climate can strongly inhibit creativity and this is suggested to partly influence the creative climate at the company. Moreover, the results indicate that a blame culture or punishment culture might exist. Where a perception is that employees should not question the status quo. It cannot be determined to which extent this statement is valid as further investigation would be required. Nevertheless, it leads to the argument that there is a risk that these tendencies in the climate can impede on information sharing, collaboration and make teams look out for their own interests.

These factors could lead to implications for the creative climate and innovative outcomes in the company. Hence, it is suggested that this need to be reviewed in order to obtain a creative climate where co-workers freely share ideas and opinions to a larger extent.

5.4.2 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Co-Worker Support	Team Climate	Avoid a secrecy climate		○		Amabile, 1988; Cummings & Oldham, 1997; Ekvall, 1996
		Encourage teamwork and collaboration		○		
		Discuss, listen and supportive feedback for each others ideas.			✓	

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 15 Authors' analysis of the category, Co- Worker Support

5.5 Work Characteristics

5.5.1 Empowerment of Employees

Damanpour (1991) and Thompson (1965) states in their research that empowerment and participation are two important attributes for creating a work environment that encourages creativity and innovation. All the managers that were interviewed, described their own leadership style as a style where they try to delegate a lot, make the team members feel ownership in their work and making sure that everyone feels involved. The team members that were interviewed confirm the managers perception of their leadership style. The leadership styles in terms of how the leaders exercise their leadership, has been found according to the authors to be one of the most important parts in establishing a climate that promotes innovation. The importance of this kind of leadership is further elaborated in section 5.2.

5.5.2 Job Complexity

Regarding the success factor challenge, the results from the interviews and the survey are coherent, where all feel challenged. Ekvall (1996), Amabile (1988) and Oldham and Cummings (1996) consider challenge, or job complexity, as an important factor for individual motivation which impacts creativity. However too much challenge is not good as it can have the opposite effect, hence it is a fine line to be enough challenged. The reasons why employees at CEVT feel challenged differs. They all feel challenged in a positive sense as the work itself challenges them. However, the general perception received during the interviews was that the respondents sometimes felt it too challenging. The authors' analysis of this success factor, is that employees at CEVT in general are positively challenged.

Although, the combination of the described lack of time and the rapidly changing environment, together with external factors as challenges in cross border collaboration, missing strategy alignments and poor information can make the work environment too challenging. This is argued to compose a potential obstacle for the development of the creative climate and innovation culture.

5.5.3 Job Autonomy

During the interviews the respondents were asked about what the best part of working at CEVT is. They all answered independently that one of the best parts in their work is the freedom. Freedom and independence are two building blocks which the literature refers to as job autonomy (Hackman and Oldham, 1976). Many employees at the company have previous experience within the industry working for other automotive companies, described to have more rigid processes and structures compared to CEVT. Hence, being without such rigid structures is described as one of the best reasons for working at CEVT. Moreover, it is an important reason to what has attracted very skilled people to form the company. Factors which seem to have influenced the freedom employees experience. This is validated by the survey results related to this topic. The results therefore indicate that freedom can be considered a success factor that permeates the organization and is beneficial for the creative climate.

5.5.4 Motivation

Furthermore, authors as Amabile (1997), Ekvall (1996) and Oldham and Cummings (1996), all highlight the importance of freedom as it motivates individuals to perform and to stay creative. The survey validates that the vast majority of the respondents feel motivated at work. What it is that motivates the respondents, depends on the employees' position within the company. The employees with some sort of managerial responsibility are primarily motivated by the managerial role and leading teams. Meanwhile team members are motivated by the job itself and by being part of CEVT, as they share the company's vision. For this category it has been found that task motivation and expertise are two characteristics of the employees at CEVT, in alignment with Amabile's theory of what the individual needs to be creative (1997). As stated above, a vast majority perceives the company to have many skilled workers, and they are all motivated in their work in some way.

However, in terms of task motivation, the literature distinguishes two different types of motivation, intrinsic and extrinsic. Extrinsic motivation implies that the motivation is not rooted by the work itself but by other things such as rewards. Meanwhile, intrinsic motivation is driven by joy, curiosity and interest. Through interviews and observations, it was learned that the company has a few reward processes in place. Although, a wish for more rewards was noted during a few of the interviews in order to motivate idea generation and increase recognition of employees' innovative efforts. Meanwhile, most respondents did not mention rewards during the interviews.

Therefore, it can be stated that the respondents are mainly motivated by intrinsic reasons since they all describe being motivated but do not highlight any specific (extrinsic) rewards. However, in order to develop the climate to be more creative and innovative, the authors suggest to further recognize employees for their new ideas and creative efforts.

5.5.5 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Work Characteristics	Empowerment of employees	Participative decision making			✓	Damanpour, 1991; Thompson, 1965; Sharifirad & Ataei, 2012
		Create a sense of ownership/ responsibility			✓	
		Delegate power			✓	
		Share important information			✓	
	Job Complexity	Create a challenging job			✓	Amabile, 1988; Ekvall, 1996; Oldham & Cummings, 1996
	Job Autonomy	Give freedom for employees on how to carry out work			✓	Amabile, 1997; Ekvall, 1996; Hackman & Oldham, 1976; Oldham & Cummings, 1996
		Do not pursue too much control over work processes			✓	
	Motivation	Focus of recognition of creative work instead of rewarding with non work related items.		○		Amabile, 1997; Deci & Lancetta 1971; Sandvik, Espedal & Selart, 2015; Zhang & Bartol, 2010

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 16 Authors' analysis of the category, Work Characteristic

5.6 Resources

5.6.1 Time

Resources such as time and money are according to the literature crucial to foster a creative climate (Amabile, 1988). When performing the interviews, all interviewees agreed upon that there is a valuable resource the company lacks, namely time. Amabile (1988) suggests in her research that time is a delicate resource that is complex to innovative firms. Too little time and tight deadlines inhibit the creativity and generation of good ideas. For this reason, the literature advocates some sort of balance between time limits and slack.

Ekvall (1996) similarly advocates idea time for employees to discuss and share ideas with each other as a part of developing new ideas. From the interviews, it was understood that time is the most valuable and scarce resources at CEVT. This was validated by the survey results, which shows that the perception is that there is not enough time to discuss new ideas. With the operating structure at CEVT, all work performed needs to be tied to a project. This leads to that resources are fully booked against projects with no or little space for doing other things, such as innovative activities. It is unfortunate as all the respondents are very interested in innovation and in performing innovative activities, but do not have time for these types of activities. Furthermore, since CEVT's vision and mission is to be an innovative company, there ought to be time set aside for idea generation and implementation (Mathisen et al., 2012; Kanter, 1983; West and Farr, 1990) in order to reach this objective.

Hence, it is visible that there is a gap between the strategy to be innovative, as well as employees' willingness to innovate, and time allocation. Therefore, it can be suggested that the company lacks the time resources to support a creative climate and reach the strategic objective.

5.6.2 Money

Time is however linked to another valuable resource, namely money. Reading the statistics from the survey regarding the statement "I experience budget constraints" it can be seen that the answers are scattered over the various response options. This shows that the opinions are divided regarding budgets. When analyzing the survey results it is not possible to make any further analysis as no relationship was found within each answering option. However, during the interviews regarding budgets, a few mentioned that some projects of innovational character are not prioritized or realized due to budget constraints. In addition, that there are nowadays constraints regarding the headcount at the company compared to previously. This shows that resources are gradually becoming more controlled. The understanding and analysis of the resource situation at CEVT, is that a majority of resources are allocated for ongoing, more short-term projects. Thus, it is argued that innovation and long-term goals are not prioritized since the company appears to favor a short-term focus on current delivery projects. This again indicates that there is a misalignment between resources and the company's strategy, which can impede on innovation processes (Amabile, 1988).

5.6.3 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Resources	Time	Balance between time limits and slack	✗			Amabile, 1988;1998; Ekvall, 1996
		Allow employees to have planned time for discussions		○		
	Money	Assure stable funding to avoid that the creative process is disturbed		○		Amabile, 1998

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 17 Authors' analysis of the category, Resources

5.7 Psychological Safety

5.7.1 Create a Safe Climate for the Individual

One part of creating a climate that promotes innovation, is to foster an environment that makes all individuals feel safe. Ekvall (1999) writes about psychological, or emotional safety as a dimension in creating a climate that promotes innovation. A safe environment is characterized by trust, an acceptance towards failure and diversity of opinion where individuals can share ideas freely.

If the climate is not permitting in this sense, people will not be able to be creative to come up with new ideas or improvements, leading to an organizational climate that is not promoting innovation. As mentioned previously in the category ‘co- worker support’, the employees at CEVT feel that they have trust for sharing thoughts and ideas with their colleagues. The survey data validates this information. This indicates that CEVT promotes a safe work environment beneficial for innovation. However, one concern related to safety is that the employees experience that they do not have time for discussing and sharing new ideas with colleagues. Scarcity in time has been confirmed both from the interviews and the survey results. Due to the budget constraints and the project delivery focus, it can be said that employees work under time constraints, and possibly feel that they cannot afford to take initiatives which could potentially lead to failure of the delivery. Therefore, it can be argued that employees might not have the time and do not feel safe enough to elaborate on solutions, being creative and taking risks (Ekvall, 1999). Even though a safe climate exists to a certain extent, it is argued that the creative capability might be somewhat impaired since there is not enough time to try new things, or opportunities within the projects to take innovative initiatives. Resulting in a potentially large impact on the organization's ability to promote innovation.

In creating a safe climate for the individuals, it can be stated that the managers play an important role. This since managers responsibility includes transformational leadership and ability to create an atmosphere within the team where people feel safe (Zhou and Pan, 2015). Some managers mentioned during the interviews how they thought it was important for them to be present and available for their team members. Being present and available to the team could be stated to increase trust which in turn can contribute to a safe climate. This is line of what literature calls transformational leadership style. Isaksen and Akkerman (2011), Zhou and Pan (2015) states in their research that there is positive relationship between transformational leadership and creativity. This type of leadership style was confirmed by the team members that were interviewed at CEVT. They all agreed on that their managers are inspiring, available, caring and motivational. Thus, it can be said that the company has the right characteristics in order to create a climate which makes the individual feel safe.

Furthermore, Ekvall (1999) promotes that a creative climate should be characterized by humor and playfulness. According to the survey results, people state that they have fun at work. However, during the interviews this was something that was not frequently mentioned. Instead, most of the respondents described the team atmosphere and work environment as very good, but professional. Ekvall (1999) states that work environments with too serious atmospheres threats to hinder the creative process in a company. From the survey results and interviews performed it is visible that the company holds a very professional environment which could possibly benefit from more playfulness and humor. The manager is argued to be someone who can strongly influence the everyday work climate, thus the manager can play an important role to make it become more fun. A further elaboration is that increased humor and playfulness could affect the climate positively, as well as to potentially increase the job satisfaction and the well-being at the company (Ekvall, 1999).

Potential obstacles for creating an innovation culture are according to the literature factors as judgments, improper criticism and conflicts. Reviewing the factor of conflict and the survey data related to this question, the answers are spread out, which could suggest that conflicts might exists. However, it is not possible to make any further assumptions from the survey results, with the reason being that conflicts were not highlighted in the interviews and because conflicts could also indicate having a positive nature related to diversity of opinion. As mentioned above in the category 'work group design', the employees that were interviewed described the company's climate to be open, where one can share ideas and opinions between managers and colleagues. This shows that the company might not have problems with conflicts but instead an open climate which can support innovative activities (Cummings, 1965; Ekvall, 1999).

5.7.2 Authors' Assessment of the Category

The authors' assessment of each activity for the associated success factor within this category, that influence the creative climate, is demonstrated in the table below:

Categories	Success factors	Activities	✗	○	✓	Authors
Psychological Safety	Create a safe climate for the individual	Promote Transformational leadership			✓	Ekvall, 1999; Cummings, 1965; Zhou & Pan, 2015
		Allow playfulness and humour	✗			
		Show trust and openness			✓	
		Express and share ideas			✓	
		Avoid conflicts by not giving improper judgements			✓	

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory

Table 18 Authors' analysis of the category, Psychological Safety

5.8 Summarizing Analysis of the Creative Climate and Innovation Culture

This section of the thesis presents a summarized analysis. The aim with this section is to clarify the connection between the categories in the authors' own developed framework and highlight key takeaways. Firstly, a summarized analysis of the creative climate and innovation culture at CEVT, relative to the theoretical framework is presented. Finally, the section ends with a summarized assessment of the creative climate relative to the authors' framework.

5.8.1 Summarizing Analysis relative to the Theoretical Framework

The empirical findings and the analysis suggest that CEVT values participative decision-making, open communication, training and development, values which are included in the organizational culture (OC) characterized by human relations according to the competing values framework (CVF). Further, the company values adaptability and readiness, visionary communication and adaptable decision-making, values part of an OC characterized by Open systems according to the CVF. Finally, the empirical findings suggest that the company also values efficiency and productivity, included in the OC characterized to value rational goals (Quinn, 1988). What can be made out from this is that the company values lean more towards a flexible structure represented by human relations and open systems, which are organizational cultures argued to promote innovation.

When analyzing the innovativeness at the company, an assessment of the creative climate needs to be performed (Amabile, 1997; Ekvall, 1999). As previously mentioned, resources were found to be an important component for the creative climate and possibility to innovate at the company. This in alignment with Ekvall's framework (1999) which shows how resources affect climate which in turn affects innovation. Hence, it is argued that the lack of time affects the creative climate at the company which can affect organizational innovativeness. However, in Ekvall's framework, the time component is not included under resources (see figure 6). Since time is the primary resource perceived to be lacking in the company. This report thus argues that this component could be added to Ekvall's framework (1999).

Further analyzing the climate at the company, it is argued that the strategic direction is not clear, and thus the organizational motivation is lacking. As mentioned, resources, particularly time, are scarce. But more importantly, the findings suggest that the resources are not aligned towards innovation. Therefore, it is argued that there are not resources which support a creative climate. Management practices on the other hand support a creative climate according to the analysis. When these three components are in balance it can be said that the organization provides a work environment which supports creativity that is the prerequisite for innovation. Since these three components are argued to not be in balance at CEVT, it affects the individual creativity despite the expertise that exists in the organization. As a consequence, it is suggested that the gap between organizational motivation and resources impedes creativity and in the end the organizational capability for innovation (Amabile, 1997).

5.8.2 Summarizing Assessment relative to the Authors' Framework

After reviewing the empirical findings using the authors' creativity framework for developing an innovation culture, all seven categories are argued to be important when assessing a creative climate. In this case study, three categories stand out as they have been found to affect the current creative climate at CEVT to a larger extent than the other categories. This is further demonstrated in the authors' assessment of the creative climate at CEVT (see appendix 3).

The first category is organizational structure and processes. This category is argued to make up the foundation for the climate at CEVT as it is suggested to include success factors and activities which have shown to have a strong influence on the overall organization from a corporate perspective. More specifically, the company demonstrates a flat organizational structure which allows for the freedom in work that all employees agree is the best thing about working there. Moreover, this affects the management within the company in terms of empowering leadership execution that can have further positive effects on individual creativity. Challenges within this category concerns the strategic direction. The company does not appear to communicate the vision clearly, which is argued to strongly impede with an innovation culture. Furthermore, the discrepancy between articulated vision and daily operations is suggested to create an obstacle for the cultural openness towards innovation. Moreover, the unclarity in strategic direction appears to enhance frustrations when changes occur. These factors are argued to impact the overall daily operations and the level of innovativeness in the organization. The difficulties in communicating and downscaling the vision affects a majority of the other categories in a potentially negative manner. This is visible in the authors' assessment of the creative climate, where the activity linked to communication of vision and mission is marked red, as non-satisfactory (see appendix 3).

The second category that the analysis highlights regards resources. How resources are divided relates back to the strategic direction, where resources naturally ought to be aligned with the strategic direction in order to achieve it. In this case the company has articulated a vision which strongly puts emphasis on innovation, as follows: *"World leading innovation research center, Developing cars for a different tomorrow"*. All respondents describe that they do not have enough time for their projects, and definitely not for innovation. This is further demonstrated in the authors' assessment of the creative climate, where the activity of balance between time limits and slack is marked red, as non-satisfactory. Moreover, the other activities related to resources are marked as partly satisfactory (see appendix 3). Inevitably, the report suggests that there exists a gap between the strategic direction communicated and the resource division. Bridging this gap is argued to be one way to improve the creative climate.

The third category is management support, which is also found to play a major role for the creative climate. All managers in the organization are responsible for downscaling the strategic direction set by the top management to their individual teams. The challenges in communicating the vision from the top management, in combination with lack of resources for innovative activities, is argued to obstruct manager support.

From a manager's perspective it can be found difficult to support and encourage team members in their work, when it is not clear what they are supposed to work for. This in turn can impede on the intrinsic motivation for the individual employee. In this case when the strategic direction and purpose of the organization is described to be unclear, it has become the manager's responsibility to bridge that gap by finding their own way to keep the teams motivated. The managers thus constitute a great strength for the company, who positively influence the creative climate. This can be seen where the majority of the activities within the success factors for this category are marked green, hence are satisfactory (see appendix 3). If the managers gain resources for innovative activities and better support in understanding the company's strategic direction, the authors argue that managers could further motivate their teams and improve the creative climate for an innovation culture.

These three categories are argued to highly influence the current creative climate at CEVT. Although, it should be noticed that several of the categories relate to each other (see table 3), and they are all considered to be of importance for improving the creative climate that supports an innovation culture at CEVT. The figure below demonstrates the relationship between the three most influential categories. Where, Organizational Structure and processes, in terms of strategic direction, affects Management Support and Resources. In addition, that Resources affect Management Support. The gap between the strategy communicated and the resource allocation has been identified to influence managers ability to pursue transformational leadership that supports innovation.

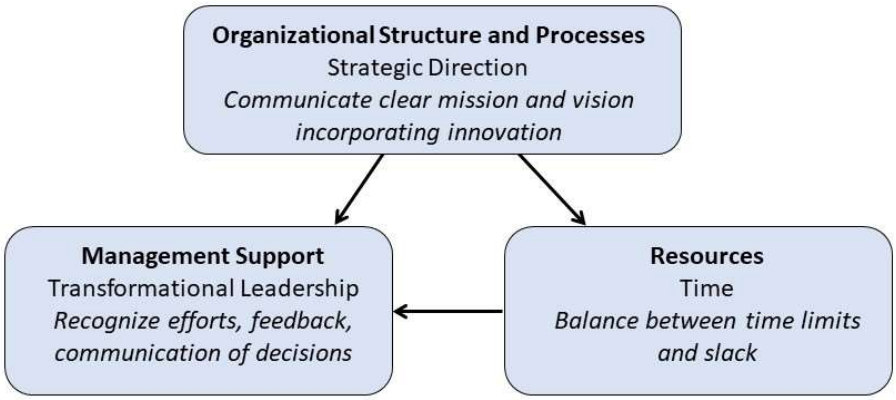

Figure 11 The Relationship between the Three Highlighted Categories, compiled by authors

6. Conclusion

The final chapter concludes this study by summarizing the major points derived from the empirical findings in order to answer the stated research question. The assessment of the creative climate at the company is demonstrated through the authors' developed framework, compiled in appendix three. The chapter ends with a section regarding recommendations for future research.

This thesis has assessed the current climate at CEVT, which was performed with the authors' developed framework. The framework consists of identified success factors for creativity and innovation in an organization, based on existing literature. This served as a tool to fulfill the purpose of this study. The purpose was to examine CEVT's current climate to gain a deeper understanding of it and be able to provide CEVT with valuable knowledge on how to successfully improve the current climate to further support the innovation culture. For this purpose, the following research question guided the research approach:

How can CEVT improve the creative climate to support an innovation culture?

To examine the innovation culture at CEVT a deeper knowledge needed to be gained about the concepts of culture and innovation. During the literature review it was discovered that climate and creativity are concepts closely related to culture and innovation that thus needed to be included in the research. Subsequently, the literature revealed that creativity is a prerequisite for innovation. The focus has therefore been to assess the creative climate, since it is considered important for an organization to foster a work climate which encourages individual creativity to support an innovation culture.

Seven categories with associated success factors and activities that an organization needs to implement as the foundation to foster an innovation culture were identified in the literature. The empirical findings in this study suggest that three out of the seven categories stand out as they have been found to affect the current creative climate at CEVT to a larger extent than the other categories. These three categories consist of organizational structure and processes, management support and resources. Out of these three, the category organizational structure and processes is found to be the most influential in affecting the other categories and the overall climate. Included in this category is the activity to exercise a flat organizational structure, which is found to strongly affect the creative climate at CEVT in a positive sense. This since employees experience a great freedom which is considered to positively influence their everyday work climate. Something which is reflected throughout the organization and enables managers in their work to successfully practice a transformational leadership. This freedom in the organization is argued to promote a favorable condition in their work climate for individual creativity, which supports an innovation culture. It can be concluded that this empowerment of employees through their job autonomy is one of CEVT's greatest strengths in supporting an innovation culture. The implication of this is that employees are given freedom to carry out their work and it encourages participative decision-making. Activities which the literature has found to support individual creativity, thus positively influencing the innovation culture.

Another success factor within this category concerns strategic direction. It has been identified that the vision and mission is not clearly communicated since there exists a confusion regarding the meaning of it that permeates the organization. This affects individual motivation at the company, as employees do not clearly understand the purpose of their work. Unclarity in the strategy makes it challenging for managers to downscale the vision and motivate their teams. This causes a ripple effect which creates frustration among employees. Frustration that becomes reinforced in the rapidly changing environment in which the company operates. This is considered to impede on the creative climate. Hence, a conclusion is that the company needs to improve the communication of their strategy in order to make it relatable and understandable for every individual in the organization. Succeeding in this is believed to be a vital stepping stone to support the innovation culture at CEVT.

The unclarity in the company's strategy has been found to impinge on other categories, impeding the creative climate. One of those categories being resources. This thesis has identified a gap between the category of organizational structure and processes, in terms of strategic direction, and time resources. The empirical findings show that there is not enough idea time and that budget for project delivery is prioritized in front of innovative activities and research. Short-term priority on project delivery might impede the company's capability for idea generation and implementation of new and useful ideas, which could affect CEVT's innovative ability. The authors conclude that the lack of time resources and the company's emphasis on project delivery, creates a focus in the organization which deviates from the strategy to be innovative. Thus, in order to support an innovation culture aligned with the strategy, the company needs to prioritize resources for activities that can improve the creative climate.

Another category argued to be of high importance to improve the creative climate, and which is closely related to organizational structure and processes, is management support. Managers' transformational leadership is related to the remaining categories in the authors' framework for assessing the creative climate: work group design, co-worker support, work characteristics and psychological safety. Accordingly, the empirical findings show that the managers at CEVT influence the everyday work climate to a large extent, and thus play an important role in improving the creative climate. It is reflected by how managers support and encourage their teams, create trust, and empower their teams through job autonomy and participative decision-making. The conclusion is that managers at CEVT practice transformational leadership that is appreciated by team members and helps to foster the creative climate. Although, for the creative climate to be improved, it should be noted that managers need more support from top management in guidance of how to downscale the strategy in order to not lose motivation for creativity in their teams. Again, the strategic direction is identified as important to support organizational motivation for innovation.

Finally, the authors recommend CEVT to use the developed framework and academic models presented as tools to improve the creative climate. Firstly, the authors suggest that the company continues to promote the activities that have been identified as satisfactory in continuing to support their innovation culture. Secondly, by performing the activities for the success factors in the framework that have been identified as partly, or non-satisfactory (see appendix 3), the authors believe that CEVT can improve the current climate to help the company reach its vision to become a world leading innovation and research center. The authors highlight the importance for CEVT to focus on improving the communication of its strategy and to allocate more resources for innovation as two key activities in supporting their innovation culture. When accomplished, it will be easier for managers to motivate their teams and focus daily operations on innovative activities. This is believed to create the organizational motivation needed to improve the creative climate to further support an innovation culture at CEVT.

6.1 Future Research

As presented in the introduction, today's changing business environment pressures companies to stay highly innovative in order to remain competitive. Discussing the external environment and its potential effects on the company's innovative activities lied outside the scope of this thesis. However, as the external environment most probably affects the innovation culture, further research may investigate external factors which influence the company's organizational culture and approach to innovation.

Further, this research identified potentially negative aspects of change on the creative climate. In the literature however, being adaptable to change was only suggested to have a positive influence on creativity.

The empirical findings suggested the contrary, that being too adaptable to change can cause frustrations in the organization which therefore is considered to impede on the creative climate to some extent. Hence, a suggestion for future research is to further look into openness and adaptability to change and its implications on the creative climate.

This thesis focused on conducting an in-depth assessment of the creative climate at CEVT to provide an overview of how the company supports an innovation culture. The aim was not to provide a general overview of how the automotive industry currently fosters innovation by conducting multiple case studies. Another area outside of the scope of this thesis was thus to investigate other firms within the industry to make a comparison of their creative climates and what factors they practice that supports innovative activities. Further research in the relationship between strategy and resources could complement the findings from this study. Looking deeper into how other organizations communicate their vision and allocate their resources in alignment of their strategic direction, could be beneficial as this study found those factors to be lacking in supporting innovation.

Finally, future research could examine specific activities within the framework used in this research to further investigate their effect on the creative climate at CEVT. Moreover, a suggestion is to investigate the potential future implementation of the actions suggested from the empirical findings in this study. This that would involve details from the implementation process, including implications for management and resources.

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8. Appendices

Appendix 1: The Interview Guide

Background/ Introduction questions:

- Could you please introduce yourself, what is your name, age, title and for how long have you been at the company?
- What is your role and responsibilities?
- What is the best part about working at CEVT?
- How would you describe the Organizational Culture at CEVT?

Organizational structure and processes

- What is your opinion about the company values?
- How are they reflected in your everyday work?

Management support

- Can you tell us more about how you perceive the leadership in your team as well as the organization?
- How often do you meet with your team members / Manager?
- How is the top management visible to you?

Work group design

- Can you describe more about your team dynamic?

Co-worker support

- How would you describe the team atmosphere?

Work characteristics

- How much freedom do you feel that you have in your work to carry out your work the way you want?
- Do you feel that your job is challenging enough?
- What motivates you in your work? / How are you motivated in your work?
- Do you feel empowered to make decisions and have ownership in your work?

Resources

- Do you feel that there is enough resources such as time and money for example to carry out your work?

Psychological Safety

- Do you trust your manager and the people in your team?
- Do you share your work and ideas in your team, and with your manager?

Creativity/Innovation

- What does innovation mean to you?
- In what way do you think CEVT is innovative?
- What conditions do you believe are needed for innovation?
- If you have new ideas, how do/can you take them forward?

Appendix 2: The Survey

Category	Success Factors	Statements	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Total	Average
Work Characteristics	Empowerment of employees	I experience that important information is shared with me	0	1	2	8	0	11	3.64
		I experience that i get full ownership over my work	0	1	0	7	3	11	4.09
		I am allowed to take decisions without consulting my manager	0	0	3	6	2	11	3.91
	Job Complexity	I feel that my job challenges me	1	0	0	4	6	11	4.27
	Job Autonomy	I am given freedom to carry out the work the way i want to	0	1	1	7	2	11	3.91
		I experience in my role that there are formal procedures i have to follow	0	1	1	8	1	11	3.82
	Motivation	I am interested in the automotive industry	0	0	4	4	3	11	3.91
		I feel motivated at work	1	0	0	6	4	11	4.09
Management Support	Supervisory Encouragement/ Transformational leadership	I get recognized for my work achievments	1	0	1	5	4	11	4
		I experience that my manager supports and encourage me in my role	0	1	0	4	6	11	4.36
		I experience that my manager provides me with feedback	0	2	1	7	1	11	3.64
		I experience that my manger is available for me	0	1	2	5	3	11	3.91
		I trust my manager	0	2	0	4	5	11	4.09
		My manager communicates well	0	0	2	6	3	11	4.09
		I experience that my manager has an open attitute towards change	0	0	2	4	5	11	4.27
	Top Management alignment	I experience that short term goals are favourised over long term goals	0	0	2	8	1	11	3.91
Co-Worker Support	Team Climate	I feel support from my team members	1	0	0	2	8	11	4.45
		We have a good collaboration within my team	1	0	0	3	7	11	4.36
Psychological Safety	Create a safe climate for the individual	I can share my ideas with my colleagues	0	0	0	2	9	11	4.82
		I have fun at work	1	0	0	5	5	11	4.18
		I can be myself at work	1	0	0	4	6	11	4.27
		I experience conflicts at work	1	2	4	3	1	11	3.09
Resources	Time	I feel pressured by time to deliver or do my job	0	2	3	4	2	11	3.55
		I experience that we have time to discuss new ideas	1	3	1	5	1	11	3.18
	Money	I experience budget constraints	1	2	2	3	3	11	3.45
Work group design	Diversity	I experience that employees have different backgrounds and skillset	0	0	0	4	7	11	4.64
		I think that CEVT promotes diversity of oppinions	0	0	2	4	5	11	4.27
Organisational Systems And Processes	Organisational structure	I experience that the company holds a flat company structure	1	2	3	5	0	11	3.09
		I experience that the company has many rules and procedures	1	3	4	2	1	11	2.91
	Strategic direction	I know the companys vision, mission and values	0	0	2	7	2	11	4
		I experience that the companys values are being followed	0	2	2	7	0	11	3.45
	Collaboration	I collaborate with other teams or departments	0	0	0	7	4	11	4.36
		Total	**12**	**26**	**44**	**160**	**110**	**352**	**3.94**

Appendix 3: Authors' Assessment of the Creative Climate

Categories	Success factors	Activities	✗	○	✓	Authors
Organizational Structures and Processes	Evaluation and reward system	Create a reward system for creativity		○		Amabile, 1997
	Organisational structure	Maintain a flat organizational structure			✓	Cummings, 1965; Amabile, 1997; Dobni, 2008
		Avoid bureaucracy and strict rules			✓	
	Strategic direction	Communicate clear mission and vision that incorporates innovation	✗			Quinn, 1988; Amabile, 1997; Sharifirad & Ataei, 2012; Hamel & Pahalad, 1994; Jones et al., 2005; Dobni, 2008; Zaltman et al., 1973
		Organizational ability to be adaptable to change			✓	
		Openness to innovation		○		
	Collaboration	Promote collaboration between teams and departments		○		Amabile, 1997
Management Support	Supervisory Encouragement/ Transformational leadership	Recognize employees efforts		○		Amabile, 1988;1998; Isaksen & Akkermans, 2011; Williams, 2001; Anderson, 1992; Oldham & Cummings, 1996; Shalley, Zhou & Oldham, 2004; George & Zhou, 2007; Sharifirad & Ataei, 2012; Hurley & Hult, 1998
		Participative decision-making			✓	
		Provide support and encouragement			✓	
		Provide developmental feedback to employees		○		
		Being trustworthy			✓	
		Frequent Interaction between leaders and team members			✓	
		Attitude towards change			✓	
		Communication of decisions		○		
	Top Management alignment	Avoid Top Management isolation			✓	Quinn, 1985
		Do not favour short term goals over long term goals	✗			
Work group design	Diversity	Promote different backgrounds and skill sets		○		Sharifirad & Ataei, 2012; Thompson, 1965; Amabile, 1998; Ekvall, 1996; Cummings, 1965; Kurtzberg, 2005; Mannix and Neale, 2005; Amabile & Hennessy, 2010
		Promote diversity of opinions			✓	
		Avoid intolerance of differences			✓	
Co-Worker Support	Team Climate	Avoid a secrecy climate		○		Amabile, 1988; Cummings & Oldham, 1997; Ekvall, 1996
		Encourage teamwork and collaboration		○		
		Discuss, listen and supportive feedback for each others ideas			✓	
Work Characteristics	Empowerment of employees	Participative decision making			✓	Damanpour, 1991; Thompson, 1965; Sharifirad & Ataei, 2012
		Create a sense of ownership/ responsibility			✓	
		Delegate power			✓	
		Share important information			✓	
	Job Complexity	Create a challenging job			✓	Amabile, 1988; Ekvall, 1996; Oldham & Cummings, 1996
	Job Autonomy	Give freedom for employees on how to carry out work			✓	Amabile, 1997; Ekvall, 1996; Hackman & Oldham, 1976; Oldham & Cummings, 1996
		Do not pursue too much control over work processes			✓	
	Motivation	Focus of recognition of creative work instead of rewarding with non work related items.		○		Amabile, 1997; Deci & Lancetta 1971; Sandvik, Espedal & Selart, 2015; Zhang & Bartol, 2010
Resources	Time	Balance between time limits and slack	✗			Amabile, 1988;1998; Ekvall, 1996
		Allow employees to have planned time for discussions		○		
	Money	Assure stable funding to avoid that the creative process is disturbed		○		Amabile, 1998
Psychological Safety	Create a safe climate for the individual	Promote Transformational leadership			✓	Ekvall, 1999; Cummings, 1965; Zhou & Pan, 2015
		Allow playfulness and humour	✗			
		Show trust and openness			✓	
		Express and share ideas			✓	
		Avoid conflicts by not giving improper judgements			✓	

✗	Non satisfactory
○	Partly satisfactory
✓	Satisfactory