



UNIVERSITY OF TWENTE

MASTER THESIS

**THE INFLUENCE OF EXTERNAL  
LABOR ON CREATIVE CAPITAL**

AN EXPLORATIVE STUDY

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## **Abstract**

**Purpose** – Creative capital has been a popular topic in the urban and economic literature since it was introduced by Florida (2002). Research on creative capital has been focused on the urban level, where creative capital is considered a key predictor of economic growth of urban cities and regions. Scholars tried to translate this concept to an organizational level. However, this research stream is still limited and mostly based on conceptual papers. This research stream also proposed that Human Resource Management impacts the firm-level creative capital (Straatman, Veenendaal, and van Velzen, 2012). This thesis is therefore aimed at extending existing literature by exploring creative capital at an organizational level as well as its relationship to Human Resource Management with a special focus on the role and use of external labor.

**Design / methodology / approach** – A qualitative multiple comparative case study based on an explorative research approach was employed. Semi-structured interviews with managers at eight organizations within the design, engineering and manufacturing industry in the Twente region in the Netherlands were conducted. Previous to the interviews, these organizations were categorized into low- and high creative capital organizations in order to ensure that both low and high creative capital organizations constituted the sample to allow for exploration of differences between these quotas. The interviews were fully transcribed and analyzed by using open coding. Before cross comparing between the cases, the case organizations were first separately analyzed in order to describe the role and use of external labor and assess if the assumed level of creative capital coincided with the actual creative capital findings of the interviews. This then allowed for the exploration of differences in the use external labor between high and low creative capital organizations.

**Findings** – Creative capital exists at the organizational level and therefore has a right for existence. Differences exist between the use and role of external labor for low firm-level creative capital and high firm-level creative capital organizations. While low creative capital organizations mostly use external labor in form of temporary employees for non-core functions for capacity and flexibility reasons, high creative capital organizations also make use of external employees in form of contract and project-based employees as well as consultants and specialists for core activities in order to enhance the diversity of KSAOs and in turn the creative capital of the organization. Additionally, we found support that the use of labor market intermediaries for external labor differs between low creative capital organizations and high creative capital organizations. While low creative capital organizations mostly use labor market intermediaries that are primarily focused on providing information about external employees, high creative capital organizations used specialized labor market intermediaries that resulted in a better match between the organization and the external employee in order to stimulate the creative capital of the organization. Additionally, the dynamism of the market seemed to influence the importance of external labor for creative capital of organizations as the findings indicate that external labor has a stronger effect on creative capital for companies operating in dynamic environments than for companies operating in stable environments.

**Limitations / further research** – The findings cannot be generalized as an explorative case study based on purposive sampling was conducted. Thus, future research should aim at developing a study design that allows generalizing the findings to a larger population. This should include a larger sample size as well as a more detailed research scope by focusing on certain departments within an organization. Additionally, research should also further investigate the role of consultants for firm-level creative capital and the possible moderating effect of the dynamism of the market environment.

**Originality / value** – The study is of high originality and value to existing theory as no research exists aimed at exploring the relationship between external labor and firm-level creative capital.

**Key-Words:** Creative Capital, Firm-level creative capital, External labor, Innovation

**Paper Type** – Master Thesis

## Executive Summary

This thesis is part of the creative capital research program, which is focused on exploring the relationship between HRM and firm-level creative capital. Firm-level creative capital, which originates from the urban literature (Florida, 2002), has been argued to be underdeveloped (Straatman, Veenendaal, and van Velzen, 2012). Florida and Goodnight (2005) therefore conducted research on creative capital on the organizational level. However, the authors only based the study on one organization without assessing the creative capital of that case based on an operationalization of firm-level creative capital. Straatman et al. (2012) aimed at conceptually extending literature. Based on the idea that firm-level creative capital is embedded within employees, Straatman et al. (2012) propose that Human Resource Management might stimulate firm-level creative capital as HR is responsible for practices used to recruit, select, train, develop and motivate these employees. Thus, this research builds upon the work of Straatman et al. (2002) by exploring the relationship of HRM, specifically the use of external labor, on firm-level creative capital.

However, due to the fact that existing empirical research is limited, no operationalization of the concept of firm-level creative capital exists. Nonetheless, in order to explore the relationship between external labor and firm-level creative capital, an operationalization is of utmost importance. Hence, in conclusion with the creative capital research program, an operationalization of creative capital and its dimensions was developed. In order to derive at the operationalization, firm-level creative capital was positioned in relation to other capitals and therewith refuted existing critiques regarding the novelty and importance of creative capital by Glaser (2004). Based on existing literature, we argued that there is an overlap in the scope of the concepts of firm-level creative capital as well as human capital, social capital and organizational capital. However, as only firm-level creative capital constitutes the essence of the aggregated creative ability, the other concepts alone cannot explain firm-level creative capital, which is why we strongly argue in contrast to the critique of Glaser (2004) that firm-level creative capital has a right for existence.

Based on the literature review we therefore defined firm-level creative capital as *“the aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships”*. Individual creativity is therewith understood as *the ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization*.

As mentioned above, organizations might use HR management to increase their firm-level creative capital (Straatman et al., 2012). Organizations might obtain firm-level creative capital from its environment by simply hiring employees with higher creative abilities (Straatman et al., 2012). In turn, we expect that the added creative ability then increases the firm-level creative capital. These employees can be either hired based on a standard employment contract or as flexible, external employees.

External labor, also referred to as contingent labor or flexible staffing within literature, can be understood as all forms of non-standard employment agreements including temporary agency workers, consultants, part-time employees, network partners and alliances. These employees are only hired for a short period of time or for the duration of a certain project and therewith fulfill specific requirements of

knowledge, skills, abilities and other characteristics (KSAOs) that are not currently available within the organization

The extensive literature review relating the concepts of creative capital, firm-level creative capital and the use of external labor has led to a research framework, indicating that we expected organizations using external labor for core positions in relation to innovation to have a stronger influence on the firm-level creative capital as a wider variety of knowledge, skills, abilities and further characteristics (KSAOs) are available within the organization that the employees can draw upon to enhance their creativity. In turn, we further proposed that this diversity of knowledge and skills through external labor can be enhanced through the use of a labor market intermediary focused on supporting the organization in finding an external employee that actively stimulates the creative capital of the organization. Additionally, we expected the importance of external labor for the creative capital of an organization to differ based on the dynamism of the market.

Subsequently, a qualitative, multiple comparative case study of organizations with low, medium and high creative capital was conducted using semi-structured interviews among eight case organizations in the Twente area in Netherlands were selected using a combination of purposive, quota sampling and self-selection. The respondents were asked to discuss the existing level of creative capital at the company, as well as the use and role of external labor for the organization. The interview outcomes have led to valuable insights of both theoretical and practical relevance.

The research findings indicated support for the above discussed proposed framework. However, we only found partly support for our proposition that external labor increases the diversity of the workforce as the research findings indicated that external labor can be either used to increase the diversity or to hire external employees with similar KSAOs and backgrounds as the existing workforce, leading to homogeneity of the workforce. Nonetheless, the main conclusions in this paper are that differences exist between the use and role of external labor for low creative capital and high creative capital organizations. While low creative capital organizations mostly use external labor in form of temporary employees for non-core functions for capacity and flexibility reasons, high creative capital organizations also make use of external employees in form of contract and project based employees as well as consultants and specialists for core activities in order to enhance the diversity of KSAOs and in turn the creative capital of the organization. Additionally, we found support that the use of labor market intermediaries for external labor differs between low creative capital organizations and high creative capital organizations. While low creative capital organizations mostly use labor market intermediaries that are primarily focused on providing information about external employees, high creative capital organizations used specialized labor market intermediaries that resulted in a better match between the organization and the external employee in order to stimulate the creative capital of the organization. Additionally, the dynamism of the market seemed to influence the importance of external labor for creative capital of organizations.

Concluding, with the research results of this study and the differences found in the use and role of external labor for low creative capital organizations and high creative capital organizations, we contributed to existing literature by conducting field research and exploring the relationship. However, while we

conducted field research, it was non-empirical and therefore has limitations that offers possibilities for future research. The choice for an explorative qualitative multiple case study holds strong theoretical reasons. As literature was limited and no operationalization existed, it was necessary to explore the relationship before aiming at measuring it. Nonetheless, future research should conduct empirical research that allows for generalization. Additionally, future research should be based on a larger sample size in order to increase the validity of the findings. Moreover, a more specific research focus, including both organizations that are more comparable in size as well a focus on one department within an organization, might also be beneficial. Additionally, future research should investigate the exact role of consultants and specialists on firm-level creative capital as well as the relationships between firm-level creative capital and innovation. Lastly, the research findings outlined that only one company operated in a truly dynamic environment. While this organization indicated support for our proposition regarding the role of the dynamism of the market, it is highly recommend further research to investigate this issue with a larger sample. This may also allow future research to highlight the possible moderating effect of the market environment proposed in this paper.

## **Acknowledgments**

This thesis is the conclusion of the research I have done as part of my graduation for the Master of Sciences in Business Administration at the University of Twente. Having chosen the study track Human Resource Management, I realized that I am especially interested in the relationship between HRM and innovation. I am therefore thankful to be part of a research team focusing on creative capital and its relation to HRM. I highly enjoyed working on this topic within this research team for the past six months.

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## List of abbreviations

AMO	Ability, Motivation, Opportunity
CC	Creative Capital
HR	Human Resources
HRM	Human Resource Management
KSAO	Knowledge, Skills, Abilities and other Characteristics
LMI	Labor Market Intermediary
OCC	Firm-level creative capital
THS	Temporary Help Service Firm
PEOs	Professional Employer Organizations
VRIN	Valuable, Rare, Inimitable, Non-substitutable

# 1Introduction

## 1.1 Research background

Creative capital has been a popular topic in the urban and economic literature since it was introduced in Richard Florida's best-selling book *The rise of the Creative Class* (2002). Since its introduction, research on creative capital has been focused on the urban level, where creative capital is considered a key predictor of economic growth of urban cities and regions. Florida (2002, p. 249) therefore argues that "regional economic growth is powered by creative people, who prefer places that are diverse, tolerant and open to new ideas". This means that creative people can be understood as the key drivers of urban and regional growth as they attract creative business, generate innovation and have a higher level of entrepreneurship. Hence, areas with more creative people are expected to outperform areas with fewer creative people (Florida, 2002, 2004, 2008; Lee, Florida & Acs, 2004; Stolarick & Florida, 2006). The discussion within this literature stream has been mostly concentrated on questions regarding the measurement and accumulated of urban creative capital. Often cited in relation to this is Florida's (2002, 2005) work on the creative class, which is a list of occupations that require and use creative capital. However, Straatman, Veenendaal, and van Velzen (2012) argue that literature regarding creative capital is rather undeveloped as it should rather focus on fundamental questions such as proofing the existence of creative capital. Since organizations are the places where people work together and create economic value for the organization, Straatman (2011) conceptualizes that firm-level creative capital will contribute to this research as it is the performance of organizations within a city or region that determines that area's economic performance. By this logic, it is expected that the creative capital identified in regions could also be identified in the organizations within this regions. Hence, we expect creative capital to contribute to the organization's performance similar to the way it does on the urban level (Veenendaal, van Velzen, & Looise, 2012).

In this paper we define firm-level creative capital as *the aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships*. Individual creativity is therewith understood as *the ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization*.

Based on this definition, the concept of creative capital can be considered as a resource, which is defined as "all assets, capabilities, organizational processes, firm attributes, information, knowledge etc. controlled by a firm that enable a firm to conceive of and implement strategies that increase its efficiency and effectiveness" (Barney, 1991, p. 101). Furthermore, according to the resource based view, organizations achieve sustainable competitive advantage if they possess resources that are valuable, rare, inimitable and non-substitutable (VRIN) (Barney, 1991). As creative capital is embedded within employees and between the relations of these employees, we argue that creative

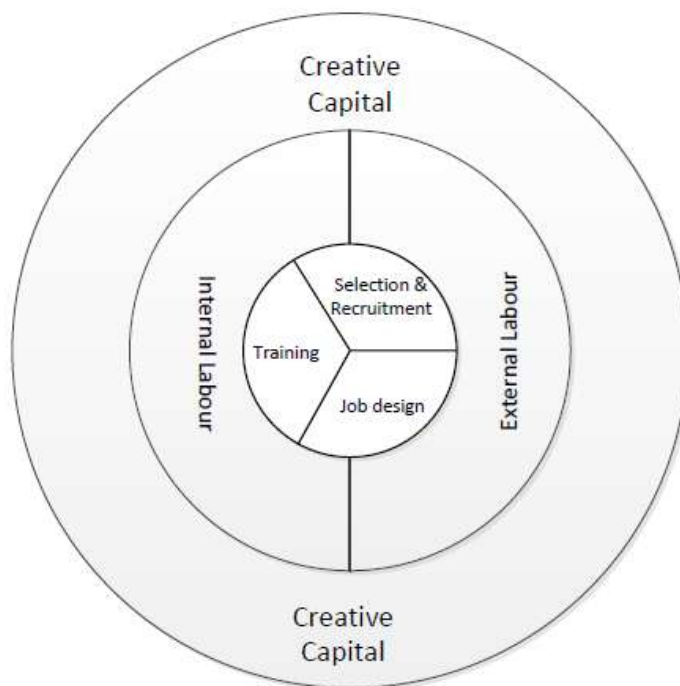
capital might be difficult to replicate by competitors. Further, creative capital is valuable for innovation (Florida & Goodnight, 2005). Consequently, creative capital fulfils the VRIN criteria and might therefore lead to competitive advantage to organizations. It is therefore of utmost importance to study the concept of creative capital and how it can be facilitated.

Based on the idea that firm-level creative capital is embedded within employees, Straatman et al. (2012) propose that Human Resource Management might stimulate firm-level creative capital as HR is responsible for practices used to recruit, select, train, develop and motivate these employees. Hence, organizations might obtain creative capital either from its environment or develop it internally (Straatman et al., 2012). The first option refers to organizations using HR practices related to recruiting standard employees or external employees with higher creative ability in order to stimulate firm-level creative capital. The latter option refers to training and job design practices to enhance the creative ability of the existing workforce (Straatman et al., 2012).

We therefore build upon the work of Straatman et al. (2012) by extending the existing literature and further exploring the proposed relationship of creative capital and HRM with qualitative research. This thesis is part of a larger research program focused on exploring the central research question of:

*What is the impact of human resource management on creative capital?*

In order to explore and answer the central focus question of the creative capital research program, the four HR practices- recruitment and selection, training, job design and external labor- mentioned by Straatman et al. (2012) were chosen to be researched (see figure 1).



**Figure 1 Firm-Level Creative Capital Research Program Framework**

The focus of this specific thesis is the relationship and role of external labor on creative capital. The research on the relationships of the further HR foci and creative capital is discussed in different theses (Noordhoek, 2013; van Zijp, 2013; Groot Koerkamp, forthcoming). The overall objective of the research group is to provide a profound, comprehensive overview and shed light onto the relationship between human resource management and creative capital.

### **1.2 Research problem statement**

As mentioned above, organizations might obtain firm-level creative capital from its environment by simply hiring employees with higher creative abilities (Straatman et al., 2012). In turn, we expect that the added creative ability then increases the firm-level creative capital. These employees can be either hired based on a standard employment contract or as flexible, external employees.

External labor, also referred to as contingent labor or flexible staffing within literature, can be understood as all forms of non-standard employment agreements including temporary agency workers, consultants, part-time employees, network partners and alliances. These employees are only hired for a short period of time or for the duration of a certain project and therewith fulfill specific requirements of knowledge, skills, abilities and other characteristics (KSAOs) that are not currently available within the organization.

Nesheim, Olsen, and Kalleberg (2007) found that the use of external labor is in line with an organization following an innovation strategy as organizations can hire external labor with scarce KSAOs, which in turn leads to the generations of new ideas. Nesheim et al. (2007) refer to this as ‘qualitative flexibility’ as they argue that external labor allows “to assess, create, and implement new knowledge and to change tasks and activities according to changes in the market, the strategy of the firm, and relevant technology” (p. 251). We therefore argue that this ‘qualitative flexibility’ also applies to firm-level creative capital. Hence, we propose that the use of external labor allows for new knowledge development through a wider available network of diverse KSAOs, and in turn to increased firm-level creative capital.

This is in line with Straatman et al. (2012), who conceptualized that external labor increases the diversity of KSAOs within organizations, which in turn mobilizes firm-level creative capital. This idea is based on urban literature as Florida (2004) argues that areas with high levels of tolerance and an open-minded view towards new ideas are more attractive to members of the creative class, which then increase the creative capital of this area. More specific, Florida (2003, 2004) identified three critical factors which places should possess in order to stimulate creativity and attract members of the creative class members. These three factors are Technology, Talent and Tolerance (3Ts) (Florida, 2003). Technology can be seen as a function of both innovation and high- technology concentration, while talent includes the people with a bachelor’s degree and above. Lastly, tolerance relates to the openness, inclusiveness, and diversity to all ethnicities, races and walks of life of the people within a specific city or region (Florida, 2003). This diversity mobilizes creative capital as it leads to low entry

barriers, which in turn enhances the creative economic performance in regions (Boschma & Fritsch, 2009).

Straatman et al. (2012) translate this idea to an organizational level and argue that creative capital should not only be obtained but should be mobilized similar as proposed in urban literature. Hence, a diverse, heterogeneous workforce might mobilize creative capital (Veenendaal et al., 2012). Also Shalley and Gilson (2004, p. 43) argue that “increasing diversity should increase the range of knowledge, skills, and perspectives available within a group that should positively impact creativity [and] stimulate the consideration of nonobvious alternatives”. This is also in line with human capital theorists, who argue that areas or organizations with a high variety of knowledge, skills, abilities and other characteristics leads to higher performance (Glaeser, 2004; Veenendaal et al., 2012). Also organizational theorists found that diversity in terms of group composition benefits group creativity performance (Shalley & Gilson, 2004; Woodman, Sawyer, & Griffin, 1993). In turn, this then increases organizational creativity (Woodman et al., 1993).

Urban scholars usually operationalize creative capital in terms of diversity in ethnicity (melting pot index) (Hoyman & Faricy, 2009), diversity in terms of the number of bohemians (bohemian index) (Boschma & Fritsch, 2009; Florida, 2004) and in terms of sexual orientation (gay index) (Hoyman & Faricy, 2009). According to Bissola and Imperatori (2011) diversity in an organizational context could be understood in terms of ethnic background as well as differences in creative abilities between employees or teams. Consequently, this means that a higher organizational diversity, such as differences in KSAOs and in creative abilities between employees or teams, might lead to an increase of firm-level creative capital as the employees, which are the holders of the creative ability, have an increased amount of KSAOs to draw upon in order to generate new ideas (Straatman et al., 2012).

As already mentioned, based on this line of thinking, Straatman et al. (2012) propose that firm-level creative capital can be obtained by using external labor that leads to diverse KSAOS. In turn, the overall amount of available KSAOs within an organization that the employees can draw upon is increased, which in turn is expected to mobilize the creative capital of the organization. However, Florida and Goodnight (2005), who conducted a case study with the organization SAS, which scored high on firm-level creative capital according to these authors, found that SAS did not focus on buying knowledge and creativity, hence making use of an external labor force, but rather achieved creative capital by ensuring long-term employment modes and relationships with employees. This means that Florida and Goodnight (2005) found that SAS did not mobilize firm-level creative capital through a heterogeneous workforce but rather through a homogenous workforce as the socialization process and low turnover rates tend to lead to a homogenous group composition in terms of structure, processes and culture (Angel & Sanchez, 2009). In turn, this then might lead to the homogeneity of knowledge and skills (March, 1991).

However, these findings are contradicting to the propositions of Straatman et al. (2012). Possible reasons for these contradicting findings could be the study design of Florida and Goodnight (2005) as only one case was used and no operationalization was developed to actually assess and compare the firm-level creative capital of SAS to other organizations. Additionally, the use of external labor to influence firm-level creative capital might also depend on further contingent factors such as the competitive pressures of the environment and might therefore explain the absence of flexible staffing at SAS. As an illustration, if competitive pressures are high it might be that organizations need to ensure that all KSAOs are developed internally to protect their competitive advantage from their competitors.

In order to gain new knowledge relating the relationship of the use and role of external labor on firm-level creative capital, it is therefore of utmost importance to conduct further research based on multiple case organizations in order to allow for comparisons between low firm-level organizations and high-firm-level organizations.

### **1.3 Research objective**

Forthcoming the research problem statement, the main research objective of this thesis is to extend the existing literature by exploring the relationship between external labor and firm-level creative capital. Within this research objective, three research goals can be identified.

First, in order to explore the relationship between external labor and firm-level creative capital, it first needs to be further investigated how creative capital can be applied to an organizational level as the existing literature on this issue is rather limited. Second, as the relationship between external labor and firm-level creative capital can then be explored, the goal for this objective is to research conditions influencing the use and role of external labor and how this then in turn influences firm-level creative capital. Lastly, in order to extend the existing literature, the goal is to research the relationship in form of qualitative, semi-structured interviews for multiple organizations with both high and low creative capital, rather than with just one case organization as Florida and Goodnight (2005) did.

Additionally, this thesis also has further group research objectives. First, due to the fact that the concept of creative capital is rather new, its right for existence is often questioned within literature as it is similar to other concepts such as human or social capital (Glaeser, 2004). Consequently, this thesis also aims at positioning creative capital in relation to these other capitals in order to outline the differences between the capitals and proving its right for existence. Second, due to the lack of currently existing empirical research regarding firm-level creative capital, no operationalization of the concept exists to assess the creative capital within an organization. However, as an operationalization is of utmost importance in order to explore the concept of creative capital and conducting research, a further goal of this thesis is to develop such an operationalization.

## 1.4 Research questions

In order to derive at answers to the research objective, the following research question arises

*What is the impact and role of external labor on firm-level creative capital?*

Based on this research question, the following sub questions will be answered

- What constitutes firm-level creative capital? How does creative capital differ from other capitals?
- How can an organization make use of external labor? What are advantages and disadvantages of using an external labor?
- How does the use and role of external labor influence creative capital?
- How does the use of external labor for core activities versus non-core activities influence creative capital?
- What is the role of labor market intermediaries on creative capital?

## 1.5 Research strategy

The thesis pursues a research design in which the existing literature on creative capital and firm-level creative capital form the basis of the analysis. Hence, the first step of the research was to review the existing literature and extend it by positioning firm-level creative capital.

Additionally, based on a literature review on external labor, propositions relating the relationship of these concepts were formulated. In order to conduct research on this relationship, it is of utmost importance to be able to operationalize the concepts. However, the intense literature review revealed that no existing operationalization for firm-level creative capital exists. An assessment of the operationalization of creative capital in urban literature showed that these existing scales were not applicable to the organizational level as the focus of these studies were on indexes such as the amount of bohemians or gays. Hence, in conclusion with the research program, an operationalization for firm-level creative capital was developed. In order to assess this operationalization and detect differences between organizations with high and low creative capital, the choice for a comparative, multiple case study appeared to be valuable. Hence, the advantage of this thesis is that the results are not only based on one case such as the research of Florida and Goodnight (2005) but on eight case organizations, which in turn also increases the reliability and validity of this study.

The case organizations included in the study were selected purposively. This means that preceding to the qualitative research, company documents (website as well as available documents and reports) were analyzed to assess if these case organizations would fit the quota of high or low firm-



level creative capital. However, as the organizations decided if they would participate, also a form of self-selection sampling exists.

The next step of the research process was to conduct the interviews with all case organizations. Within these interviews, the dimensions of the operationalization of firm-level creative capital were discussed in order to analyze if the pre-interview assumed level of creative capital is in line with the actual described firm-level creative capital of the interviewees. Additionally, interviewees were encouraged to describe the use, experience and importance of external labor within their organization.

The interviews were then transcribed and if needed translated in order to conduct the analyses, which had been done in form of open coding. This analysis was conducted individually for each case, which then allowed to cross compare between cases and detect patterns, similarities and differences between the use of external labor for high and low firm-level creative capital organizations. These patterns then allowed drawing conclusions on the role of external labor on firm-level creative capital. Figure 2 visualizes the research process of this thesis.

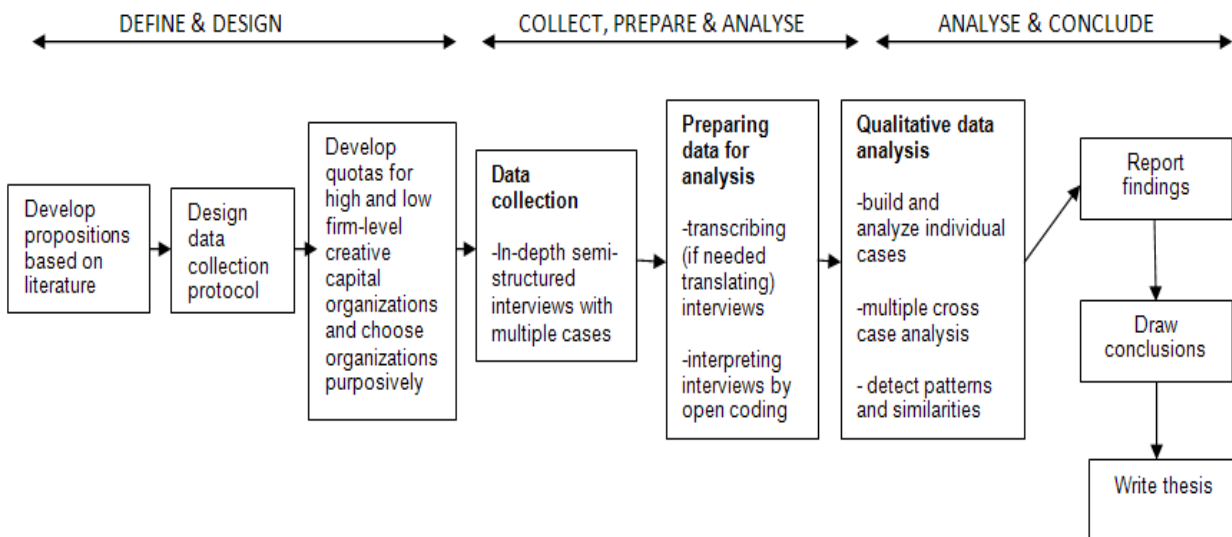


Figure 2 Research process

### **1.6 Relevance of the thesis**

This research is of both highly practical and theoretical relevance as it extends existing research by providing research findings based on a multiple comparative case study, while at the same time enabling practitioners to understand how human resource management could be used to stimulate creative capital.

The development of the operationalization of firm-level creative capital is of high theoretical relevance as the existing literature lacked an operationalization (Straatman, 2012). However, without an operationalization, no profound research can be conducted. This thesis therefore provides novel insights into the operationalization of firm-level creative capital and in turn offers a valuable starting point for further research to conduct empirical research.

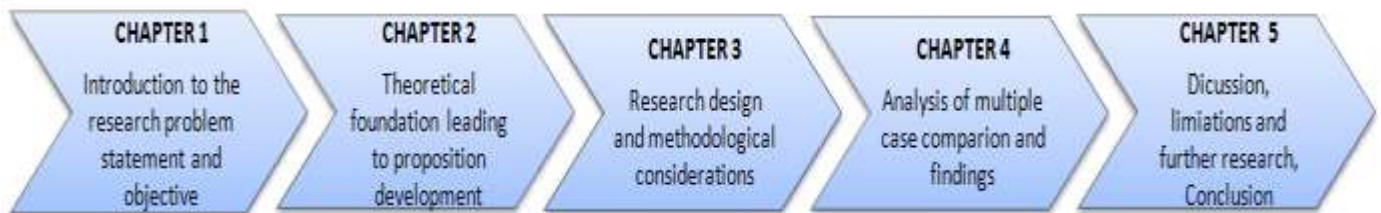
Additionally, this thesis also holds theoretical relevance by positioning creative capital in relation to other capitals such as human and social capital. Literature has argued that creative capital is not a novel concept but rather constitutes the same as these other concepts and has therefore no right for existence (Glaeser, 2004). However, we argue that while there are overlaps between firm-level creative capital and other capitals, the concept is of relevance to both theory and praxis and therefore has a right for existence. In order to illustrate this, we position firm-level creative capital within other forms of capital.

Moreover, this thesis also is of theoretical relevance as the relationship between firm-level creative capital and external labor is explored based on a multiple comparative case study. Hence, this thesis extends the existing research of Florida and Goodnight (2005) and Straatman et al. (2012) by exploring the topic further with a multiple comparative case study compared to Straatman et al. (2012) who conceptually developed their paper and Florida and Goodnight (2005) who only conducted one case study.

Although this paper has mostly theoretical relevance it is also of practical relevance. As also acknowledged by all case organizations, creativity and innovation is crucial nowadays in order to maintain competitive. Hence, the topic itself is highly relevant to the business world. Additionally, this thesis also offers practical relevance as it offers the case organizations as well as other organizations interested in the concept of creative capital to assess their way of working in comparison to their competitors and other organizations. Additionally and more importantly, this thesis also provides an insight into how organizations might facilitate and stimulate firm-level creative capital by using external labor.

## 1.7 Disposition of the thesis

Within this first chapter, relevant background information about the thesis and its rationale were provided. Chapter two continues by providing a theoretical foundation regarding all relevant concepts, leading to the development of the research propositions and a conceptual research framework, which guides the remainder of the research. The third chapter discusses the employed methodology that was used to conduct the research. Chapter four outlines the findings of each case organization as well as an analysis of the assumed creative capital and the actual firm-level creative capital of the cases. Additionally, chapter 4 provides an analysis by cross comparing between the cases and outlining patterns, similarities and differences between the quotas of high and low creative capital organizations. Lastly, chapter 5 provides the final discussion as well as recommendations for further research, leading to the conclusion of this study. Figure 3 visualizes the chapter structure of this thesis.



**Figure 3 Chapter outline**

### **2 Theoretical foundation**

The underlying idea of firm-level creative capital is based on Florida's (2002) concept of urban creative capital. Firm-level creative capital is a newer concept and rather unexplored (Straatman et al., 2012). One of the first attempts to transfer creative capital to an organizational level was by Florida and Goodnight (2005) who argued that firm-level creative capital is "an arsenal of creative thinkers whose ideas can be turned into valuable products and services" (p.5). Straatman et al. (2012) further investigated the concept of firm-level creative capital by conceptually defining it as "the aggregated creative ability of the organization, embedded in the individual employees and in the relations between employees" (p.5). The work of Straatman et al. (2012) can be conceptually considered as state of art research regarding firm-level creative capital. However, we argue that their definition has the prominent drawback that it does not clearly explain what exactly aggregated creative ability consist of. Moreover, the debate about the right of existence for creative capital, which entails the argument that creative capital has the same essence as human and social capital (Glaeser, 2005), has still not been solved. Additionally, due to the fact that existing literature is limited, no operationalization of firm-level creative capital exists.

With this chapter we therefore aim at extending the existing literature by

- Extending the definition of firm-level creative capital by explaining the concept of creative ability
- Proving the right of existence of firm-level creative capital by positioning it in relation to other capitals
- Build a theoretical foundation to derive at an operationalization of firm-level creative capital and its sub-dimensions (see chapter 3 for more information).

In order to do so, we will first go back to the origins of firm-level creative capital by discussing the concept of urban creative capital. Despite the fact that also literature regarding urban creative capital has been argued to be underdeveloped (Straatman et al., 2012), empirical evidence exists. Hence, reflecting on creative capital and existing research findings allows reflecting on limitations that need to be addressed for the operationalization of firm-level creative capital.

The discussion will then proceed by positioning and defining firm-level creative capital. Once this theoretical foundation of firm-level creative capital has been developed, the influence of external labor on creative capital will be discussed, leading to propositions to guide the remainder of this thesis.

### 2.1 An introduction to Creative Capital

According to Florida (2002), who coined the terms creative capital and creative class, creative class is the main force behind the economic growth and regional development of a city or region. The reason for this is that regions with a high share of creative people generate more innovations, have a higher level of entrepreneurship, and attract creative businesses (Boschma & Fritsch, 2009). As a result, it is concluded that cities and regions who want to succeed in economic performance should concentrate their efforts on trying to attract members of the creative class (Batabyal & Nijkamp, 2012).

Florida (2004) divided the creative class in separate groups of creative occupations. He makes a distinction between the creative core, creative professionals and bohemians. The creative core consists of members “whose economic function is to create new ideas, new technology and/or new creative content” (Florida, 2004, p. 8). Creative core members can be found “in science and engineering, architecture and design, education, arts, music and entertainment” (Florida, 2004, p. 8). Creative professionals “engage in complex problem solving that involves a great deal of independent judgment and requires high levels of education” (Florida, 2004, p. 8) and work in “business and finance, law, health care and related fields” (Florida, 2004, p. 8). The group of bohemians is made up of individuals who are engaged in cultural and artistic occupations.

Places with high levels of tolerance and an open-minded view towards new ideas and new people are especially attractive to members of the creative class, according to Florida (2004). More specific, Florida (2003, 2004) identified three critical factors which places should possess in order to make creativity and the attraction of creative class members happen. These three conditions are Technology, Talent and Tolerance (3Ts) (Florida, 2003). Technology can be seen as a function of both innovation and high- technology concentration. Talent includes the people with a bachelor’s degree and above, and Tolerance stands for the openness, inclusiveness, and diversity to all ethnicities, races and walks of life of the people within the specific city or region (Florida, 2003). When a city or region is diverse this means that they are open and possess low entry barriers for people and gain a creativity advantage, because they are able to attract people from a wide range of backgrounds (Boschma & Fritsch, 2009).

According to Florida (2004), Boschma and Fritsch (2009) and Hoyman and Faricy (2009), one of the factors that a city or region can measure in order to find out if they are attractive to people from the creative class is looking at the gay and bohemian indexes according to Florida (2002), which indicates the tolerance of a region. The gay index looks at the number of gay people that live in a high-technical concentration in a region, which is an indicator of the level of discrimination within a region. The bohemian index measures the number of writers, designers, musicians, actors, directors, painters, sculptors, photographers and dancers within a region. This will predict the regional employment and the population growth.

To conclude, when looking at the 3Ts and its measurements, Florida (2004) stated that the creative class is attracted to a diverse, urban climate that is tolerant and open minded to new ideas and

people, the so called people's climate (Boschma & Fritsch, 2009). This means that talented and creative people are considered mobile and choose to live in a region with a people's climate instead of a business climate. A business climate uses conventional explanations for growth, for example low taxes or a rich supply of physical infrastructure (Boschma & Fritsch, 2009). Based on the proposition of Florida (2004) it can be concluded that certain areas are better able to retain and attract creative people because of their climate. It is necessary to attract creative people because as is claimed by Florida (2002) businesses move to areas with qualified labor instead of the creative class moving to areas for jobs.

### **2.2 Research findings of creative capital in the urban literature**

The following subchapter discusses research findings of creative capital in the urban literature to see if there are applicable and transferable to an organizational level in order to be able to define and operationalize firm-level creative capital.

The research by Boschma and Fritsch (2009) indicates that the creative class, that constitutes creative core, creative professionals and bohemians, is unevenly distributed across the European regions. Within these European regions the highest creative population are found in the main cities of the countries (Boschma & Fritsch, 2009).

Moreover, Boschma and Fritsch (2009) found support for a positive effect of the openness index on bohemians in all European countries included in the analysis like England and Wales, Finland, Germany, The Netherlands, Norway, however with the exception of Sweden. Second, a positive effect of openness on creative core is found in all European countries with the exception of The Netherlands. Third, a positive effect of openness on creative professionals is found with the exception of The Netherlands and Sweden. Thus, Boschma and Fritsch (2009) provide some evidence for the notion that the presence of the creative class is affected by the tolerance and openness of a region and thereby providing some support for the claim made by Florida (2004). Besides the influence of the culture on the choice of creative class for certain regions the authors also investigated the regional facilities as the explanatory factor. The coefficient of the public provision index as a measure for regional facilities shows a positive sign for the creative core for all European regions with the exception to England and Wales and a negative sign is found for creative professionals. In addition, the second measure cultural opportunity index is able to explain the share of creative core and the creative professionals only when the share of bohemians is omitted (Boschma & Fritsch, 2009). This means that a region is better able to attract bohemians when it has many cultural amenities. As mentioned before it is argued that the creative class is attracted to an urban climate and this notion is supported by Boschma and Fritsch (2009). They measured urban climate with the population density and found a positive effect on the share of creative class in all European countries except England and Wales. In addition, past employment growth does have effect on the share of the creative class. This is also in line with the

research of Hansen and Niedomysl (2009) who found that the main reason for migration is employment and this migration is more profound for highly educated people.

Consequently, based on these findings it can be concluded that a region that is tolerant and open is able to attract the creative class. Moreover, regions with cultural and recreational activities are able to explain the share of the creative core and creative professionals when the share of bohemians is omitted from the regression. While an open culture and cultural activities are important for attracting the creative class, employment opportunities are of equal importance (Boschma & Fritsch, 2009).

However, the findings of Hansen and Niedomysl (2009) are contradictory to the findings mentioned before. They investigated the migration of different age groups in Sweden. Hansen and Niedomysl (2009) found that highly educated people and low educated people move away from a place that is characterized by tolerance as measured by the integration-, bohemian- and openness index. Nevertheless, they found that people below twenty-five years old and with low education move towards areas which score high on tolerance. It is argued by Hansen and Niedomysl (2009) that people with low education move towards areas which score high on tolerance in order to get education and afterwards when educated move towards areas which score lower on tolerance. Thus, people move towards areas that score high on people climate and afterwards when they are part of the creative class move towards areas which score low on people climate and therefore these findings are the opposite as argued by Florida (2002). This is even more pronounced by their survey research which showed that the share of education reason to migrate is bigger for low educated persons (18%) than for high educated persons (15%).

To conclude, some authors find evidence for the notion of Florida that the creative class is attracted to areas that are open, tolerant and have employment opportunities. However, other authors find that the creative class move away from areas that are open.

### **2.2.1 Research findings concerning the creative class and economic growth**

The creative class has a positive effect on the regional development in The Netherlands measured by the annual employment growth rate in the period 1993 till 2002, however only bohemians have a positive effect on regional development in Germany (Boschma & Fritsch, 2009). In combination with the education measure the creative class measure dominate the education measure in its effect on regional development for The Netherlands however not for Germany. The effect on regional development can be the result of the positive relationship between innovation, creativity and the formation of new business (Hackler & Mayer, 2008; Lee, Florida, & Acs, 2004) which is based on notion of Florida (2003, 2004) that cultural-, economic and technological creativity reinforce each other. Boschma and Fritsch (2009) found a positive effect of a creative or highly educated workforce on the start-up rate. Moreover, they found a positive effect of the share of employees with high education, share of creative core and share of creative professionals on innovation. More specific, the

effect of education on patents is stronger than that of creative occupations. While Hansen and Niedomysl (2009) focused on the effect of the creative class on employment growth in Sweden, Marlet and van Woerkens (2007) focused on the creative class in The Netherlands. They also found support for the notion that the creative class is correlated with employment growth. It is found that the creative class is a better predictor of employment growth than the education measures and the employment growth is especially caused by the employment growth in the financial and commercial services, and start-up companies. This effect of the creative class on start-up rate is also found by Boschma and Fritsch (2009). Nevertheless, Hoyman and Faricy (2009) found that growth measured by job growth, absolute levels of wages or growth in wages is not affected by the creative class, while human capital is found to be a predictor of economic growth and development measured by job growth, average wage and average wage change.

Thus, while some authors find evidence for the notion that the creative class positively affects growth other researchers find no effect on the creative class on growth.

### **2.2.2 Shortcomings in the research on creative class**

Due to the fact that the creative class is a rather new concept, as it was introduced in 2002 by Richard Florida, research is still limited. While there are empirical findings on the creative class of Florida and each empirical research on this topic provides guidelines for further research, there are some shortcomings that should be addressed.

First, although Boschma and Fritsch (2009) showed that a climate of tolerance and openness, and job opportunities have a positive effect on the share of the creative class the measure they used for a climate of tolerance and openness could be improved. This is also the situation for the research of Hoyman and Faricy (2009) who found that tolerance is negatively related to all their economic measurements and in which tolerance is measured by the gay index, bohemian index and the melting pot index. The climate of tolerance and openness used by Boschma and Fritsch (2009) is measured as “the share of the regional population in bohemian occupations” (Boschma & Fritsch, 2009, p. 406), which is also used by Florida (2004), only called differently namely the bohemian index. The second measure used for the climate is “the share of foreign-born people” (Boschma & Fritsch, 2009, p. 407) which is also used by Florida (2004) only referred to differently namely the openness index. It is assumed that the openness index reflects the degree of cultural diversity, tolerance and open-mindedness in a region. The bohemian index represents liveliness of a region and the openness to lifestyles that are different as argued by Florida (2004). However, a diverse population does not mean that the population is indeed more tolerant and open. Therefore a better measure for openness should be used. As argued by Boschma and Fritsch (2009) a substitute could be the degree of unemployment rates among non-western people or attitude of people towards interracial marriage.



Second, a more broad perspective on creativity should be taken into account because it is possible that creativity is not only a characteristic of the creative class (Boschma and Fritsch, 2009). Boschma and Fritsch (2009) therefore argue for a more dynamic approach.

Third, although Hansen and Niedomysl (2009) found that the creative class moved in the opposite direction than expected this finding should be viewed in its regional context (Hansen and Niedomysl, 2009). The regional hierarchy in Sweden can be regarded as a strong, which means that for countries which have less strong regional hierarchy it is still possible that people move towards areas with high people climate. There is some evidence in the study of Hansen and Niedomysl (2009) that highly educated persons move towards areas with high people climate; these areas are Stockholm and Gothenburg in Sweden.

Consequently, a better measure for openness should be used because the gay index, bohemian index, openness index and the melting pot index are not appropriate measures simply due to the fact that a higher score on each measure does not reflect how open-minded people truly are. Moreover, a dynamic approach should be taken into consideration because creativity does not necessarily imply characteristics of the creative class. Third, research on the creative class is context dependent for example on countries, which means that findings cannot easily be generalized to other countries.

We therefore argue that these shortcomings need to be kept in mind when researching firm-level creative capital. Hence, chapter three provides a first attempt to operationalize creative capital on an organizational level.

### **2.3 Defining and positioning organization-level creative capital**

Having reflected on the origins and existing empirical evidence of creative capital, the concept of creative capital can now be applied on an organizational level for the purposes of this paper.

However, in order to do so it is crucial to address one of the main critiques regarding Florida's (2002) concept of creative capital, which is that it has been argued that creative capital is not a novel idea but rather the same concept as human or social capital (Glaeser, 2004), which in turn can be associated with the umbrella concept of intellectual capital (Kang & Snell, 2009). Consequently, this section will discuss the differences and similarities between creative capital and these other forms of capitals. This will then lead to the positioning of creative capital for this paper. In addition, as mentioned earlier, this thesis builds upon the work of Straatman et al. (2012). While these authors extend the definition of Florida's (2002) creative capital to an organizational level, it has a prominent drawback as it argues that creative capital entails the aggregated organizational creative ability but does not explicitly state what creative ability is constituted of. Consequently, this section will also discuss the concept of creative ability, leading to the final definition of creative capital for this paper.

### **2.3.1 Positioning firm-level creative capital in relation to the concept of intellectual capital**

Intellectual capital can be understood as all knowledge stocks firms utilize for competitive advantage (Kang & Snell, 2009). One research stream views intellectual capital as consisting of (1) human capital, (2) social capital/ relational capital, (3) organizational/ structural capital and (4) customer capital (Kang & Snell, 2009; Stewart, 1997; Yang & Lin, 2009). Within this research stream, it can be broadly differentiated between literature focusing on human, social and organizational capital (Kang & Snell, 2009; Yang & Lin, 2009) and Bontis (1998) work encompassing human, structural and customer capital. Within these foci, the understanding of human capital is similar as both foci concentrate on the KSAOs of individuals. Additionally, the concept of organizational and structural capital also contains the same underlying idea as both concepts are focused on the organizational routines and structures that enable organizations to function (Kang & Snell, 2009; Yang & Lin, 2009; Bontis, 1998). However, while customer capital and social capital have some overlaps such as the scope of external relationships to stakeholders (Kang & Snell, 2009; Bontis, 1998), also some differences to be found, which is why both concepts will be further explained.

According to Yang and Lin (2009), human capital is defined as the “*core asset of an organization, including knowledge, skills, experience, competence, attitude, commitment, and individual personal characteristics; in other words, a firm’s repository of valuable knowledge and skills*” (p.1968). While various scholars include further concepts such as intellectual agility (Ross, Ross, Dragonetti, & Edvinsson, 1997), education and psychometric evaluations (Edvinsson & Malone, 1997; Schultz, 1961), most scholars define human capital as the knowledge, skills, abilities and other characteristics (KSAOs) of individuals that might be utilized to create value (Kang & Snell, 2009; Yang & Lin, 2009; Straatman et al., 2012). As an illustration, Kang and Snell (2009) argue that human capital is the basis for organizational learning as organizational learning is facilitated through individual learning. On an organizational level, human capital can be understood as “the aggregate accumulation of individual human capital that can be combined in a way that creates value for the unit” (Wright & McMahan, 2011, p. 95). The human capital within an organization can either be homogenous or heterogeneous (Gong, 2003; Willis, 1986). While heterogeneous organizational human capital consists of employees with differences in KSAOs, homogenous organizational human capital refers to employees with the same KSAOs.

Second, social capital, or in some research referred to as relational capital, can be understood as the value created and embedded in both internal relationships among employees as well as external relationships such as with stakeholders or customers (Kang & Snell, 2009; Yang & Lin, 2009). Consequently, social capital enables for a knowledge exchange within an organization as well as externally through the organizations network (Kang & Snell, 2009). Thus, while human capital can be considered as the foundation for organizational learning, social capital enables organizational learning through a common ground of insights and knowledge (Stata, 1986). Social capital is therefore often related to innovation and the generation of new ideas. However, it has been criticized that social

capital has been used too widely and stretched (Veenendaal et al., 2012). In order to create focus Veenendaal et al. (2012) have drawn on the seminal work of Coleman (1990), defining social capital in terms of the value available in relationships, which are generated through socialization and sociability.

Various scholars distinguish social capital into bonding and bridging social capital (Putnam, 2000). While bonding social capital refers to the value of relationships between homogenous groups, bridging social capital refers to relationships between heterogeneous groups (Putnam, 2000). Kang and Snell (2009) argue that three main dimensions influence social capital- the structure, affect and cognition. While, the structural dimension of social capital relates to the network configuration, the affective dimension can be understood as characteristics of relationships such as trust and expectation. Lastly, the cognitive dimension relates to the importance of shared values and norms among groups. Based on these dimensions, Kang and Snell (2009) conceptualized two archetypes of social capital. The first one, cooperative social capital, is characterized by a tight network configuration with strong and dense relationships, a foundation of trust and a common understanding of how knowledge can be merged. Entrepreneurial social capital on the other hand is compromised by a loose social system with weak network relationships, flexible trust through personal experiences and a common understanding regarding technical, professional or operational knowledge (Kang & Snell, 2009). Kang and Snell (2009) conceptualize that cooperative social capital might therefore facilitate exploitation, while entrepreneurial social capital might facilitate exploration.

Customer capital can be understood as “the value of an organization’s relationships with whom it does business with” (Stewart, 1997, p. 77). The essence of customer capital is therefore the knowledge embedded in the market channels and customer relationships of organizations, including customers, suppliers, the government or related industry associations (Bontis, 2004). The idea of customer capital is based on the ‘market orientation of the firm’, which can be understood as the concentration of an organization on the current and future needs on their customers (Bontis, 1998; Kohli & Jaworski, 1990). This means, that an organization should ensure that its strategy is based and aligned with its customers. However, according to Barney (1991) an organization should not only focus on its customers but also its internal tangible and intangible resources in order to be competitive.

Relating the concept of customer capital to social capital, it can be argued that both concepts include external relationships of the organization. However, customer capital is specifically focused on the knowledge embedded in the customers, while social capital includes the relationships to all external stakeholders as well as internal relationships within the organization. In addition, due to this wider scope, social capital could entail a market-orientation as well as another orientation such as the resource based view of the firm. Hence, the main difference between those two concepts lay within the scope both in terms of relationships as well as the essence. It could therefore be argued that customer capital could be a part of social capital as it does not preclude each other. Hence, even though a difference between these capitals exists, the remainder of this thesis will only position firm-level

creative capital in relation to social capital as we argue that this entails also customer capital. Further research is encouraged though to build upon this research and investigate the relation to customer capital.

Lastly, organizational or also sometimes termed structural capital refers to knowledge that is transferred into processes, systems and routines (Yang & Lin, 2009). In a similar way, Yang and Lin (2009) define organizational capital as any structural element of an organization that facilitates the employee's ability to create wealth for the firm and its stakeholders including efficiency, transaction time, procedural innovativeness, and access to information for knowledge codification. Consequently, it has been argued that organizational capital basically is the knowledge that stays behind if all employees leave (Kang & Snell, 2009). Thus, organizational capital is possessed by the organization and is not influenced by employees.

Based on these understandings of the concepts, scholars argue that intellectual capital is related to knowledge management and innovation (Ling, 2012; Stewart, 1997; Subramaniam & Youndt, 2005). According to Powell, Kenneth, and Lauren (1996) knowledge, learning capabilities and knowledge transfer are vital for innovation. Thus, innovation is dependent on the interaction and exchange of knowledge (Landry, Amara, & Lamari, 2000), leading to the establishment of the link to intellectual capital. Consequently, intellectual capital can explain how knowledge, which is embedded in individuals- human capital- and relationships- social capital and customer capital- as well as in organizational processes- organizational capital, leads to innovation. Also creative capital is related to human and social capital as it is the creative ability embedded within and between employees. Thus, there is a close relationship to creative capital. According to Glaeser (2004) creative capital is fundamentally the same as human or social capital and no novel idea and therefore should not be positioned as an individual capital. In order to further explore this issue, the next section demonstrates the differences and similarities between creative capital and other capital such as social, human, organizational/structural and customer capital.

### **Positioning creative capital in relation to human capital**

It could be argued based on the definition of creative capital used by Veenendaal et al. (2012) that creative capital is the similar to the concepts of human and social capital. Human capital includes the KSAOs of individuals and social capital the relationships individuals possess. However, human capital is understood as the collection of knowledge, skills, abilities and other characteristics, not the aggregation as proposed in the definition of firm-level creative capital (Veenendaal et al., 2012).

However, we earlier discussed the definition that is used by Wright and McMahan (2011) and they say that human capital on the organizational level is "the aggregate accumulation of individual human capital that can be combined in a way that creates value for the unit" (p. 95). Within this definition individual human capital consist of the characteristics possessed by an individual that can yield positive outcomes for that individual (Wright & McMahan, 2011, p. 95). This definition is based

on unit-level and states that human capital is more than the sum of the KSAO's of individuals, what is stated by the definition that is used by Straatman et al. (2012). When using this definition the only difference between human and creative capital would be creative ability. Creative ability can be seen as a part of all the abilities of human capital. Consequently, creative capital is not a different concept but a part of human capital. This is also found by (Marlet & van Woerkens, 2007) who found that creative capital is a better predictor than education (part of human capital) for employment growth (p.2616).

When looking at creative capital as a part of human capital we need to figure out where we position it within the theory. Human capital can either be homogeneous or heterogeneous. The difference between a heterogeneous and a homogeneous workforce depends on whether an organization uses the KSAO's of their employees for exploration or exploitation. A homogeneous workforce consists of people with the same KSAO's and uses exploitation. Exploitation looks at old certainties and makes the existing workforce more efficient (March, 1991). A heterogeneous workforce uses exploration and is about risk taking, variation, experimentation, etcetera (March, 1991). Within a heterogeneous workforce the KSAO's of the employees are different and can be used to look outside the boundaries of an organizations, which makes more radical innovation possible (Veendenaal et al, 2012; Florida, 2002)..

Combining human and creative capital it can be stated that creative capital only arises when the human capital of the workforce of an organization is heterogeneous. Because a heterogeneous workforce has no boundaries, the creative abilities of the employees will be used for innovations. Within a homogeneous workforce the (possible) creative abilities of employees will not arise, because they are not needed for making the existing processes more efficient.

### **Positioning creative capital in relation social capital**

Similar to human capital, also social capital has a close relationship to creative capital. According to Straatman et al. (2012), the difference between social and firm-level creative capital is that social capital is possessed by the organization, while creative capital is embedded within the employees. However, based on the definitions of social capital discussed earlier (Kang & Snell, 2009; Yang & Lin, 2009), social capital is as well embedded within the employees. Additionally, while an organization might possess a relationship based on a contractual form, it is not possible to actually possess these relationships as the employees establish and endure these relationships. Consequently, when an employee leaves the organization, the relationships in relation to this employee might end as well.

Hence, at first sight, no dominant difference seems to exist as both concepts are embedded within the employees and include internal as well as external relationships. However, rather than arguing for a difference between these concepts, this paper aims at positioning creative capital in relation to social capital theory. Research of Pullen, de Weerd-Nederhof, Groen, and Fisscher (2012), who researched

the required network characteristics for open innovation, indicated that organizations should share the same goals, have a common level of trust in terms of fairness and reliability and have a high resource complementarity, while having weak network ties in order to have successful open innovation. The reason for this is, that weak network ties allow a business-like approach to open innovation, which in turn leads to higher performance. Relating this to creative capital, it could be argued that organizations should follow a rather entrepreneurial social capital structure with weak ties, resilient trust and common knowledge (Kang & Snell, 2009).

This can also be applied to the concepts of bonding and bridging social capital. We argue that firm-level creative capital requires bridging social capital as a heterogeneous workforce might lead to creativity. As discussed before, the underlying idea for this is that a diverse, heterogeneous group will have higher creative ability as a homogenous group as the diverse KSAOs will broaden and stimulate the group's creativity (Veenendaal et al., 2012). Also Leana and van Buren (1999) argue that strong bonding social capital can prevent that new ideas are entering an organization and that external relationships will allow new ideas to enter. However, in order for these new ideas to actually enter the organization, bridging social capital is needed to develop a relationship to a dissimilar group (Putnam, 2000). However, we argue that employees can only make use of bridging social capital if a certain level of trust and bonding social capital exists. This is in line with the findings of Pullen et al. (2012), who found that a shared objective and trust is of importance in order to simulate open innovation. Consequently, we argue that a certain amount of bonding social capital is required in order to make use of bridging social capital.

Lastly, as discussed above, social capital can encompass both internal and external relationships. Consequently, we argue that firm-level creative capital encompasses both internal relationships as well as external relationships.

### **Positioning creative capital in relation to organizational/structural capital**

As discussed above, organizational or structural capital refers to knowledge that is transferred into processes, systems and routines of an organization (Yang & Lin, 2009). Relating this concept to the idea of firm-level creative capital, we argue that certain processes or systems of organizational capital could be used to facilitate firm-level creative capital. As an illustration, an organization might use an idea box or certain tools to enable employees to be creative and share ideas.

### **2.3.2 Conclusion of the relationship between firm-level creative capital and other forms of capital**

Having positioned firm-level creative capital in relation to other capitals, we argue contradictory to Glaeser (2005) that firm-level creative capital has its right for existence besides of the overlap to the other capitals. Table 1 indicates that neither human, social capital nor organizational capital alone are sufficient to explain creative capital as they do not have the focus and essence on the organizational aggregated ability. Hence, also a combination of these concepts does not explain firm-level creative capital.

**Table 1 Comparison of different capitals at the organizational level**

	<b>Human capital</b>	<b>Social capital</b>	<b>Customer capital</b>	<b>Organizational/ structural capital</b>	<b>Creative capital</b>
<b>Essence</b>	Human intellect	Internal and external relationships	Market relationships	Organizational routines	Creative ability
<b>Definition</b>	Knowledge, skills, abilities and other characteristics that might be utilized to create value (Kang & Snell, 2009; Yang & Lin, 2009; Straatman et al., 201)	The value created and embedded in both internal relationships among employees and external relationships such as with stakeholders (Kang & Snell, 2009; Yang & Lin, 2009)	The value of an organization's relationships with whom it does business with (Stewart, 1998)	Any structural element of organization that facilitates the employee's ability to create wealth for the firm and its stakeholders including efficiency, transacting time, procedural innovativeness, and access for knowledge codification (Kang & Snell, 2009)	The aggregated organizational ability, which is the enactment of organizations to integrate and aggregate the creativity of individuals and embedded within their relationships into something valuable
<b>Scope</b>	Internal within employees	Internal and external	External organizational links	Internal organizational links	Internal within employee node, internal within employees, internal organizational links, external organizational links

Hence, while there is an overlap in the scope of the capitals as firm-level creative capital basically includes the scope of the other capitals, we argue that firm-level creative capital has a right for existence. Consequently, it is vital to research the concept of firm-level creative capital as it extends intellectual capital.

Figure 4 further visualizes the relationship between creative capital and other capitals. Human and social capital have the largest overlap with firm-level creative capital as also argued by Glaeser (2005). However, firm-level creative capital as explained above cannot be fully explained by these other forms of capitals as they do not entail the essence of creative ability and therefore has its right for existence.



**Figure 4 Visualization of the relationship between firm-level creative capital and other capitals**

### **2.3.3 Extending the definition of creative capital by discussing the concept of creative ability**

As mentioned before, the definition of firm-level creative capital by Straatman et al. (2012) has a prominent drawback as it states that creative capital entails the aggregated organizational creative ability but does not explicit state what creative ability is constituted of. Consequently, this section is aimed at discussing the concept of creative ability in order to derive at a definition for the purposes of firm-level creative capital.



As argued by Veenendaal et al. (2012) the firm-level creative capital concentrates on the creative ability instead of the creative thinking ability. The creative thinking ability is the manner in how individuals cope with problems and solutions (Amabile, 1998). It is their capacity to combine ideas into new combinations. This thinking ability is based on an individual's personality, but also on how individuals think and work (Amabile, 1998). As argued by Amabile (1998) not only is creative thinking ability important for creativity but also expertise and motivation are essential for creativity. Creativity can be understood as the development of new and valuable ideas in any domain (Amabile, Conti, Coon, Lazenby, & Herron, 1996). Creativity can therefore relate to products, processes and people. Creativity is not the same as innovation, as Amabile et al. (1996) describe creativity is part of innovation: "innovation is the successful implementation of creative ideas within an organization" (p. 1155). Thus, creativity does not necessarily imply the implementation of the ideas. As mentioned before creative thinking, expertise and motivation are essential for creativity. In this regard expertise can be seen as the knowledge of the individual. While expertise and creative thinking are part of individual's human capital, the individual will not put forward his knowledge, skills and abilities if that individual is not motivated (Amabile, 1998). The motivation comes in two forms, extrinsic- and intrinsic motivators (Amabile, 1998). Extrinsic motivators come from outside the person and are used by the individual to get something desirable like incentives or avoid something painful like getting fired. Intrinsic motivators come from inside the person. It is the desire of a person to do something (Amabile, 1998). Amabile (1998) found that people are more creative when they are motivated mainly by interest, satisfaction, and when they are challenged and not by extrinsic motivators. While the definition of creativity by Amabile (1998) is on a rather individual level, Woodman et al. (1993) argue that group creativity is influenced by the constitution of the group in terms of its diversity, certain group characteristics, such as the size, shared identity, homogeneity, as well as contextual influences.

Nevertheless, one shortcoming of the model on creativity by Amabile (1998) is that it does not include the occasion to use the skills and abilities. The opportunity is one of the three necessary prerequisites to realize the required performance as argued by the AMO-framework. The three prerequisites constitute opportunity, ability and motivation. The AMO-framework therefore state that performance is a function of the opportunity to participate, motivation and ability (Boselie, Dietz, & Boon, 2005). It means that the needs of the organization are realized when an human resource management system is in place that serves the interest of employees, their motivations and their job quality (Boselie et al., 2005). As argued by Bailey, Berg, and Sandy (2000) these three components make up the high-performance work system. This system provides employees the possibility to participate in decisions, provides human resource management practices to ensure the workforce is skilled for the task at hand and provides incentives to motivate employees to participate. However, as argued by Wright and Kehoe (2008) the AMO-framework ignores certain practices like stock options. The abilities and opportunities to participate are seen as direct influences on performance while the motivation can be regarded as the mediator between HR practices and performance (Boselie et al.,

2005). Concerning creativity, creative thinking and expertise can be regarded as the human capital of an individual and the motivation the promoter for creative performance. However, based on the AMO-framework even if a person is motivated and has the abilities to generate new and valuable ideas that person still needs the opportunity to do so. Therefore creative ability should have at least some component of the provided opportunity.

The definition of creativity by Amabile et al. (1996) is in line with the definition used by Choi (2004a, 2004b) who defined creativity as “the generation of novel or original ideas that are useful or relevant” (Choi, 2004a, p. 188). Creativity is seen as performance outcome while creative performance is the behavioral manifestation of creativity. Creative performance is measured in both studies as the degree to which the student listens to someone’s ideas and is open towards their ideas; the degree to which the actor produces and shares new ideas, provide different explanations, have alternative perspectives and other solutions which can be regarded as creative; the degree to which the actor combines or integrate different perspectives, ideas or materials in a manner that can be regarded as constructive. This measure is in both studies of Choi (2004a; 2004b) used to assess the creative performance of students by their instructors. It is found that creative performance can be predicted by creative ability, because of the positive relation between creative ability and creative performance (Choi, 2004b; as mentioned in Choi, Anderson, & Veillette, 2009). The creative ability at the individual level can be defined as the individual “skills or competencies that are relevant for creative performance” (Choi, 2004a, p. 198). It is about the abilities to generate new ideas or take a differentiating view towards problems (Choi, 2004a).

This definition of creative ability has some similarities with the definition on the regional creative ability of the workforce as mentioned by Veenendaal et al. (2012). It is about the entity’s ability to make a combination of unrelated concepts, knowledge, ideas or experience into something valuable for the region (Baer, 2010; Vartanian, Martindale, & Matthews, 2009). This definition can be converted to an organizational definition of creative ability. This paper defines organizational creative ability as *the aggregated ability of organizations to integrate the creativity of individuals into something valuable*. Individual creativity is therewith understood as *the ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization*.

Consequently, the definition given for organizational creative ability positively extends the concept of firm-level creative capital as defined by Veenendaal et al. (2012). The conceptualization of this concept is necessary in order to be able to operationalize this concept and measure which organizations have high creative capital. It is not only the possession of creative capital but the ability of organizations to make use of the creativity of individuals and thereby realizing creative performance. This is in line with the entrepreneurial view of Foss, Klein, Kor, and Mahoney (2008) who state that entrepreneurship is “a creative team act in which heterogeneous managerial mental models interact to create and arrange resources to produce a collective output that is creatively

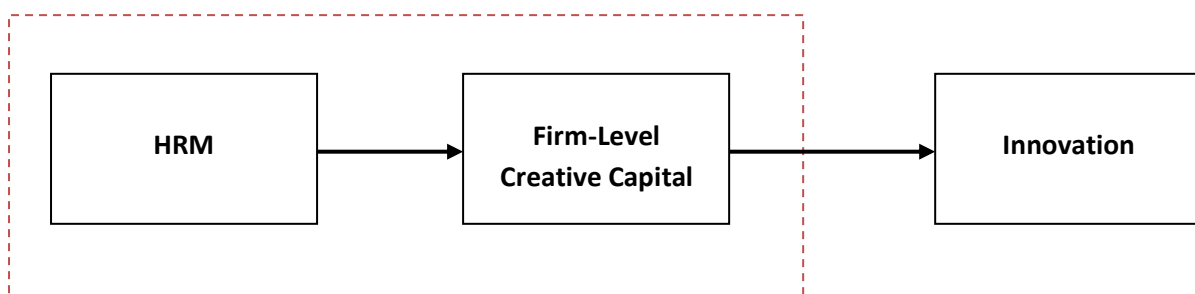
superior to individual output” (Foss et al., 2008, p. 73). Thus, it is not about the possession of resources like the creativity of individuals but about the services like the creative outcome these resources can generate. So creative ability is about the active use of the creativity of individuals.

### **2.3.4 Definition of firm-level creative capital**

With the preceding discussion we have argued for right of existence of firm-level creative capital by positioning it in relation to other capitals. In addition, we have extended the existing literature by explaining what specifically creative ability for the definition of firm-level creative capital. This discussion has led us to the following final definition of firm-level creative capital: *the aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships*. Individual creativity is therewith understood as *the ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization*.

## **2.4 Firm-level creative capital and innovation**

According to Tidd, Bessant & Pavitt (2005, pp. 66), innovation can be understood as “a process of turning an opportunity into new ideas and of putting these into widely used practice”. Relating this to the concept of firm-level creative capital, we argue that firm-level creative capital facilitates the innovation outcome through the aggregated creative ability embedded within employees and their relationships. As this thesis is focused on the relationship between HRM and firm-level creative capital, we therefore argue that innovation can be seen as the outcome of this relationship as illustrated in figure 5.



**Figure 5 Proposed relationships between HRM, Firm-level creative capital and Innovation and research focus of this thesis**

Tidd et al. (2005) distinguish between four types of innovation- product innovation, process innovation, position innovation and paradigm innovations. First, product innovation is aimed at innovations in relation to products an organization offers to their customers. In turn, process innovation are changes in how an organization delivers products or services. Position innovation are changes in the context an organization is operating in, while paradigm innovations relate to the 'underlying mental modes' of an organization (Tidd et al., 2005). Tidd et al. (2005) argue that these types of innovation do not exclude each other as an organization can make use of various types of innovation simultaneously.

A further possibility to distinguish between forms innovations is the degree of innovation for an organization (Tidd et al., 2005). While incremental innovations are about continuous improvement of products, services and processes, radical innovation refers to completely new changes in form of products or processes for an organization (Tidd et al., 2005). Lastly, innovation can also be distinguished by its rate. Both radical and incremental innovation can pursue at a slow as well as a fast rate.

A further possibility to distinguish innovation is by how the organizational learning leading to innovation occurs. One way of organizational learning is exploration, which is focused on learning and gaining knowledge outside of an organizations current knowledge domain (March, 1991; Kang & Snell, 2009). Exploitation on the other hand is focused on exploiting and improving current knowledge in form of products, processes or services.

It could be argued that high firm-level creative capital is rather related to radical, explorative innovation of product, processes or services due to the high aggregated creative ability of different KSAOs (Veendenaal et al, 2012; Florida, 2002). As no empirical research on this issue exists, we strongly argue that research on this issue is necessary. However, the main focus of this thesis lays on the first relationship illustrated in figure 5, between HRM and firm-level creative capital. Hence, while we also try to outline how firm-level creative capital impacts the outcome of innovation in terms of its rate, degree and organizational learning level, we are more focused on how human resources management influences the firm-level creative capital. Hence, we strongly encourage further research to build onto this work and further research it the exact relationship to innovation.

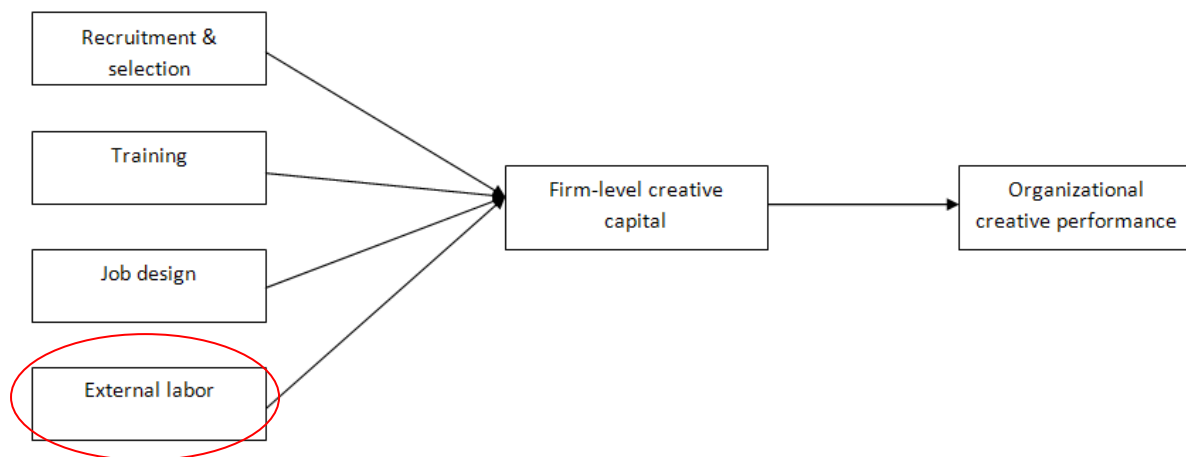
### **2.5 Firm-level creative capital and HRM**

Innovation and creativity is vital for organizations in order to maintain competitive. Also Gupta and Singhal (1993, p.41) state that “successful companies create competitive advantage in the marketplace through innovation and creativity”. Due to the fact that innovation and creativity is facilitated by human resources, Human Resource Management can therefore influence the innovation process. As an illustration, Gupta and Singhal (1993, p.41) argue that “successful innovation-based companies have learned how to manage, motivate and reward people”. Becker and Matthews (2008) therefore argue that innovation cannot occur without human resources. Hence, Human Resources Management, which can be understood as “all management decisions and activities that affect the nature of the relationship between the organization and its employees – the human resources” (De Leede and Looise, 2005, p.2009), should develop and implement HR practices that are in line with the stimulation of firm-level creative capital and innovation. The importance of HRM to innovation can also be seen in the increasing rise of literature concerning this relationship (Beugelsdijk, 2008; De Leede & Looise, 2005; Shipton, West, Dawson, Birdi, & Patterson, 2006; Veenendaal, van Velzen, & Looise, 2009).

Shipton et al. (2006) researched the relationship between HRM and innovation and found that two groups of HR mechanisms facilitate innovation. The first one mechanism is focused on facilitating exploratory learning while the second one is focused on exploiting existing knowledge through practices such as training, induction, appraisal, contingent pay and team working. Also Crossan, Lane, and White (1999) argue that “it requires the capability to link human resources management, strategic management, and the management of information technology as a means to facilitate the flow of learning” (p.535), which in turn then might facilitate innovation. Beugelsdijk (2008) further argues that HR practices used to facilitate innovation should be focused on the creativity of employees as creativity is needed in order to innovate. We argue that creative capital and innovation are closely linked as innovation can be considered as the outcome of the firm-level creative capital of an organization (Florida, 2002). Straatman et al. (2012) therefore conceptualize that there are three ways of obtaining firm-level creative capital and hence stimulate innovation. The first option might be to obtain firm-level creative capital through an organizations environment through recruitment or the use of external labor. The second option might be to train the creative abilities of employees. Lastly, the third option is focused on creating jobs that facilitate firm-level creative capital (Straatman et al., 2012). This means that an organization could either obtain creative capital externally or develop firm-level creative capital internally. This is in line with existing literature which states that HRM can stimulate innovation with practices such as recruitment & selection, training, and job design (Kang & Snell, 2009, Beugelsdijk, 2008, Shipton et al., 2006). While empirical findings exist for the relationship between HR practices and innovation outcomes, no empirical evidence exists for the relationship between HRM and firm-level creative capital. Hence, this thesis, in conclusion with the creative capital research program, is aimed at empirically researching this relationship by building

onto the conceptual research of Straatman et al. (2012), who propose that recruitment and selection, training, job design and external labor might positively influence firm-level creative capital.

Figure 6 visualizes the researched relationships between the chosen HR practices and strategies and firm-level creative capital. As illustrated in figure 6 the objective of this thesis is to investigate the role of external labor on firm-level creative capital. The next subchapter therefore provides a theoretical foundation on external labor as well as propositions on its relationship to firm-level creative capital.



**Figure 6 Creative Capital Research Program Focus**

### 2.6 External labor

External labor, also often referred to as contingent labor within literature, can be understood as all non-standard labor contracts, including temporary agency workers, consultants, part-time employees, network partners and alliances. In turn, a standard employee is contracted “on a full-time basis, under the employer’s supervision, and with the mutual expectation that employment will continue indefinitely” (Way, Lepak, Fay, & Thacker, 2010, p. 128).

Literature has shown that the internal labor market model or the standard labor contracts (Doeringer & Piore, 1971; Kerr, 1954; Osterman, 1984) have become less prevalent (Bonet, Cappelli, & Hamori, 2013; Heery & Salmon, 2000; Way et al., 2010). The increasingly competitive environment and globalization leads organizations to increase layoff practices and use a non-standard external workforce (Bishop, Goldsby, & Neck, 2002; Davis-Blake, Broschak, & George, 2003; Lepak

& Snell, 1999). As an illustration, between 1990 and 2008, the use of external labor grew by 168% (Bonet et al., 2013). Additionally, according to Cieltt (2012), 81% of all organizations worldwide use temporary help service firms (THS) to handle fluctuation in demand and workload. According to Bonet et al. (2013), 2,5% of the US workforce is accounted by temporary help employees. External labor is of as much importance within Europe as over 30% are not employed with a standard contract (Extracts, 2012).

### **2.6.1 Advantages and disadvantages of using external labor**

Organizations nowadays have to face an increasingly global competitive environment and therefore require to maintain flexible (Bishop et al., 2002; Davis-Blake et al., 2003). Hence, an external workforce offers a sensible response to this competitive global marketplace (Davis-Blake et al., 2003).

The two most discussed advantages of external labor in relation to this, seem to be strategically flexibility as well as reduced overhead costs (Lepak & Snell 1999; Bishop, Goldsby & Neck, 2002; Davis-Blake, Broschak & George, 2003). External labor offers organizations the possibility to quickly hire and fire employees with relatively small repercussions, leading to staffing flexibility, which fits modern work practices such as just-in-time-production (Bishop et al., 2002). In addition, this flexibility allows organizations to hire temporary employees with needed skills that are not existent in the current workforce. A further flexibility advantage is that external work offers both organizations and employees the opportunity to investigate their fit before deciding to enter into a more stable employment relationship. Davis-Blake et al. (2003) also found in their study that external labor reduces the interest of standard employees to unionize, which in turn increases organizational flexibility as unions limit organizations in decision freedom.

Additionally, external labor enables organizations to guarantee a psychological contract, which is the mutual beliefs, perceptions and informal obligations between permanent employees and the employer, as the external employees can function as a buffer zone in times of economic turbulences (Bishop et al., 2001). This “shield” approach might also have a positive influence on standard employees as it illustrates to these that the organizations cares about their standard labor force so that they do not layoff these employees. In turn, according to Bishop et al. (2001), if organizations layoff standard employees rather than external employees, it might violate the psychological contract, leading to an increase in standard employees intention to quit and a decrease in organizational commitment. However, research also has shown that employees could feel threatened by external employees as these signalize the standard employees replace ability. Davis-Blake et al. (2003) found in relation to this that external labor might have a negative effect on job security, development and mobility opportunities commitment.

Relating the second most discussed advantage of external labor in literature, reduced costs, Bishop et al. (2002) found that the use of external labor reduces costs associated with benefits,

retirement, and taxes as well as long-term compensation costs. Additionally, in situation of economic downturns, organizations might save costs by being able to quickly layoff these external labors.

Concluding, it can be stated that the use of external labor bears various advantages as well as disadvantages. Thus, when using external labor an organization should strive to maximize benefits by arranging the external labor contracts in a way that negative aspects are minimized. If this is not done appropriately, the use of external labor will have mostly negative effects as it decreases employees' commitment and increases the intentions to exit. In turn, this might decrease the organization's competitive advantage as employees can be considered as valuable resource (Lepak & Snell, 2002). Hence, the question arises how external labor influences creative capital and how can organizations benefit from external labor, e.g. bringing new KSAOs into the organization, without having the risk of the negative effects of external labor.

### **2.6.2 Theory development on the relationship between external labor and creative capital**

Within the past decades, a shift from a production to a knowledge intense economy in western countries had occurred. Thus, it is of increasing importance for organizations to continuously develop in terms of their knowledge in order to facilitate innovation of new products, processes and services and maintain competitive. In order to do so, it is vital to design HRM practices, such as employment modes and labor contracts, in such a way that innovation is stimulated.

Based on the resource-based view of the firm, human capital offers the possibility of sustainable competitive advantage as some employee skills can be considered as valuable, rare, inimitable and non-substitutable (Barney, 1991; Lepak & Snell, 2002). Thus, using external labor for work of strategic value might contain the risk that other organizations have availability over the same external workers and skills. Hence, it could be argued that external labor negatively influences creative capital, if used for core activities related to innovation of an organization, such as R&D.

However, according to Storey, Quintas, Taylor, and Fowle (2002), innovation and creativity benefits from external labor as organizations are able to continually access new ideas, attitudes and perspectives due to the short-term and project based work arrangements. This implies that these temporary externally employed workers stimulate creativity within the organization as the standard employees are challenged with new ideas and perspectives. As a result of this, Storey et al. (2002) found that this external influence prevents an organization from becoming insular and static.

Nesheim et al. (2007) further argue that external labor leads to 'qualitative flexibility' as external labor supports "to assess, create, and implement new knowledge and to change tasks and activities according to changes in the market, the strategy of the firm, and relevant technology" (p. 251). Hence, Nesheim et al. (2007) also support the argument that external labor prevents an organization from being static as the contingent employees enable the organization to monitor trends on the market and to translate external knowledge into the organization.



In a similar vein, Matusik and Hill (1998) found that the use of external labor leads to the creation and accumulation of new knowledge and that it might therefore contribute towards the competitive advantage of an organization. The authors (1998) argue that besides of knowledge stimulation leading to competitive advantage, external labor also facilitates public knowledge into the firm, such as industry best practices. Additionally, external labor also has a catalytic influence on the knowledge-creation process, as the diversity in terms of the new labor force constellation stimulates creativity (Matusik & Hill, 1998). Hence, literature suggests various advantages of using external labor for innovation (Storey et al., 2002; Nesheim et al., 2007; Matusik & Hill, 1998).

However, contradictory to these findings, Zhou, Dekker, and Kleinknecht (2010) argue that the use of external labor weakens organizational knowledge. According to the authors, the reasons for this is that high use of external labor reduces employees' loyalty and commitment, resulting in high employee turnover and hence an easier leakage of knowledge to competitors. Zhou et al. (2010) therefore conducted quantitative research on the relationship between numerical flexibility of employees, in terms of external labor, and innovation. Zhou et al. (2010) found support that the use of temporary labor positively influenced organizations following an innovation strategy of 'new-to-the-firm' rather than 'new-to-the-market' products, processes or services. These organizations can be termed as "supplier-dominated innovators" (Pavitt, 1984), which means that these organizations innovate through creatively adopting equipment or products purchased from suppliers. Zhou et al. (2010) argue that the reason for this positive relationship is that organizations following such a strategy need to ensure that certain KSAOs are within their organization, which can be done by first hiring an employee temporary before offering a standard contract. However, Zhou et al. (2010) found support for a negative relationship between the use of temporary labor and organizations focused on a new-to-the-market innovation strategy. According to Zhou et al. (2010), the reason for this is that these organizations have a "routinized" Schumpeter II innovation regime, which means that "the path-dependent historical accumulation of knowledge is critical to superior product and process performance" (p.4). Zhou et al. (2010) further argue that the majority of this accumulated knowledge is rather "tacit", which means that it is formed through personal experiences and hence difficult to turn into organizational structural capital. This is in line with the research findings of Lucidi and Kleinknecht (2009), who found support that the growth of knowledge benefits from long-term commitment of employees, which ensures that their tacit knowledge maintains within the organization.

Zhou et al. (2010) propose that the research findings could indicate that market leaders prefer not to use external labor in order to ensure employee commitment and facilitate tacit knowledge, while market followers use external labor in form of temporary contracts in order to bring new KSAOs into the organization to be able to 'imitate' market leaders. The authors argue that these temporary employees were hired with the intention for a standard contract if the temporary contract indicated a fit. However, Zhou et al. (2010) were not able to actually find support for these explanations of the relationships but rather hypothesized them. A crucial limitation of their research is the fact that the

majority of the organizations participating in the study could be classified as market followers. Concluding, the negative relationship detected between temporary employees and innovation for market leaders could be misleading. Hence, it is vital to explore the reasons of organizations for using external labor.

Based on the preceding discussion, we argue that the use of external labor leads to diversity of KSAOs within organizations, which in turn can stimulate innovation as also outlined by Zhou et al. (2010) in the findings of the market followers. We further argue in line with March (1991), that the underlying reason for this creativity stimulation is due to the fact that external labor facilitates fresh ideas and knowledge, in terms of organizational codes of languages, beliefs and practices which was not available within the organizations beforehand. The importance of diversity for creativity is also in line with urban creative capital literature as Florida (2002) found that a more diverse area is more tolerant towards new ideas and therefore mobilizes higher creative capital. Also human capital scholars argue that diversity in form of varied KSAOs will lead to higher innovation performance (e.g. Glaeser, 2005). Further, organizational theorists (e.g. Woodman et al., 1993; Shalley & Gilson, 2004) affirm that diversity in terms of group composition facilitates creativity. Hence, Shalley and Gibson (2004, p.43) state that “increasing diversity should increase the range of knowledge, skills, and perspectives available within a group that should positively impact creativity [and] stimulate the consideration of nonobvious alternatives” (Shalley & Gilson, 2004, p. 43).

Based on this, we propose that:

*Proposition 1a: We expect that the use of external labor increases diversity within teams. As diversity is known to increase creativity, we propose that external labor increases the firm-level creative capital of organizations and that the use of external labor will therefore differ between high and low firm-level creative capital organizations.*

However, in order to make full use of this diversity for the aggregation of creativity when using external labor, we argue that it is vital for organizations to have a common level of bonding social capital exists, while also being open to bridging social capital. As an illustration, if an organization scores low on bridging social capital, employees might feel threatened by the external employees and hence are not willing to assess and share their KSAOs. This is also in line with Veenendaal et al. (2012), who argue that the extent to which an organization strives for new ideas indicates the openness of an organization and in turn this openness then leads to diversity of KSAOs, which might result in new-to-the-firm KSAOs. In turn, this then might also lead to new-to-the-firm products, processes and services and hence be positive for both market leaders and market followers. One could argue that an organization could also aim to generate diversity by relocating employees internally to new functions (Zhou et al., 2010). However, if a strong bonding social capital and socialization process exists, the diversity of the group might be limited. However, when using external

labor, the socialization process is rather limited, allowing for new KSAOs to enter the organization and increase the firm-level creative capital. Hence, a certain level of trust in form of bonding social capital is needed while also having a high degree of openness in form of bridging social capital.

*Proposition 1b: We expect that the level of both bonding and bridging social capital as well as the organizations openness' influences in how far this diversity increases the firm-level creative capital.*

The discussion above outlined that we strongly argue that the use of external labor facilitates creativity and innovation through the increased diversity of KSAOs within an organization. However, external labor can be used in various forms and for different positions within an organization. How exactly external labor is used and for which functions, might also influence the firm-level creative capital of an organization.

Lepak and Snell (1999) argue that the workforce can be distinguished based on the strategic value as well as the uniqueness of employees. Based on these factors, Lepak and Snell (1991) argue that four main groups within the workforce should exist, that should be addressed with different employment modes. Figure 7 illustrates those employees that are of high strategic value to the organization and possess valuable, unique KSAOs can be considered as core of the organization and should therefore be developed and maintained internally with an HR configuration focused on commitment (Lepak & Snell, 1998). In turn, Lepak and Snell (1999) argue that only functions that are of low strategic value and uniqueness should be addressed with external employment modes based on contract work. This classification of core versus non-core employees is based on the idea that every organization has activities and resources, which are vital for the competitive advantage, as well as activities and resources, which are more peripheral to the organization in supporting these core activities.

Uniqueness of Human Capital	High	<p>Quadrant 4: Alliance Partners</p> <p>Employment mode: Alliance</p> <p>Employment relationship: Partnership</p> <p>HR configuration: Collaborative</p> <p>Hospital workforce groups: Clinical specialists and research scientists</p>	<p>Quadrant 1: Knowledge Employees</p> <p>Employment mode: Internal development</p> <p>Employment relationship: Organisation focused</p> <p>HR configuration: Commitment</p> <p>Hospital workforce groups: Clinical managers, medical directors and management</p>
	Low	<p>Quadrant 3: Contract Workers</p> <p>Employment mode: Contracting</p> <p>Employment relationship: Transactional</p> <p>HR configuration: Compliance</p> <p>Hospital workforce groups: Administration, clerical support and catering</p>	<p>Quadrant 2: Job-based Employees</p> <p>Employment mode: Acquisition</p> <p>Employment relationship: Symbiotic</p> <p>HR configuration: Market-based</p> <p>Hospital workforce groups: Doctors, nurses and allied health professionals</p>
		Low	High

Strategic Value of Human Capital

**Figure 7 Employment modes in relation to strategic value of uniqueness of employees**

Source: Lepak and Snell (1999)

Based on this line of thinking, a crucial potential negative effect of using external labor for these core activities is then that knowledge, which is vital for the organization, might leak out of the organizations once external employees discontinue their and start within a different organizational context (Lepak & Snell, 1999). Based on the resource based view of the firm, scholars therefore argue that external labor should only be used for non-core activities and that core activities, which are vital to the organization, should be kept in-house in order to prevent this knowledge dissemination. However, Nesheim et al. (2007) challenge this view as they found support that using external labor for core activities offers benefits for organizations following an innovation strategy.

Within their research, Nesheim et al. (2007) investigated how organizations use different kinds of external labor contracts for core versus non core functions and found support that using consultants in contrast to temporary help workers for core activities have different strategic correlates as organizations perceive different benefits of these work arrangements. Nesheim et al. (2007) differentiate between organizations following an innovation strategy compared to organizations following a cost strategy. Organizations following a innovation strategy were found to make use of consultants in order to bring special KSAOs into the organization. These consultants were also found to be used for core activities in relation to the competitive advantage of the organization. This is in line with Matusik and Hill (1998), who found that external labor for professional and technical functions has increasingly risen in importance for organizations. However, regarding organizations following a cost strategy, Nesheim et al. (2007) found support that these organizations make mostly use of temporary help agencies in order to save costs and be flexible in terms of numerical capacity rather than the capacity of their KSAOs.

Based on this discussion we argue that especially the use of external labor for core activities of organization will influence firm-level creative capital. While we expect that any kind of external labor work arrangement influences the creative capital of an organization as new KSAOs might enter the organization, we propose that especially the use of external labor for professional functions such as consultants or project based labor for core activities will influence firm-level creative capital. The reason for this is that we expect that the increased diversity of KSAOs leads to increased creativity of the core employees, which are needed to develop new product or processes. External labor used for non-core activities such as labor from temporary work agencies, e.g. an external employee stocking shelves in a factory, might still increase the firm-level creative capital as it could enable the standard employees to contemplate on their work through the eyes of these externals, hence stimulating creativity. However, as already discussed for the previous propositions, we assume that an organization can only mobilize creative capital if the organization has a certain level of bonding social capital, while possessing the openness for bridging creative capital. If an employee feels threatened by the external labor and easily replaceable, they might not be capable to stimulate their creativity by these externals. Hence, we argue that organizations should convey trust to their employees in order to stimulate bridging social capital.

*Proposition 2a: We expect that especially the use of external labor for core activities will differ between low firm-level creative capital organizations and high firm-level creative capital organizations.*

Matusik and Hill (1998) further found support that in order to maximize the benefits of external labor, the decision of using external labor, including the decision on which positions are used for creative capital, should depend on the environmental context an organization is operating in. This environmental context is characterized by two factors. The first factor is the extent of extreme competition initiated through cost pressures. The second factor is the extent of dynamism within the environment characterized by the rate of technological change (Matusik & Hill, 1998). Based on these factors, Matusik and Hill (1998) therefore conceptualize that external labor is best suited for organizations operating in dynamic industries, where competitive pressures are intense and leakage of company specific knowledge will have a small impact on the organization. The reason for this is that the external environment of these organizations requires that knowledge and innovation is constantly renewed in order to maintain competitive. Hence, the benefit of stimulating creativity within the organizations outweighs the possibility of knowledge dissemination.

In turn organizations operating in stable industries, where competitive pressures are mild, should prevent using external labor for their core activities as the core activities are vital for competitive advantage and the risk of knowledge dissemination is too intense (Matusik & Hill, 1998). This means that since the organizations in this environment do not have to constantly renew their innovations, it is crucial to keep the core activities in-house so that competitors could not imitate these activities.

Consequently, it could be argued in line with Matusik and Hill (1998) and Nesheim (2007) that external labor will have a larger impact on creative capital for organizations operating in a dynamic environment.

*Proposition 2b: We expect that external labor used for core activities has a larger influence on creative capital for organizations operating in a dynamic environment than for organizations operating in a stable environment.*

### **2.6.3 Labor market intermediaries**

As discussed above, the use of external labor within western countries has significantly risen in the past decades (Nesheim, 2007). This development also led to the rise of a new industry of organizations that operate as job brokers to match job applicants with organizations (Bonet, Cappelli, & Hamori, 2013). But also employees tend to rely more on these brokers to find a suitable profession (Ashford, George, & Blatt, 2007). Hence, when using external labor, organizations have the possibility to either

hire employees directly or to make use on a labor market intermediary, which can be understood as standing between an organization and an employee (Bonet et al., 2013). But also employees tend to rely more on these brokers to find a suitable profession (Ashford, George, & Blatt, 2007). Figure 4 illustrates the different kind of labor market intermediaries (LMIs) as well as how these LMIs function. The overview of the different kind of labor market intermediaries outlines that these third party organizations mediate between organizations and employees. Consequently, while mediating between those parties, labor market intermediaries create a triangular relationship that differs from the traditional direct, bilateral relationship between workers and employers (Bonet et al., 2012). Figure 4 outlines that LMIs can be both membership based intermediaries such as unions or professional associations, public sector intermediaries such as unemployment agencies as well as private sector intermediaries. According to Bonet et al. (2013), the majority of the operating LMIs belong to the latter classification. The importance of private sector LMIs is visible in various trends within the labor market such as the increase of importance of job boards for recruitment. Despite the fact that job boards were introduced less than 20 years ago, in 2012 these job boards accounted for 20% of all external hires within the US (Bonet et al., 2013). Additionally, also social networking sites operating as LMIs have risen in importance. As an illustration, LinkedIn, which was founded in 2003, accounts for 175 million members in over 200 countries, who mostly use the site for recruitment related activities (Bonet et al., 2013). This increase in importance of LMIs is in accordance with the increase of the use of external labor, which grew by 168 % between 1990 and 2008 (Berchem, 2009).

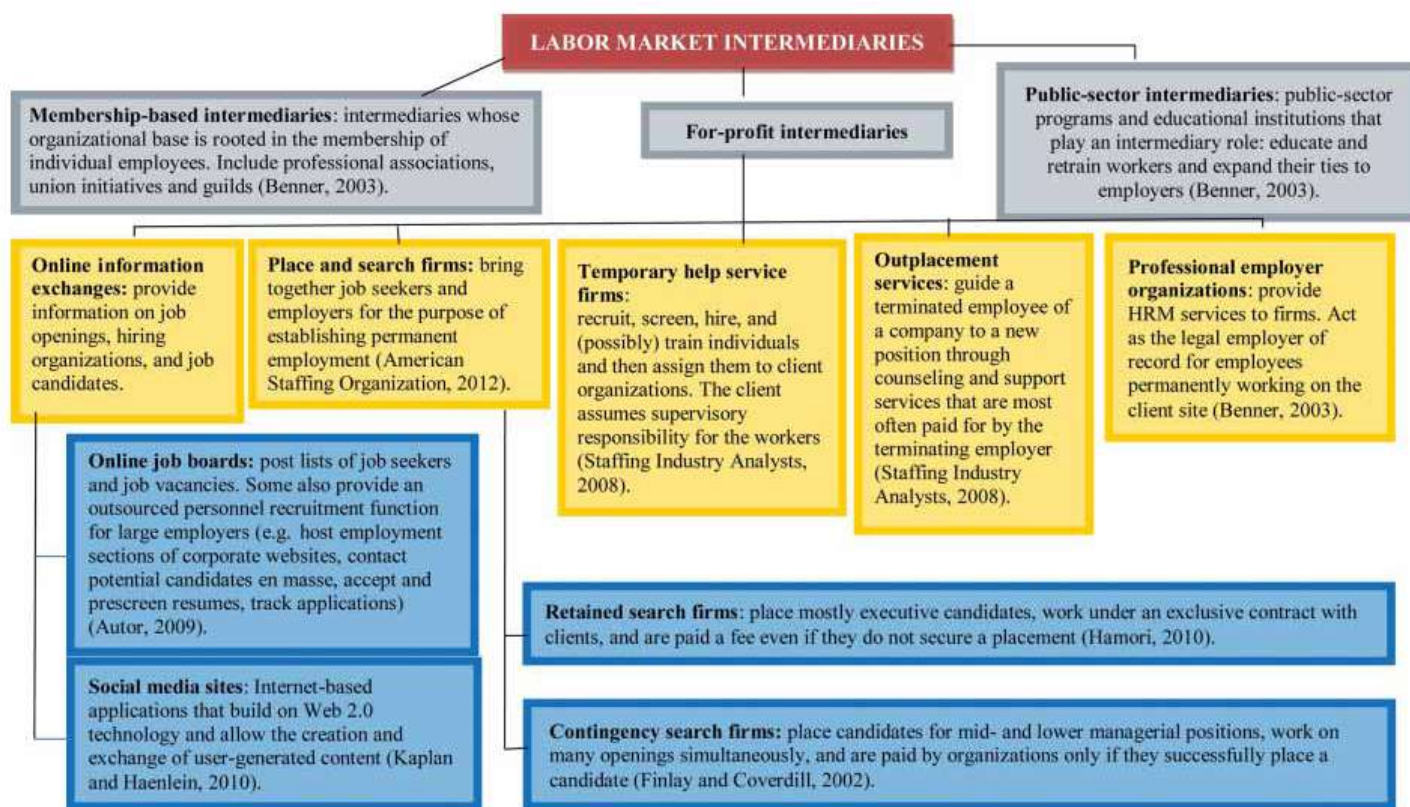


Figure 8 Types of Labor Market Intermediaries

Source: Bonet, Cappelli, and Hamori, 2013, p. 341

Due to this strong development of LMIs, a wide diversity of different kind of LMIs exists. As an illustration, the variety of LMIs ranges from organizations providing job applicants with information regarding job satisfaction and experience of peers, to LMIs operating as job boards such as Monster.com, to professional employer organizations (PEOs) that operate as the legal employer of an organizations existing workforce, e.g. Randstad, to LMIs operating as temporary help service (THS) firms. Bonet et al. (2013) therefore argue that labor market intermediaries can be grouped into three major categories depending on the HR functions they fulfill, including (1) staffing, (2) retention, (3) development, (4) adjustment, and (5) managing change. Based on the extent these functions are carried out by intermediaries, LMIs can be grouped into: Information Providers, Matchmakers, and Administrators LMIs. Bonet et al. (2013) argue that these LMIs affect various employment outcomes, e.g. access to employment and working behavior of employees, in a different way. Thus, the three roles of LMIs and their effects on employment outcomes are introduced in the following paragraphs.

Labor market intermediaries in the category of the Information Provider role are solely focused on introducing labor market parties. Consequently, labor market intermediaries such as job boards, social media sites, membership-based intermediaries and outplacement agencies belong to this classification. Information Provider LMIs are therefore mostly focused on obtaining and selling information about job applicants to organizations and vice versa (Autor, 2009). Hence, the triangular relationship described earlier ends once an organization has learned about the existence of an applicant or vice versa (Bonet et al., 2013). According to Parry and Wilson (2009), organizations benefit from using LMIs with an Information Provider role as these LMIs tend to have a wider and more diverse applicant pool as they tend to serve across various industries and functions. However, it is important to note that these LMIs usually do not collect this information themselves but rather serve as a platform where individuals can place their information independently. Additionally, as Stevenson (2009) found that the majority of job board users are already employed employees, it offers a further advantage to organizations as they would not have had access to these applicants otherwise. Bonet et al. (2013) therefore argue that LMI in the Information Provider role positively affect the access to candidates of organizations as well as for individuals. However, Bonet et al. (2013) argue that due to the fact the triangular relationship is very limited, Information Provider LMIs do not significantly impact other areas of employment outcomes.

Labor market intermediaries in the Matchmaker role on the other hand extend the triangular relationship until the employment relationship starts. Informal relationships with individuals might continuously exist, especially if these are aspiring to be placed in a different organization once the current contract ends. However, Matchmakers solely fulfill the HR functions of recruiting, selection, and promotion of qualified candidates (Bonet et al., 2013). Hence, Matchmaker LMIs handle the full process of matching organizations adequate individuals in the labor market, ranging from providing information to both parties, to the actual placement. The most represented LMIs within this category are search firms as well as placement agencies. The search firms can be distinguished between

retained search firms, which are paid a fee irrespective if a hire actually takes places, and contingency firms, which are only paid a fee if a hire takes place (Bonet et al., 2013).

Just as Information Provider LMIs, Matchmaker LMIs positively affect the access of employment of hiring organizations. However, superior to the Information Providers, the Matchmakers tend to collect the information on organizations and individuals within the labor market themselves and therefore might achieve an even advanced placement (Bidwell & Fernandez-Mateo, 2008). According to Felix (2012), organizations therefore often use Matchmaker LMIs as these have a wider access to candidates with rare talent or specific knowledge than these organizations themselves. Compared to Information Providers, Matchmakers have a stronger impact on which applicants are taken into consideration (Coverdill & Finlay, 1998). Hence, Matchmakers are responsible for more HR functions than Information Providers as they not only introduce applicants to organization but also act as a first selection filter of candidates (Bonet et al., 2013; Marchal, Mellet, & Rieucan, 2007). However, despite the evidence that organizations positively benefit from Matchmaker LMIs, Bidwell (2011) found that hires through these LMIs performed worse than internally promoted employees. Bidwell (2011) conceptualizes that the reasons for this might be that organizations placed too much trust into the Matchmaker LMI and neglected possible challenges new hires had to face within the organization, such as that the existing workforce might feel threatened by these contingent workers (Davis-Blake et al., 2003). Nonetheless these findings, it can be argued that both Information Providers and Matchmakers influence the employment outcome of access to employment. Additionally, literature has also shown that Matchmakers influence the outcome of pay as applicants hired through a Matchmaker tend to obtain higher pay compared to applicants applying for job on their own (Bidwell, 2011; Bielby & Bielby, 1999; Seidel, Polzer, & Stewart, 2000). As an illustration, Seidel et al. (2002) found that organizations who used headhunters in form of both contingency and retained LMIs paid higher salary offers to those applicants than if they would have conducted the search on their own. However, despite the influence on access to employment and pay, no further influence of Matchmaker LMIs on other labor outcomes are known as the HR function is concentrated on the recruitment, and sometimes selection process, solely.

Lastly, labor market intermediaries in the Administrator role, maintain the triangular relationship throughout the duration of the match by fulfilling various HR functions (Bonet et al., 2013). As an illustration, most Administrator LMIs are responsible for recruiting and selecting employees, just as the Information Provider and Matchmaker LMIs, but their responsibilities continue on to further manage the employees once they are hired by supervising day-to-day activities of these employees (Bonet et al., 2013). Hence, the hiring organization becomes also an employer for the Administrator LMI, which therefore is in charge of most transactional administrative HR functions of the employees such as payroll and employment taxes (Bidwell & Fernandez-Mateo, 2008). Some PEOs Matchmakers even take over further HR functions such as training and performance appraisals (Klaas, Gainey, McClendon, & Yang, 2005). Besides of taking over HR functions, Administrator



LMIs have the advantage for organizations that they take over the costs and risks that the organization would have in case of a standard employment contract. As an illustration, Houseman, Kalleberg, and Erickcek (2003) researched an auto parts supply manufacturer and found that ‘high-risk’ applicants were hired through an LMI order to first see how the candidate would work on the job before offering a standard employment contract.

Relating the outcome of pay, similar as the Matchmaker LMIs, Administrator LMIs are expected to lead to higher wages for employees as a better match between applicants and organizations is anticipated (Bonet et al., 2013). Additionally, Administrator LMIs are also expected to influence labor outcomes of employee commitment, work attitudes and working conditions (see Bonet et al., 2013). The previous subchapter already gave an insight into disadvantages of using external labor. The same findings hold true to Administrator LMIs as they are involved into the employment of the external labor and hence also are affected by the tensions between external labor and the standard labor force (see Bonet et al., 2013 for more information).

Based on this discussion, it can be argued that the higher the interaction between a LMI and an organization is, the more the LMI will know about the specific requirements needed regarding KSAOs of future applicants. Thus, a better match and placement of applicants can be obtained. Relating this theory to creative capital, it can be argued that labor market intermediaries in the role of Matchmaker or Administrator will have a larger impact on an organizations creative capital. The reason for this is that these LMIs have a wider, more diverse applicant pool, which can be matched superiorly to the needs and requirements of the organization in order to facilitate creative capital. Thus, the following proposition arises

*Proposition 3: We expect the use and role of labor market intermediaries to differ between organizations with high and low creative capital.*

### **2.7 Resulting Research Framework**

Based on the above discussed propositions, figure 9 illustrates the resulting research framework and the relationships between the propositions that will be explored in the further qualitative research. The figure shows that especially the use of external labor for core activities in relation to innovation is expected to influence firm-level creative capital. The reason for this is that the use of external labor for these core positions to the organizations competitive advantage, e.g. R&D or management employees enables standard employees to have a wider access to diverse KSAOs, which in turn is expected to enhance the creativity. However, this relationship can be influenced by the use of a labor market intermediary. The discussion above outlines that a LMI in the role of a Matchmaker or Administrator might achieve a better fit of the external labor and the organization as they are familiar with the

available KSAOs of the organization and can therefore propose specifically external employees that widen the KSAOs to achieve diversity and facilitate creativity. In turn, a LMI in the role of a Information Provider does not support the organization in finding external labor with specific KSAOs but does solely provide information about individuals in the labor market seeking employment. We then argue that the use of external labor especially for core activities related to innovation will increase the firm-level creative capital of an organization and in turn the creative performance of the organization. Additionally to these relationships, it is to be expected that further variables influence the role of external labor on firm-level creative capital. As an illustration if an organization has a dominant bonding culture, it might be difficult for standard employees to allow the external employee into the existing culture as they might feel threatened by them. Hence, the standard employees will then not be able to make use of the diverse KSAOs of the external labor, so that the work might only be fulfilled by these externals without facilitating the knowledge into the organization. However, based on our conceptualization of firm-level creative capital, we assume that organizations with high firm-level creative capital have a certain level of bonding relationships, but also high bridging social capital that allow employees to have a wider network. Hence, we expect that organizations with high creative capital are less affected by these issues than organizations with low creative capital. However, in order to draw generalizations, the qualitative research will allow gaining an insight into these other factors influencing the relationship between firm-level creative capital and external labor.

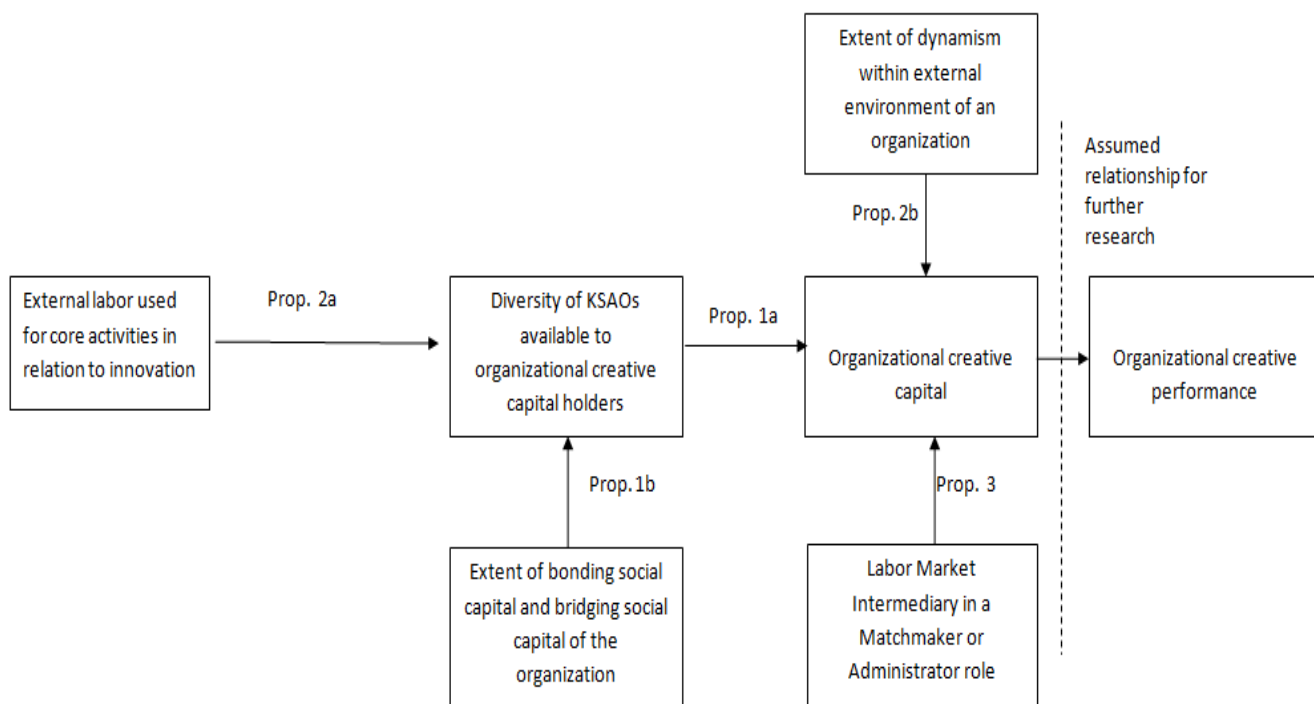
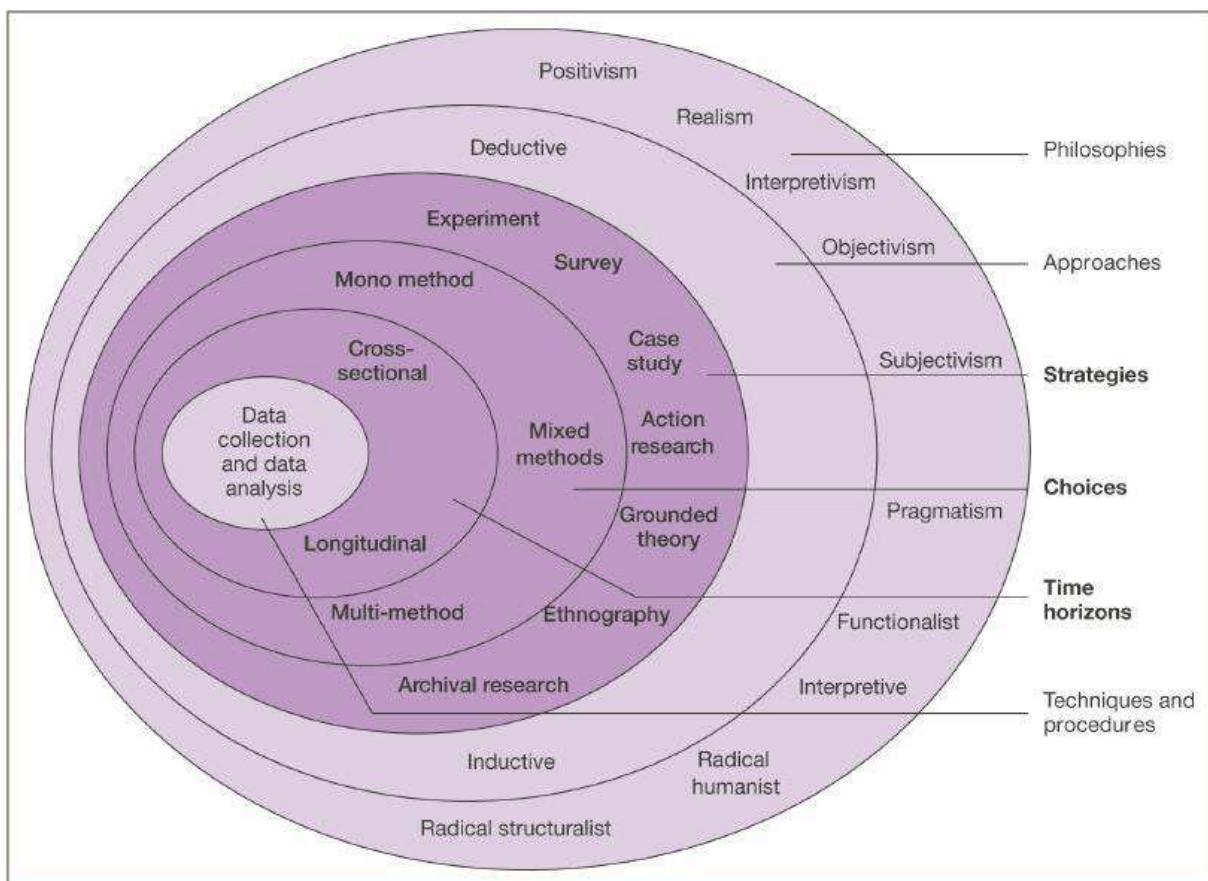


Figure 9 Resulting research framework with proposed relationships

### 3 Methodology

According to Saunders, Lewis, and Thornhill (2007), the decision for a specific research paradigm, research strategy and method has a significant impact upon the research findings. It is therefore of utmost importance to consider the relationship between the research philosophies, research approaches, research strategy and relating research methods. Thus, to construct a profound research, this chapter follows the outline of the research onion proposed by Saunders et al. (2007).



**Figure 10 The Research Onion**

Source: Saunders, Lewis, & Thornhill (2007)

### 3.1 Research philosophy

According to Saunders et al. (2007), one must consider all layers of the *research onion*, before deciding on the core of the research design. Thus, the research philosophy, which contains considerations regarding epistemological and ontological beliefs, should be of high concern. The research philosophy describes a researcher's beliefs, perceptions and assumptions towards the nature of reality and knowledge (Bryman & Bell, 2007; Saunders et al. 2007). However, as those beliefs are personal and subjective, they will also most-likely have a certain influence on the undertaken research activities and results. Thus, it is of utmost importance to discuss those philosophical stances - in particular, the epistemological and ontological stances- in order to ensure that researcher biases are minimized (Bryman & Bell, 2007).

Epistemological considerations concern the issue of how knowledge should be appraised as acceptable. As mentioned in the introduction, the aim of this research is to extend the existing theory regarding creative capital and is therefore of high explorative nature. This explorative nature implies that the concept of creative capital needs to be comprehended well. Thus, this thesis follows an interpretivist stance, which means that that human behavior is too complex to follow the laws of physical sciences. Further, the concept of '*Verstehen*', which can be defined as "*a science which attempts the interpretive understanding of social action in order to arrive at a causal explanation of its course and effects*" (Weber, 1947 in Bryman & Bell, 2007:p.18), is used to ensure that the concept of creative capital and its relationship to an external workforce is truly grasped. In order to apply the concept of *Verstehen*, semi structured, in-depth interviews are chosen that enable to follow the interviewees string of thoughts (Bryman & Bell, 2007).

Ontological considerations are concerned with the nature of social entities and whether those entities should be considered as objective, having a reality external to social actors, or if they are rather built up from the perceptions and actions of social actors (Saunders et al., 2007). One ontological stream, constructionism, suggests that an organization and its culture are created by the social actors of the organization. This means, that the culture of an organization is based on the perceptions of the social actors. Based on social interaction theory, this means that an organization can change through its social actors (Bryman & Bell, 2007). This thesis conceptualizes that employment strategies, and the decision to use external labor influences creative capital and therewith the creativity and innovation performance of an organization. Consequently, this thesis does not follow the belief that organizations have a reality external to its social actors, but rather follows the constructionist's stance, that these social actors, e.g. human resource managers, can change the organizations with certain decisions and perceptions, such as integrating external labor.

### **3.2 Research approach**

A research approach is the way theory is handled in relation to research and can be distinguished into deductive or inductive (Saunders et al., 2007). While deduction aims at testing existing theory, induction proposes that theory evolves out of research (Bryman & Bell, 2007).

According to Saunders et al. (2007) and as illustrated in the research onion in figure 5, a inductive approach correlates with an interpretivism and constructionism stance and should therefore be the chosen research approach for this study. Thus, the researcher decided to follow an inductive approach in form of qualitative in-depth, semi-structured interviews in order to further discover the concept of HRM and creative capital, which had been rather unexplored in existing literature. Thus, an exploratory qualitative study was conducted in order to investigate this phenomena. Qualitative research is based on a unstructured, open-ended approach, which aids to explore all possible concepts and correlations between them (Bryman & Bell, 2007).

The semi-structured in-depth interviews had been chosen as a appropriate research technique. The reason for this is that this research technique results in rich, detailed answers of interviewees as it allows the flexibility to follow the respondent's string of thoughts by using interview techniques such as probing. Hence, in-depth, semi-structured interviews enable to uncover relevant topics identified in the literature study, while allowing enough flexibility to also explore new concepts of importance. Concluding, this research technique allows for explorative insights into the research problem.

### **3.3 Research strategy**

According to Bryman and Bell (2007), a research strategy relates to the criteria that are employed when conducting business research. After having analyzed various research strategies, the comparative multiple-case study design appeared to be the best choice for various reasons. This research design allows for a replication design (Yin, 1984), as the cases are conducted as a series of independent interviews that can then be compared to confirm or disconfirm conceptual propositions. According to Saunders et al. (2007), case studies are a good way to explore existing theories, and even challenge those theories, whether or not they should be accepted or if more research could be done on the matter. Since this study builds upon existing theory as a foundation for further research, but also aims at exploring further concepts, the case study is a suitable design. Veal (2006) argues that a case study involves the study of a phenomenon by studying single examples. This idea can be related to the use of quantitative research. Moreover, case studies have been known to be a proper tool for exploratory studies as the outcomes of case studies aim at suggesting or confirming theory. In addition, the limited number of cases needed to conduct a case study offers a manageable data collection task, which is desirable due to the time restriction of the dissertation project (Bryman & Bell, 2007).

### **3.4 Research purpose**

According to Veal (2006), research can follow four major purposes, which are of descriptive, explanatory, exploratory and applied purpose. As mentioned before, the aim of this research study is of high exploratory nature, as the research outcome is aimed gaining insight into the relationship between external labor and firm-level creative capital as this is a rather unexplored relationship. According to Bryman & Bell (2007), exploratory studies try to satisfy curiosity and provide a better understanding of concepts by seeking new insights into a topic. Thus, the purpose of this paper is to extend the existing theory by exploring the relationship between creative capital and external labor. However, the study also has a descriptive purpose, which can be defined as trying to understand a phenomenon by observing the detail of the elements that account for it (Bryman & Bell). Consequently, the dissertation does not only aim at exploring new concepts but also investigates all details that contribute to the investigated concepts.

### **3.5 Sampling methods and selection of respondents for the qualitative study**

For the population of the study, Dutch medium-sized to large organization in the manufacturing, design and engineering industry were chosen. The main reason that this population had been chosen laid within the fact that it was to be expected that both organizations with high creative capital and with low creative capital were represented in these industries. Thus, the industry, size and nationality of the organizations served as control variables for the study.

A sampling method which is related to qualitative research is the non-probability sampling frame which implies that respondents have not been chosen based on a random sampling method but rather have been selected by the researcher. This entails that some units in the population are more likely to be selected than others as human judgment might affect the process (Bryman & Bell, 2007). While this might seem counterproductive to the aim of generalizing the findings of the study as validity and reliability issues might arise, one needs to keep in mind that this research is not aimed at generalizing but rather exploring the concepts and relationship between external labor and creative capital. Thus, the choice for non-probability sampling holds strong theoretical and practical reasons. The latter refers to the fact that time and mobility issues can be prevented as the researcher selects the respondents. This is of high convenience as time and mobility are major restricting factors in this dissertation. The theoretical advantages are due to the fact that the non-probability sampling allows the selection of respondents based on characteristics which have been identified of importance in existing literature (Bryman & Bell, 2007). Based on this reason, within the background of non-probability sampling, purposive sampling had been chosen to select the case organizations. Purposive sampling is aimed at selecting respondents based on particular characteristics, which are of interest to the study as they will increase the feasibility of answering the research questions (Saunders et al., 2007). In other words, interviewees were selected purposively on the basis of their ability to contribute to the research

objective. Consequently, the creative capital research program reviewed medium to large sized organizations operating in manufacturing, engineering and design industries in the Twente region and assessed based on existing company documents (e.g. website, company profile, performance results) if they would fit our understanding of high creative capital or low creative capital. Hence, the purposive sampling was coupled with a quota sampling procedure as the organizations were separated into two groups- organizations with high and with low creative capital. The main reason for dividing the cases into these quotas previous to the actual research was to ensure that we could expect an evenly distributed sample for both low and high creative capital organizations.

These organizations were then contacted by the research program via E-Mail and introduced to the research (see appendix II). Of these contacted organizations, eight organizations decided to participate in this research. As the organization decided lastly if they would participate in the research, the results could be influenced by self-selection bias as the organizations that decided not to participate could have lead to different insights of the relationships between creative capital and external labor than those that actually did participate. This possible bias needs be kept in mind. However, as we research multiple cases, we argue that these cases will be able to explain the relationship sufficiently. Additionally, the only current research on this topic involves only a single case study, which means that this study extends the existing research. We do strongly advise further research though to aim at designing the study based on probability sampling to prevent this possible bias.

Table 1 illustrates the actual interview sample with all participating organizations, company information as well as the presumed classification into high or low creative capital based on pre-interview data analysis. In order to provide anonymity to organizations, companies names are not prevailed in this paper but are referred to as company A to company H for the remainder.

The table outlined, that we assumed that three organizations with high creative capital would be participating and five organizations with low creative capital. Thus, the two quotas have not the same size but as the sizes are still rather balanced, we argue that it will not influence the research outcomes of this study.

Overall, the sampling procedure was grounded in the concept of theoretical saturation. Essentially, this means that sampling of case organizations and the decision for the sample size was carried on until a category had been saturated with data, which occurs if (a) no new or relevant data is emerging, (b) the category is well developed, and (c) the relationships among categories are well established (Bryman & Bell, 2007).

**Table 2 Overview of Case Organizations**

<b>Company</b>	<b>Industry</b>	<b>Employees</b>	<b>Strategy towards innovation</b>	<b>Assumption of creative capital</b>
<b>A</b>	products for the metal-machining industry and the construction industry	45	The core strategy is focused on the production of high-quality machines, as well as customized machines for special requests. Hence a combination of exploitation and exploration products.	<b>HIGH</b>  The main activity of this company is to produce existing products, however also a focus on the development of customized products for customers exists. Additionally, existing company documents outlined that the company won a price for making use of the creativity of their employees.
<b>B</b>	Products for the human care, medical cure and e-mobility sector	43	The core focus is on developing innovative products for customers by taking care of the entire innovation cycle: from product development to production management and supply. Hence a focus on exploration.	<b>HIGH</b>  The main activity of this company is designing products. For this activity people have to develop new ideas and concepts by combining existing ideas, knowledge and concepts, in other words employees have to be creative.
<b>C</b>	Tire manufacturer	1800	The core focus is on producing tires and continuously improving these to maintain competitive. Hence a focus on exploitation.	<b>LOW</b>  The main activity of this company is to produce existing products, specifically tires. While the company aims to be innovative, the process is rather slow and incremental. Thus, despite of the R&D department, it is likely that the majority of the employees do not need to be creative. Strong ties within the company, very little outflow of employees as the average employee turnover is 17years, which indicates strong bonding social capital. Most likely new hires are recruited from the available network.



<b>D</b>	Wall Systems manufacturer	160	The core focus is on producing wall systems, while continuously improving existing concepts due to customer requirements. Hence a focus on exploitation	LOW  The market this company operates on is stable, as is the environment. Produce according to specifications, no need for creativity in terms of production. While the company aims to produce innovative products, the majority of the projects are focused on existing products. Strong ties within the company, very little outflow of employees, bonding social capital.
<b>E</b>	Garden Furniture manufacturer	40	The core focus is on producing existing products. Hence a focus on exploitation.	LOW  The market this company operates on is stable, as is the environment. Produce according to specifications, no need for creativity in terms of production.
<b>F</b>	Medical device manufacturer	64	The core focus is on developing, modifying and customizing medical devices. Hence a focus on exploration	HIGH  The main activity of this company is designing and developing products. For this activity people have to develop new ideas and concepts by combining existing ideas, knowledge and concepts, in other words employees have to be creative. Strong external ties with stakeholders are required, hence need for bridging capital.
<b>G</b>	Manufacturer and supplier of industrial butterfly valves and actuators	Around 200	The core focus is on producing existing products and producing products to specifications. Hence a focus on exploitation.	LOW  The market this company operates on is stable, as is the environment. Focus on exploitation and product improvement. Produce according to specifications, no need for creativity in terms of production.
<b>H</b>	Manufacturer of media-, card- and gift	72	The core focus is on producing existing products and	LOW  The market this company is

	packaging		producing products to specifications. Hence a focus on exploitation.	operating in is decreasing as products are getting replaced by online versions. No creativity is needed of employees to produce the existing products. Very strong bonding social capital culture as company documents illustrate very low turnover rates of employees.
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### 3.6 Performed research activities and data analysis

The interviews were carried out with either HR managers or CEO’s with HR responsibilities that were knowledgeable about process and product innovation within the company and had insights how HRM is intended and actually implemented. Companies were briefed on the interview topics before the actual interview took place so that the organization could determine which manager would be best suited to answer the interview questions. Hence, self-selection sampling was also used to determine the exact interviewee within each case organization.

The qualitative interviews were held in person on a date and in a place of the respondents’ choice in order to provide convenience for the interviewees. Therefore, most interviews took place at a meeting room at the case organizations site. This also had the advantage that the interviews were conducted in a familiar setting of the interviewee, hence ensuring a comfort level as discomfort of interviewees could negatively affect the interview validity (Bryman & Bell, 2007).

Resulting, the interview took place as follows

	<b>Date</b>	<b>Company</b>	<b>Occupation</b>	<b>Duration</b>	<b>Language used</b>
Interview I	29/04/2013	A	HR Manager	1:28:14	Dutch
Interview II	01/05/2013	B	CEO	1:11:29	English
Interview III	24/05/2013	C	HR Manager	1:20:24	English
Interview IV	27/05/2013	D	HR Manager	1:15:23	Dutch
Interview V	04/06/2013	E	HR Officer	1:42:29	English
Interview VI	05/06/2013	F	HR Manager	1:20:53	Dutch
Interview VII	05/06/2013	G	Commercial Director	1:43:25	English
Interview VIII	10/06/2013	H	General Manager	1:52:33	English

The interviews were conducted in conclusion with the other researchers of the creative capital research team and were therefore divided into six parts- introduction, creative capital, recruitment, job design, external labor and ending. In order to conduct interviews in relation to those topics, a topic list was used (see appendix I), which is a brief list of memory prompts of areas to be covered during the interview (Bryman & Bell, 2007). Thus, a topic list is much less specific as a structured interview as it is only a tool to support the memory of researcher so that all relevant issues are researched. However, as the order of the topic list is flexible, it allows following the respondents' string of thoughts and exploring their thoughts (Bryman & Bell, 2007). Consequently, the in-depth interviews are not intended to only discuss items on the topic list but also to find items of interests that were not previously mentioned in literature. Despite the possible change of order of interview topics and the inclusion of new topics throughout individual interviews, the interview topics were standardized across all interviews in order to ensure validity. The process of interviewing respondents in conclusion with the research team outlined to be positive as the questions regarding recruitment and job design gave further insights into the strategy used by the case organizations and most likely would not have been discussed if the interview was only conducted regarding external labor and creative capital.

In order to ensure credibility of the research, which refers to the trustworthiness of the research and its findings, the study aimed at meeting the recommended guidelines of qualitative research by following Kvale's list (1996, in Bryman & Bell, 2007). This means, that open, clearly formulated, non-leading questions were asked in order to motivate the respondents to talk freely. Additionally, in order to fully comprehend the relationship between external labor and creative capital within each case organization, the interviewees were encouraged to use storytelling and examples of practice to formulate their answers. Additionally, probing was used to further obtain insights into the research topics and to ensure respondent validation (Bryman & Bell, 2007).

The interviews have been conducted in the English language unless the respondent did not feel comfortable with this foreign language, then their mother language, Dutch, was used. Both the use of the English language as well as the translation of the Dutch interviews into the English language could prevail a loss of answer integrity as they are not the researcher's mother languages. Nonetheless, this is not expected to impact the validity of the interview.

#### ***Data analysis***

In order to conduct the comparative multiple case study, the interview data was first analyzed by constructing individual cases. These cases were then compared with each other, allowing for replication logic (Yin, 1984), in order to derive at a conceptual framework regarding the relationship between creative capital and external labor.

Hence, the first step of the qualitative data analysis was to fully transcribe the recordings of the interview. This has been done manually by the researcher with help of the freeware program F4, which allows to decelerating the pace of the audio file. Once the interviews were transcribed, a

summary of each interview was created and sent to the interviewees to ensure respondent validation and to prevent inaccuracies as a result of misinterpretations.

Next, open coding, which is the process of developing concepts by breaking down, analyzing, comparing and conceptualizing data (Bryman & Bell, 2007), had been used to process the data. Thus, the researcher reviewed the transcription of each interview and labeled all quotes that were of importance regarding the interview topics, leading to the development of concepts. These concepts were based on the previous developed operationalization (see next subchapter). Hence, we also made use of pattern coding, as patterns were detected throughout the coding. This process was a constant comparison between the data and the operationalization and therefore ensured that a close connection maintained, while also new concepts were derived through the data. The coding process has carried out in Microsoft Word 2007 as it offered superior tools to manage the design with assigning labels and concepts.

Based on the data analysis, a coding scheme for each organization was developed (see appendix III), which build the foundation to write the cases. This process was iterative as the transcribed interviews had been revisited when new data regarding the concepts emerged from other cases. Despite the fact that first similarities and differences were observed while constructing the individual cases, no analysis was undertaken until all cases had been completed. This prevented bias and allowed for the individual replication logic (Yin, 1984). In order to increase face validity, which is vital when developing a new measure (Bryman & Bell, 2007), three further researchers, which were also part of the creative capital research program, reviewed the transcribed interview data, commented on the coding schemes and added further points of interest. Additionally, in order to increase the objectivity of the research findings, the analysis and cross case comparison of the study was conducted in conclusion with the creative capital research program.

Once the case building process was completed, the cases were compared based on their coding scheme and the priori propositions. The results of this process can be found in chapter 4.

### **3.7 Operationalization of concepts**

This subchapter deals with the operationalization of the concepts used in this dissertation. Thus, it is the foundation for the measurement and the validation of the proposed conceptual model. According to Berthon, Ewng, and Hah (2005), operationalization can follow a deductive or an inductive approach. The former consists of the development of an operationalization based on a thorough literature review and already existing measurement scales. Such an approach enables research to draw upon an already existing and validated pool of items related to each concept. In contrast, an inductive approach consists of identifying concepts through qualitative methods. This approach is

accommodating when only limited theory or knowledge in relation to a topic exists (Berthon et al., 2005).

For the purposes of this thesis, two concepts are crucial to measure and thus to be operationalized. These concepts derive from the central focus question of this thesis and are firm-level creative capital and externalizing labor. While an operationalization and scale for creative capital has been developed in the urban literature, no scale exists for an organizational level. Hence, a rather inductive approach to operationalization seems appropriate. In turn, a vast amount of literature exists regarding externalization of labor.

#### **3.7.1 Operationalization of firm-level creative capital**

For the purposes of this paper, firm-level creative capital is defined as *the aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships*. As mentioned, no firm-level creative capital scale exists that this study could have drawn upon for the purposes of this research. Nonetheless, in order to conduct the explorative study regarding the relationship of firm-level creative capital and external labor it is vital to build the study upon a valid operationalization of firm-level creative capital. In order to develop an operationalization of firm-level creative capital, the three vital constructs of our definition were analyzed based on the urban creative capital literature and translated to an organizational level. These concepts are:

- aggregated creative organizational ability
- creativity of employees
- Organizational and employees' relationships

Consequently, we decided to operationalize and explore firm-level creative capital based on a multiple-indicator measure of three dimensions. Table 3 explains and illustrates these dimensions, its sub-dimensions, as well as the related interview topics of our explorative research of firm-level creative capital.

**Table 3 Operationalization of firm-level creative capital**

<b>Firm-level creative capital</b>				
<i>The aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships</i>				
<b>Dimension</b>	<b>Dimension definition</b>	<b>Sub-dimensions</b>	<b>Topic</b>	<b>Example question/ interview item</b>
<b>Organizational Creative Ability</b>	The ability of organizations to integrate and aggregate the creativity of individuals		The organizational enactment to integrate the creativity of individuals and their relationships	The main activity of our organization is developing new products, services and processes/ main activity of our organization is focusing on our current product portfolio and improving
<b>Individual Creativity</b>	The ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization	<i>Expertise</i>	knowledge of an individual (Amabile, 1998)	people have to develop new ideas and concepts by combining existing ideas, knowledge and concepts
		<i>Motivation</i>	the force to execute a certain behavior	employees are motivated to be creative / are encouraged to combine different ideas, knowledge and concepts
		<i>Creative thinking skills</i>	How flexible and imaginatively people approach problems (Amabile, 1998)	Generate new ideas and think outside the box
<b>Relationships</b>	Relationships within an organization and outside to its stakeholders that are both aimed at strengthening existing relationships and building new ones	<i>Bonding</i>	Relationships between homogenous groups (Putnam, 2000)	Relationships exists mainly between groups that are familiar to each other
		<i>Bridging</i>	Relationships between heterogeneous groups (Putnam, 2000)	Relationships exists mainly between groups that are dissimilar to each other / groups have access to non-redundant information / the knowledge base is increased by connection to other groups
		<i>Internal</i>	Relationships between employees within the organization	The organization has a strong internal network, which means that employees have the opportunity to use their creativity
		<i>External</i>	Relationships between the organization and external stakeholders	The organization has a wide and external network that can be used for idea generation

		<i>Weak</i>	Weaker relationships, those involving comparatively low levels of closeness and interaction (Granovetter, 1973)	The relationships are characterized by relatively low levels of interaction
		<i>Strong</i>	Stronger relationships involve a high level of emotional closeness and relatively frequent interaction and reciprocity (Granovetter, 1973)	The relationships are characterized by relatively frequent interaction / Relationships are based on trust

Based on these dimensions, a document analysis of the case organizations was conducted previous to the interviews in order to get a first impression of the creative capital level and pre sample these organizations into high and low creative capital (see 3.5 for more information).

Due to the lack of an existing valid scale to measure the exact degree of creative capital of organizations, the focus of this study lays on exploring the concept of firm-level creative capital in organization in order to build a foundation for further research. In order to be able to explore the creative capital of the case organizations, a firm-level creative capital indicator was developed in order to encourage the interviewees to engage in the discussion about the creative capital without stimulating social desirability as we expected respondents to be biased if we directly ask about creative capital in their organizations. Hence, we translated the operationalization of firm-level creative capital into two descriptions of an organization, describing (1) an organization with high firm-level creative capital, (2) an organization with low firm-level creative capital. In order to further eliminate social desirability we named the description of high firm-level creative capital ‘company X’, while the low firm-level creative capital description was named ‘company Y’. These descriptions can be found in the interview protocol in appendix I.

The descriptions were then presented to the interview respondents, who in turn were asked to explain which description their organization would fit best. Thus, the description of the low and high creative capital organizations actually served as an indicator to assess the firm-level creative capital of the case organizations. To further investigate in how far the interviewees agree with one of the company descriptions, the respondents were asked to rate the fit to the description on a scale from strongly disagree (1) to strongly agree (5) (see appendix I). The 5 point likert scale was chosen as the most appropriate method due to practical reasons, e.g. quick comprehension of scale. While there have been arguments that a 4 point likert scale is superior as it does not leave the opportunity to chose neutral, the 5 point likert scale was chosen for exactly this reason as it might lead to bias if a neutral option is not included. To further assess the case organizations creative capital and to ensure that the

self-assessment of the interviewees were valid, follow up question regarding the dimensions of creative capital were asked. Additionally, respondents were asked to provide examples to these follow up questions. Based on this indicator and the follow up questions of the concept dimensions, it allowed exploring the actual creative capital of the case organizations and comparing it to the assumed pre interview analysis of the creative capital.

**3.7.2 Operationalization of external labor**

External labor can be understood as all non-standard labor contracts, including temporary agency workers, consultants, part-time employees, network partners and alliances.

In order to operationalize external labor, this paper builds upon existing research and scales. First, interviews items of Matusik and Hill (1998) were used in order to identify the intensity of external labor. The use of external labor was measured with a dichotomous variable in order to indicate if the organization uses external labor at all. However, not only identifying the use and strength of the using external labor is crucial but also reason of using external labor as well as the effects it has on performance and creative capital. To further investigate these issues, the core activities of the case organizations were identified in relation to external labor. Additionally, in order to determine the role of the intermediary, the thesis will build upon the work of Bonet et al. (2013) by asking questions regarding the functions the used labor market intermediaries perform.

Table 4, illustrates the exact operationalization of external labor, its dimensions and interview items.

**Table 4 Operationalization of External Labor**

<b>External labor</b>				
<i>All non-standard labor contracts, including temporary agency workers, consultants, part-time employees, network partners and alliances</i>				
<b>Dimension</b>	<b>Dimension definition</b>	<b>Sub-dimensions</b>	<b>Topic</b>	<b>Example question/ interview item</b>
<b>Use of external labor</b>		<i>Strength of use</i>	Number of external employees in comparison to standard-hired employees and overall employees in the establishment (Matusik & Hill, 1998)	If exact numbers are not known: Could you tell me in how far you make use of external labor?



		<i>Design of non-standard labor contracts</i>	How is the external labor contract designed, e.g. temporary agency workers or consultants	Could you tell me more about which kind of external labor contracts you use?
		<i>positions/ departments used for external labor</i>	External labor for core activities versus non-core activities(Matusik & Hill, 1998)	Can you tell me more about the importance of the external labor you use in relation to the core activities of your firm? Do you use external labor for core activities, in how far?
		<i>Reasons of use</i>	The main purpose of using external labor, e.g. lower costs, flexibility, competitive advantage, knowledge and creativity generation	Could you tell me more about the main purpose for using external labor? Why do you use external labor? What advantages do you experience from using external labor?
<b>Labor market intermediaries</b>	An organization acting as an intermediary between organizations and job applicants (Bonet, Cappelli, & Hamori, 2013)	<i>Role of intermediaries</i>	<p><b>Information provider role</b> Organizations focused on introducing organizations to employees and vice versa (Bonet et al., 2013)</p>	<p>Could you tell me more about the labor market intermediary you use? Why do you use them? Which HR functions do they fulfill? How long does the relationship between you and the labor market intermediary exist? How long between the hired employee and the LMI? In how far does your choice of labor market intermediary influence the effectiveness of the hired applicant?</p> <p>-&gt; Based on this, it can be determined which role the LMI fulfils</p>
			<p><b>Matchmaker role</b> LMI extending the triangular relationship until the employment relationship starts (Bonet et al., 2013)</p>	
			<p><b>Administrator role</b> Organizations maintaining the triangular relationship throughout the duration of the match by fulfilling various HR functions (Bonet et al., 2013).</p>	

#### **3.8 Issues related to qualitative reliability and validity**

While quantitative research relies on measures of reliability and validity to evaluate the value of a study, Lincoln and Guba (1985) argue that qualitative research can be assessed by its “trustworthiness”. Trustworthiness consists of several constructs that need to be addressed in order to ensure the utility of a study. These constructs are: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. The following paragraphs therefore assess this thesis based on the ‘trustworthiness’ criteria of Lincoln and Guba (1985).

##### Credibility

Credibility of qualitative research can be compared to the concept of internal validity in quantitative research. Credibility can be ensured by confirming with the members of the social world who were studied in order to guarantee that this social world has been understood correctly (Saunders et al., 2007; Bryman & Bell, 2007). In order to ensure credibility for this research, we made use of respondent validation by summarizing the interview results and presenting them to the interviewees of each case organization. This enabled the interviewees to check if they were understood correctly or if adjustments had to be made.

##### Transferability

Comparable to the concept of external validity in quantitative studies, transferability supports to determine if the results relate to other social settings and can be transferred to other contexts (Lincoln & Guba, 1985; Bryman & Bell, 2007). According to Guba and Lincoln (1985), *thick descriptions* in form of transcripts, codebooks and research settings can ensure that the transferability of a study is ensured. Hence, we aimed at describing the research process and context within this methodological chapter as precise as possible. Additionally, the interview protocol and all codebooks are available in the appendix. We therefore aimed at enhancing the transferability of this study by providing this thick, rich description. While we are aware of the limited generalizability of the research findings due to the study design, we argue that these thick descriptions allow readers to decide if the findings might be applicable to their context.

##### Dependability

Dependability is comparable to the concept of reliability in quantitative research as it assess if the results of the study are consistent over time and across researchers (Lincoln & Guba, 1985; Bryman & Bell, 2007). Due to time restrictions of this research, we cannot ensure dependability in terms of consistency over time. We therefore strongly encourage for further research to build upon this work. However, in order to ensure dependability in terms of consistency among various researchers, we relied on peer debriefing. Three other researchers of the creative capital program were asked to review the results and coding of this thesis and to comment on weaknesses, clarity of findings and further

aspects of interest. Hence, this method ensured that the thesis has dependability across researchers, which in turn enhances the potential for dependability for consistency over time.

#### Confirmability

Confirmability relates to the degree of objectivity. While it is extremely complex to achieve full objectivity in qualitative business research as the researcher might influence the outcomes, e.g. asking biased questions, it is of utmost importance that personal values do not vanquish the process and findings of the research (Bryman & Bell, 2007). Those personal values, which are visible in the philosophical stance towards epistemological and ontological considerations, can cause bias in the research design. We therefore aimed at increasing the objectivity of this research by clearly outlining our personal values in relation to research stances, which should in turn eliminate bias and enhance confirmability.

## 4Research findings

This chapter presents the findings of the in-depth, semi-structured interviews by highlighting and discussing the segments which relate to the concepts of firm-level creative capital and the use and role of external labor. Due to the fact that the research is based on the design of a comparative multiple case study in order to explore differences between organizations with high creative capital and organizations with low creative capital, the structure of this chapter follows this approach by first describing the level of the firm-level creative capital as well as the role and use of external labor for each case individually before comparing across the cases. Based on the analysis of the creative capital of the case organizations, the companies were then divided into groups of low, medium and high creative capital in order to explore similarities and differences between these quotas in relation to the use and role of external labor.

### 4.1 Case descriptions

Before discussing the level of creative capital of the case organizations, we first want to recapitulate how we assumed the distribution of high versus low creative capital organizations based on pre-interview data such as company documents (websites, reports, etc). Figure 11 illustrates that we assumed high firm-level creative capital only for company A, B and F, while we expected company C,D,E, and H to have rather low creative capital (see chapter 3 for more information).

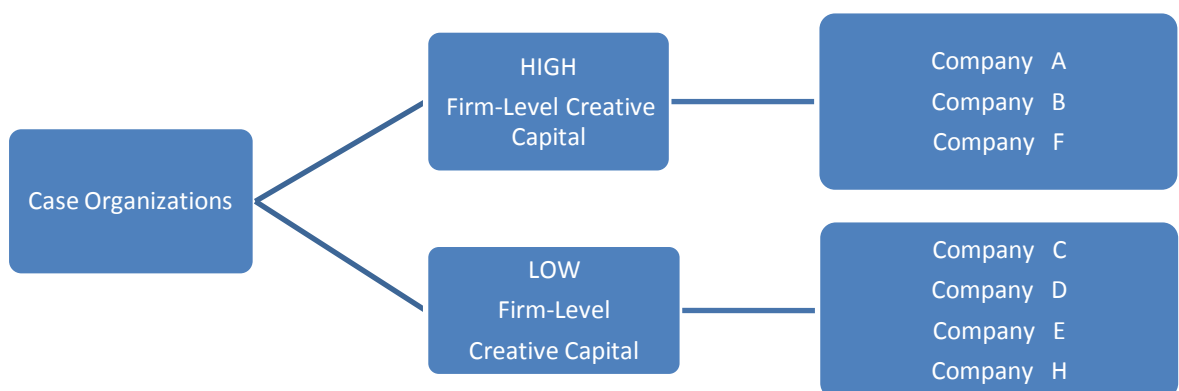


Figure 11 Assumed creative capital of case organizations

However, this information was only available through company documents as outlined in chapter 3. As we expect a certain amount of social desirability of these organizations, e.g. presenting themselves on their webpage to have more creative capital than actually present in order to be competitive, we conducted qualitative semi-structured interviews in order to explore characteristics of firm-level creative capital within these organizations. The findings of these interviews will now be discussed in turn.

In order to ensure objectivity, each case was discussed based on the developed operationalization of firm-level creative capital in conclusion with the creative capital research program. To further increase objective, significant interview quotes that reflected characteristics of firm-level creative capital within the companies were chosen in conclusion with the research program for the further analysis. The following case descriptions will therefore first describe the characteristics of creative capital within each case, followed by the use and role of external labor.

### **4.1.1 Analysis of Case Organization A**

As outlined in figure 11, we expected company A to have high firm-level creative capital as existing company documents indicated that the company actively tries to stimulate creativity and innovation within the company. However, when asked to review the descriptions of organizations with high and low creative capital, the interviewee chose description Y, indicating low creative capital. The main reason for choosing the description of low creative capital is that company A is focused on improved their existing product range than developing completely new products. Additionally, the interviewee mentioned that the internal relationships of the low creative capital description described the company best, as company A has a very strong internal culture as the following quote outlines.

*“The employees see each other really as a team. For example, one employee said he cannot let the other employees down.”*

The interviewee explained that a high level of trust exists between the employees, which is enhanced by low employee turnover rates that allow the employees to develop the trust. This high level of trust between employees also leads to high support between employees as the following quote outlines:

*“We have an older employee who is in a team with employees who have children and in one of the weeks it was necessary to make some extra hours, so the older employee said to the other employees that he will adjust his schedule as he does not have any children and is more flexible.”*

This quote indicates that the employees of organization A have a strong bonding social culture. However, differences can be found between the relationships the employees have with each versus the relationships between the employees and management. While both relationships are rather strong and

based on bonding social culture, the relationships between the employees seem to be rather informal, while the relationships of the employees to management is based on trust and delegated responsibility.

Relating external relationships, organization A has a strong external network, as the interviewee, which is the manager of the organization, outlined that he is very embedded within the network, e.g. participation in boards, network meetings and relationships to local universities, and tries to use this network to learn and improve the existing products and processes of the organization. These relationships are mostly informal and might range from daily to monthly contact points. As an illustration on how the organizations uses the network to improve the existing processes, the interviewee explained that company A was invited by a German car manufacturer to visit their production chain, which was used as an opportunity for organization A to recapitulate their own processes and detect room for improvement.

*“What you see is that companies are getting more specialized, you cannot do everything yourself. What you can do better is that you get partners around you. You need to have a good network around you, including specialists and who fit well with your company”*

While company A is focused on having a strong network, the relationships are rather fixed and limited to a certain amount of network partners in order to build trust to ensure the quality of the relationships. Thus, the ties among the network partners are very strong and tight. However, according to our understanding of creative capital, a wide network with weak network ties increases open innovation and creative capital. It allows cooperation among organizations that possess required KSAOs for certain projects, rather than being tied to fixed relationships. However, the interviewee explained that company A prefers to have a fixed number of relationships as they can ensure the quality of these relationships. Hence, while company A has external relationships to heterogeneous and diverse groups, the focus of these relationships is to build a strong culture of trust, similar to the internal culture.

*“I am really embedded in networks and I always try to see how the network can provide value. When you speak to a lot of people you get ideas. There you also find a partner who is open towards the idea. One who also thinks it is a good idea. There has to be a bond. You should be able to talk well to each other. You have to share the same vision, while you are doing something completely different.”*

Despite the fact that organization A is rather focused on improving existing products and processes, the company aims to think outside the box and to be more innovative. This process is mostly focused on creating new and improved ways of producing existing products, such as using robots for certain tasks. The interviewee explained that the company is building project groups once ideas have been generated.

*“When someone has an idea the organization creates a team to discuss the idea. The team constitutes the idea principal, managers, engineers and the employees who are affected by the implementation of that idea.”*

However, the organization has no formal processes set up to actively engage the creativity of the employees. Instead, a strong focus on idea generation is on the managerial level, as the manager uses network relationships to enhance their own creativity and apply these ideas to the organization, e.g. organizing classes with master students of local universities to enhance creativity. Hence, the creativity process is rather top-down. Based on this discussion, we argue that the organizational creative ability of company A is rather low and limited as it is mostly focused on the managerial level and no processes are set in place to actively stimulate the creativity of employees. Additionally, as pointed out, both internal and external relationships are based on bonding social capital with strong ties, which might also be a reason why the creativity of the employees as well the organizational creative ability is not as actively used.

Relating this discussion to the concept of firm-level creative capital, we argue based on the findings that the creative capital of company A is rather medium to low. Although company A promotes knowledge exchange, creativity stimulation is mostly focused on the managerial level and their relationships. Additionally, the organizational creative ability is low as the company does not make active use of the creativity of employees or their relationships and no formal procedures are in place to motivate the employees to be creative. Moreover, the relationships of company A are mostly focused on trust and bonding social capital by ensuring fixed relationships, which might limit the idea generation as loose network ties are needed to stimulate open innovation. Hence, our a priori assumption of company A’s creative capital based on company documents does not coincide with our research findings.

#### **The role and use of external labor of organization A**

Company A makes regular but limited use of external labor as it is mostly used in form of temporary employment modes for production activities during peak times. The main reason of using external labor for Company A is to ensure numerical flexibility, which in turn allows the company to save costs. The interviewee outlined that the use of these temporary employees does not necessarily save costs as the costs for external employees are almost twice the costs of their standard employees. Instead, company A saves costs due to reduced overhead costs and enhanced flexibility. Hence, company A mostly uses external employees to increase the organizational flexibility and prevent the risk of having to layoff standard employees during times of economic downturns.

While company A mostly uses external labor for production purposes, external employees are used for both core and non-core activities within these production functions. However, the interviewee explained that external labor is not used to enhance the creativity of the standard employees by having

a wider diversity of KSAOs in the company and to integrate the knowledge but solely for capacity reasons.

Company A cooperates with local organizations to lend available personnel during high season times, which saves further administrative costs of labor market intermediaries. According to the interviewee of company A, the company is operating in a highly competitive but stable market and therefore is mostly focused on saving costs while still offering high quality products. Hence, external labor in form of temporary employees supports the company to maintain competitiveness within this market.

When making use of labor market intermediaries, the interview results illustrated that the company prefers to work together with LMIs in form of Matchmaker or Administrator roles as outlined in the quote below:

*“We are contacted by a lot of temporary employment agencies. What we think is important is that we have a relationship with one or two temporary employment agencies. Eventually this leads to an intermediary at the temporary employment agency who knows exactly what we are looking for.”*

Hence, company A prefers to work with labor market intermediaries that are familiar with the needs of company A and can therefore support the organization in finding high quality applicants that lead to a good person-organization fit. Summing up, while organization A makes regular use of external labor, it is not used to actively enhance the creative capital of the organization as the company is not focused on stimulating the creativity of the employees through more diverse KSAOs of external employees. Instead, company A solely uses external labor to increase the organizational flexibility and allow managing capacity fluctuations.

### **4.1.2 Analysis of Case Organization B**

As figure 11 illustrates, we assumed case organization B to have high firm-level creative capital as we expected their employees to require high creative thinking skills as the company focus is on developing and designing new products for the medical sector. While company B is focusing on designing and developing their own products, they also operate as a contract development company, which means that products are developed, designed, tested and produced for the specific requirements of costumers.

*“We are company that is creating products that people rely on. Creating a product means looking at the needs in the market and trying to find a concept that meets the need and create a real demand and to fully develop that concept to a ready product and doing the manufacturing management and we look for commercial products to actually sell the product to the end-user.”*



When asked to decide between the company descriptions, indicating the level of firm-level creative capital, company B stated that they strongly agree with company X, which stood for high creative capital. Hence, based on the firm-level creative capital indicator, the interviewee of organization B answered in line with our assumed level of creative capital. In order to further follow up on this and ensure that the creative capital description indicator actually described the creative capital of organization B, follow up questions about the organization were asked about their competences, creativity and relationships.

*“We changed the last few years because when you innovate products in the market it’s also important to maintain products and to do more incremental innovation and improvement so I would say that our core competencies are on Y but we have realized that to have a structural success we also need to be more Y.”*

This statement outlines, that while a focus on exploration exists, company B also changed the focus to include an exploitation strategy by continually improving existing products, services and processes in order to maintain competitive. Nonetheless, in order to stay competitive and develop new products and processes, the interviewee outlined that creativity is the core activity of organization B.

*“The core thing we do in-house is being creative in finding needs as well as concepts to fit those needs and to see if we can develop a business model with this concept. And of course this is on the business level but mainly also on the product level.”*

Company B aims to be creative by detecting gaps in the market where customer needs are not satisfied yet. Based on these gaps, the company tries to develop products that could meet these needs and are then presented to the market after a trial period. Hence, while creativity is partly encouraged by customers who contract company B to develop products for a certain project or based on a certain idea, company B also uses out-of-the-box thinking to develop new concepts and products that could meet market needs where a gap currently exists. Hence, as creativity is crucial for success of company B, the company actively stimulates the creativity of employees. This is done by providing employees with challenging projects as well as increased responsibilities.

The company is broadly divided into two teams, the innovation team and production team. To specifically stimulate the employees of the innovation team, employees are given more freedom and project ownership, as this freedom allows for creativity and some of the best ideas therefore happen at the coffee machine when employees can be free. In turn, the technical employees are motivated by demanding work. Overall, the management creates a certain tension between those teams in order to enhance competition and creativity. While the company does not have formal organizational tools and structures in relation to the creativity enhancement, e.g. idea box, the company ensures that all employees have high creative thinking abilities during the recruitment process. According to the interviewee, *for innovation it helps if people are quick thinking and have a good level of thinking.*

Consequently, organization B does not necessarily stimulate creativity through formal procedures but rather by ensuring that employees already have a certain level of creative thinking skills and expertise. These skills can then be used to generate new ideas through creating an environment in the organization that allows for idea generation, learning and thinking outside the box. Hence, we argue that company B possesses strong organizational creative abilities.

*“The team comes up with ideas and possibilities for current projects. We want to try be growing business and to keep the gross margin we need to have new projects. So the team actually discusses those topics and people are really fond of participating in those teams in order to keep a common focus.”*

This quote shows that the creativity and motivation of the employees of company B is high. The interviewee states that the success of a product innovation is directly connected to the success of a team as only successful teams can lead to new ideas, which is why company B is focused on building successful teams. Thus, we argue that organization B has a certain amount of bonding social capital as a certain amount of trust is needed to allow for teamwork and idea sharing. However, company B also has strong bridging social capital as these teams are open to external ideas, which is supported by company B in creating a certain tension between the teams to stimulate competitiveness to achieve bridging social capital as these employees then use their network to get to solutions. This corresponds with our understanding of firm-level creative capital, as we argued that a certain level of bonding social capital needs to exist in order to make use of bridging social capital, which we expect to stimulate creativity. Additionally, the interviewee outlined that company B is striving to build teams that consists of employees with heterogeneous backgrounds, which also illustrates the bridging social capital of the organization as the interviewee outlined that the diversity of the team allows the employees to strengthen communication skills and learn from each other, which then can also be applied to external relationships.

Company B does not only make use of internal bridging social capital but also externally. A strong external network exists and is frequently made used to acquire KSAOs which are not already in the organization. As the interviewee states:

*“We don’t have the highest competences in every area. So if a project really has some challenging questions we would early involve external resources with higher competences. And we know that people in the company feel motivated if they can work with people with higher competences as they feel more secure then.”*

This quote shows that organization B does not only make use of external relationships to facilitate knowledge into the organization but also to motivate internal employees with this extra expertise and integrate the new knowledge into the company.

In order to choose appropriate network partners for these external relationships, company B requires that their engineers visit the partner, which enables company B to test a fit and already acquire external knowledge. These collaborations are based on certain KSAOs that are needed for that period and can therefore involve network partners such as universities, researcher institutes, partners, suppliers or customers. Thus, company B has a wide and strong external network by making use of strong bridging social capital.

*“In bringing a concept to the market you need specific know-how disciplines. So we like to work with an orchestra concept and we want to be the conductor. We have some key players in our team but will never be able to have every music instrument played by our team in-house, so we need to have the network of people that have specific knowledge, for example a specific software development. So we have this network and we try to maintain this network so we can use this network if we need to play a certain piece. That’s quite important for us.”*

This quote outlines that company B follows an open innovation approach as outlined by Pullen et al. (2012). The company has a wide, strong network with loose ties to network partners that can be used when needed.

Concluding, we argue that company B has strong creative ability that stimulates the creativity of employees. In turn, company B employs a heterogeneous workforce and makes use of internal bridging social capital in order to enhance creativity. Additionally, the company also has a certain level of bonding social capital that allows for the employees to have enough trust to share ideas and stimulate creativity. Moreover, company B has a wide external network with loose ties, which the company actively uses to enhance the creative capital of the company. Concluding, we argue that organization B has high firm-level creative capital.

### **The role and use of external labor of company B**

Company B makes very strong use of external labor when the company realizes that special competences or KSAOs, which are unavailable in the company, are needed.

*“And my experience is that you better scale up quickly to find the best competences because if the problem was not that big than you are safe quickly, but if the problem was big you have done the right scaling up at the right time”*

Hence, external labor in form of different labor contracts such as contractors, consultants, part-times and temporary employees, are used as soon as the need for special competences arises. The interviewee outlined that the main reason for using external labor extensively is that company B operates in a dynamic industry, which requires the constant development of new products, including products based on radical and leap innovation. Thus, the time it takes to get a new product to the

market is crucial in order to be market leader and successful. The interviewee therefore outlined that company B does not have the time to develop missing KSAOs and competences internally but that the decision to use externals is made quickly in order to maintain competitive.

*“When competences are missing we look internally if we can have people or if our people can grow, so that we develop people in a certain position. But developing somebody in a certain position is something you do more over like three years. And if you have a need for that competence on a short notice, we would use externals and try to find somebody in the network.”*

This quote illustrates that company B uses external labor to ensure that specific KSAOs are available to the company, which according to the interviewee allows the company to both save time as well as costs. Regarding the latter, the interviewee outlined that the increased costs of using external labor is relatively small in comparison to the time and knowledge gained as it would cost more if the company would decide to take over these tasks themselves.

The interviewee of company B addressed the issue of knowledge dissemination by explaining that it offers a risk to every company, but company B tries to eliminate that risk by not sharing all information with externals and using patents on their knowledge. Hence, company B rather has a business style approach to open innovation. Additionally, the interviewee points out that the benefits of using external labor, e.g. fast access to required KSAOs outweigh the risks of knowledge dissemination.

*“But then we also often try to have cooperations so we do take the job outside but we also discuss with people they can you learn from this cooperation by participating in the project.”*

This quote illustrates that company B not only uses external labor for specific tasks or projects but that they also aim at stimulating the creativity of the standard employees by having these employees make use of the diverse KSAOs while cooperating and taking part in those projects and tasks.

*“Yes a lot of time (it has happened that a consultant motivated internal people to be creative.) Especially younger people, who come in from University sometimes stay too long in the circle and get stuck. I think if you mature more in your job you will think “I’m doing this now for the third time and to find a solution I have to step out off the circle”. And what you see is that if you bring in outside competences, they can actually broaden the picture of our employees and they show different ways of how things can be done and that way you can come quickly to a solution and that actually kicks their thinking and our employees becoming more creative and think more about what they can do.”*

Company B therefore aims to use external labor to motivate the standard employees by increasing their creativity and knowledge as these external employees bring new, diverse KSAOs into the organization and make them feel secured.

Nonetheless, the interviewee did mention that it could possibly happen that employees feel threatened by external employees as they feel easily replaceable. Company B therefore tries to create a culture that stimulates employees to feel secured and open to work together with these externals in order to be able learn from these externals.

*“But for key tasks we try to have at least three persons who can do a job. And if the job is too small to have three people then we also try to use externals for it. So that’s for us a way to be lazy: if we can just try to find somebody outside and then that’s better than for us.”*

This quote illustrates that company B uses external labor for both core and non core activities, indicating that external labor in all functions might facilitate the creativity of standard employees.

Regarding the use of labor market intermediaries, company B outlined that they prefer to work with a detachment company that knows the organization in order to allow for a better match of the external employees to the organization, indicating the role of a matchmaker or administrator labor market intermediary.

### **4.1.3 Analysis of Case Organization C**

As illustrated in figure 11, we assumed that the level of creative capital for organization C would be rather low as the company is focused on improving the existing product line which includes tires for cars, bicycles and agriculture vehicles, and does not allow for endless product innovation but rather for improvements of processes or materials. Hence, we assumed that the organization does not require high firm-level creative capital to maintain competitiveness. When company C was asked to rate its fit to the descriptions of organizations with high and low organizational capital, the interviewee chose for description Y, indicating a low firm-level creative capital, which was in line with our assumption.

*“I think we are focusing more on our current products because we are big production plant, that is what we are doing mainly is producing the tires that we know. That is our main focus here on our site. New products are as important for us in order to stay competitive but a lot less people are focusing on that. So that is why I strongly agree with Company Y and more than with company X but without company X we cannot survive in the long term. Tires need to be continuously improved in order to meet the market needs. And if we don’t improve we place ourselves out of the market. So in that way it is very important for us to look at innovative ways to make tires and to improve tires. So that’s what we are continuously doing.”*

However, this quote illustrates that while the main focus of the company is on improving the existing product range, the company aims to be creative and to think outside the box by innovating the way these tires are produced, e.g. researching the feasibility of developing tire rubber with flowers. These projects of improvement are mostly operated by the R&D department. However, company C also

engages all employees to be creative by having an idea box and rewarding the employees with both monetary and non-monetary rewards.

*“We have an idea box, so that’s something we use to improve our production process. We also give our employees incentives to come up with ideas, for example we publish a personnel magazine every quarter and the best ideas are in there and it talks about the idea and the costs we saved because of that idea. We also have a meeting with all the idea winners and at our monthly meeting with the director of production and engineering, he will invite all the idea winners to take a picture, which we also publish in the personnel magazine.”*

Consequently, the company actively stimulates and facilitates creativity of the employees by demonstrating an innovation focus to the employees as these formal procedures are in place to motivate employees to be creative. Additionally, the organization also makes use of the creativity by creating interdisciplinary teams, who are in charge of further developing ideas into a concept. This indicates that company C has high organizational creative ability.

The example of the interdisciplinary teams also outlines that there is a high level of collaboration among departments within the organization. The interviewee further explained that the company culture is very open and informal as employees have a certain level of trust, which stimulates the employees to share ideas. Hence, the ability to internally work together with different departments is a sign of internal bridging social capital, which is in line with our definition of firm-level creative capital. This shows that company C matches our description of a high creative capital organization, as a certain level of trust and bonding exists in order to facilitate idea sharing among different levels of departments.

Additionally, company C also makes use of external relationships to advance idea generation and organizational learning by collaborating with partners such universities, suppliers, contractors and other partners. These relationships can either be formal through contracts or informal by attending conferences and making use of personal relationships. In managing these relationships, company C aims to work together with network partners that have heterogeneous KSAOs in comparison to their own KSAOs in order to learn from them.

*“So someone is coming from another company and brings in a lot of new fresh thoughts and then it’s always a big challenge to not let him drown in our way of working and our culture.”*

This quote illustrates that besides of the open culture that allows for knowledge sharing, it is still a challenge to motivate employees to make use of bridging social capital to continuously ensure creativity stimulation. Hence, while the aim is to have a heterogeneous workforce, the bonding social capital might lead to a socialization process of external contractors working in the company for a longer time, leading to a homogenous workforce. Nonetheless, the way company C motivates the employees and makes use of their creativity indicates high organizational creative ability.

Additionally, the interviewee outlined that a wide network with partners such as recruitment agencies exists, but the company prefers not to have fixed relationships with these partners. Company C decides which relationship has the most value to them depending on the situation. This is in line with Pullen et al.'s (2012) findings regarding open innovation as the company has a wide network but also lose ties within this network.

Concluding we argue that company C has medium to high firm-level creative capital as the organizational creative ability is very strong and the company actively motivates employees to be creative. Additionally, a certain level of trust exists between the employees, which the organization uses to stimulate bridging social capital by having relationships with partners that have diverse KSAOs. However, the current bonding social capital, coupled with the low turnover rates leading to many employees working in the company for over 20 years, complicates the bridging social capital process, which is why organization C has medium-to-high creative capital rather than high creative capital. The interview findings are therefore contradictory to our assumptions of the creative capital and the interviewee's choice of the description indicating low firm-level creative capital.

### **The role and use of external labor of company C**

Company C makes regular use of external labor in form of different employment forms, e.g. temporary workers, contract workers and consultants, for both core and non-core activities. Company C employs about 20% of their production employees externally in form of temporary employees.

*“In case our company revenues will go down it's quite easy to cut cost by using flexible labor. So in order to maintain flexibility you need flexible personnel. Not too much and not too little.”*

Hence, using temporary employees allows company C to stay flexibility and save costs as already discussed with the previous companies. Company C primarily uses temporary employees for non-core activities, while contract-based employees are used for both core and non-core activities. However, contract employees are always hired with the intention of a permanent standard employment if the contractual period indicates a good person-organization fit as the quote below outlines.

*“First of all it's a very good way to make sure that your new employees are from the standard quality that that you want.”*

Additionally, company C uses external employees if certain competences or KSAOs are not present in the organization and cannot be developed internally due to time or capacity issues. However, if company C perceives that KSAOs are already internally available or the circumstances allow for development from within, company C does not make use of external labor but rather uses their network to educate individuals.

*“Yes we do that for example within finance there are consultants. And also with engineers we will hire external specialists, so that does happen. But not a lot, well what is a lot. But within HR we feel that we have a lot of expertise within our own department, so it’s not necessary to use external HR consultant because we feel that that is not necessary as we have enough competences internal. But it is necessary for me to go outside and network with other colleagues in the field to make up my mind to see where we are at with HR in our company and to see where others are and to learn from others.”*

These external employees are then not only used to fulfill certain tasks and functions but to also integrate the knowledge into the organization so that the standard employees can learn from these external employees and enhance their own creativity. Additionally, the interviewee outlined that the use of external employees has positive benefits as it motivates internal employees as they feel supported by external employees rather than easily replaceable by them. The interviewee explained that the employees work at 110% and therefore feel supported by the external employees rather than threatened as they know that company C would only use external employees if the required resources are not available internally. Hence, employees of company C perceive external labor favorably and not as a risk to the psychological contract.

Additionally, the interviewee of company C outlined that the organization operates in a very competitive but rather stable market as their product range, tires, only allows for limited innovation. Hence, company C does not necessarily use external labor to stimulate the creativity of employees towards product innovation but rather process innovation. Consultants and specialists are therefore often used to improve existing technologies and procedures.

*“We have some older machines but you cannot really see that they were build in the 80s. They are still working but we changed those machines a lot to make them fit our needs. We had flown in specialist and engineers to build and change these machines for us. So that was a collaboration and you don’t find any of those machines anywhere.”*

Concluding, company C makes use of external labor in form of temporary employees, contract based employees and consultants for both core and non-core activities. However, if possible especially for core activities, company C aims at developing the needed KSAOs internally before using external labor. If external labor in form of contractual employees is used for core activities company C always hires these employees with intentions for long term employment in order to ensure that these new KSAOs stay within the organization. The company actively experiences that these external employees enhance the creativity of standard employees and lead to new ways of working and ideas. However, the interviewee explained that the company has a very strong bonding culture due to the high tenure and low turnover rate, which makes it difficult for these external KSAOs to enter the organization as the socialization process takes place quickly. Thus, as most employees are hired based on contract work with intentions for standard employment, it might lead to the development of homogenous



KSAOs, which then does not actively widen the diversity of KSAOs within the firm and is not in line with our proposition of creative capital.

Lastly, company C makes use of various LMIs in form of Matchmaker and Administrator role to allow for a good match between the employee and the firm. However, the interviewee explained that company C prefers to not solely rely on one agency but to decide from a broader range to find the best possibly candidate.

### **4.1.4 Analysis of Case Organization D**

Based on the document analysis, we assumed company D to have low creative capital as the industry the company operates in is rather stable and the focus of the organization is on the current product range. Hence, the need for creativity is limited.

Based on the question to describe which company description organization D fits best, the interviewee decided for company Y, indicating low firm-level creative capital. The interviewee explained that the reason for this is that the company is currently not making successful use of the creativity of employees, as outlined in the interview quote below:

*“It is mine opinion that we need to use the creativity of employees more, more than we used to do and then we will find a solution. We have made barely use of the creativity of employees on the work floor, but they are the ones that come up with ideas. I think if we use the creativity of our employees more than we currently have done, then the solutions will come by themselves.”*

Hence, the organization does not make active use of the creativity of the employees, which leads to low creative ability of company D. Nonetheless, if an employee comes up with an idea which adds value to the organization, the company will consider moving along further with the idea.

*“Our core business is decency screens, but he (i.e. the director) says that if someone comes up with an idea for a different area that it can be discussed.”*

The organization strives to motivate employees to come up with ideas by having an idea box and rewarding employees accordingly. However, the interviewee explained that it does not happen often that employees make use of the idea box or get rewarded.

*“When you talk about innovation then it stops there within our company because people think this is how we have been doing things for 25 years, so why should we worry about it and change things.”*

The preceding quote indicates that a reason for the low creativity of the employees could be the fact that most employees have been working at company D for many years and do not understand why the organization should change. The combination of high tenure and a low turnover rate has led the

employees to build a culture of trust and homogenous KSAOs, indicating very strong bonding social capital.

Additionally, company D does not only have high bonding social capital internally but also to external partners, as mostly all of their network partners have the same background and KSAOs. As an illustration, the company participates in the Dutch Inner Walls Industry Associations to discuss trends in the industry with competitors. The other members of the association are company D's competitors, which indicates external bonding relationships as they are from the same industry.

*“I see that when for example a competitor received a big assignment and that he cannot handle it themselves he will ask our company to do part of the production. So that is some sort of collaboration.”*

This quote illustrates strong bonding relationships because a high level of trust exists. Moreover, company D also organizes meetings for partners within the network such as architects, interior designers, contractors and government related individuals.

*“We are also the founders of the cradle to cradle café. There are a lot of architects, our R&D department, and interior designers who take seat in the cradle to cradle café, so all people who are involved in building movable decency screens. But also our completion takes part in the cafe (...) So it is very diverse (i.e. the companies that take seat in the cradle to cradle café) but we all have the common denominator decency screens and the expertise that contributes to that.”*

While these network partners have diverse KSAOs and different backgrounds, indicating external bridging relationships, common backgrounds and interests exists, indicating also bonding social capital. These relationships are mostly fixed and strong due to frequent interaction. However, company D also has rather loose relationships when competences are lacking internally. The interviewee explained that the manager of the company strives to widen the cooperation with network partners by discussing prices with various parties before deciding on one partner. Thus, company D is undergoing a change from fixed relationships to more loose relationships with a business approach, which is in line with our definition of creative capital.

Based on this analysis, we argue that company D has low creative capital as both internal and external relationships are mostly focused on bonding social capital and the company does not actively makes use of the creativity of their employees. Nonetheless, the company strives to widen their external network to make use of bridging social capital and allow for diverse KSAOs to enter the organization, which might have an impact on the creative capital in the future.

### **The role and use of external labor of company D**

Company D used to make extensive use of external labor in form of temporary employees for non-core activities to enhance the numerical flexibility during seasonal economical fluctuations.

*“During busy times we always had five or six temporary workers in the past. But from the beginning of 2013, we decided to no longer use external employees. We have a busy period right now but we decided to educate employees from our other divisions to take over the job.”*

However, Company D is undergoing a change of management in order to turn into a lean organization. Hence, the goal of company D is to develop internal employees to be able to carry out various positions in the organization. Employees can then be moved horizontally within the organization during high seasonal times, leading to a change from numerical flexibility to functional flexibility. The interviewee of organization D explains that this strategy is expected to save even more costs as no additionally external employees will be hired but all tasks can be fulfilled within the existing workforce.

However, in order to facilitate the change to a lean organization, the company employed an external consultant, indicating that if specific competences and KSAOs are needed, the company does use external employees. Nonetheless, the objective of company D for the future is to develop all KSAOs internally, so that no need for external knowledge is needed. Based on our understanding of creative capital, it might be that this leads to a homogenous workforce, which might make it difficult for new, diverse knowledge to enter the organization, and hence weaken the creative capital. Relating to the use of labor market intermediaries, it can be stated that company D is not using any kind of labor market intermediary anymore as the company no longer makes use of external labor.

### **4.1.5 Analysis of Case Organization E**

We assumed the firm-level creative capital of organization E to be rather low as the focus is on trading with products, which is why no need for high creativity exists. Based on the question which description company E fits best, the interviewee chose for description Y, indicating low creative capital, which was in line with our assumption of the organizations creative capital.

*“Of course you try to develop new concepts and ideas but I think the business that we are in, garden furniture, is more stable. So it's not a product in which you can innovate endlessly. That's why think it is organization Y and it's not an unstable environment. So I know it's organization Y.”*

Additionally, the interviewee explained that the company does not necessarily develop and design their products, garden furniture, but rather acquires owning rights of suppliers in far eastern countries. Thus, the core concept of the organization is not to produce and design garden furniture but trade it. The company did try to cooperate with a designer in the past to develop their own product range but it

was not successful as their price range was too high for their targeted customer segment. Besides of this project, the creativity process for the products does not happen within company E, but rather at the supplier level. Due to this, the interviewee stated that the current management is not focused on creativity and therefore does also not stimulate it in any way as the innovation focus is not in line with the management style of company E.

*“I think the main reason is the management style. I think our management is not really into innovation. It’s not in their minds and it’s also not the focus at this moment. And that’s why it is not actively stimulated”*

As creativity is not the focus of company E, the company does not motivate the employees in any way to be creative such as with help of an idea box or having a culture which stimulates creativity and rewarding employees for ideas. However, the interviewee pointed out that if somebody has a good idea and the management approves of it, the company might develop the idea further. The interviewee explained that it does not happen often that employees come up with ideas. This indicates that the creativity of company E is very low both on an organizational and individual level.

While the organization has strong, tight relationships to suppliers, external relationships to other network partners are rather limited. Moreover, these suppliers are mainly located in China and despite the fact that these relationships are fixed, the level of trust is rather low as company E employs quality engineers in China to check on these suppliers.

*“So we have a lot of fixed suppliers and I don’t know how many but we do have a lot of suppliers there. But with suppliers in China you really should have a good relationship and maintain that relationship.”*

So in order to maintain these relationships, the company uses internal employees to check the quality of these suppliers. Thus, while the company does not bridging social capital, trust is low and the ties are rather loose. The same holds true to other examples of relationships. While the company is trying to be creative by collaborating with an organization to research new materials, the interviewee outlined that it is still in the testing phase and if the product is successful the company will try to get a patent on it. This shows that trust to external partners is low, which does not allow to build a common bond or allow for idea sharing by making use of bridging social capital.

Regarding internal relationships, a strong bonding social capital culture seems to be present as employees have a high tenure and a common level of trust. Additionally, when hiring new employees, the company strives to search for applicants with the same background and skills as the currently employed workforce. This indicates that the workforce is rather homogenous with strong bonding social capital and low bridging social capital.

Concluding, we argue that company E has very low creative capital as the company does not make use of the creativity of employees. Additionally, company E has strong, tight external

relationships, which are based on low trust and not actively used for creativity. Thus, the interview findings indicate that the company scores low on every dimension of our understanding of firm-level creative capital, which is in line with our pre-interview assumption as well as their own choice of the low creative capital indicator description.

#### **The role and use of external labor of company E**

Company E makes rather limited use of external labor as it is mostly used in form of temporary employees for non-core activities during seasonal periods that require an increase in personnel capacities.

*“We are very seasonal business, so from February until June or July we have some flexible employees mainly in the warehouse to get all of our products to our customers.”*

This quote illustrates that the company mostly makes use of external labor for warehouse activities, which are non-core activities for seasonal labor fluctuations. This enables the company to save costs and maintain flexibility as these temporary employees can be easily hired and terminated without repercussions.

*“Not so much (do we use external labor besides of the warehouse). How far does it go? I mean most of the people that work here do a lot and of course we sometimes need legal advice or technical advice but it’s not that we hire those people it’s just a cooperation.”*

Hence, the company does not actively make use of other external labor types and does not use external labor for core activities. The interviewee explained that the main reason for this is that the tenure of employees is high while employee turnover low, so that a lot of the knowledge already exists internally. Thus, the interviewee of company E explained that the company does not require external employees for specific competences or KSAOs. Nevertheless, in the case that company E does need special knowledge, e.g. legal advice or an IT programmer for the company website, the company would rather externalize the work than hire external employees. This means that these tasks are not carried out within the organization so that standard employees cannot make use of the KSAOs of these externalized employees.

*“I could imagine that sometimes of course when you do something you do it a couple times and maybe it’s not that different than the times before and then of course you can do it yourself. But normally I would say we still go get advised.”*

This quote further illustrates that company E not only externalizes these tasks but also does not actively support that these diverse KSAOs enter the organization so that standard employees can make use of them. Thus, company E does not make use of external labor to enhance the organizational creativity as we proposed in our theoretical foundation.

*“I think the main reason is the management style. I think they are not really into this. So it’s not that they stimulated actively. It’s not in their minds and it’s also not in the focus at this moment.”*

This quote of the interviewee outlines that the company generally does not make active use of the creativity of the standard employees as this is not the focus and style of the management of company E. Hence, company E also does not try to motivate employees to make use of the diverse KSAOs of external employees.

If the company does make use of external labor in form of these temporary employees for non-core activities, the company mostly uses an existing relationship to a government program that supports applicants who have been out of work to get re-employed. However, this agreement and relationship does not support the organization in necessarily finding a good match but rather just in providing applicants. Hence, company E mostly uses labor market intermediaries in form of Information Providers. A labor market intermediary in form of a matchmaker might be used if top management functions are recruited but not to acquire external labor. Hence, company E tends to make use of Information Provider’s in the form of government programs as well as further job boards.

### **4.1.6 Analysis of Case Organization F**

We expected company F to have high creative capital based on the company document analysis previous to the interview. However when company F was asked to describe their creative capital based on our creative capital indicator, the interviewee could at first not decide between the two descriptions. Finally, company Y was chosen, indicating low creative capital as the current focus of the organization is on incremental innovation on existing products rather than developing completely new products, which therefore does not require high creativity. Nonetheless, radical innovation regarding new products has happened in the past for company F as the following quote outlines:

*“We recently developed new products and we continuously improve our own old products. But if I have to make a choice and when talking about the current situation, then I would choose Y.”*

In order to stimulate the creativity of employees, the company tries to create an innovation focused culture rather than having formal procedures such as an idea box. However, the company does not actively motivate the employees to be creative but rather expects the employees to motivate themselves by reading up on articles in the industry, talking to other people and attending conferences. Once an employee has an idea, the company then develops the idea further into praxis. Employees are especially encouraged to visit conferences as it enables the employees to get stimulated by diverse KSAOs.

*“People are mostly motivated by themselves to go to conferences. When people start working here we ask them, dependent on their function, if they would like to go and network.”*

In order to be able for employees to share their ideas with the organization, company D has a strong bonding culture that allows for trust between employees as the following quote outlines:

*“We have a yearly trip for female employees, or employees will also meet up in private for a movie or dinner, those things happen spontaneously. Every year there is a barbecue organized by one of the employees in his backyard, and all colleagues including families are invited.”*

Company F has a very strong internal culture with high levels of trust and emotional closeness. The interviewee explained that the employees therefore feel ownership and responsibility for the company and consider themselves as a certain group of people with similar characteristics as the following quote outlines:

*“Employees of company F are a certain type of person; you can say this person is a real company F-ler.”*

However, also a certain level of bridging social capital exists within the organization as interdisciplinary teams are developed to test the feasibility of ideas. As the employees of these teams belong to different departments in the company, bridging social capital is used.

Additionally, not only internal relationships are strong and based on bonding capital but also external ones. As an illustration, company F has a fixed relationship with a temporary work agency as it allows for trust and this in turn allows the agency to propose temporary employees which fit into the culture of company F. Besides these external bonding relationships, company D also makes strong use of external bridging relationships for incremental innovation. For example, managers use the contact with customers to learn how improvements could be done. Additionally, experts are contacted to discuss ideas for improvements and the company also cooperates with other organizations in the network that have diverse KSAOs to generate creative ideas such as universities and research institutes.

This analysis shows that company F makes use of the creative ability of their employees by nurturing a culture focused on creativity rather than setting formal procedures. This leads to high employee creativity and high organizational creative ability. Additionally, while a strong internal bonding culture exists, the company makes use of both external and internal bridging social capital to enhance incremental innovation. Concluding, we argue that company F has high creative capital as they match our understanding of creative capital with their bridging and bonding social capital but can make even more use of their employees' creativity by having more loose relationships in their network to allow for diverse knowledge and ideas to enter the organization.

### **The role and use of external labor of company F**

Company F makes regular but limited use of external labor. If the company makes use of external labor it is mostly for capacity reasons rather than to acquire special competences or KSAOs. Hence, company F uses temporary employees for non-core activities. The interviewee explained that the main reason for this is because the costs as using highly qualified external employees, e.g. consultants, is too great and would require extensive training due to the fact that the core activities of company F are rather complex.

*“Indeed at peak times we just need some extra hands. Someone, who can do simple work and who does not need a lot of guidance. But we only do that for simple tasks, so that the other production employees can focus on their job. So, no (i.e. external workers are not used for core activities).”*

This quote outlines, that company F uses mostly temporary employees for non-core activities in order to maintain flexible and save costs. However, company F might use external labor for core activities in form of contract-based employment with the intention of standard employment. This allows to test the person-organization fit before offering standard employment as the following quote outlines:

*“People from the temporary work agency always get a contract for one year just to see how it works. Those persons are temps, they do the core activities but are hired when everything goes fine and get a fixed contract.”*

The interviewee of company F explained that the company is operating in a very competitive but rather stable market as products are used for several years, which therefore does not require for constant innovation and leap innovations as we assumed it to be. Therefore, the company rather focuses on developing KSAOs internally rather than using external labor.

Company F makes use of labor market intermediaries in form of Matchmakers or Administrators as the company uses recruitment agencies that are specialized on the requirements of company F. The interviewee pointed out that this has allowed for a better match with the external employees.

### **4.1.7 Analysis of Case Organization G**

Based on the document analysis, we expected company G to have low creative capital. However, during the interview, the interviewee explained that the company is currently undergoing a change of management as the parent company of company G is striving to change the focus of the company to be more creative. The interviewee therefore stated that description Y, which indicates low firm-level creative capital, currently describes them best but that they are striving to match the description of company X, indicating high firm-level creative capital. The interviewee outlined that it is difficult for



an organization that has been established for a long period to think outside the box, which is why the change of management is occurring.

*“We don’t have an R&D department that comes up with completely new ideas and then introduces these products. Innovation is driven out of a product committee but then most of the time the salespeople have the lead in deciding if it’s feasible to enter into a market.”*

The innovation process of company G is market driven in order to meet explicit needs of customers rather than company-driven. Hence, the focus of the organization is not so much to increase the creativity of employees to generate completely new ideas for products, but rather for employees to share their knowledge and ideas so that products and process can be improved. The interviewee stated that this process is crucial for the organization as they are not able to compete in the market with prices but only with added value through increased customer service and knowledge development. In order to enhance the creativity, the company tried to motivate the employees by using an idea box in the past, but realized that it did not lead to success. Hence, the company changed its strategy by trying to have the floor managers communicate the new focus on innovation and reward employees accordingly. While an individual reward for creativity has been given in the past, the company has now changed the system to a group reward.

*“So we do this (i.e. group reward) to get people more motivated to share ideas because sometimes people have something in mind but they don’t know how exactly to formulate it and then they cannot express their idea. And just by talking to their fellow colleagues he might overcome that barrier and work on it as a group.”*

This shows that company G motivates employees to make use of bridging social capital by rewarding groups rather than individuals, leading to employees sharing and enhancing each other’s creativity. Additionally, once employees generate ideas, the company then uses a project group to further analyze the idea and translate it into praxis.

*“We have a product development group and we have a meeting once a month and in this group everybody can bring in proposals for new ideas. We discuss ideas in this group and if there’s enough interest in this group then we will start an examination. So what we will do is that we further investigate the market and the potential and from there we go and build a business case to see if it is worthwhile to develop the product.”*

However, the employee who is the owner of the idea is not further included in this team, which could be de-motivating as the employees may feel that they cannot have ownership of the idea. Nonetheless, making use of groups to enhance creativity is in line with our understanding of creative capital and

due to the fact that the organization actively tries to motivate employees not only on an individual level but also on the group level shows that company G has a high creative ability.

When assessing the internal relationships of the company, mostly bonding social capital exists. Many employees have been working in the company for a long time and feel ownership of the company because most employees grew with the company from being a family business to part of a large international business. While the interviewee stated that this led to the advantage that a lot of knowledge is in-house, it also led to the formation of a homogenous workforce. Hence, while the level of trust to share ideas is sufficient, the interviewee explained that group idea generation is currently not working, which may be due to the limited bridging social capital and homogenous workforce.

*“Yes (i.e. we are looking for people with the same background, same knowledge and skills).”*

Company G not only has a homogenous workforce due to low employee turnover, but also is homogenous because new recruits are hired based on the same KSAOs as the company already possess. The internal relationships are therefore an indicator for low creative capital due to the strong bonding culture, coupled with a homogenous workforce. This does not allow for the stimulation of creativity and is therefore contradictory to our understanding of relationship dimension of firm-level creative capital. While the company actively stimulates the creativity of employees and makes use of their creativity, the strong bonding internal relationships limit the process and lead to low creative capital outcome. Nonetheless, the interviewee stated that the company is aware that they need a more diverse workforce that is also able to share ideas with individuals that are external to the organization. However, as company G wants to avoid to lay off personnel to enable this change, the company is rather focused on changing the positions of the employees internally in order to broaden their KSAOs.

Regarding external relationships, the interviewee stated that company G had not participated in any kind of external network as there was no need for innovation in the past and the required knowledge was already in-house.

*“Yes I have to say that our networks externally are not that thick and what you see is that we have been a company that has been mostly focused internally. We have a lot of knowledge in-house but we don't use outside networks, for example the University of Twente we hardly ever contacted them to do some innovation or research.”*

Hence, organization G used to have a very weak external network but they realized that in order to follow an innovation strategy, an external network is crucial for knowledge generation. As a result, company G started cooperation with a local college and further network partners. Hence, while the network is still weak, the company is striving to build up a wider network. While doing so, it will be crucial for the organization to build up a network with loose, flexible relationships rather than fixed, tight relationships as these might again lead to homogenous relationships.

Based on this discussion, we argue that company G has medium to low creative capital. While it used to be low creative capital in the past as creativity was not stimulated, a strong bonding culture existed and no external network was present, the company is currently striving to change their focus to creativity. Company G therewith already achieved a change to high organizational creative ability, which now need to be used more efficiently by ensuring a certain amount of internal bridging social capital and a heterogeneous workforce as well as a wider, loose network. If the company manages to develop in this direction, it might be that company G could have high creative capital in the future.

### **The role and use of external labor for company G**

Company G makes regular use of external labor for different kind of positions and tasks as the following quote illustrates:

*“If you look at the production we use external labor every day because we have a certain amount of fixed employees and based on the market demand we will add or decrease our production force. In the other departments we have a lot of people based on a one year contract. So basically when we hire somebody new we always start with a one-year contract in 90% of the cases and then if somebody performs well the intention is to extend the contract to make it a fixed contract. We also use consultants now and then, not a lot. And part-time we also use a lot for example in my sales department; we have a lot of part-timers.”*

Hence, company G uses different forms of external labor for both core and non-core activities for various reasons. The use of temporary employees for production enhances the numerical flexibility for high production period. These temporary employees allow to save costs as company G does not need to hire standard employees, but can base the use of external labor in form of temporary employees on their production rates.

*“It’s a part of flexibility that you don’t need to have a department of let’s say it’s 12 or 15 people. And most of them these externals are going to take over part of the normal job of our standard employees and then the internal employee takes the lead of the project.”*

These temporary work arrangements are mostly for capacity reasons and are used for non-core activities. While company G does use external labor for core activities it is more in form of contract work or consultants. Contract-based employees are used for core activities when the intention for full-time employment exists in order to test the person-organization fit within this contracted period. However, the interviewee outlined that company G has a strong internal bonding culture, which might make it difficult for this new knowledge to actually enter the organization as the external employee might get socialized into the existing culture quickly, leading to a homogenous workforce.

Moreover, company G also makes use of consultants for core activities in form of advising positions and to implement new strategies. The reason for using consultants for these core activities

and projects is to ensure that specific competences and KSAOs are available to the organization that are required to manage these tasks. The interviewee argued that company G prefers to hire somebody externally with a proven track record in order to make sure they are implemented successfully.

*“What we are really trying to maintain is that the knowledge that builds up is staying in the company, so it’s a mix. Sometimes we need people that are really specifically skilled and then you basically give them a very important role in the project but it’s also that they take over the lower part of the job that another guy does.”*

This quote illustrates that company G is not just trying to use external labor for flexibility and knowledge reasons but also for the external knowledge to enter the organization and enhance the creativity of their standard employees.

*“If you look at what this consultant is doing it is more company broad. She is looking at the processes and how to improve these process and we see some good results because they are new ideas and new ways of working. And there we choose to do small projects by external people because sometimes they need to clean the way for the next one to come in. So then we use those people to set the record straight and to work out the right process and then pave the way for somebody else to finish the job.”*

This quote outlines that in addition to the specific KSAOs of consultants entering the organization, public knowledge might also enter the organization as consultants tend to work for various organizations in similar industries. This new knowledge increases the diversity of KSAOs, which the company then uses to enhance the creative ability and to allow integrating knowledge into the firm. Summing up, company G uses external labor for various reasons, including increased flexibility, decreased costs, increased accessibility of special KSAOs as well as the integration of new knowledge into the firm.

In order to make use of these external labor arrangements, the company is in contact with different kind of LMIs as outlined in the following quote:

*“Some of the agencies also deliver very good quality employees, for example for the production they have the experience for that. And we even have an in-house agency, in-person is doing that for us and that’s working out fine to what I’m experiencing. But on the other hand I think that each individual job has certain requirements and not every standard recruitment agency can fulfill that in all cases. So I personally believe in using more specialized agencies that have the experience and network in one field because then you can choose from the network and choose the best and not just from the general labor market. So I think for some areas it’s going very well and you see that those general bureaus most of the time have candidates that are fitting well for certain jobs but in other job areas in my opinion it would be more effective to have specialized partners and who have the experience in bringing in these kind of guys.”*

Hence, company G uses LMIs in form of Matchmaker and Administrator labor market intermediaries as it allows for a better fit between the organization and the external employee. However, the interviewee explained that the more specialized and knowledgeable the LMI is about the company and the industry requirements, the better the match with the external employee. This means that standard recruitment agencies might be sufficient to generate a good fit for non-core production workers while specialized recruitment agencies lead to a better fit for core functions for company G.

### **4.1.8 Analysis of Case Organization H**

We assumed the creative capital of company H to be quite low; which was in line with the interviewee as he chose for company description Y, indicating low creative capital. The focus of company H is on improving the same product range rather than thinking outside the box and the relationships of company H are strongly internally focused. However, the interviewee also outlined that the company is undergoing a change of management to turn into a lean organization and being more creative in order to maintain competitiveness.

*“Since last year we got one creative guy here because we want to move the business to different customers. We don’t want to compete on price, we want to be special and be in an advising position.”*

Company H is starting to explore new markets and products, which was partly an idea of a collaboration of a former employee together with a student from a local college, indicating bridging social capital. One example of a new product line is the packaging for the make-up and personal care industry, however the interviewee explained that they do not consider it as a new product as it still requires the same processes and materials and hence is the old product in a new shape.

*“Same products and service. Yes. So if you see that as a different product than it is more the description of company X. But for me it is cardboard, you print it; you make decreasing lines and you glue it. You could also produce it for the shoe market.”*

Organization H does not necessarily focus on developing completely new products, but rather finding innovative ways to create a better customer service which adds value. As an example, company H is part of an international packaging group and instead of customers having to deal with three organizations within the group spread over Europe, the company is striving to extend their KSAOs in order to offer further services in-house.

In order to stimulate the creativity of the employees to come up with ideas to save costs and add value, the company strives to create a culture which actively facilitates creativity. In order to create this culture, the company therefore organizes meetings with all employees to discuss improvements and outlines the costs these improvements have saved.

*“It should be a culture, not a project. Every two month we share with our people our continued improvement program. Last year it was nearly 8.000 euro savings. But we show that to everybody, every month: Those are the savings. So that they have an idea what the improvements were.”*

Company H also motivates employees to be creative by rewarding them in terms of both monetary and non-monetary rewards. An example of non-monetary rewards is the participation of the employee in the project group, which is responsible for the execution of the idea.

*“If somebody from the production floor has an idea it is also a reward to take him in the project group, not to work on the machine. He doesn't have to work on the floor, just here in this room and to make a presentation for everyone.”*

Company H uses the creativity of their employees by allowing them to have project ownership and increased responsibilities, which serves as a motivation to generate further ideas. Additionally, the employees that came up with ideas are also being honored in these company-wide meetings when improvements are discussed. Thus, the company makes active use of the creative abilities of their employees as they actively motivate them and have set procedures and regulations to do so, indicating high creative ability of company H. However, the interviewee explicitly outlined that they do not make use of an idea box.

*“I had a bad experience with an idea box in my previous company. We paid 20% of the improvement/the cost savings of the project to the employee with the idea. But once one guy had an idea and the shift leader put it forward as his idea. He achieved nearly 11.000 Euros. After that there was a war in this department.”*

This quote shows that company H actively strives to motivate the employees to be creative, while also ensuring a level of trust and fairness amongst employees by having formal procedures set in place. This discussion indicates that organization H has high creative capital as they successfully make use of the aggregated creativity of their employees.

Relating the relationships of the company, the interviewee outlined that company H is mostly internally focused. While company H does collaborate with other organizations within their network for idea generation, these organizations are all part of the group they belong to.

*“This also has to do with the network in the company. For example if you take L'Oreal. Our plant in Chicago is a supplier for L'Oreal in the States. We want to start to produce the same products over here. So training, quality issues and quality agreements. We are sharing the ideas together.”*

In order to share these ideas between the group, the company has monthly online meetings with other organizations of the group within Europe to discuss how improvements were made within the company and which effects these improvements had. While the network of the company is therefore very wide, it is mostly internal to company H as it consists of the group member organizations. These relationships are frequent and fixed. Additionally, as these companies belong to the same group and are based on the same structures, the relationships are rather based on bonding social capital due to the heterogeneity of the relationships.

Company H realized that to create a wider external focus is vital and is therefore now striving to change this internal focus. One example for this is the collaboration with a local college to allow students to execute research programs in the company. Additionally, company H also visits customers to stimulate discussion on how products and processes could be improved

*“Sometimes (we also get ideas from the market). They ask us for ideas and developments. Normally we create the questions for the costumers: Ok this is our product, how should we go to the market with our product. Normally we make 4 or 5 proposals to start the discussion with the costumer.”*

Nonetheless, the uses of these external relationships are still limited. This discussion indicates that company H has medium creative capital. The organizational creative ability is very high and the company is successful in finding creative ways to extend their product range and services to maintain competitive in a decreasing industry. However, the relationships are mostly internally focused by having fixed and frequent partners within their group, indicating strong bonding social capital. Thus, if the organization could change their internal and external relationships with a focus on a looser network, the organization might increase their creative capital.

#### **The role and use of external labor for company H**

Company H used to make extensive use of external labor in form of temporary workers for capacity reasons during high seasonal periods. The interviewee of company H explained that the company used to employ a certain labor market intermediary that was able to generate a profit of about 2 million euro by providing temporary employees to company H but it has decreased to about 200.000 Euro over the past years, indicating the decrease in use of external labor. The reason for this is that the company is operating in a decreasing industry and had to layoff standard employees in the past years. Hence, while company H still makes use of temporary employees, it is rather limited.

*“For production we get the temps in, after one hour training and a buddy for two days they can work very independent and can start working directly. To have extra people for marketing and areas like this it cost much more and you need a longer training period. And what is the pay-back of that? This is always difficult. A temp on the machine is much easier to save cost and see the pay-back.”*

This quote illustrates that company H mainly uses external labor for non-core activities in order to increase numerical flexibility and decrease costs. The company is currently undergoing a change of management to become a lean company with a strategic focus on costs savings. Hence, company H also makes use of contract workers as it allows more savings to hire these temps directly as contractors than hiring through the temporary labor agency and having to pay overhead costs. However, most of these contractors have been employed before as temporary employees. Hence, the employees are already familiar with the company and might have already established bonding social capital with the standard employees, which might limit the flow of external knowledge into the organization.

*“Temporary employees are easier because if they don’t fit we can call the same day and say that we want somebody else for tomorrow. With a contract for a half year that would be more difficult in the Netherlands to stop the contract.”*

Additionally, the company balances the amount of temporary workers and contract workers rather than only employing contract workers in order to reduce risks of terminating contract workers. In order to ensure a good fit with temporary workers company H makes use of a detachment company in the role of an administrator LMI.

*“We only use in-house LMIs because Randstad made a contract about it and we are not supposed to use others. But Randstad also did some improvements (...)Randstad made a scan to make the use of external labor more efficient..”*

Hence, the reason for using an Administrator LMI is partly because they are committed to them through a contract as well as the added value the LMI can provide as the extensive knowledge about the company can lead to a better fit between the organization and the external employee. In order to circumvent the costs related to the contract with the LMI, company H also uses external labor in form of contract work as the fit of the external employee is already guaranteed.

The interviewee explained that the main reason for using these external employees is based on the costs strategy as it enables company H to save costs and maintain flexible. It does not happen often that these external employees enhance the creativity of standard employees through diverse KSAOs as the interviewee explained that these workers are usually low-educated and not interested in stimulating innovation. However, the interviewee also pointed out that it could be that external employees do have great ideas but do not know how to communicate them to superiors as the following quote explains:

*“But when the temp is coming in and says to the operator: You have been doing it wrong for the last 10 years; he will be getting killed the day after. It is difficult for the temps to find somebody to share their ideas with.”*



The analysis of the creative capital of company H indicates that the company has a very strong bonding culture, which makes it difficult for external knowledge to enter the organization. Additionally, the interviewee pointed out that the external employees are mostly hired with the same KSAOs as the standard employees, leading to homogeneity of the KSAOs. Additionally, due to the fact that the contract workers have been employed before as temporary employees, it is to be expected that a bonding relationship with the existing workforce exists, which might increase through the socialization process that the contract worker is expected to undergo due to the longer period of employment. Hence, these reasons might explain why company H does not use external employees for the enhancement of KSAOs and to enhance the organizational creative ability but rather solely for costs reasons. Additionally, the external employees have mostly the same KSAOs as the internal employees, which might lead to a homogenous workforce.

### **4.2 Cross comparison of firm-level creative capital**

The analysis of the creative capital of the case organization indicated that creative capital does exist at the organizational level and has also been acknowledged to be of high importance by the respondents. However, the analysis showed that some organizations, e.g. company C and H, scored differently than we expected prior to the interviews. Additionally, while the interviews illustrated that the concept of creative capital is present within organizations, it cannot be understood as universal, meaning that an organization can only have either high or low firm-level creative capital. Our exploration of the creative capital of the case organizations indicated that companies can score high on some dimensions of our understanding of creative capital, while other dimensions might be low, indicating a progress to a rather medium creative capital and explaining why some organizations might have scored differently than we expected. We therefore cross compared the cases and positioned them in relation to each other (see figure 12) before being able to group them in the quotas of low, medium and high creative capital.

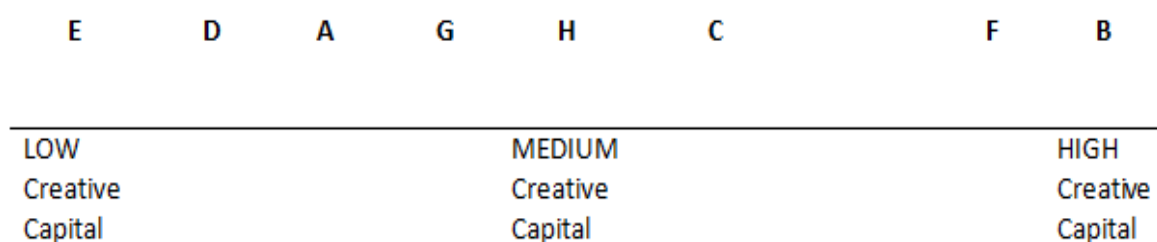
Figure 12 shows that we placed company B at the high end of firm-level creative capital, indicating that in comparison to the other cases the company had the highest creative capital. The reason for this is that the analysis outlined that the company scored high on all of the dimensions of firm-level creative capital. Based on the cross-comparison, we then decided to place company F as the second highest creative capital organization, close to organization B. The reasons for positioning company F lower than company B is that the company does not use their external network as extensively as company B does. Additionally, the strong internal bonding culture and emotional closeness of company F allows for trust to share ideas but also may complicate it for new, external ideas to enter the organization. In contrast, company B is more focused on creating a culture that allows for new ideas to enter the organization.

Company C is placed between medium and high creative capital but more towards the medium end for various reasons. First, company C actively makes use of the creative ability of employees and

offers various opportunities for these employees to communicate ideas and offers rewards for good ideas. Additionally, the company has a strong, but loose external network that is extensively used for idea generation. However, the company also has a very tight, bonding external relationships as well as a very strong internal bonding culture that makes it difficult for ideas from external partners to enter the organization. Nonetheless, the very high organizational creative ability and existing network led to the decision to place the company as third highest creative capital organization.

Next, we positioned company H as medium creative capital company and therewith on the middle of firm-level creative capital scale. The reason for this is that company H actively enhances the creativity of their employees but only uses tight relationships that are internal to the organization as the partners are owned by the same group. Hence, in comparison to company C, F, and B the external, bridging relationships are very limited. Compared to company H, the analysis of company G showed similar results as the internal creativity of employees is used but the external network is limited. The reason why we decided to position company G lower than company H is due to the fact that company H makes more use of their internal relationships. Both organizations are owned by an international parent company, but only company H actively uses these internal group members to share ideas and stimulate the creative capital.

The next company, company A, uses external bridging relationships but the majority of the relationships are based on fixed, bonding relationships, which is not in line with our understanding of creative capital. Additionally, the creative ability of the organization is mostly on managerial level. This indicates that company A should be positioned between medium and low creative capital. In comparison to this, we argue that company D should be placed below company A as the creative ability of the company is low. Moreover, the relationships are also mostly based on bonding relationships which are not actively used for idea generation.



**Figure 12 Positioning of case organizations on creative capital scale**

Lastly, we argue that company E scores the lowest as the company does not stimulate the creativity of their employees in any way and the interviewee also outlined that this is not the focus of the management. Additionally, the external relationships are fixed and tight and not used for creativity stimulation. Hence, we argue that the company scores low on nearly every dimension of our definition of firm-level creative capital and should therefore be placed at the low end of firm-level creative capital. To now detect patterns across cases in relation to the use and role of external labor, we group organizations E, and D as low creative capital organizations, company A, G, H and C as medium creative capital organizations and company F and B as high creative capital organizations as illustrated in figure 13.

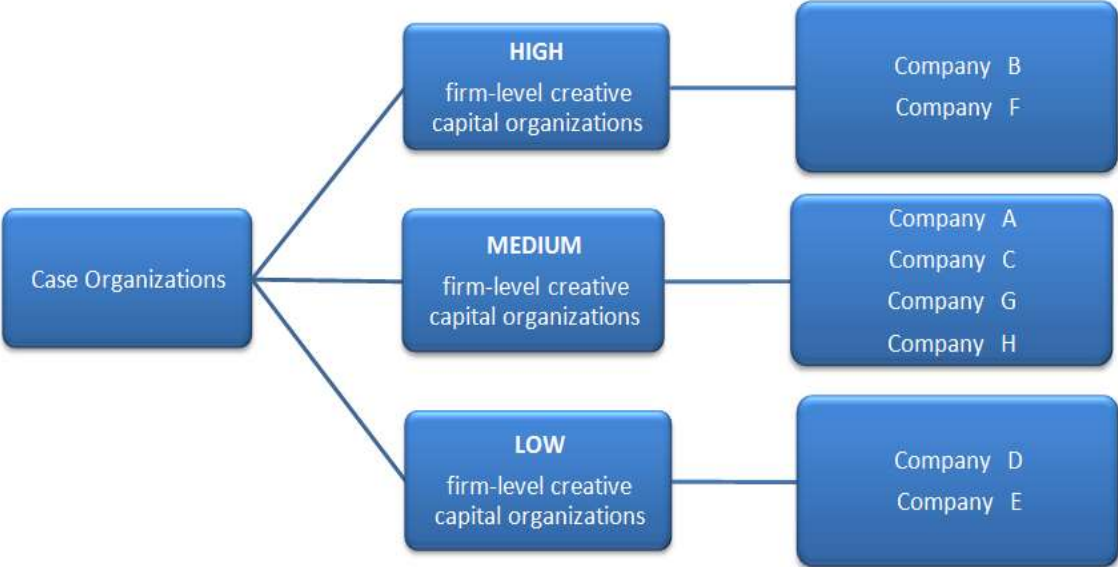


Figure 13 Actual Creative Capital Quotas based on the interview analysis

### 4.3 Cross comparison of the role and use of external labor

This subchapter will discuss similarities and patterns in the use and role of external labor within the groups of low, medium and high firm-level creative capital, leading to a comparison of the role and use of external labor between the firm-level creative capital groups.

#### External labor for low creative capital organizations

Based on the exploration of the role and use of external labor for the low creative capital organizations, which included company D and company E, specific patterns can be detected. First, both company D and company E used to make very limited use of external labor. However, company D is no longer making use of external labor in order to save costs by training standard employees cross functional KSAOs, so that these employees can be moved around in times of high operations. Nonetheless, when company D was using external labor, the role and use was very similar to company E. The main reason for using external labor of both organizations was to increase numerical flexibility in order to manage capacities during high seasonal periods. Second, both companies tend to mainly use external labor for non-core activities and are not trying to actively enhance the creativity of the standard employees by using these external employees. Third, both organizations explained that they operate in very competitive, but rather stable markets that do not require high creativity, which is why they mostly used external labor for flexibility and capacity reasons. Both organizations therefore explained that the companies are focused on reducing costs to be a lean organization. Thus, the strength and means of using external labor is similar between company D and company E. A further similarity between the companies is that both have high employee tenure and a low employee turnover rate, leading to a very strong bonding capital between the employees. The interviewees therefore pointed out that it is difficult for the KSAOs of external employees to enter the organization. The table below illustrates the cross comparison of company D and company E.

**Table 5 The role and use of external labor of low creative capital organizations**

	<b>Company D</b>	<b>Company E</b>
<b>Strength of use</b>	Used to be low and limited use, now no use at all	Low and limited use
<b>Type of external labor used</b>	Used to be mostly temporary employees as well as project based employees on rare occasions, now none	Mostly temporary employees
<b>External labor for core versus non-core functions</b>	Used to be mostly for non-core activities and on rare occasions for core activities or activities of strategic importance, now none	Mostly used for non-core activities for warehouse activities, very seldom use of other forms of external labor
<b>Reasons of using external labor</b>	Used to be for flexibility reasons, now no further use of external labor to save further costs	Seasonal flexibility, capacity reasons
<b>Role of LMI</b>	Used to be temporary employment agencies, now none	Information Provider role (mostly in form of government programs)

### **External labor for medium creative capital organizations**

Similarities and patterns can also be detected between the medium creative capital organizations, which were company A, C, G and H. A similarity of all four companies is that all organizations operate in competitive but rather stable markets. Additionally, also similarities regarding the role of labor market intermediaries can be found between all four companies as intermediaries in the form of a Matchmaker or Administrator LMI were mostly used. While company C and company H used multiple intermediaries in order to ensure the best possible fit between an employee and the organization, company A and company H worked more closely with specific intermediaries. Additionally, further differences were visible in the use and role of external labor of company A and company H compared to company C and company G.

Both company A and company H make limited use of external labor with the main focus on numerical flexibility to account for capacity fluctuations during peak operation times. Thus, the main reasons of company A and H to use external labor is to save costs and increase flexibility. In contrast company C and company G use various forms of external labor for both core and non-core activities. While temporary labor is mostly used for non-core activities in order to cope with numerical flexibility, contractual employees and consultants are used for core activities in order to implement projects that are of strategically value. In turn, this enhances the available KSAOs of the existing workforce, which enables the standard employees to enhance their knowledge and creativity as they can learn from the consultants and learn new ways of working. However, both company C and company G mainly use contract-based employment modes in order to test the person-organization fit before offering standard employment. Thus, in contrast to companies A and H, company C and G use external labor for many reasons including saving costs and increasing flexibility, ensuring the person-organization fit and increasing the available KSAOs to improve the creativity of employees. Interestingly, we placed company C at the highest end of the medium creative capital scale and argued that company G could have high creative capital in the future if the company proceeds with their current changes to extend their external network and increase both internal and external bridging social capital. In turn, both company A and company H were placed at the lower medium end of the creative capital scale. Consequently, while differences exist between the cases belonging to the medium firm-level creative capital quota, similarities can be found between the companies with low-to-medium creative capital and medium-to-high creative capital as the table on the next page illustrates.

**Table 6 The role and use of external labor for medium creative capital organizations**

	<b>Company A</b>	<b>Company C</b>	<b>Company H</b>	<b>Company G</b>
<b>Strength of use</b>	Regular but limited use	Regular use	Used to be extensive use, now still regular but rather limited use	Regular use
<b>Type of external labor used</b>	Mostly temporary employees or contracted employees from companies in the network	Temporary employees, part-time employees, contract and project based employees, consultants	Temporary employees and contracted based employees	Temporary employees, part-time employees, contract and project based employees, consultants
<b>External labor for core versus non-core functions</b>	Both for core and non-core activities	Both for core and non-core activities. Temporary employees mostly used for non-core activities and the other forms of external labor for core activities. If used for core activities then in an advising position to learn or to test the fit with possible employees before offering a standard contract	Mostly for non-core activities	Both for core and non-core activities. Temporary employees mostly used for non-core activities and the other forms of external labor for core activities. If used for core activities then in an advising position to learn or to test the fit with possible employees before offering a standard contract
<b>Reasons of using external labor</b>	Seasonal flexibility	Flexibility, costs savings, ensuring quality of employees entering a standard contract, acquiring missing KSAOs, facilitating creativity	Seasonal flexibility and costs savings	Capacity reasons, flexibility, costs savings, ensuring quality of employees entering a standard contract, acquiring missing KSAOs, facilitating creativity
<b>Role of LMI</b>	Matchmaker And Administrator role	Matchmaker and Administrator role	Matchmaker and Administrator role	Matchmaker and Administrator role

### External labor for high creative capital organizations

The two companies labeled as high creative capital companies in this study are found to make different use of external labor. While company B uses external labor for all positions in order to acquire knowledge quickly and motivate standard employees to be creative, company F mainly uses external labor for non-core activities for capacity reasons as it would take too much time and money to train external employees the needed complex KSAOs for core functions. Thus, company F strives to develop required KSAOs internally. If company F makes use of external labor for core functions it is therefore in form of contractual work with intentions of standard employment if a good fit is indicated. However, company B operates in a very dynamic, fast changing market, while company F operates in a high competitive but stable market. Company B stated that the benefits of using external labor outweigh the risks such as knowledge dissemination as it is crucial to acquire the needed KSAOs in a timely manner in order to remain competitive. In contrast, company F outlined that the market is rather stable and slowly changing and the company therefore can develop required KSAOs internally. The market stability and rates of innovation therefore might explain the differences in the use and role of external labor between company F and company B.

Lastly, both company B and company F prefer to work with detachment recruitment agencies as it increases the fit between the company and the external employees. Table 7 summarizes the findings of the exploration of the role and use of external labor for high creative capital organizations.

**Table 7 The role and use of external labor for high creative capital organizations**

	<b>Company B</b>	<b>Company F</b>
<b>Strength of use</b>	Strong use	Regular but limited
<b>Type of external labor used</b>	Temporary employees, Part-time employees, contractors, consultants	Temporary employees, contract-based employees
<b>External labor for core versus non-core functions</b>	External labor used for both core and non-core activities	Mostly used for non-core activities. Only used for core activities in form of a contract-based employment with the intentions for standard employment.
<b>Reasons of using external labor</b>	Fast acquirement of needed KSAOs, creativity facilitation, motivation of standard employees, cost savings, capacity reasons	Capacity reasons, costs savings, testing fit of employees before offering standard employment
<b>Role of LMI</b>	Matchmaker and Administrator role	Matchmaker and Administrator role

### **Cross comparison of the role and use of external labor between the different firm-level creative capital groups**

The findings of the low, medium and high creative capital groups suggest that there is a difference in how the companies in the different groups make use of external labor. While low creative capital organizations mostly use external labor in form of temporary employees for non-core functions for capacity and flexibility reasons, high creative capital organizations also make use of external employees in form of contract and project based employees as well as consultants and specialists for core activities. While also the higher creative capital companies used external labor in form of temporary labor mostly for numerical flexibility and costs reasons, they made use of the external labor in form of contracted-based employees and consultants for core activities in order to enhance the diversity of KSAOs, in turn increasing the creative capital of the organization.

The medium-to-low creative capital companies use external labor similar to the low creative capital organization, while the medium-to-high creative capital organizations use external labor similar to the high creative capital organization. However, within the high creative capital organizations differences were explored as company F did not use external labor as extensively as company B. While company B uses external labor for core activities whenever certain KSAOs are required, company F only uses contract-based labor for core activities with the intention for full-time employment. Similar results can be found in the group of medium creative capital organizations with the companies that had high-to-medium creative capital as these organizations used contract-based employees with intentions for standard employment for core activities and strive to develop KSAOs internally if possible. In turn, company B outlined that the turnaround time of product development is vital for the company, which is why it does not allow for developing KSAOs internally if the need for these KSAOs is urgent. Company B is the only company that operates in a truly dynamic, fast-changing environment, which could explain the difference in the use and role of external labor in comparison to the other higher creative capital organizations as outlined in the literature review.

Lastly, also differences in the role of labor market intermediaries between the lower and higher creative capital organizations can be found. While the low creative capital organizations mostly use intermediaries in form of Information Provider, the higher creative capital organizations also used intermediaries in form of Matchmakers and Administrators. Additionally, the higher creative capital organizations stated that they preferred to work with specialized intermediaries that know the companies well in order to allow for a better person-organization match.



## **5. Discussion and Conclusion**

The analysis of the use and role of external labor for low, medium and high creative capital organizations showed that there are differences in how organizations in the varied quotas use external labor. This chapter discusses these findings in relation to the research propositions of this study as well as to existing literature. This will lead to the answer of the central focus question of this study as well as limitations and issues for further research.

### **5.1 Research findings in relation to the research propositions**

In order to guide our explorative research we developed propositions regarding the relationship of firm-level creative capital and external labor. Proposition 1a was aimed at exploring how the use of external labor increases the diversity of teams as literature indicated that diversity increases the creative capital of an organization. The findings indicate partly support for this proposition as the interviews showed that external labor can lead to diversity but does not necessarily do so automatically. As an illustration, company H made use of external labor in form of contract work for non-core employees. However, these contract workers were previously employed as temporary employees, which in turn allowed company H to already assess the person-organization fit. This means that while the contract workers are external to the organization, they have already been previously employed for a period as temporary employees and hence are familiar with the work as well as the standard employees. This leads to the expectation that the contract worker already has experienced a socialization process, which increases bonding social capital. Thus, the question arises in how far these external employees lead to diversity of KSAOs of company H.

Additionally, companies might purposively hire external employees with the same KSAOs and background as the standard employees in order to ensure that they deliver the same quality work as standard employees if they are needed for capacity reasons as investigated in the case of company A. Thus, the results indicate that external labor can be used as a tool to increase the diversity of KSAOs within the company, which can enhance the creative capital, but as we detected in the examples of company H and company A, the use of external labor does not automatically enhance the diversity. If an organization strives to use external labor to enhance diversity, it is crucial to be aware of how external labor, e.g. which forms of external labor are used for which positions, increases the diversity of the workforce. The example of company B and company C showed that external labor can lead to increased diversity of KSAOs, which in turn lead to higher creative capital. These organizations employed external labor with diverse, new KSAOs to learn from the external employees and integrate the new knowledge into the organization, in turn motivating the standard employees.

In order for the diversity of KSAOs to positively influence the creative capital of the organization, we further propose that organizations require a certain degree of both bonding and bridging social capital as well as openness as explained in proposition 1b. The research findings indicate support for this proposition. As an illustration, the interviewees of company B and company C explained that they encourage their employees to work together with external employees to learn from each other and enhance the creative capital. In order to do so, company B and company C aim to create an environment in which the standard employees feel motivated by the external employees rather than threatened and replaceable. Contradictory to this, company H for example outlined that their use of external employees could lead to the enhancement of their firm-level creative capital but that the external employees do not have a way to communicate ideas to the standard employees as a strong bonding culture exists and the standard employees are not open to the KSAOs of the external employees. The findings showed that the higher creative capital had a higher degree of openness than the lower creative capital organizations. This is in line with the findings of urban creative capital literature as Florida (2002) argued that an area needs to have tolerance in order to attract the creative class and stimulate creativity.

Proposition 2a was aimed at exploring the relationship between external labor for core versus non-core activities and creative capital. The findings show that there is a difference in the use of external labor of low creative capital versus high creative capital organizations. While low creative capital organizations mostly used external labor in form of temporary employees for non-core activities, medium to high creative capital organizations also use external labor for core activities. The companies that also used external labor for core activities pointed out that this use of external labor for core activities especially influenced the creative capital as the organization was more focused on making use of the diverse KSAOs. This allowed for the knowledge of these externals to enter the organizations and enhance the knowledge and creativity of the standard employees. Hence, the use of external labor for core activities led to new ways of thinking and working, in turn stimulating the creative capital of these organizations. This is in line with Storey et al. (2002), who found that innovation and creativity benefits from external labor as organizations are able to continually access new ideas, attitudes and perspectives due to the short-term and project based work arrangements. This prevents an organization from becoming static. In turn, the use of external labor for non-core activities was mostly used for capacity reasons and numerical flexibility, rather than to enhance the existing KSAOs. According to Bishop et al. (2001), this numerical flexibility also increases the psychological contract of the standard employees as the external employees can function as a buffer zone in times of economic turbulences (Bishop et al., 2001). This was noticeable in the research findings as the interviewees outlined that temporary labor can be easier laid off than standard employees.

Additionally, we also detected patterns in the form of external labor modes that were used for core activities to enhance the existing KSAOs. Most of the medium and high creative capital organizations that used external labor for core activities made use of contract employees or consultants

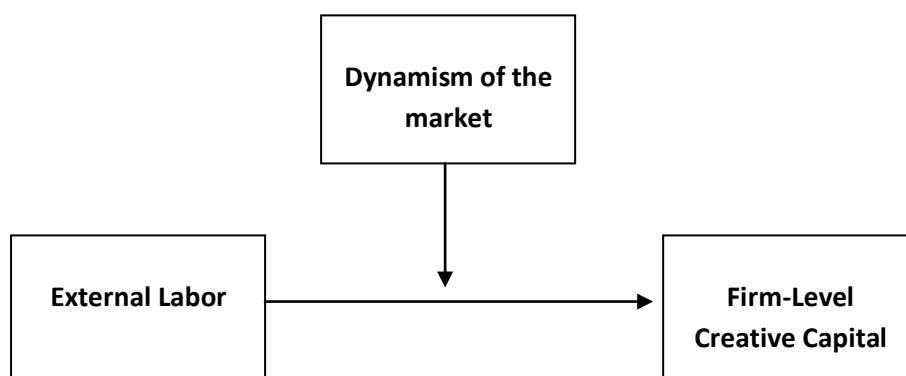
rather than temporary employees. Moreover, contract employees were mainly used with the intention for standard employment if the contracted period indicated a good fit, ensuring that the required KSAOs are kept internally. According to Zhou et al. (2010), companies with a “routinized” Schumpeter II innovation regime, make use of external labor in form of contract employees to ensure that certain KSAOs are within their organization, which can be done by first hiring an employee temporary before offering a standard contract. Company C, F and G, which made use of contract-based labor in such a way, can be classified as “routinized” Schumpeter II innovation regimen companies as they focus on continuous improvement of tacit knowledge rather than exploration and leap innovation.

Moreover, the higher creative capital organizations mainly used consultants and specialists for certain projects and for advising positions where it was not necessary to keep the KSAOs internally after the project or contract ended. Additionally, company G, company C and company B explained that consultants have an advising position, which allows standard employees to learn and see certain issues from a new perspective, which in turn enhances the creativity of these employees and the creative capital of the organization. The findings therefore indicate that in particular the use of consultants and specialists for project-based employment for core activities might enhance the creative capital of organizations as it allows the use of diverse KSAOs. As consultants and specialists tend to only stay for short periods within an organization, the socialization process might be rather limited, which further implores these external KSAOs to enter the organization as the knowledge is not homogenous and drown into the existing company culture as the interviewee of company G explained it. This socialization process might take place for a contract worker as the companies pointed out that this period is used to test the fit and to integrate the external employee into the organization. Thus, these findings support proposition 2a and should be addressed in future research to investigate the exact influence of consultants on the creative capital of an organization.

Relating proposition 2b, which aimed to explore the relationship between the use of external labor for core activities in dynamic versus stable environments, the analysis of the interviews showed that only company B operates in a truly dynamic market where it is crucial to constantly develop new products and services . The time these products and services take to develop are essential to be a market leader and successful in this dynamic environment. The interviewee of company B explained that because of this dynamic market, the use of external labor can be the key to success as missing competences and KSAOs vital to the development of these products can be brought into the organization. As the timeframe to develop these products is essential, company B cannot develop these KSAOs internally. The interviewee pointed out that the benefits of using external labor therefore outweigh possibly risks such as knowledge dissemination. These findings are in line with Matusik and Hill (1998), who found support that external labor is best suited for organizations operating in dynamic industries, where competitive pressures are intense and leakage of company specific knowledge will have a small impact on the organization. The reason for this is that the external

environment of these organizations requires that knowledge and innovation is constantly renewed in order to remain competitive (Matusik & Hill, 1998). Comparing the interview results to company F, who also is a high creative capital organization but operating in a rather stable market, the use of external labor for core positions is not necessarily as crucial to the success of company F as it is for company B. Company F aims to develop KSAOs internally and due to the fact that their products are more durable and the time to the market of incremental innovation is not as essential as it is for company B, company F can take the time to develop these KSAOs internally. When company F does require specific KSAOs and uses external labor for core activities, it is mostly in form of contractual employees which are hired with the intentions of standard employment in order to ensure that these KSAOs stay within the company. The same pattern was detected for company C and company G, which are positioned at the high end of the medium creative scale and operate in rather stable, yet competitive environments.

Consequently, the research findings support the proposition that the use of external employees for core activities has a larger influence on the creative capital of organizations operating in dynamic environments than for organizations operating in a stable market. The research findings even suggest that the dynamism of a market might have a moderating influence on the relationship of external labor and creative capital. This means that the more dynamic a market is the stronger might be the relationship between external labor and creative capital. In turn, if an organization operates in stable markets, the influence will be less strong as it is more important for these organizations to develop KSAOs internally and protect their knowledge in order to remain competitive. Thus, organizations in stable environments using external labor in form of contract work with the intentions of standard employment might use this as a tool to allow for required KSAOs to enter the organization while still increasing the competitive advantage by ensuring knowledge stays within the organization. Hence, we find indications supporting proposition 2b and strongly encourage further research to investigate this issue further with a larger sample of organizations operating in dynamic organizations as figure 14 illustrates.



**Figure 14 Proposed relationship for further research**

Relating our last proposition, the role of labor market intermediaries, we found support that nearly all of the medium and high creative capital organizations made use of labor market intermediaries in the role of a Matchmaker or Administrator role in order to achieve a better fit between the KSAOs of the external employee and the organization. In turn, the low creative capital organizations either did not use a LMI or only in form of an Information provider. This also indicates support for proposition 3 as the use and role of labor market intermediaries differs between the low creative capital organizations compared to the medium and high creative capital organizations. Our study design does not allow for causality explanations as we focused on the exploration of the relationship. Hence, we cannot say if the difference of the use is due to the differences of the creative capital degree of the organizations or due to other circumstances. However, the fact that the research findings support our third proposition offers valuable information, which should be further researched within a study design that allows for causality analysis.

Concluding, the findings show support for propositions 1b, 2a, 2b and 3, while only finding partial support for proposition 1a.

### **5.2 Answering the research questions**

To recapitulate, the central research question of this study was: *What is the impact and role of external labor on firm-level creative capital.* External labor can influence the creative capital of an organization if the employment mode is created in such a way that it allows for external KSAOs to enter the organization. The research findings indicated that especially the use of consultants and specialists can influence the creative capital of an organization and allow for new, diverse KSAOs to enter the organizations. However, this may only be possible if the organization has a sufficient level of tolerance, meaning that the employees need to be open minded for these new KSAOs to enter the organization and learn from them. Additionally, the findings indicate that external labor has a stronger impact on organizations operating in a dynamic, fast changing market as it is crucial for these organizations to remain knowledgeable and innovative.

Additionally, this study also allowed finding answers to the research sub questions. Hence, this paragraph illustrates how we were also able to detect and provide answers to these sub questions:

1. What constitutes firm-level creative capital? How does creative capital differ from other capitals?

We were able to answer this sub-question within our conceptual research of this chapter. Based on our in-depth analysis of existing literature, we developed an operationalization of firm-level creative capital by outlining which dimensions constitute the concept, which were creativity of individuals, organizational creative ability and the relationships of the employees. Additionally, our detailed

discussion in relation to positioning creative capital in comparison to other forms of capital illustrates overlaps of the capitals as well as the vital difference of the essence, as only creative capital constitutes the essence of aggregated creative ability and has therefore right for existence.

2. How can an organization make use of external labor? What are advantages and disadvantages of using an external labor?

We were able to provide answers to this sub-question with our theoretical foundation on external labor. We pointed out different forms of external labor as well as advantages and disadvantages. Additionally, our research findings highlighted how organizations can use different forms of external labor in order to impact the creative capital of the organization.

3. How does the use and role of external labor influence creative capital?

Based on our theoretical analysis of literature regarding creative capital and external labor we developed propositions on how the concepts relate to each other. Especially propositions 1a and 1b were focused on exploring this research question. We proposed that external labor increases the available KSAOs of the creative capital holders which in turn increases their creativity. However, we further proposed that a certain level of trust and openness needs to be developed in order for the standard employees to make use of the diverse KSAOs of external employees. We found support for proposition 1b, indicating that a certain level of trust and openness needs to exist so that standard employees feel secure and learn from the externals. However, we only explored partial support for proposition 1a. While external labor can lead to increased diversity of KSAOs, it does not do so automatically. Especially the use of consultants and specialists influence the diversity of KSAOs, while temporary employees for non-core activities did not significantly influence the diversity of KSAOs. These findings indicate that if organizations want to use external labor to increase the available KSAOs, it is important to be aware of the effects of different forms of external labor on different positions.

4. How does the use of external labor for core activities versus non-core activities influence creative capital? What is the role of labor market intermediaries on creative capital?

In order to explore this research sub-question, propositions 2a, 2b and 3 were developed. The findings indicated support for all three propositions. This means that especially the use of consultants and specialists used for core activities in relation to innovation influenced the creative capital of an organization. Additionally, also the use of a Matchmaker or Administrator labor market intermediary related to higher firm-level creative capital as these intermediaries allowed for a better person-organization fit.

Hence, this thesis contributed to the creative capital research program, which is aimed at exploring the central focus question *What is the role of human resource management on creative capital*, by exploring the influence of external labor on firm-level creative capital.

### **5.3 Findings in relation to existing literature**

The findings of this research offer valuable insights into the concept of firm-level creative capital in relation to existing literature, which are discussed in turn.

According to Florida (2002), the creative class is the main force behind the economic growth and regional development of areas. Thus, Florida (2002) argues that areas with high creative capital have a higher amount of creative class members. Florida distinguishes the creative class between the creative core, creative professionals and bohemians. Creative core members can be found “in science and engineering, architecture and design, education, arts, music and entertainment” (Florida, 2004, p. 8), while creative professionals “engage in complex problem solving that involves a great deal of independent judgment and requires high levels of education” (Florida, 2004, p. 8) and work in “business and finance, law, health care and related fields” (Florida, 2004, p. 8). Our research findings showed that the highest firm-level creative capital was present at company B, which is a design organization operating in the medical device sector. Also company F, which had high firm-level creative capital is operating in the medical field by designing and manufacturing medical devices. In contrast, the case organizations that were solely focused on production and manufacturing operation had rather low firm-level creative capital. As company B and company F are focused on designing products for the medical device sector, they could be considered as part of the creative class as explained by Florida (2002). Future research should therefore further explore in how far the idea of the creative class can be translated to an organizational level.

Moreover, Florida (2002) also pointed out three conditions that are critical for areas in order to stimulate creativity and attract the creative class: technology, talent and tolerance. The research findings also indicate that these urban creative capital findings hold true at an organization level. Technology refers to innovation, talent comprises individuals with a bachelor’s degree and above, and tolerance stands for attributes such as openness and inclusiveness (Florida, 2002). The research findings showed that the high firm-level creative capital organizations fulfilled these conditions. As an illustration, both company B and company F are focused on designing and innovating medical devices. They employ highly qualified personnel as the core activities are rather complex and the companies have a high degree of openness as employees are encouraged to use the network to enhance their KSAOs. Especially the condition ‘tolerance’ seems to be important as the high firm-level creative capital case organizations are actively focused on allowing for external knowledge to enter the organization. In turn, the low firm-level creative capital organizations had a very weak network and did not focus actively on new KSAOs entering or integrating them within the organization. Thus, the

findings indicate that these conditions are applicable to an organizational level and are vital for organizations to have high firm-level creative capital.

While this research was not focused on exploring the outcome variable of the relationship between HRM and creative capital, which is innovation, the research allowed for some insights into this topic. We assumed based on literature that high creative capital organizations would be focused on exploration in relation to products and services, while low creative capital organizations would be focused on exploitation of existing products and services. Hence, the focus on exploration and exploitation was included in the creative capital indicator, which was used to guide the interview. However, the interviews showed that the case organizations mostly based their choice for company X versus company Y on the exploration versus exploitation issue, rather than the other dimensions of firm-level creative capital- relationships, creativity of employees and organizational creative ability. Thus, company C for example chose the fit of company Y, indicating low creative capital. Their product, tires, is limited for exploration and endless innovation. However, the other dimensions such as the relationships and creative ability of company C indicated that the company matches the description of a high creative capital company more than a low creative capital company. Our findings therefore indicate that creative capital may not only be related to exploration but also to exploitation. Additionally, most respondents outlined that while a stronger focus on either exploration or exploitation exists, the companies realized that ambidexterity, which is the combination of exploration and exploitation, is vital in order to remain competitive. The research findings are therefore in contrast to the existing literature and our assumptions. However, we also found support that external labor has a stronger impact on companies operating in dynamic environments than companies operating in stable environments. Based on the interview findings, it can be argued that the companies operating in stable environments were more focused on incremental innovation, while the company operating in the dynamic environment was more focused on radical and leap innovation. Hence, external labor might have a stronger influence on firm-level creative capital of companies operating in dynamic environments focused on radical innovation. Nonetheless, as this study was not focused on exploring the relationship between firm-level creative capital and innovation, we cannot give further insights into this relationship but strongly encourage future research to investigate this issue.

### **5.4 Limitations and further research**

This research includes limitations that offer possibilities for future research. As the existing literature relating the relationship between firm-level creative capital and HRM is limited, an explorative, qualitative multiple case comparison study was conducted in order to derive valuable research findings. While this study design had strong theoretical reasons, it also has limitations that should be addressed in further research.



First, the use of non-probability sampling does not allow for generalizations. However, this study was not aimed at generalizing the research findings but offering a foundation for further research by exploring the relationship. Therefore, the research choice and sampling method hold strong theoretical reasons. Nonetheless, further research is strongly advised to research the relationship between HRM and creative capital with a study design that allows for both generalizations and causality explanations. This means to conduct empirical, quantitative research based on a larger sample. The study is based on a sample design of eight organizations as this number allowed for insights to explore the relationships of HRM and firm-level creative capital at both low and high creative capital organizations. Nonetheless, future research should aim at providing generalizable findings and therefore include a larger sample size.

Additionally, the research findings outlined that only one company operated in a truly dynamic environment. While this case indicated support for our proposition regarding the role of the dynamism of the market, a larger sample size of organizations operating in a dynamic environment might be especially important for future research to allow investigating the issue further. This may also allow highlighting the possible moderating effect of the market environment proposed in this paper.

Another point for discussion is the possibility that some respondents gave socially desirable answers to the questions as the pre-interview document analysis indicated that nearly all companies are striving to be more innovative and hence trying to position themselves as more innovative than they actually might be. Additionally, it could be that there might have been information respondents contained due to regulative company restrictions, which might have influenced the findings of this study. As an example, one respondent said that she could not answer a question. We therefore asked if she could not answer the question because she did not know or because she was not allowed to due to company reasons. The respondent left this question open, leading to the assumption that not all information were prevailed. Consequently, the research findings are based on what one respondent decided to explain. This issue was tried to be prevented by asking non-leading, follow-up questions but it is assumable that it could not be prevented completely.

This also means that the answers might not reflect the creative capital of the entire organization but how the respondent perceived it. As an illustration, despite follow-up questions, the interviewee of organization A mainly related the questions to his tasks and experiences rather than explaining the role of other employees. Hence, the findings indicated that company A mostly uses the creative ability on a managerial level, which might be misleading and might not reflect reality. In order to prevent that interviewees only talked about themselves or certain departments, we aimed at interviewing managers with HR responsibilities that had knowledge about both innovation within the company as well as all departments, so that the interviewees could provide a broad insight into the company. However, in order to further eliminate the issues, we encourage future research to have a more specific research scope by focusing on certain departments within an organization. As an

example, future research might particularly focus on interviewing line managers of the same department within different organizations, e.g. developing a sample of production managers. Additionally, it is recommended to interview more respondents within the chosen department in order to assess if the intended creative ability and relationships of organizations are in line with how employees perceive it, hence making use of triangulation. This could be of high importance as the management of an organization could have various practices in place to motivate employees', indicating high organizational creative ability. However, organizational creative ability is not just about motivating employees with formal procedures but also the enactment of the creativity, meaning the active use to integrate the creativity of the employees into something valuable. Consequently, it could be of value to also conduct research on the work floor to investigate how employees perceive the organizational creative ability and if their creativity is actually actively used by the organization. A further possibility to prevent this could also be by employing a study design based on observation. Additionally, a longitudinal study design could also be of value as it allows investigating how changes in the organization and the environment influence the creative capital of an organization.

Moreover, future research should also extend this study by conducting research within organizations that are more comparable in terms of size. The eight case organizations of this study range in terms of employees from 40 to 1800 employees. These size differences therefore limit the generalizability. However, as mentioned this study was not aimed at generalizing but exploring the relationship of external labor and firm-level creative capital for medium to large organizations. Additionally, the findings show that high creative capital was visible for both smaller and larger organizations. As an example, company B and company F have 40 and 60 employees respectively while company C has 1800 employees. Despite the differences in size, both company B and company F have high firm-level creative capital, while company C has medium-high firm-level creative capital. In turn, company D and company E have 140 and 40 employees respectively and have low firm-level creative capital. These findings therefore indicate that the company size does not influence the creative capital to a large extent. Nonetheless, literature suggests that the firm size could influence the creative capital of an organization. Alvarez and Barney (2001) found support that large firms have the advantage of a wider accessibility to new technologies, talent and innovative capabilities as they have stronger resources and capabilities. However, smaller, more entrepreneurial firms have the flexibility to have a stronger focus on developing new, innovative technologies and concepts but might be lacking the resources to develop these into a competitive product. This indicates that the characteristics of firm-level creative capital might differ between small and large companies. As example, a small entrepreneurial company might have strong organizational creative abilities and high individual creativity, leading to high firm-level creative capital, while a large firm might have a wide network with loose relationships, which might also lead to high firm-level creative capital. Future research therefore should focus on exploring differences in firm-level creative capital characteristic of small

versus large companies. Consequently, a larger sample of companies that are more comparable in size may lead to more detailed, valuable findings.

Lastly, in order to build a foundation for future research we explored the relationship between HRM and creative capital. However, as mentioned we were not focused on the proposed outcome variable of firm-level creative capital, which is innovation. While we explored high-firm level creative capital for both organizations focused on exploration and organizations focused on exploitation, as well as both product innovation and process innovation, we still recommend for future research to focus on the relationship between firm-level creative capital and innovation of organizations. This will allow to further explore how firm-level creative capital impacts different forms of innovation and lead to conclusions on this topic.

### 5.5 Conclusion

This thesis is part of the creative capital research program, which is focused on exploring the relationship between HRM and firm-level creative capital. Particularly, this thesis was focused on gaining insights into the relationship of external labor and firm-level creative capital.

The literature review of creative capital outlined that the research on firm-level creative capital is limited. Besides of the work of Florida and Goodnight (2005) only conceptual research exists. Moreover, the work of Florida and Goodnight (2005) is only based on one organization so that it does not allow comparing the findings and ensuring that the case organization actually has high creative capital. We therefore aimed at extending the existing literature by conducting a multiple comparative case study by cross comparing between quotas of low and high creative capital organizations. Additionally, due to the fact that empirical existing research is limited, no operationalization of the concept of firm-level creative capital existed. Hence, in conclusion with the creative capital research program, an operationalization of creative capital and its dimensions was developed and explored within this research. In order to derive at the operationalization, firm-level creative capital was positioned in relation to other capitals and therewith refuted existing critiques regarding the novelty and importance of creative capital. Based on existing literature, we argued that there is an overlap in the scope of the concepts of firm-level creative capital as well as human capital, social capital and organizational capital. However, as only firm-level creative capital constitutes the essence of the aggregated creative ability, the other concepts cannot alone explain firm-level creative capital, which is why we strongly argue in contrast to the critique of Glaser (2002) that firm-level creative capital has a right for existence.

Based on the literature review we therefore defined firm-level creative capital as *“the aggregated creative organizational ability, which is the organizational enactment to integrate the creativity of individuals as well as the creativity embedded in their relationships”*. Individual creativity is therewith

understood as *the ability of employees to make a valuable combination of previously unrelated concepts, knowledge, ideas or experience for the organization.*

In order to then explore the relationship between external labor and firm-level creative capital, a qualitative, multiple comparative case study was conducted. To derive at the interview sample the creative capital of the case organizations was analyzed in conclusion with the creative capital research program prior to the interviews based on existing company documents. This then allowed comparing the firm-level creative capital to the actual creative capital based on the interviews results. This analysis outlined that some organizations had a different level of creative capital than it was assumed prior to the interviews. The interviews also illustrated that the concept of creative capital is present within organizations, which is of high theoretical relevance as we are able to prove its right of existence with this research. However, the analysis outlined that organization can also have medium creative capital by scoring high on certain dimensions while scoring low on others..

Based on the analysis of the creative capital of the case organizations, we where then able to explore differences in the use and role of external labor for low, medium and high creative capital organizations. While low creative capital organizations mostly use external labor in form of temporary employees for non-core functions for capacity and flexibility reasons, high creative capital organizations also make use of external employees in form of contract and project based employees as well as consultants and specialists for core activities in order to enhance the diversity of KSAOs and increase the creative capital of the organization. Moreover, the findings indicate that the dynamism of the market environment influences the influence of external labor on firm-level creative capital. Additionally, the findings indicated supported that the use of labor market intermediaries for external labor differs between low creative capital organizations and high creative capital organizations. While low creative capital organizations mostly use labor market intermediaries that are mainly focused on providing information about external employees, high creative capital organizations used specialized labor market intermediaries that resulted in a better match between the organization and the external employee which stimulates the creative capital of the organization. This study therefore allowed to explore answers to the central research question of *How does external labor influence firm-level creative capital.*

However, this study also has limitations which offer possibilities for further research. Future research should therefore analyze the role of consultants on creative capital as well as the possible moderating effect of the dynamism of the environment. In order to do so, we encourage future research to make use of a larger sample in order to investigate these issues further. Additionally, we outlined that research in form of quantitative research, observatory research or a longitudinal design might be of relevance. Additionally, future research should also investigate the effect of the firm size on firm-level creative capital. Nonetheless, this study is of high value as it explored and allowed insight into the relationship between firm-level creative capital and external labor and should therefore be used as a foundation for further research.

Consequently, the research findings allowed providing an answer to the research question on how external labor influences the creative capital of organizations. Thus, the research findings of this thesis are of high theoretical and practical contribution.

### Theoretical contribution

Based on this explorative research study, we see four main aspects on how we theoretically contribute to existing literature. First, we conceptually positioned firm-level creative capital in relation to other forms of capitals and outlined points of overlaps between the capitals but were also able to illustrate that no other form of capital includes the essence of the aggregated creative ability of the firm. Hence, the conceptual part of this thesis outlines that firm-level creative capital does exist and has a right for existence. Thus, this study contributes to literature by refuting the critique of Glaeser (2004) and other scholars.

Second, as no empirical research regarding firm-level creative capital exists, no operationalization of the concept was present. The literature review showed that existing research of firm-level creative capital was based on non-empirical research as well as conceptual research and did not include an operationalization. However, the literature review also showed that the findings of the urban creative capital literature are not transferable to an organizational level as measurement indexes such as of the degree of gays and bohemians in areas were used to determine the creative capital of the area. We therefore developed a detailed operationalization including all dimensions of the concept of firm-level creative capital. Thus, this study contributed to existing literature with this operationalization of firm-level creative capital as it can be considered state-of-the-art research as no other operationalization of firm-level creative capital exists.

Third, to derive at this operationalization of firm-level creative capital we reviewed the existing definitions of firm-level creative capital and recognized that while the definition of Straatman et al. (2012) offers a valuable definition, it has a prominent drawback. The definition mentions the importance of creative ability but does not explain how creative ability relates to creative capital. Thus, we developed a definition of firm-level creative capital by building upon the work of Straatman et al. (2012) and including the concept of creative ability.

Lastly, as mentioned before, existing research on firm-level creative capital was mostly conceptually based. Florida and Goodnight (2005) aimed at transferring the concept to an organizational level by conducting a single case study. However, the study had strong limitations as only one case was included and the authors did not explicitly illustrate the degree of the creative capital of the case organization. This study therefore contributed to the existing theory by conducting a multiple comparative case study, which allowed analyzing and comparing differences between low creative capital organizations and high creative capital organization. Additionally, we also explored the role and use of external labor in relation to firm-level creative capital and therefore strongly extended and contributed to the existing literature.

### Managerial contributions

Additionally, this study also has managerial contributions by outlining the importance of creative capital for organizations, which was also acknowledged by the case organizations. In addition, this thesis shows how organizations use external labor to increase the diversity of KSAOs and how to use this diversity to enhance the creative capital of organizations. While this study does not allow for generalizations, it provides the suggestion that the use of consultants and experts for tasks related to core activities of organizations operating in dynamic environments can lead to success as it allows for needed KSAOs to quickly enter the organizations, and in turn enhancing the creative capital. Moreover, the research findings also indicate that organizations operating in rather stable environments might especially benefit from using external labor in form of contract employees with intentions for standard employment for core activities. This ensures required KSAOs enhance the creative capital of the organization but also stay within the organization in order to maintain competitiveness. Consequently, managers might draw the conclusion that the market environment should be analyzed before making a choice on a form and design of external labor. However, when using external labor, managers should ensure that the standard employees feel secure so that a high degree of openness exists towards these external employees. Additionally, employees then should be motivated to work together and learn from the external employees in order to increase the available KSAOs of the workforce.

As we build upon the work of Straatman (2011) and Straatman et al. (2012), this thesis will conclude by referring back to their work. Straatman (2011) guided his conceptual paper by quoting the DreamWorks' character Donkey of the movie Shrek, who continuously asked the question '*Are we there yet?*' during one movie scene. Straatman (2011) outlined that firm-level creative capital research can be compared to this movie scene. Donkey and Shrek are on a long journey and Donkey repeatedly asks '*Are we there yet?*', which Shrek always answers with '*No!*'. Straatman (2011) conducted a conceptual study to further explore firm-level creative capital and continuously asked himself '*Are we there yet?*' but admitted that the question had to be answered with '*No!*' as more research is needed. We therefore based our research on the work of Straatman (2011) and conducted explorative, qualitative research but must say that while we got a lot closer to the destination, we are still not there yet. However, we were able to show that firm-level creative capital has right for existence and how HRM in form of external labor influences the creative capital of an organization. Additionally, we pointed out how future research might be able to further contribute to the research stream, which then might allow to finally answer the question '*Are we there yet?*' with '*Yes!*'.

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## **Appendix**

**I Interview protocol**

**II Introduction E-Mail send to interviewees**

**III Coding Scheme of case organizations**

## **I Interview protocol**

The interviews were conducted in conclusion with the creative capital research group, indicating that 3 students were together interviewing each respondent, which was mostly a HR manager or a manager with HR responsibilities. The interviews were semi-structured and lasted about 60 to 90 minutes. The semi-structured nature of the interviews allowed the interviewers to follow the string of thoughts of the respondents and thereby changing the order of the interview topics accordingly, based on the flow of the interview. Additionally, if a topic item had been discussed previously and no further information was required, the question might have been skipped in order to ensure the flow of the conversation. All interviews were recorded and fully transcribed at a later stage. In addition, handwritten notes were taken.

The interviews were divided into seven segments- general introduction, creative capital, selection & recruitment, training, job design and external labor, end of the interview. The first segment was to introduce the interviewee to the research and ensure that all necessary information was provided. The second segment focused on determining if the organization has high or low creative capital. In order to do so, the interviewees were presented with descriptions of an organization with each high and low creative capital and were then asked to describe which description fits the organizations best and why. This was further investigated with follow up questions. Then the individual sections followed in which each group member asked interview questions about their approach. The final section was about the ending of the interview, this includes the provision of time for the interviewee to mention anything relevant for this topic and the process after the interview will be mentioned. The exact interview protocol can be found below. Since one interview was conducted in Dutch and the others in English, the interview protocol is presented in both languages to illustrate that the translations did not influence the interview outcomes.

### **Part I- Introduction (approx. 5 minutes)**

The interviewee will be introduced to the topic and the respondents, all formalities should be discussed.

#### **Example introduction:**

*Welcome and thank you for taking part in our research. We are Roy, Celeste and Marina and as you probably know we are students at the University of Twente studying Human Resource Management and currently working on our dissertation. The topic for our research is creative capital, also known as creatief kapitaal which is introduced by Richard Florida, a Canadian professor in the urban economies. The idea of creative capital is to explain the innovative performance of regions and we are researching if this can also be applied to an organizational level (see appendix A E-mail). In addition we will also ask questions related to 3 HR topics- selection & recruitment, job design and*

*external labor. We therefore want to investigate the relationship between these HR topics and creative capital. Celeste is responsible for the recruitment section, Roy is responsible for the job design section and Marina is dedicated to external labor. Although each of us is responsible for his own section we will ask questions during the interview if something interesting comes along. The interview will take about 60-90 minutes and it will be transcribed. Is this ok? Would it be ok with you if we use your organization in our report or do you prefer to stay anonym? We would like to record the interview, is that ok? We will also take some notes during the interview, but that's just for administration purposes, so don't let it distract you. Do you have any questions about the interview or the process? We just introduced ourselves, but tell us something about you. For example, starting with your name and your job.*

*Dank u wel voor uw tijd om deel te nemen in ons onderzoek. Wij zijn Roy, Celeste and Marina en zoals u mogelijk al weet studeren wij Human Resource Management aan de Universiteit Twente. Dit onderzoek is voor onze afstuderen. Het onderwerp voor vandaag is creatief kapitaal, een term geïntroduceerd door Richard Florida, een Canadese professor in stedelijke ontwikkeling. Het idee achter creatief kapitaal is dat dit concept de regionale innovatieve prestaties kan verklaren en wij onderzoeken of dit ook toegepast kan worden op organisaties. Wij zullen vragen stellen gerelateerd aan drie HR onderwerpen, namelijk werving en selectie, job design en externe werkkraft. Wij doen onderzoek naar het effect van elk van deze onderwerpen op creatief kapitaal. Celeste zal zich richten op werving en selectie, Roy zal zich bezig houden met job design and Marina op het gebruik van externe werkkraft. Ondanks dat ieder van ons verantwoordelijk is voor zijn eigen onderdeel zal ieder van ons actief deelnemen aan het interview. Het interview zal ongeveer 60 tot 90 minuten duren en zal vervolgens uitgewerkt worden. Kunt u zich hier in vinden? Vind u het goed als wij uw organisatie in ons verslag vermelden of wilt u liever anoniem blijven? Wij willen graag het interview opnemen, is dat akkoord? Gedurende het interview maken wij ook aantekeningen, dat is slechts voor onze eigen administratie, laat dat u vooral niet afleiden. Heeft u op het moment vragen met betrekking tot het interview of het process? ... We hebben ons net voorgesteld, kan u wat over uzelf vertellen? Beginnend met bijvoorbeeld uw naam en werkzaamheden?*

## **Part II- Creative capital (approx. 10-15 minutes)**

We have two descriptions of two different organizations that we would like you to read. Could you please tell us which description your organization fits best? Why? (Show the descriptions below to respondents on a separate sheet)



### **Company X**

The main activity of our organization is developing new products, services and processes. For this activity people have to develop new ideas and concepts by combining existing ideas, knowledge and concepts, in other words employees have to be creative. In order to stay competitive in the volatile environment, we constantly have to generate new ideas and think outside the box. We have a wide and diverse external network that we can use for idea generation. Besides the external network, we also have a strong internal network, which means that we give our employees the opportunity to use their creativity together.

### **Organisatie X**

De voornaamste activiteit van ons bedrijf/ onze organisatie bestaat uit het ontwikkelen van nieuwe producten, diensten en processen. Voor deze voornaamste activiteit moeten mensen nieuwe ideeën en concepten ontwikkelen, door het combineren van bestaande ideeën, kennis en concepten, of te wel; werknemers moeten creatief zijn. Om concurrerend te blijven in de veranderlijke omgeving zijn we continu nieuwe ideeën aan het genereren en moeten we ‘out-of-box’ denken. We hebben een breed en divers extern netwerk die we kunnen inzetten voor het genereren van ideeën. Naast dit externe netwerk hebben we ook een sterk intern netwerk, wat eigenlijk inhoudt dat we onze werknemers de mogelijkheid geven om hun creativiteit gezamenlijk in te zetten.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
0	0	0	0	0

### **Company Y**

The main activity of our organization is focusing on our current product portfolio and improving our products, services and processes. For this activity our employees have to use their existing knowledge to improve the efficiency of our existing products. We fit in a stable environment. We have a very strong internal network and rely mainly on the skills and abilities of our employees. We also have a good external network and use the network for improving products and processes rather than for idea generation and innovation.

### **Organisatie Y**

De voornaamste activiteit van ons bedrijf/ onze organisatie is gericht op de bestaande product portfolio en het verbeteren van de huidige producten, diensten en processen. Voor deze voornaamste activiteit moeten onze werknemers hun bestaande kennis inzetten om de efficiëntie te vergroten van onze

huidige producten en diensten. We hebben te maken met een stabiele bedrijfsomgeving. We hebben een sterk intern netwerk en vertrouwen voornamelijk op de vaardigheden van onze werknemers. We hebben ook een goed extern netwerk en gebruiken dit netwerk voor het verbeteren van producten, diensten en processen, minder tot niet voor het genereren van ideeën en innovatie.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
0	0	0	0	0

Ask follow up questions about dimensions (see Appendix C Creative capital dimensions).

### **Relationships**

*1. What can you tell me about the relationships of employees? Are they more internally-, externally focused or both? Could you give us an example? Is cooperation within or outside the organisation needed for creativity?*

*1. Wat kunt u mij vertellen over de relaties van werknemers? Zijn deze relaties meer intern gericht, extern gericht of op beide gericht? Heeft u een voorbeeld daarvan? Is samenwerking tussen werknemers of samenwerking met personen buiten de organisatie nodig voor creativiteit?*

#### **2a. Relationships internally focused (bonding versus bridging)**

*Are these relationships between employees similar to each other? Are these relationships mainly between employees of the same department? Do you have an example of such relationships?*

#### **2a. Relaties tussen werknemers (bonding versus bridging)**

*Zijn deze relaties tussen werknemers die dezelfde achtergrond hebben? Zijn deze relaties voornamelijk tussen werknemers van dezelfde afdeling? Heeft u een voorbeeld voor deze relaties?*

#### **2b. Relationships externally focused (bonding versus bridging)**

*Are these relationships between individuals dissimilar to each other? Are these relationships mainly between individuals similar to the employee within the organisation? Do you have examples of such relationships?*

#### **2b. Relaties tussen werknemers en actoren buiten de organisatie (bonding versus bridging)**

*Met betrekking tot de relaties buiten de organisatie hebben deze actoren een andere achtergrond dan de werknemers? Zijn deze relaties voornamelijk tussen werknemers en actoren met een gelijke achtergrond? Heeft u enkele voorbeelden van deze relaties?*

*3. Is there much interaction within these relationships or are they used only a few times a year?*

*And why is there (not) much interaction?*

*3. Wordt er veel gebruik gemaakt van deze relaties, of is dit slechts enkele keren per jaar. Waarom is er zoveel / weinig interactie?*

### **Organizational creative ability**

*4. What does the organisation do when someone has an idea?*

*4. Wat doet de organisatie wanneer iemand een idee heeft?*

### **Creativity**

*5a. Do the employees of your company develop new ideas?*

*5a. Komen uw werknemers met nieuwe ideeën?*

*5b. And are they creative within this process (think outside the box)? -> Could you give us an example?*

*5b. Zijn ze creatief in het ontwikkelen van nieuwe ideeën (think outside the box)? -> Heeft u een voorbeeld?*

*5c. And are they motivated by the company to be creative (combining different ideas, knowledge and concepts)?*

*5c. Zijn ze gemotiveerd door de organisatie om creatief te zijn? (het combineren van verschillende ideeën, kennis en concepten)?*

## **Part III- Selection & Recruitment (approx. 15 minutes)**

### **Recruitment**

1) When there is a vacancy, will this vacancy be posted internally or externally?

1. Wanneer er een vacature vrijkomt, wordt deze dan intern of extern uitgezet?

When it is job dependent:

Wanneer het afhankelijk is van de baan:

1b) Can you give examples of specific jobs or does it depend on jobs with special criteria?

Zou u een voorbeeld kunnen geven van specifieke banen of is het afhankelijk van de eisen van banen?

1c) Okay, and what are the percentages of the total vacancies that are posted internal and external?

1c. Wat is de verhouding tussen vacatures die intern worden uitgezet en vacatures die extern worden uitgezet in percentages?

When it is internal:

2) For what reasons is the company focussing on internal recruitment?

2. Wat zijn de redenen voor het intern uitzetten van de vacature?

When it is external:

3a) For what reasons is the company focussing on external recruitment?

3a. Wat zijn de redenen voor het extern uitzetten van de vacature?

3b) Is the recruitment done by a recruitment agency or by the organization itself?

3b. Wordt de werving gedaan door het bedrijf zelf of door een wervingsbureau?

4) Which channels/methods are used?

4. Van welke methoden maken jullie gebruik?

5) After the determination of the channels to be used, a job description will be published to search for new employees. How are the job criteria for this job description composed?

5. Na het bepalen van de methode, wordt er een beschrijving van de baan gemaakt om die naar buiten te kunnen brengen. Hoe worden de criteria voor deze beschrijving gemaakt?

6) What are the companies' benefits by using these criteria for the job description?

6. Waarom maakt het bedrijf gebruik van deze criteria, wat zijn de voordelen?

### **Selection**

1) When the recruitment process is finished, the best person for the job has to be selected. What are the criteria that will be used for the selection process?

1. Na het wervingsproces is het de bedoeling dat de beste persoon voor de baan gekozen wordt. Wat zijn de criteria die worden gebruikt voor het selectie proces.

When overall competencies:

Wanneer het gaat om algemene competenties:

2) Do these criteria change over time, when new staff is hired, or does these criteria remain the same?

2. Veranderen deze criteria over tijd, wanneer er nieuwe mensen worden aangenomen of blijven deze criteria over het algemeen hetzelfde?

3a) What are the methods that the company uses for selecting the best person?

3a. Van welke methode maakt het bedrijf gebruik voor het selecteren van de beste persoon?

3b) Multiple questions when answer contains tests, group work or mix of methods?

4) Why is the company using this/these method(s)?

4) Waarom maken jullie gebruik van deze methode? voorbeeld?

5) Are these methods carried out by the company itself or by an assessment centre?

5. Wordt de selectie procedure door het bedrijf zelf gedaan of door een assessment center?

6) What are the reasons for carrying out the methods this way?

6. Waarom hebben jullie voor deze methode gekozen?

7) Who is responsible for the final decision?

7. Wie is verantwoordelijk voor de uiteindelijke beslissing? (hr manager, directeur, assessment center).

### **Part V- Job Design (approx. 15 minutes)**

The interview starts with a general question regarding job design. Then during the interview the interviewer asks follow-up question concerning the dimensions of job design namely contents, methods and relationships. Each dimension starts with a general question about the topic and if needed the interviewer asks leading questions regarding the sub-dimensions.

#### **General**

1a. How do you design tasks?

1a. Hoe ontwerp je taken?

1b. How do you design work?

1b. Hoe ontwerp je werk?

#### **Contents**

2a. More specific, what can you tell me about the contents of the job?

2a. Iets specifieker, wat kan u mij vertellen over de inhoud van het werk?

2b. What can you tell me about the difficulty of the jobs? What can you tell me about the challenge of the job? Can you give me an example?

2b. Wat kan u mij vertellen over de moeilijkheid van het werk? Wat kan u mij vertellen over de uitdaging van het werk? Kunt u een voorbeeld geven?

2c. In order to realise their tasks how much information or data do they need or process for their tasks? Can you give me an example?

2c. Voor het succesvol voltooiën van het werk, hoeveel informatie moeten ze verwerken? Heeft u een voorbeeld?

### **Methods**

3a. More specific, what can you tell me about the methods?

3a. Iets specifieker, wat kan u mij vertellen over de methoden?

3b. How much freedom do the employees have in choosing their work schedule? Can you give me an example?

3b. Hoeveel vrijheid hebben de werknemers om hun eigen werktijd in te delen? Heeft u een voorbeeld?

3c. How much freedom do the employees have in choosing their methods? Can you give me an example?

3c. Hoeveel vrijheid hebben de werknemers om hun eigen methoden te kiezen? Heeft u een voorbeeld?

3d. How much freedom do the employees have in making their own decisions? Can you give me an example?

3d. Hoeveel vrijheid hebben de werknemers om hun eigen keuzes te maken? Heeft u een voorbeeld hiervan?

3e. While working on the job do they know how to progress? Are the jobs defined in such a manner that they know what is expected from them? Can you give me an example?

3e. Gedurende de werkzaamheden weten de werknemers hoe ze verder te werk moeten om het tot een succes te brengen. Zijn de taken zo ontworpen dat ze weten wat er van ze verwacht wordt? Heeft u daar een voorbeeld van?

### **Relationships**

4a. More specific, what can you tell me about the relationships?

4a. Iets specifieker, wat kan u mij vertellen over de relaties?

4b. What can you tell me about the interaction between employees and actors outside the organisation?  
To what extent do employees need to communicate with these actors?

Can you give me an example?

4b. Wat u mij vertellen over de relaties tussen werknemers and actoren buiten de organisatie? In welke mate moeten werknemers communiceren met deze actoren? Heeft u een voorbeeld?

4c. What can you tell me about the reliance of employees on each other in order to complete their work? Can you give me an example?

4c. Wat kan u mij vertellen over de afhankelijkheid tussen werknemers voor het voltooien van hun werkzaamheden? Heeft u een voorbeeld?

4d. What can you tell me about support of colleagues? Can you give me an example? What can you tell me about the support of supervisors? Can you give me an example?

4d. Wat kan u mij vertellen over de ondersteuning van werknemers richting andere werknemers? Wat kan u mij vertellen over de ondersteuning door leidinggevenden? Heeft u een voorbeeld?

### **Part VI- External labor (approx. 15 minutes)**

I would like to interview you regarding the topic of external labor. First, external labor includes as all non-standard labor contracts, including temporary agency workers, consultants, part-time employees, network partners and alliances.

Ik wil u graag interviewen over het gebruik van externe werkkraft. Als eerste, externe werkkraft bestaat uit alle mensen die niet in vaste dienst zijn. Hierbij moet u denken aan part-time krachten, consultants, uitzendkrachten en werknemers van bedrijven met wie jullie samen werken/ externe partners.

#### **Strength of use**

1. Do you make use of external labor?

1. Maak je gebruik van externe werkkraften?

2. In how far do you make use of external labor?

2. Hoeveel gebruik maak je van de externe werkkraft?

3. How would you describe the ratio of external employees to internalized employees?

3. Wat is het percentage van eigen werkkraft ten opzichte van externe werkkraft?

### **Design of external labor contracts**

4. Could you tell me what kind of types of external labor you use? Can you give me examples? Could you tell me why you chose for those kinds of external labor contracts?

4. Zou u mij kunnen vertellen wat voor types of externe werkkraft u gebruikt? Heeft u een voorbeeld? Waarom heeft u gekozen voor deze vorm van externe werkkraft?

### **Reasons for use**

5. Could you tell me more about the main purpose for using external labour?

5. Zou u wat meer kunnen vertellen over de redenen voor het gebruik van externe werkkraft?

6. What advantages do you experience from using external labour? What disadvantages? Why?

6. Welke voordelen ervaart u bij het gebruik van externe werkkraft? Wat zijn de nadelen? Waarom zijn het nadelen / voordelen?

### **External labor for core activities**

7. Could you tell me what the core activities of your organisation are?

7. Wat zijn de belangrijkste kerntaken van de organisatie?

8. Do you use external labour for these core activities of your firm? In how far do you use it? What kind of external labor do you use? How would you describe the effect of using external labor for these activities?

8. Maakt u gebruik van externe werkkraft voor uw kerntaken? In welke mate maakt u daar gebruik van? Welke type externe werkkraft gebruikt u? Wat kan u mij vertellen over het gebruik van deze werkkraft voor de kerntaken?

9. If you are not using external labor for core activities, why is that? Did you consider it and if yes, why did you choose against it?

9. Waarom maakt u geen gebruik van externe werkkraft voor de kerntaken? Heeft u overwogen om gebruik te maken van externe werkkraft en zo ja, waarom heeft u er voor gekozen om er geen gebruik van te maken?

### **Labor Market intermediaries**

10. When using external labor, do you rather hire an external employee directly for example with a short-time contract or directly contact a different organisation such as a vendor or do you use a labor market intermediary such as a work agency.

If so, what kind of intermediary do you use? Why?

Which HR functions do they fulfil?



Does that mean you only use the intermediary to get to know the employee or do they take care of administrative tasks?

How long does the relationship between you and the labour market intermediary exist?

10. Wanneer u gebruik maakt van externe werkkraft, wordt deze persoon dan ingehuurd via een organisatie of wordt dat uitbesteed/ door een uitzendbureau gedaan?

Als er gebruik wordt gemaakt van een uitzendbureau: En van wat voor soort intermediair maken jullie gebruik (e.g. headhunters, monsterboard, randstad)? En waarom?

Hoe lang maken jullie al gebruik van een uitzendbureau?

### **Part VII- End of interview (approx. 10 minutes)**

The interviewee gets the opportunity to provide any additional information that he/she would like to provide. After the provision of information the interviewers provide the interviewee with information about the process after this interview including the provision of a transcript for validation by the interviewee. At this stage the interviewee can also raise any questions about the interview itself or the process after the interview. This step concludes with discussing the experience of the interviewee with this interview.

#### Example ending:

*At this moment we are at the end of the interview, do you have anything else to add which you regard as important and that needs to be mentioned? ... (opportunity to provide information). The next step will be the transcription of this interview by us and this transcript will be send to you for confirmation. We can use the same e-mail address that André contacted you on? ... (opportunity to agree or disagree). Do you have any questions left that you would like to have been answered? ... (opportunity to raise questions). Then we are almost finished, how did you experience this interview, any comments? ... (opportunity for feedback). Then we would like to thank you very much for your time, for your willingness to help us on this subject.*

*Op het moment zijn we aan het einde gekomen van dit interview, heeft u nog wat toe te voegen waarvan u denkt dat het belangrijk is om te vermelden? ... (mogelijkheid voor extra informatie). De volgende stap is het uitschrijven van het interview door ons en deze uitwerking zal naar u gestuurd worden ter bevestiging. Kunnen wij hetzelfde e-mailadres gebruiken dat André heeft gebruikt? ... (mogelijkheid tot bevestiging). Heeft u nog vragen over die u graag beantwoord wilt hebben? ... (mogelijkheid tot het stellen van vragen). Dan zijn we nu bijna klaar, hoe heeft u dit interview ervaren, nog enkele opmerkingen? ... (mogelijkheid tot terugkoppeling). Dan willen we u hartelijk bedanken voor uw tijd, en dat u ons bij dit onderzoek wilt helpen.*

## **II Introduction e-mail send to case organizations**

The following e-mail was send to the organizations to establish a first contact and inform them about the project. Consequently, at the point of the actual interview the respondents had the following knowledge:

Wij zijn een onderzoeksproject gestart waarin we willen kijken of we ‘creative capital’ kunnen identificeren op organisatie-niveau. Graag zouden we u willen vragen of we een aantal interviews mogen afnemen om dit onderzoek uit te voeren.

De term Creative Capital, ofwel creatief kapitaal in goed Nederlands, is tien jaar geleden geïntroduceerd om innovatieprestaties van regio’s te kunnen verklaren (door Richard Florida). De bestaande verklaringen die uitgaan van het idee dat innovatie wordt veroorzaakt door sterke relaties en netwerken, zogezegd een hoge mate van sociaal kapitaal, werden tegengesproken door nieuwe bevindingen. Regio’s leken juist innovatiever te zijn als er sprake was van lage hoeveelheden sociaal kapitaal en een hoge mate van creatief kapitaal. Wij vragen ons af hoe dit werkt voor organisaties. Creatief kapitaal past bij de benadering om menselijk kapitaal (human capital) centraal te stellen en om als bedrijf kennis te benutten die ergens voorhanden is, niet per se binnen het bedrijf zelf.

Om meer inzicht te verkrijgen over creatief kapitaal bij organisaties willen we bij bedrijven interviews afnemen om het begrip scherper te krijgen en daarmee instrumenten te kunnen ontwikkelen om potentiële creatief kapitaal in kaart te brengen en het creatief kapitaal te vergroten via human resource management.

Aan u dus de vraag of u medewerking wilt verlenen aan dit onderzoek. Als u wilt meedoen zullen we zeer spoedig contact met u opnemen voor afspraken voor interviews. Wanneer de beginfase van dit onderzoek is afgerond zult u een rapport ontvangen over onze bevindingen.

Mocht u vragen hebben, neemt u gerust contact op.

Met vriendelijke groet,

André Veenendaal

Namens het onderzoeksproject-team ‘HRM & Creative Capital’

## **III Coding Scheme of Case Organizations**

COMPANY A			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>It happens that employees, not necessarily for a project or a product, have contact with other employees in other companies in the same sector (p. 6).</p> <p>I am really embedded in networks. I always try to see if it provides value, is it valuable or not. You see that when you speak to a lot of people you get ideas. There you also find a partner who is open towards the idea. One who also thinks it is a good idea. There has to be a bond. You should be able to talk well to each other. You have to share the same vision, while you are doing something completely different (p. 19)</p>
		<i>Bridging</i>	<p>I have good contact with the importer (p. 11)</p> <p>What you see is that companies are getting more specialized, you cannot do everything yourself and that is also something that you do need to do. What you can do better is that you get partners around you. You take care of a good network around you, including specialists and who fit good with your company (p. 18)</p> <p>We have a company that only saws, because they are better in that than we are (p. 19)</p> <p>I am busy to form a group of companies that complement each other (p. 19)</p> <p>What you do is that you get a partner around you; a partner who has the knowledge, who knows how to do it (p. 19).</p> <p>I am really embedded in networks. I always try to see if it provides value, is it valuable or not. You see that when you speak to a lot of people you get ideas. There you also find a partner who is open towards the idea. One who also thinks it is a good idea. There has to be a bond. You should be able to talk well to each other. You have to share the same vision, while you are doing something completely different (p. 19)</p> <p>Two years ago the principal and I were invited at BMW München to see their production chain, because these companies learn a lot from smaller companies and this time they turned it around. They explained everything in detail, how and why they did it like that. I have seen things there that I applied within our company (p. 22)</p>
		<i>Internal</i>	<p>You have to give them (i.e. employees) trust (p. 3)</p> <p>When someone has an idea the organization makes a team around it to discuss the idea. The team constitutes principal, manager, engineers and the employees who are affected by the implementation of that idea (p. 10).</p> <p>They (i.e. employees) see each other really as a team, he (employee) said I cannot drop the others, together we said we will finish it, together, nothing else (p. 12)</p>

			<p>Around one of the elderly people works a group of employees with children and in one of the weeks that it was necessary to make some extra hours, he said to the other that he will adjust his schedule to the other because they have children (p. 12)</p>
		<i>External</i>	<p>Yeah, I have a seat in some boards, one of them organizes master classes, organizes meetings, which are dedicated to knowledge exchange (p. 7)</p> <p>You are contacted by a lot of temporary employment agencies. What we think is important is that we contact one or two temporary employment agencies with who we like to do business (p. 4)</p> <p>Every collaboration is an informal collaboration and the best relationships we do have with people are the informal ones. Companies that sent us contracts we always have a challenge with that (p. 6)</p> <p>We have three more temporary employment agencies with who we do a lot of business (p. 5)</p> <p>Use of temporary employment agencies is mainly for the production because that are many peaks and therefore you need an employee for only three or four weeks (p. 5)</p> <p>The company outsources the work to a few partners, not to many because if you are doing business with twenty companies and outsource at each a bit then you do not know where each is good at (p. 6)</p> <p>It happens that employees, not necessarily for a project or a product, have contact with other employees in other companies in the same sector and not. The manager stimulates the contact. (p. 6).</p> <p>Make sure you have a good network around you, also with specialists and who complement the organization (p. 18)</p> <p>Two years ago the principal and I were invited at BMW Munchen to see their production chain, because these companies learn a lot from smaller companies and this time they turned it around. They explained everything in detail, how and why they did it like that. I have seen things there that I applied within our company (p. 22)</p>
		<i>Weak</i>	
		<i>Strong</i>	<p>You are contacted by a lot of temporary employment agencies. What we think is important is that we contact one or two temporary employment agencies with who we like to do business. That is something we did in the past, and we put extra time and energy in that (i.e. relationship) (p. 4).</p> <p>Eventually this leads to an intermediary at the temporary employment agency who knows exactly what we are looking for (p. 5)</p>

			<p>We have three more temporary employment agencies with who we do a lot of business (p. 5)</p> <p>The company outsources the work to a few partners, not to many because if you are doing business with twenty companies and outsource at each a bit then you do not know where each is good at (p. 6)</p> <p>The contact with those partners (outsource partners) varies between daily to once a month (p. 6)</p> <p>Every relationship is an informal one. The best relationships are the informal ones (p. 6)</p> <p>When companies in the near area have it quiet (i.e. low on orders) then we get sometimes their employees to work for us or we give them our work. You try to help each other (p. 6)</p> <p>What you see in the existing relationships the directors see and speak each other quite a lot, but that does not say that the organizations fit each other (p. 6)</p> <p>The contacts in each organization speak each other frequently but the person in the production does not speak the person in the other company to which we outsource the work (p. 6)</p> <p>There is a time that no company within the chain likes to have things in supply. So we started thinking, together with the employees behind the machines, how we are going to accomplish that. Because everyone knows that robots can assemble everything, but then you have to make series of it. We looked at propositions and went to fairs and in the end to me because they liked to get one thing extra. They had a good explanation for it and so we made it possible. At that moment you see that they are eager to have the machine rolling to realize high performance (p. 10)</p> <p>I have good contact with the importer (p. 11)</p> <p>The importer is getting the help they need, otherwise he is not able to help their customers, but we will help and we get the advantage that the employee is motivated because he does get to do other things (p. 11)</p> <p>They (i.e. employees) see each other really as a team, he (employees) said I cannot drop the others, together we said we will finish it, together, nothing else (p. 12)</p> <p>Around one of the elderly people works a group of employees with children and in one of the weeks that it was necessary to make some extra hours, he said to the other that he will adjust his schedule to the other because they have children (p. 12)</p>
	<p><b>Organizational creative ability</b></p>		<p>Yeah, I have a seat in some boards, one of them organizes master classes, organizes meetings, which are dedicated to knowledge exchange (p. 7)</p>

			<p>Just to think out of the box. To start from scratch, how can we make a product in a totally different way than we already deliver (p. 8)</p> <p>When you look at creativity, the combination of existing ideas, knowledge and concept, that is really important and that is also what we try (p. 8)</p> <p>We like to improve our current products and processes continuously that is where we are devoted to (p. 8)</p> <p>I like to go for company A because there you try to think and come up with new things (p. 9)</p> <p>I do not like to send invoices and purchase requisitions because this takes time, money and energy. I like to do it without these invoices and purchase requisitions. This way you are busy improving your processes and there are a lot of processes that you can do in another way (p. 9)</p> <p>They (i.e. companies) are like to have one piece welded, how are you going to do that on the robot. Everybody knows that everything can be done on the robot as long as you make series. So we started thinking, together with the employees who stand behind it (i.e. machine) how can we make that happen (p. 10)</p> <p>Two years ago the principal and I were invited at BMW Munchen to see their production chain, because these companies learn a lot from smaller companies and this time they turned it around. They explained everything in detail, how and why they did it like that. I have seen things there that I applied within our company (p. 22)</p>
	<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>Yeah, I have a seat in some boards, one of them organizes master classes, organizes meetings, which are dedicated to knowledge exchange (p. 7)</p> <p>The manager has made up the welding-cell himself by combining different techniques like robotics, RFID and software (p. 9)</p> <p>It varies who come up with an idea. When someone is standing behind a certain machine and needs to stretch himself all the time to reach something high. He knows that he is getting it at his back and that he is not able to do that anymore (p. 10)</p> <p>What we try is to have our good craftsmen educated further so that they are not only a good craftsmen but also that they know how such a robot works. If you combine those two things then you have a really good combination (p. 11)</p> <p>I would like to have at least one thing, preferably three, which I get from the network meetings that I can use the next day in practice (Absorptive power) (p. 22)</p> <p>Last time we have written down the welding cell, how it should function. Then we went to the importer and asked if there is a company anywhere in the world who has such a welding cell, so that we can see it first. That way you come at companies. There you see what is</p>

III Coding Scheme of Case Organizations

			so called state of the art, and you notice how it should be done different. Then you know what things go wrong because you have been there (p. 22)
		<i>Motivation</i>	The company motivates their employees to come up with new ideas (p. 10) (No description of how)
		<i>Creative thinking skills</i>	<p>The products we make go through every machine we own. Now we are going to think of the same product that does not need to be welded, or chipped up so that we do not need those machines. Just to think outside the box for once (p 8/9)</p> <p>The manager has made up the welding-cell himself by combining different techniques like robotics, RFID and software (p. 9)</p> <p>It varies who come up with an idea (p. 10)</p> <p>You see that employees who are more creative come up faster with a solution (p. 21)</p>
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	We mainly use temporary employees for production
		<i>Design of labor contract</i>	We mostly use temporary employees for production of both core and non-core activities
		<i>positions/ departments used for external labor</i>	
		<i>Reasons of use</i>	The use of external labor saves costs and increases our flexibility, we can hire and fire when we need to
		<i>Influence on creative capital</i>	We do not really use external labor for creativity
		<i>Effects of using external labor</i>	



### III Coding Scheme of Case Organizations

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	<b>Labor Market Intermediaries</b>	<i>Role of intermediary</i>	<p>We have three more temporary employment agencies with who we do a lot of business (p. 5)</p> <p>Use of temporary employment agencies is mainly for the production because that are many peaks and therefore you need an employee for only three or four weeks (p. 5)</p> <p>We lend our employees to companies in the area to help each other out</p>
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COMPANY B			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>For the innovation-team it is not so structured (i.e. more free in working hours) and they walk around and stand at the coffee machine while it is not even break but as the innovation-team you should be doing that, because maybe the best idea will happen at the coffee machine (p. 6)</p> <p>In Holland we are much more like you want to get a goal and everybody understands the goal, everybody will cooperate.</p> <p>So we actually have drawn back our Dutch people and we do work with them in a much more formal way and that we make a service level agreement and clear targets and in China there is a stronger bonus culture</p> <p>The team comes up with ideas and possibilities in current projects and we want to try to grow a business and we have to keep a gross margin, we need new projects so the team actually discusses those topics and people are really fond of participating in those teams to keep a common focus (p. 6)</p>
		<i>Bridging</i>	<p>We tried to have cooperation and we also discuss with people you know how you can learn from this by participating.</p> <p>When we don't have in every area the highest competence. The project really has some challenging questions we would early involve external resources as a higher competence. Because we just know that people in the company feel motivated if they can work with a higher competence so they feel more secure.</p> <p>We bring our engineers also to the company and try to find out what their (e.g. suppliers) competence levels is. And that's a criteria for us in selecting relationships and suppliers and then what we know the people we also try to get those people for the project.</p> <p>Maybe it's not about Dutch and German and Chinese but you have to understand what motivates people and to create a dialogue between that</p> <p>At the moment we are looking more at companies that are strong at marketing and sales and want to outsource the innovation or product development because those companies are the best fit for us and for our strategy (p. 2)</p> <p>But we are thinking that we are good at managing the integral innovation process so we can actually not present powerful strengths to these big international companies. With SME's that have an international focus they often are really too small to handle the integral innovation process on a professional level themselves so with those companies we have the best added value (p. 2)</p> <p>We also had projects with for instance the University Hospital who have research projects where the need for the product is in the</p>

		<p>hospital and they come up with the concept and we check with them if that is a concept that is not only a good concept for their hospital but also for hospitals in the internal market a good concept (p. 2)</p> <p>Very often there is already a start-up company that is well-financed and they can focus on doing the clinical trials and getting access to the market but they are not skilled in the actual medical device development and making the products, that is all skill (p. 2)</p> <p>We also work with knowledge institutes so we started out some research programs and we have more applied research for instance on e-mobility (p. 2)</p> <p>Now we start with the University of Twente a project we call Sophie it is an intelligent bike for elderly (p. 2)</p> <p>So we are doing a research project with a University and the rehab clinic here to find out what could be a solution, what kind of product do we need to bring to the market and to the normal consumer sales channel (p. 3)</p> <p>We need to have some key players in our boot, because we will never be able to have every music instrument played by the team on house, so we need to have the network of people that have specific knowledge (p. 3)</p> <p>So we have this network and we try to maintain this network so we can use this network if we have to play a certain piece. The network can be research institution, specific service providers, a single person often, maybe part of a company or not (p. 3)</p> <p>What we basically do with innovation team we call product market and technology team so we have commercial people but we also have technical people in one team focusing on one market trying to monitor what's happening in the market and what kind of projects we would like to do (p. 6)</p> <p>So we first of all try to build relationships as being a preferred customer and then we can ask for their best engineers in our projects. So we bring our engineers also to the company and try to find out what their competence levels are (p. 9)</p> <p>We do have some intermediaries (detachingbedrijven) that we work with more often, somebody with skills and sometime we already know some people with skills and we try to get them back (p. 9)</p> <p>I think if you have a detachment company who knows us and we know them the fit is better (p. 10)</p> <p>Yes for instance for plastic injection molding a consultant, and he has been doing that in the field for 25 years and I don't know anybody who is more skilled than he is. So we have a little problem and we find that the team is not handling it, we will call him (p. 10)</p> <p>And if you have a need for that competence on a short notice that we would outsource and try to find somebody in the network (p. 11)</p> <p>So we invest in quality control and actually we stop with our assembly work and outsource it to suppliers. Because managing the whole</p>
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			assembly unit is a lot of managing the work and what we think the supplier can do it as well and probably cheaper (p. 13)
		<i>Internal</i>	<p>Company people walking around and standing at the coffee machine and it's not even broken but as the innovation team you should be doing that. Because maybe the best idea will happen at the coffee machine</p> <p>Innovation projects are difficult to manage. You have to create an excellent team to manage success (p. 6)</p> <p>What we basically do with innovation team we call product market and technology team so we have commercial people but we also have technical people in one team focusing on one market trying to monitor what's happening in the market and what kind of projects we would like to do (p. 6)</p> <p>If you don't have a team working successfully the team won't win. So there's almost a one to one connection with success of projects and a successful team. Failing projects did not have a successful team (p. 8)</p> <p>We work with a core team and a flexible circle around it (p. 10)</p>
		<i>External</i>	<p>NEDAP has been contracted in for many times for our design and branding off the products and at the moment we still work with them.</p> <p>Yes we still use many of the relationships because first of all you need to have market intelligence and you need to know about the market but especially you need to have friends in the market, who are really standing in the market (p. 2)</p> <p>For concept testing we also use the University to have virtual environment because that way we can test the concept much quicker without really having to build all of them (p. 3)</p> <p>At the moment we are looking more at companies that are strong at marketing and sales and want to outsource the innovation or product development because those companies are the best fit for us and for our strategy (p. 2)</p> <p>But we are thinking that we are good at managing the integral innovation process so we can actually not present powerful strengths to these big international companies. With SME's that have an international focus they often are really too small to handle the integral innovation process on a professional level themselves so with those companies we have the best added value (p. 2)</p> <p>We also had projects with for instance the University Hospital who have research projects where the need for the product is in the hospital and they come up with the concept and we check with them if that is a concept that is not only a good concept for their hospital but also for hospitals in the internal market a good concept (p. 2)</p>

			<p>Very often there is already a start-up company that is well-financed and they can focus on doing the clinical trials and getting access to the market but they are not skilled in the actual medical device development and making the products, that is all skill (p. 2)</p> <p>We also work with knowledge institutes so we started out some research programs and we have more applied research for instance on e-mobility (p. 2)</p> <p>Now we start with the University of Twente a project we call Sophie it is an intelligent bike for elderly (p. 2)</p> <p>So we are doing a research project with a University and the rehab clinic here to find out what could be a solution, what kind of product do we need to bring to the market and to the normal consumer sales channel (p. 3)</p> <p>We need to have some key players in our boot, because we will never be able to have every music instrument played by the team on house, so we need to have the network of people that have specific knowledge (p. 3)</p> <p>So we have this network and we try to maintain this network so we can use this network if we have to play a certain piece. The network can be research institution, specific service providers, a single person often, maybe part of a company or not (p. 3)</p> <p>So we first of all try to build relationships as being a preferred customer and then we can ask for their best engineers in our projects. So we bring our engineers also to the company and try to find out what their competence levels are (p. 9)</p> <p>We do have some intermediaries (detacheringsbedrijven) that we work with more often, somebody with skills and sometime we already know some people with skills and we try to get them back (p. 9)</p> <p>I think if you have a detachment company who knows us and we know them the fit is better (p. 10)</p> <p>Yes for instance for plastic injection molding a consultant, and he has been doing that in the field for 25 years and I don't know anybody who is more skilled than he is. So we have a little problem and we find that the team is not handling it, we will call him (p. 10)</p> <p>So we invest in quality control and actually we stop with our assembly work and outsource it to suppliers. Because managing the whole assembly unit is a lot of managing the work and what we think the supplier can do it as well and probably cheaper (p. 13)</p>
		<i>Weak</i>	
		<i>Strong</i>	<p>We have been doing business with NEDAP for more than 22 years (p. 1)</p> <p>What we have done in the past 10 years is that we also had projects with for instance the University Hospital for research projects (p. 2)</p>

			<p>Yes we still use many of the relationships because first of all you need to have market intelligence and you need to know about the market but especially you need to have friends in the market, who are really standing in the market (p. 2)</p> <p>Yes, we have a team now with different parties discussing about this issue (i.e. gap between the use of electrical bike and electrical scooter (p. 3)</p> <p>So we have this network and we try to maintain this network so we can use this network if we have to play a certain piece (p. 3)</p> <p>We have done a lot of work together with a German company and it is a small company but there are quite some skilled people there (p. 9)</p> <p>So we first of all try to build relationships as being a preferred customer and then we can ask for their best engineers in our projects. So we bring our engineers also to the company and try to find out what their competence levels are (p. 9)</p> <p>It's one way or the other if you keep everything with yourself I cannot get the benefit so I have to share (i.e. some of the information, not all with outside parties) in the drawback is that people will also use that knowledge for the areas (p. 9)</p> <p>We do have some intermediaries (detacheringsbedrijven) that we work with more often, somebody with skills and sometime we already know some people with skills and we try to get them back (p. 9)</p> <p>I think if you have a detachment company who knows us and we know them the fit is better (p. 10)</p> <p>We try to make a good relationship (i.e. between the office in China and company in The Netherlands) but it is a challenge because of the communication (p. 12)</p> <p>We have one project running with a German supplier. A Very skilled one, we like him very much (p. 12) So we have to trust them to do the right thing (p. 13)</p>
	<p><b>Organizational creative ability</b></p>		<p>Creating products that people rely on so creating a product means looking at the needs in the market and trying to find a concept that meets the need and create a real demand and second is to fully develop that concept to a ready product and doing the manufacturing management and we look for commercial products that actually sell the product to the end-user (p. 1)</p> <p>We have changed the last few years because when you innovate products in the market it's also important to maintain products and to do more incremental innovation and improvement so I would say our core competencies are on A, but we have realized that to have a structural success we also need to be more B (p. 1)</p> <p>Strongly fit with company A description, with room for incremental innovation (p. 1)</p>

			<p>I think that's (creativity) may be the core for our company</p> <p>The core thing we do in-house is being creative in finding needs in concept to fit those needs and to see if with this concept we also have a business model. And of course it is on the business level but mainly also on the product level.</p> <p>Many products you see half what we call a leap innovation because there are ahead in the market 3 to 5 years. And to create this position its actually the creativity that we need</p> <p>The team comes up with ideas and possibilities in current projects and we want to try to grow a business and we have to keep the gross margin we need to have new projects sot team actually discusses those topics and people are really fond of participating in those teams to keep a common focus</p>
	<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>We are looking for people with a certain skill set, often we look for people that have a technical skill set, industrial design, mechanical engineering, software engineering (p. 4)</p> <p>We are also looking for people with more diverse backgrounds ... she is a board member and she has been working as a clinical physician in hospital for 10 years in operating rooms and worked in a large international company in business development and now she has come to us (p. 4)</p> <p>So we are more looking for somebody who has been working in different environments and not just technical environments but who does understand these environments and can be a communicator within the team (p. 4)</p> <p>So the project really has some challenging questions we would early involve external resources at a higher competence (p. 7)</p> <p>You see is that if you bring in outside competence in, they can actually broaden the picture and they say okay you take this decision here, here and here but you can also do this or this and that way you can come quickly to a solution and that actually kicks their thinking also and so they think they actually have to be more creative and thinking about what they can do (p. 11)</p> <p>In bringing a concept to the market you need specific know-how disciplines and we like to work with an orchestra of concepts so we want to be the director and we have some key players in our team boat.</p> <p>So somebody is really challenged by taking extra education or going in-depth in a technical problem we try to discuss</p>
		<p><i>Motivation</i></p>	<p>By having challenging projects and within XX we have this method we call USEIT Industrial design (p. 6)</p> <p>People have a tendency to get motivated and to really get out there and test concepts if they feel that it is something people want to have. That also motivates them. So talking to the market is the best way of motivation (p. 6)</p>

			<p>If you look at technical people they are motivated by having a challenging project, you can do anything else but if they don't have a challenging project they are not motivated. So you have to create a challenging project</p> <p>Yes there is (tension between the two teams) and we also stimulate it a little bit. So we try to keep a little bit of keep a little bit of competition.</p> <p>It is also motivating for the employees if they have somebody with the knowledge (p. 8)</p> <p>Yes there is (tension between the two teams) and we also stimulate it a little bit. So we try to keep a little bit of keep a little bit of competition.</p>
		<i>Creative thinking skills</i>	<p>The core thing we do in-house is being creative in finding concepts to fit market needs and to see if with this concept we also have a business model (p. 4)</p> <p>Innovation helps if people are quick thinking and a good level of thinking</p> <p>Many products you see half what we call a leap innovation because there are ahead in the market three to five years (p. 4)</p> <p>To create this position its actually the creativity we need (p. 4)</p>
		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	<p>And most time there's only a limited number of problems that really create a break in the project and that are what you have to solve and then you need to find the best people to try to help with that. It can be internal but it can also be external (p.7)</p> <p>And in my experience I had the luck to have been doing this now for 25 years in my experience is that you better scale up quickly to find the best competence because if the problem was not that big then you are safe quickly but if the problem was big at least you have done the right scaling up (p.7)</p>
		<i>Design of labor contract</i>	<p>No we work with a core team and a flexible circle around it. And I think we keep our core team bigger than we maybe need to because we also see that for certain competencies you need two a three people in the company to maintain it (p.10)</p> <p>We do have our structuring of a team so we built a team where we maintain the competences that we have and then when we have a team we have project running and if we have a project we try to organize it running the project which does not always has to be done with our team. So it's more about competences and phases of project but it's not that one to one connected to the organizations</p>



			<p>structure and the positions we have from the organization structure (p.11)</p>
		<p><i>positions/ departments used for external labor</i></p>	<p>Yes (we also use external labor for core activities). (p.10)</p> <p>For instance for plastic injection molding a consultant and he has been doing that in the field for 25 years and I don't know anybody who is more skilled than he is. So we have a little problem and we find out that the team is not handling it we will call him. And the money you pay us always cheaper than mess up yourself (p.10)</p> <p>So if you know those people use them. And they also bring a lot of new ideas (p.10)</p>
		<p><i>Reasons of use</i></p>	<p>Because we just know that people in the company feel motivated if they can work with a higher competence so they feel more secure (p.7)</p> <p>And second in projects it just saves time because if you doing too much evaluations that really costs money (p.7)</p> <p>In my experience is that you better scale up quickly to find the best competence because if the problem was not that big then you are safe quickly but if the problem was big at least you have done the right scaling up (p.7)</p> <p>But then we also often try to have cooperation so we don't take the job outside and nobody internally looks at it. So we tried to have cooperation and we also discuss with people you know how can you learn from this by participating (p.8)</p> <p>But if you're small company you really need to have your product working well. Because that's the trust the market gives you. So I would say that we make a risk analysis more specific to the project in the market and what we can do (p.8)</p> <p>When a competences missing we look internally if we can have people or people can grow, you know can we develop people in a certain position. But developing somebody in a certain position is something you do more over like three years. And if you have a need for that competence on a short notice that we would outsource and try to find somebody in the network (p.11)</p> <p>But for key tasks we try to have at least three persons who can do a job maybe not the best way to take over. And if it's too small to have three people than we also try to outsource it. So that's for us a way to be lazy if we can just try to find somebody outside and that's better than for us (p.13)</p>

			<p>And we would try to find a person or company who skilled to do it even if the cost might be higher than doing it internally, we will still outsource it. So you can concentrate on your core activity, that's our basic thinking. So we as a company we are trying to grow our business but not the team that much. It's not that we want to have a big team (p.13)</p>
		<i>Influence on creative capital</i>	<p>But then we also often try to have cooperation so we don't take the job outside and nobody internally looks at it. So we tried to have cooperation and we also discuss with people you know how can you learn from this by participating (p.8)</p> <p>And most of the time it's not because we're such a big customer but they think we can try to obtain the position that they can learn from us and bring them market intelligence but also being ahead of the market with certain technology trends and then it's beneficial to them see what's happening (p.9)</p> <p>So we first of all try to build relationships as being a preferred customer and then we can ask for their best engineers in our projects. So we bring our engineers also to the company and try to find out what their competence levels is. And that's a criteria for us in selecting relationships and suppliers and then what we know the people we also try to get those people for project. (p.9)</p> <p>And if the people think it's fun working with XX on the people level then you often see that the management of the company is also willing to comply with that (p.9)</p> <p>Yes a lot of time (it has happened that a consultant motivated internal people to be creative) when people are stuck with something especially younger people who come in from University sometimes they stay too long in the circle, you know I think if you mature more in your job you will find okay now I'm doing this for the third time and to find a solution I have to step out off the circle. And I think the seniority learned in the first five years after you graduate, well you what you see is that if you bring in outside competence in, they can actually broaden the picture and they say okay you take this decision here, here and here but you can also do this or this and that way you can come quickly to a solution and that actually kicks their thinking also and so they think they actually have to be more creative and thinking about what they can do (p.11)</p>
		<i>Effects of using external labor</i>	<p>Yes, we are (worried about information leaking out). We don't share all of the information with outside parties. That's one way of doing (p.9)</p> <p>And the other way is really just is to protect your knowledge by having a patent and an agreement in place. It's one way or the other if</p>

			<p>you keep everything with yourself I cannot get the benefit so I have to share in the drawback is that people will also use that knowledge for the areas. And if you're really vulnerable in that then you have to find a way and trying to not let this problem very big by for instance maturing auto information and don't give them the total picture of the innovation (p.9)</p> <p>So we are outsourcing the assembly to a Chinese supplier but at the same time we get stronger grip on the supply by having a strong quality control. So we invest in quality control and actually we stop with our assembly work and outsource it to suppliers. Because managing the whole assembly unit is a lot of managing the work and what we think the supplier can do it as well and probably cheaper (p.13)</p>
	<p><b>Labor Market Intermediaries</b></p>	<p><i>Role of intermediary</i></p>	<p>I think if you have a detachment company who knows us and we know them the fit is better. We are more understanding each other. Normally if we find somebody ourselves it is more for a permanent job and sometimes also through those agencies. We asked somebody who has already done work with us before we know is available to us like a consultant and we would ask them directly (p.10)</p>

COMPANY C			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>But it is necessary for me to go outside and network with other colleagues in the field to make up my mind to see where we are at with HR in our company and to make up my mind to see where others are and to learn but that's another thing (p. 5)</p> <p>So I think an average level there's a lot of trust in people are very happy here on average</p> <p>There's a lot of collaboration between departments and between interdisciplinary teams but also within sub departments there is a lot of collaboration. Also when there's a big machine and four employees are needed then you need to collaborate all the time</p>
		<i>Bridging</i>	<p>Since the 90s we are working together with Giorgetto Giugiaro and he is a famous Italian designer (p. 2)</p> <p>Yeah for example with the flower that's also something we did together with the University (p. 3)</p> <p>So there are a lot of things for example we have to NRK, national rubber group, and yes we do (p. 4)</p> <p>For example innovation and completely new compounds to use for example the flower, we cannot do that by ourselves. So we need universities and we maybe also need other companies and specialists in the field (p. 4)</p> <p>But it is necessary for me to go outside and network with other colleagues in the field to make up my mind to see where we are at with HR in our company and to make up my mind to see where others are and to learn but that's another thing.</p> <p>Yes this is what I always look for. Not all the same people because then you know exactly what you're going to get. So if you have diversity then it's always a little bit exciting and also for the people but they don't realize that in the beginning.</p> <p>So someone is coming from another company and brings in a lot of new fresh thoughts and that's always very the challenge to not let him drown in our way of working and culture</p> <p>But for example if we are looking for someone for the department we have just been talking about with the 20 years then I would say I would look for somebody completely different. Somebody new with not so much the same experience but completely different experience</p>
		<i>Internal</i>	<p>I think it's a very informal culture. Mainly people are very open (p.12)</p> <p>So I think an average level there's a lot of trust in people are very happy here on average (p. 12)</p> <p>I think there's a lot of collaboration between departments and between interdisciplinary teams but also within sub departments there is a lot of collaboration (p. 13)</p>

		<p><i>External</i></p>	<p>Since the 90s we are working together with Giorgetto Giugiaro and he is a famous Italian designer (p. 2)</p> <p>Yeah for example with the flower that's also something we did together with the University (p. 3)</p> <p>So there are a lot of things for example we have to NRK, national rubber group, and yes we do (p. 4)</p> <p>For example innovation and completely new compounds to use for example the flower, we cannot do that by ourselves. So we need universities and we maybe also need other companies and specialists in the field (p. 4)</p> <p>And I also say to agencies I don't want to collaborate with you (i.e. recruitment agency) but in a good way (p. 6)</p> <p>We have a lot of networking going on and sometimes it comes from the head of the department and we make it some sort of policy. But a lot of times it's also just the person and the engineer who is involved in the network we use as a company</p>
		<p><i>Weak</i></p>	<p>And I also say to agencies I don't want to collaborate with you (i.e. recruitment agency) but in a good way (p. 6)</p> <p>I've also had people (i.e. from the recruitment agency) that want to sit at the interviews that well, personally I do not feel any added value by that but I can imagine and that was also his argument that he wanted to feel and see what we want and what we are looking for and what we ask. And I think okay maybe once but it's a little awkward (p. 7)</p>
		<p><i>Strong</i></p>	<p>Since the 90s we are working together with Giorgetto Giugiaro and he is a famous Italian designer (p. 2)</p> <p>I have a marketing guy on the agriculture tires and he is a member and there are monthly or every quarter there are meetings (p. 4)</p> <p>I think it's a very informal culture. Mainly people are very open. Every employee needs to get an appraisal by their leader once a year and has also always a voice of the employee.</p> <p>Comparing in our region we are known as a social employer and we also known as an employer where the employees are more than average happy.</p>
	<p><b>Organizational creative ability</b></p>		<p>we have an idea box, so that's something to improve our production process and we also give our employees incentives to come up with ideas</p> <p>We have an R&amp;D department and they have a big department with current products and they also have a slightly smaller department for new products</p> <p>But I think we are focusing more on our current products because we are big production plant, that is what we are doing mainly is producing the tires that we know. That is what has our main focus here on our site. New products are just as important for us to</p>

			<p>maintain and to stay competitive but a lot less people are focusing on that. So that is why I strongly agree with Company B and more than with company A but without company A we cannot survive in the long term</p> <p>So if you look into those you could see something about that but not very much because the new labeling in the tire market asked from us that all tires more or less look the same because we have to look into fuel savings, handling in the wet circumstances and sound</p> <p>But I think there's a lot of collaboration between departments and between interdisciplinary teams but also within sub departments there is a lot of collaboration. Also when there's a big machine and four employees are needed then you need to collaborate all the time</p> <p>So tires need to be continuously improved since the market will. And if we don't improve we place ourselves out of the market. So in that way it is very important to us to look at innovative ways to make tires and to improve tires. So that's what we are continuously doing (p. 1)</p> <p>But I think we are focusing more on our current products because we are big production plant, that is what we are doing mainly is producing the tires that we know. That is what has our main focus here on our site (p. 1)</p> <p>New products are just as important for us to maintain and to stay competitive but a lot less people are focusing on that (p. 1)</p> <p>Well in those departments people are likely to use systems that they've been using for 20 years and also the collaboration system and the networks stays a bit the same and then I feel okay we have to do something about it (p. 14)</p>
	<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>We educate them towards operator and there are several functions below the profession of operator (p. 4)</p> <p>So for example we will see who is Roy, how about his discipline, how about his intelligence, does he get it, does he do his job well and also is he able to combine his work with the study because it's quite comprehensive study and it's difficult for several people to combine it with your work . And we have acquired attractive roster in production but still people also need to rest, so that's quite a thing and people have to choose that (p. 5)</p> <p>He's going to perform and going to work with us and after several months the contractor and the leader has a good picture how he or she performs and then we will decide if we will give a contract (p. 7)</p> <p>when somebody from Deloitte is coming our finance guys are thinking yeah good point I didn't see that and they all didn't and then we are starting to work on that that happens a lot yes (p. 8)</p> <p>So someone is coming from another company and brings in a lot of new fresh thoughts and that's always very the challenge to not let him drown in our way of working and culture (p. 10)</p> <p>So culture is always lower and it's something we're looking into if we have five candidates then we are thinking okay they all fit so which</p>

			<p>candidate fits best within our company or which candidate has the highest potential or which candidate brings another thing that we don't have within our culture (p. 10)</p> <p>But there's not one machine that is still standing there as we bought it. So we have a lot of engineers and technicians that we fly in to improve the machine (p. 13)</p> <p>Those machines we mainly build ourselves by our own ideas but we had flown in the specialist and engineers to build it with us (p. 14)</p> <p>Use external consultants to bring the knowledge in for the future.</p> <p>So the most important things we put on there are level off education and also what kind of track you have done for example you need to have someone from business administration so we put that on or finance master or something like that. So those things are important and also the work experience for example the sales controller, has he or has she experience with sales controlling</p>
		<p><i>Motivation</i></p>	<p>We have an idea box, so that's something to improve our production process (p. 1)</p> <p>We also give our employees incentives to come up with ideas (p. 1)</p> <p>And we have a personal magazine every quarter and the best ideas are in there and it talks about the idea and the costs we saved because of that idea and we also have a formula as an incentive (p. 1)</p> <p>Well one example is to give them also stage, like podium, so the best ideas are rewarded. So first of course we look if the idea can implemented, if the company can improve by it. If this is the case then we have to formula, so there is an incentive (p. 2)</p> <p>We also have a meeting with all the idea winners. We also a monthly meeting with the director of production and engineering and he will invite all the idea winners and a picture is made of that and that picture would also come into our personal magazine (p. 2)</p> <p>there is a culture they have a good idea you could do a lot of things (p. 10)</p>
		<p><i>Creative thinking skills</i></p>	<p>For example with finance, when somebody from Deloitte is coming, our finance guys are thinking yeah good point I didn't see that and they all didn't and then we are starting to work on that.</p> <p>I cannot imagine a job where this is not useful or needed. They are departments in which the average turnover of employment is very high and they're all still sitting together for 20 years. Well in those departments people are likely to use systems that they've been using for 20 years and also the collaboration system at the networks face a little bit the same and then I feel okay we have to do something about it. But it is very hard if there specialized to start with the rotational circle. So it happens a lot but I see it in our company is a thing that we can improve. We are excepting those things too much. So for example we could say you're sitting on your job and you doing that for maximum of eight years and then we really need to push you and you have two years enough to 10 years we need to do</p>

			<p>something for example. But in the past we have not been doing that and that's what we're seeing now if we looking at departments because everybody has been there for almost 20 years.</p>
		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	<p>Yes. For example in the production we want to have 20% temporary labor (p.4)</p> <p>Yeah mainly the last completely in-house. It could be that we are starting with someone with a one-year contract but then always with the intention to make a permanent (p.8)</p>
		<i>Design of labor contract</i>	<p>Yeah we look at what we have and what we need and if we lack some knowledge skills and competencies then we go and search for it externally and hire it for the moment that we need it (p.5)</p> <p>yeah (it is also like this with external labor) then the contractors is in house contacted us and also the leaders off production and then he's going to perform and going to work with us and after several months the contractor and the leader has a good picture how he or she performs and then we will decide if we will give a contract (p.7)</p>
		<i>positions/ departments used for external labor</i>	<p>Yes yeah we do that for example within finance there are consultants. And also with engineers it's not temporary employees but we hire specialists, so that does happen. But not a lot well what is a lot. But within HR we feel that we have a lot of expertise within our own department so it's not necessary to let the HR consultant fly in because we feel that that is not necessary. But it is necessary for me to go outside and network with other colleagues in the field to make up my mind to see where we are at with HR in our company and to make up my mind to see where others are and to learn but that's another thing (p.5)</p> <p>yes (you could say that we use external labor for our core activities because we use 20% within production) (p.9)</p>
		<i>Reasons of use</i>	<p>First of all it's a very good way to make sure That your new employees are from the standard quality that that you want.</p> <p>So what we do is that we educate them in a three to five-year education program. We educate them towards operator and there are several functions below the profession of operator. And they start with a temporary contract, we also have contractor's you can see</p>



			<p>them at the parking lot if you got site when you go back and then we will start. So for example we will see who is Roy, how about his discipline, how about his intelligence, does he get it, does he do his job well and also is he able to combine his work with the study because it's quite comprehensive study and it's difficult for several people to combine it with your work. And we have acquired attractive roster in production but still people also need to rest, so that's quite a thing and people have to choose that. (p.4)</p> <p>But so that's a way to make sure that what comes in and what you contract to XX that people love good quality. (p.5)</p> <p>But also should the company go less than we are now based on revenues and contracts etc. and it's quite easy to cut the cost. So in order to maintain flexibility you need flexible personnel. A bit not too much and not too little (p.5)</p> <p>Yes. Tires are a very complex production process. So we have to tire component and then all the tire components are put together and then we haven't fully automated machines that are as big as a house and we have a lot of them. And those machines we have some older ones but you cannot really see that they were build in the 80s and they're still working but those machines we mainly build ourselves by our own ideas but we had flown in the specialist and engineers to build it with us. So that was a collaboration and you don't find any of those anywhere (p.14)</p>
		<p><i>Influence on creative capital</i></p>	<p>Well I'm not sure. But yes for example within finance, when somebody from Deloitte is coming our finance guys are thinking yeah good point I didn't see that and they all didn't and then we are starting to work on that that happens a lot yes (p.8)</p> <p>yes ( we also external labor to bring knowledge in) and sometimes it's necessary for audits and stuff like that (p.8)</p> <p>no for example a lot of the machines we have suppliers of those machines. But there's not one machine that is still standing there as we bought it. So we have a lot of engineers and technicians that we fly in to improve the machine (p.14)</p>
		<p><i>Effects of using external labor</i></p>	<p>I think it's more positive because if the employee would feel that somebody is taking over the job than the employee would not have been able to do it themselves. So those are mainly the things that we cannot do ourselves or we do not have the time for because we are very lean company. We do not have any employees left and is doing nothing that is not happening here is asking hey what I can do today. I think on all levels we are busy 110%. Something for example the technician would be pleased if someone is helping them (p.14)</p>

	<p><b>Labor Market Intermediaries</b></p>	<p><i>Role of intermediary</i></p>	<p>no not a lot (of agreements with agencies). We have price agreements, also purchasing department is involved, but there's also a lot of flexibility. My personal style is to remain flexible and I just want to do whatever I think is best at that stage so that vacancy and not feel tied up to one agency. And I also say to agencies I don't want to collaborate with you but in a good way. So I make fun of it but I need them. So sometimes you need them and they also like it because I can get revenue from it (p.6)</p> <p>It depends. Most of them have the role of finding a good candidate. So they call or they will email and they say like wow I found the perfect match but I'm not saying the name yet or maybe I will do, it doesn't really matter to me, and then they ask do you guys want to interview this candidate. That's the main role. I've also had people that want to sit at the interviews that well, personally I do not feel any added value by that but I can imagine and that was also his argument that he wanted to feel and see what we want and what we are looking for and what we ask. And I think okay maybe once but it's a little awkward (p.7)</p> <p>In theory they also need to take care of some HR functions because they are in house and they are doing that but I think the real HR practices will maintain with the leaders on the shop level. it's more administrative, so more the lower level, the administrative part (p.7)</p>
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COMPANY D			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>When you talk about innovation then it stops at innovation within our company because people think that is what we are doing it for 25 years, so why should we worry about it (p. 2)</p> <p>Yeah absolutely, it is diverse (i.e. the companies that take seat in the cradle to cradle café) but all with the common denominator decency screens and the expertise that contributes to that (p. 5)</p> <p>We have united us in the NEBIVA, which is the Dutch Inner walls industry. There are all of our competitors in. You can say that the directors of our competitors have united them in, and they come together ones in the month and to talk about how it goes in the inner walls industry and how they can help each other (p. 15)</p>
		<i>Bridging</i>	<p>The R&amp;D department (i.e. employees) keeps themselves updated by developing themselves and also through being in good contact with other architects and interior designers (p. 4)</p> <p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&amp;D department, interior designers who take seat in the cradle to cradle café, so all people who are involved in building the movable decency screens, but also who are involved at the completion within the building (p. 4)</p> <p>Yeah absolutely, it is diverse (i.e. the companies that take seat in the cradle to cradle café) but all with the common denominator decency screens and the expertise that contributes to that (p. 5)</p> <p>There are for example three architects in <i>the cradle to cradle café</i>. Those numbers, I do not know the split exactly but I know that interior design are in, even contractors are in, even someone from the prevention from the government takes a seat in the cradle to cradle café (p. 5)</p>
		<i>Internal</i>	<p>When you talk about innovation then it stops at innovation within our company because people think that is what we are doing it for 25 years, so why should we worry about it (p. 2)</p> <p>With the new director there is more consciousness that managers also make contact horizontally with each other, before we had a culture with different islands, but he is really supportive that managers make contact with each other (p. 6)</p> <p>When something does not go well, project groups do write down what went wrong, what needs to be done. I choose people for that and one person is the coordinator and that becomes a project. Of course with deadlines (p. 6)</p>
		<i>External</i>	<p>The new board would like to spread the cooperation with parties and to discuss the price every time (p. 2)</p> <p>The new board totally does not like that and says every year there must be a proposal round in which also Tempo Team participates but</p>

			<p>it is not without doubt that the cooperation with Tempo Team continuous (p. 2)</p> <p>The R&amp;D department (i.e. employees) keeps themselves updated by developing themselves and also through being in good contact with other architects and interior designers (p. 4)</p> <p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&amp;D department, interior designers who take seat in the cradle to cradle café, so all people who are involved in building the movable decency screens, but also who are involved at the completion within the building (p. 4)</p> <p>Yeah absolutely, it is diverse (i.e. the companies that take seat in the cradle to cradle café) but all with the common denominator decency screens and the expertise that contributes to that (p. 5)</p> <p>What we do when it is about technical jobs, we look for technical agencies around us. We do have a few agencies around us, a number of five (p. 7)</p> <p>We have united us in the NEBIVA, which is the Dutch Inner walls industry. There are all of our competitors in. You can say that the directors of our competitors have united them in, and they come together ones in the month and to talk about how it goes in the inner walls industry and how they can help each other (p. 15)</p> <p>A competitor who has a large order in Swiss, who cannot handle it himself, asked XX to take over a part of the production. So that is some sort of cooperation (p. 15)</p>
		<p><i>Weak</i></p>	<p>The new board would like to spread the cooperation with parties and to discuss the price every time (p. 2)</p> <p>The new board totally does not like that and says every year there must be a proposal round in which also Tempo Team participates but it is not without doubt that the cooperation with Tempo Team continuous (p. 2)</p> <p>No (the person with the idea will not be part of the team) (p. 3)</p>
		<p><i>Strong</i></p>	<p>When you talk about innovation then it stops at innovation within our company because people think that is what we are doing it for 25 years, so why should we worry about it (p. 2)</p> <p>The R&amp;D department (i.e. employees) keeps themselves updated by developing themselves and also through being in good contact with other architects and interior designers (p. 4)</p> <p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&amp;D department, interior designers who take seat in the cradle to cradle café, so all people who are involved in building the movable decency screens, but also who are involved at the completion within the building (p. 4)</p>

			<p>Once in the two months a cradle to cradle café is organized (p. 5)</p> <p>The idea (i.e. the idea of cradle to cradle café) is to network and to have good contact with each other (p. 5)</p>
	<b>Organizational creative ability</b>		<p>No (the person with the idea will not be part of the team) (p. 3)</p> <p>As lean trajectory project group we are also physically at the people on the work floor to discuss it with them. And you see that people flourish in the sense that they have the feeling, we can talk along and we may think along. If we do something about that is another thing, but we at least give them the possibility to have an opinion about it and to come up with their own ideas (p. 3)</p> <p>It is really about those new ideas, to get your employees out of their comfort zone and to let them think along especially for innovative production, improvements and new concepts (p. 9)</p> <p>Our core business, we are busy with decency screens, but he (i.e. the director) says that if someone comes up with an idea that we have a business for coffins, I just say something, we are very good at wood, then it can be discussed (p. 9)</p> <p>It is mine opinion that you need to use the creativity of employees more, more than we used to do and then the solution will arise (p. 9)</p> <p>It is mine opinion that we have made barely use of the creativity of employees on the work floor, they are the ones that come up with ideas (p. 9)</p> <p>But I have the opinion that if you use the creativity of your employees more than we currently have done, then the solutions will come by themselves (p. 9)</p> <p>The market is really unexpected. That is a really burden for us (p. 15)</p>
	<b>Creativity</b>	<i>Expertise</i>	<p>The solution (i.e. the solution to the efficiency improvement) lies with the work floor (p. 4)</p> <p>They (i.e. interior designers, R&amp;D department and architects) are united in the cradle to cradle café, that is a meeting place to discuss with each other about the future, about designs and how to handle that (p. 4)</p> <p>Yeah absolutely, it is diverse (i.e. the companies that take seat in the cradle to cradle café) but all with the common denominator decency screens and the expertise that contributes to that (p. 5)</p> <p>For the cradle to cradle we are doing that in house, two years ago we hired a marketing manager. That function we did not have so we added it. We hired him, he took the lead and now he is in employed by us (p. 5)</p>

			<p>People are educated so that they can rotate between divisions (p. 7)</p> <p>It is funny that you ask that because two weeks ago we had a discussions about it that he (i.e. director) is not able to estimate the knowledge and capabilities that we have and if that is sufficient for the new concepts (p. 9)</p> <p>Also with the fit between the wall and the ceiling, you sometimes have those old premises and then it is really difficult, totally askew , and those people come up with magnificent solutions so that you will not see that it is really askew (p. 9)</p>
		<i>Motivation</i>	<p>The board indeed tries to motivate employees to come up with ideas, different working methods (p. 2)</p> <p>The new board like to have that the employees come up with ideas (p. 2)</p> <p>Employees of the work floor participate at meetings and asked by the board what if you are in control of the organization, do you have any ideas to reduce for example the turnover time of doors, how can you reduce that from 110 hours to 30 minutes (p. 2)</p> <p>We have an idea box committee and also an idea box where people are able to drop their ideas and when it is an idea that has value then it will be rewarded (p. 3)</p> <p>When it (i.e. the idea) is really exceptional than it is possible that the employee gets a raise in salary (p. 4)</p> <p>And I have to say that we are really happy with that (i.e. hiring the external advisor) because experience learn that having someone with punctual eyes, that already speaks for itself, because when he comes it needs to be done so simply as that (p. 5)</p>
		<i>Creative thinking skills</i>	
		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	<p>For the lean trajectory we hired an external consultant (p. 5)</p> <p>This management said from 2013 there is no work for temporary workers. So from January we do not have any temporary workers (p. 7)</p>
		<i>Design of labor contract</i>	<p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&amp;D department, interior designers who take seat in the cradle to cradle café, so all people who are involved in building the movable decency screens, but also who are involved at</p>

			<p>the completion within the building (p. 4)</p> <p>Ideas that are the result of the cradle to cradle café are produced internally instead of cooperating with other companies because the knowledge and expertise are in house (p. 5)</p> <p>For the cradle to cradle we are doing that in house, two years ago we hired a marketing manager. That function we did not have so we added it. We hired him, he took the lead and now he is in employed by us (p. 5)</p>
		<i>positions/ departments used for external labor</i>	The R&D department (i.e. employees) keeps themselves updated by developing themselves and also through being in good contact with other architects and interior designers (p. 4)
		<i>Reasons of use</i>	<p>We had in the past always five or six temporary workers to deal with the busy periods, yes we sold last year very much glass for example and there was a busy period for the division glass. There is now also a busy period but we said that employees are internally educated from other divisions to glass (p. 13)</p> <p>A competitor who has a large order in Swiss, who cannot handle it himself, asked XX to take over a part of the production. So that is some sort of cooperation (p. 15)</p> <p>We will search also for other companies for which we can do the production, because at this moment our production is not filled. That is what we like to do, because this director likes to have the production filled, he like to have the machines running longer (p. 15)</p>
		<i>Influence on creative capital</i>	
		<i>Effects of using external labor</i>	
	<b>Labor Market Intermediaries</b>	<i>Role of intermediary</i>	

COMPANY F			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>Yes, the group of doctors is oriented towards gastroenterology and urology. We have the children's' doctors, neurologists, and urologists, it is a fixed group (p. 2)</p> <p>You have to do it with that group, you work for eight hours or longer, then it is important to have that match (p. 6)</p> <p>Yes we work together, as I heard, with the University of Twente (to counter for the lack of certain knowledge, technology, capabilities). Like, how are we going to do that or that with Demcon. That is also what they have done. That are all people who are employed in the direction (p. 9)</p> <p>Mechanical engineering, biomedical technology are not done here, but the real technical event, our hardware department is collaborating a lot with that (p. 9)</p> <p>Then we have as women from XX our yearly females trip, that is a nice silly movie and before that something to eat. Those things happen spontaneously, or that colleagues meet with each other. Every year there is a barbecue organized by one of the owner in his backyard, then all colleagues including family, man, female, children are invited. Sint Nicholas is celebrated with the children (p. 11)</p>
		<i>Bridging</i>	<p>Yes, the group of doctors is oriented towards gastroenterology and urology. We have the children's' doctors, neurologists, and urologists, it is a fixed group (p. 2)</p> <p>In the committee for the investigation if the idea could be realized are people from different disciplines (p. 3)</p> <p>It is often the same group. Then you have people from R&amp;D, product management, marketing and sales, and often one of the directors (p. 3)</p> <p>It can change who take a seat in the project group but from every discipline one person (p. 3)</p> <p>Yeah, for design yes. Our hardware department has contacts with Thales for example that they have designed something and how does it work, is it possible, let's try it, and so on</p>
		<i>Internal</i>	<p>In the committee for the investigation if the idea could be realized are people from different disciplines (p. 3)</p> <p>It is often the same group. Then you have people from R&amp;D, product management, marketing and sales, and often one of the directors (p. 3)</p> <p>It can change who take a seat in the project group but from every discipline one person (p. 3)</p>



			<p>No, it is really that small project event. Really that project group that comes at certain intervals together, but also to see how the progress is. You have made a small project, je draw lines, deadline, do dates, who is responsible for what and after that you come together what is the result, how far are we. That needs to have a follow up. It could be that (p. 4)</p> <p>You have to do it with that group, you work for eight hours or longer, then it is important to have that match (p. 6)</p> <p>But especially how we are, as an employee of XX, that is a certain type of person, that is a real XX-er (p. 6)</p> <p>At this moment I have the door closed, but normally I have the door open en I can talk the best about this floor because my office is here, but yes it is really a jolly happening (p. 11)</p> <p>But it is really nice to be free and when the atmosphere get too cozy then the supervisors also say oke finished for now, come on. That must be able and that is also on a really friendly manner en they understand that (p. 11)</p> <p>It is a real close group, but new people can step in easily, unless they are not really liked for ever what reason that is. Then everybody acts on that. That is what you see, and notice (p. 11)</p> <p>Besides we have an open door policy, everybody can step inside of each office (p. 11)</p> <p>Then we have as women from XX our yearly females trip, that is a nice silly movie and before that something to eat. Those things happen spontaneously, or that colleagues meet with each other. Every year there is a barbecue organized by one of the owner in his backyard, then all colleagues including family, man, female, children are invited. Sint Nicholas is celebrated with the children (p. 11)</p>
		<p><i>External</i></p>	<p>No (we use) not explicitly external companies (to get information from the market about development (p. 2)</p> <p>Market managers, product managers, they have continuous contact with doctors en they say what they like to have. That is the demand from the market (p. 2)</p> <p>The dealers, besides we sell our products through a network of dealers (p. 2)</p> <p>Yes, the group of doctors is oriented towards gastroenterology and urology. We have the children's' doctors, neurologists, and urologists, it is a fixed group (p. 2)</p> <p>It (i.e. questions for improvements of the products) can also come from the side of physiotherapist. That they have a question (p. 2)</p> <p>In the first instance of course their interest, if people going to work here we say, dependent of their function, it is possible that you are going outside the organization, in the sense that you are going to visit congresses, become a stand employee (p. 3)</p>

			<p>But also software engineers who sit down with a doctor, you have people who do not like that, but you have people that say that it gives a little bit of extra's that gives a challenge (p. 3)</p> <p>I notice that parties who often help me, temporary work agency, with who I do business for a long time, they know right away that is an XX-er. That works great (p. 6)</p> <p>Yeah the recruitment agency is commonly called in, I do not have clear agreements with anybody, no, I like that, that freedom (p. 6)</p> <p>I am that commercial that when I employ quite a lot of people from the same agency that I say at a certain what are we going to do about the conversion factor (p. 6)</p> <p>Yes already several years (that they come with good CV's, because of the bond). They have visited us, have taken a tour, they already have employed several people in different departments so they have learned the organization throughout the years. That is also a nice way to cooperate (p. 6)</p> <p>I use LinkedIn myself (for the recruitment). That is also a network (p. 7)</p> <p>Yeah, for design yes. Our hardware department has contacts with Thales for example that they have designed something and how does it work, is it possible, let's try it, and so on</p> <p>Then our hardware department comes up with that. It could be, that they heard that those wheels need a brake because when I start typing something then that thing (trolley) rolls away or I like to have a sliding drawer for mine keyboard. That are things from the field, because people tries it, we do not work with it ourselves. Therefore you need other companies who think along like gosh that will work or whatever (p. 8)</p> <p>Yes we work together, as I heard, with the University of Twente (to counter for the lack of certain knowledge, technology, capabilities). Like, how are we going to do that or that with Demcon. That is also what they have done. That are all people who are employed in the direction (p. 9)</p> <p>Mechanical engineering, biomedical technology are not done here, but the real technical event, our hardware department is collaborating a lot with that (p. 9)</p>
		<p><i>Weak</i></p>	<p>Yeah the recruitment agency is commonly called in, I do not have clear agreements with anybody, no, I like that, that freedom (p. 6)</p>

		<p><i>Strong</i></p>	<p>Market managers, product managers, they have continuous contact with doctors en they say what they like to have. That is the demand from the market (p. 2)</p> <p>No, it is really that small project event. Really that project group that comes at certain intervals together, but also to see how the progress is. You have made a small project, je draw lines, deadline, due dates, who is responsible for what and after that you come together what is the result, how far are we. That needs to have a follow up. It could be that (p. 4)</p> <p>I notice that parties who often help me, temporary work agency, with who I do business for a long time, they know right away that is an XX-er. That works great (p. 6)</p> <p>I am that commercial that when I employ quite a lot of people from the same agency that I say at a certain what are we going to do about the conversion factor (p. 6)</p> <p>Yes already several years (that they come with good CV's, because of the bond). They have visited us, have taken a tour, they already have employed several people in different departments so they have learned the organization throughout the years. That is also a nice way to cooperate (p. 6)</p> <p>Mechanical engineering, biomedical technology are not done here, but the real technical event, our hardware department is collaborating a lot with that (p. 9)</p> <p>At this moment I have the door closed, but normally I have the door open en I can talk the best about this floor because my office is here, but yes it is really a jolly happening (p. 11)</p> <p>But it is really nice to be free and when the atmosphere get too cozy then the supervisors also say oke finished for now, come on. That must be able and that is also on a really friendly manner en they understand that (p. 11)</p> <p>It is a real close group, but new people can step in easily, unless they are not really liked for ever what reason that is. Then everybody acts on that. That is what you see, and notice (p. 11)</p> <p>Besides we have an open door policy, everybody can step inside of each office (p. 11)</p> <p>Then we have as women from XX our yearly females trip, that is a nice silly movie and before that something to eat. Those things happen spontaneously, or that colleagues meet with each other. Every year there is a barbecue organized by one of the owner in his backyard, then all colleagues including family, man, female, children are invited. Sint Nicholas is celebrated with the children (p. 11)</p>
	<p><b>Organizational creative ability</b></p>		<p>It is a combination of both. It is a product that we put on the market, it was really long time ago a new product but it is improved by innovation, via questions from the field. Besides that we also need to keep up by developing new products. But it is also that we take</p>

			<p>care of products from third parties if they are applicable on our own products. It is in principal a combination of A and B. We have within our company the people with creative ideas, who come up with ideas themselves, but also the questions from the market which we can use (p. 1)</p> <p>Developing new products we recently did or our own old products, to call it that way, are continuously improved. If I have to make a choice, then I talk about the current situation, then it is B (p. 1)</p> <p>It is about the current product portfolio we have, and the improvement of the current products (p. 2)</p> <p>Agree (for the scale B) (p. 2)</p> <p>Then we have a group and in that group it will be discussed, what are the ideas. Then it becomes a project, to call it that way (p. 3)</p> <p>It should be accomplishable, financially; there need to be a market. That needs to be investigated. The project group is responsible for that and when it eventually becomes a Go, then the big work finally happens (p. 3)</p> <p>But it is not like that when someone has an idea that we jump on that and that it will happen, no that does not happen (p. 4)</p> <p>No, it is really that small project event. Really that project group that comes at certain intervals together, but also to see how the progress is. You have made a small project, je draw lines, deadline, due dates, who is responsible for what and after that you come together what is the result, how far are we. That needs to have a follow up. It could be that (p. 4)</p> <p>Yes, and then the idea generator receives feedback on his idea (p. 4)</p> <p>The Dutch and German market is saturated (p. 18)</p>
	<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>Yes we have the knowledge and technology in the company to get from a cable towards wireless, but also we look at competitors.</p>
		<p><i>Motivation</i></p>	<p>They do not need to be motivated all the time, people can have that in themselves, can be motivated through the things they have read, heard or seen. Ideas that are shared with each other (p. 3)</p>
		<p><i>Creative thinking skills</i></p>	<p>Employees come up with ideas because they read, come together and by going to congresses (p. 4)</p>

		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	
		<i>Design of labor contract</i>	<i>Yeah the recruitment agency is commonly called in, I do not have clear agreements with anybody, no, I like that, that freedom (p. 6)</i>
		<i>positions/ departments used for external labor</i>	<p><i>Yeah, for design yes. Our hardware department has contacts with Thales for example that they have designed something and how does it work, is it possible, let's try it, and so on (p. 8)</i></p> <p><i>Yes we work together, as I heard, with the University of Twente (to counter for the lack of certain knowledge, technology, capabilities). Like, how are we going to do that or that with Demcon. That is also what they have done. That are all people who are employed in the direction (p. 9)</i></p> <p><i>Mechanical engineering, biomedical technology are not done here, but the real technical event, our hardware department is collaborating a lot with that (p. 9)</i></p> <p><i>No (i.e. external workers are not used for core activities). What does happen is that when we have a vacancy it always goes via a temporary work agency, recruitment agency, you have an appointment with them that when you work a certain amount of hours you can over the candidate for free or I pay an fee, then I get rid of everything. People from the temporary work agency get always the first time a contract for one year just to see how it works. Those persons are temps, they do the core activities but are hired when every goes fine and get a fixed contract (p. 12)</i></p> <p><i>No it is more for the short duration they are needed, therefore they do not use them in the core activities because then they have to educate them and it is only for a short duration (p. 14)</i></p> <p><i>No consultants (p. 14)</i></p>
		<i>Reasons of use</i>	<p><i>Then our hardware department comes up with that. It could be, that they heard that those wheels need a brake because when I start typing something then that thing (trolley) rolls away or I like to have a sliding drawer for mine keyboard. That are things from the field, because people tries it, we do not work with it ourselves. Therefore you need other companies who think along like gosh that will work or whatever (p. 8)</i></p> <p><i>Indeed at peaks, in this case at operations there we just need some hands, someone that, I do not say it polite, can do the simple work</i></p>

			<p><i>and who do not need guidance like this and that has to be done, but just the simple tasks that just needs to be done, so that the other production employees can focus on their job (p. 12)</i></p> <p><i>Like we have it now, it is indeed someone at the production, let I just say it, the extra hands we need for the simple tasks because we do not need a vacancy, it is temporary. Then it is quite quickly that you hire someone externally. After a couple of weeks, because you know it is only for a short duration, you can say goodbye. Those tasks are easy. You do not need long training periods for that (p. 12)</i></p> <p><i>No it is more for the short duration they are needed, therefore they do not use them in the core activities because then they have to educate them and it is only for a short duration (p. 14)</i></p>
		<i>Influence on creative capital</i>	
		<i>Effects of using external labor</i>	<i>What we try is to get as much information on the products of our competitors as possible and that is what our competitors are doing too, we go to the stand of our competitors but also the other way around. But really a cooperation, I have not heard of, really with competitors no. No, we like to stay ahead of them (p. 19)</i>
	<b>Labor Market Intermediaries</b>	<i>Role of intermediary</i>	<p><i>Yeah the recruitment agency is commonly called in, I do not have clear agreements with anybody, no, I like that, that freedom (p. 6)</i></p> <p><i>I am that commercial that when I employ quite a lot of people from the same agency that I say at a certain what are we going to do about the conversion factor (p. 6)</i></p> <p><i>Yes for everything (i.e. the use of recruitment agency) because I, this is a solo job. I work part-time, only Friday afternoon I am free. But otherwise you have too much work, because you have to do everything. If I place an advertisement then I have to reject people and sometimes I have to be honest with the temporary work agency, recruitment agency, that this CV reject it with this and that reason (p. 6)</i></p> <p><i>Yes already several years (that they come with good CV's, because of the bond). They have visited us, have taken a tour, they already have employed several people in different departments so they have learned the organization throughout the years. That is also a nice way to cooperate (p. 6)</i></p> <p><i>Yes, they are used for everything, except for management jobs. If it is about a management team job, then I make use of another sort of agency or it is through your own network or LinkedIn (p. 7)</i></p> <p><i>But well, it is your job and when the opportunity is there because you have and are allowed to take that time then it is nice to do it yourself and otherwise I use third parties (for recruitment) (p. 7)</i></p>



COMPANY E			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>The Headquarters is situated here in Enschede and we also have subsidiaries in England, Germany and we have a sales office in Belgium and we have a subsidiary in Czech Republic, so that is where the main part of the businesses is going on, so mainly Western Europe (p. 1)</p> <p>Yes of course we do have those QCs on the spot over there and they should do the checking (p. 5)</p> <p>We have a lot of people that have been working here for a lot of years now so there's a lot of knowledge in here (p.10)</p>
		<i>Bridging</i>	<p>But we do not produce ourselves, we source it from the far-east countries like Indonesia, China and that's where the bigger part of the collection comes from (p. 1)</p> <p>And like I said we had our own production for resin furniture and also after the bankruptcy this production is still there, it's across the street if you look out of the window, but it's now a supplier of ours (p. 1)</p> <p>Important customers for us are for example large garden centers (p. 1)</p> <p>We have suppliers which have their own models and then we try to get the exclusive selling right for Europe or the Netherlands (p. 1)</p> <p>It's all external designers (p. 2)</p> <p>Yes (we hire companies for the designs) persons as well (p. 2)</p> <p>And there are different suppliers actually; companies as well as persons as well as ideas from all managing directors who can ask a supplier to develop it for us (p. 2)</p> <p>It's more short-term I think at this moment. As far as I know we do not have a long-term relationship with any designers or design company (p. 2)</p> <p>So for example sometimes the designer has more knowledge on a special type of material or style, which are used for one year but next year you use another style and that's perhaps not his or her cup of tea (p. 3)</p> <p>We try to have stable relationships and especially with suppliers because you try to look for reliable partners and well and in the Far East it's really different culture and working attitude (p. 3)</p> <p>So we have a lot of fixed suppliers and I don't know how many but we do have a lot of suppliers there. But with suppliers in China you really should have a good relationship and maintain that relationship (p. 3)</p>



			<p>But we have a planning department that has to take care that all the stuff is coming from over there to here and they have a lot of contact by email, by phone and more and more by Skype and stuff like that. So year communication is very good (p. 4)</p> <p>But for example in the factories of our suppliers we also have a quality department here and sometimes they go to China to assist our quality team there, to feed them with information on how we want to be a sometimes when you look at a chair we think it should be of some kind of quality. Our quality requirements are different than Chinese quality requirements. So that our QC tries to explain how we think it should be and it could be something very logic (p. 5)</p> <p>Yes we have cooperation but it's still in the testing phase. But it's yet hot on some company that has a patent on that (p. 7)</p> <p>Yes they work with our quality people and our managing director responsible for the product development. But we do not have the technological knowledge ourselves in the house (p. 7)</p> <p>In China yes but it's all in China so they have the knowledge of the different material types (p. 8)</p> <p>I mean most of the people that work here do a lot and I mean of course we sometimes need legal advice or technical advice but it's not that we hire those people it's just cooperation (p. 9)</p> <p>More in the house but if you talk about marketing we work with a marketing company which of course advises you how to do your marketing campaign (p. 9)</p> <p>We also use a company for our website that's not something we do ourselves but it's really also a cooperation, so we a hire an IT consultant for a specific sales system and he maintains it and we have an IT engineer here at XX but also an external IT specialist (p. 9)</p> <p>For example when you want to have something patented then there is bureau here at 500 m that knows everything about that. So of course for those kinds of subjects we do use. So we know what we can and what we do and what we don't know that we go outside (p. 11)</p> <p>For example we just had a vacancy that we filled for an IT engineer and we tried to find one by ourselves first but we didn't succeed, so we had a recruitment agency to do it for us (p. 13)</p> <p>Yes we do but we also have our own connection with the local government for example and they have a lot of projects with people getting back into work and into the labor process again (p. 13)</p>
		<p><i>Internal</i></p>	<p>I do have contact but it's not very intense with my Chinese colleagues but I think it gets better (p.4)</p>

		<p><i>External</i></p>	<p>But we do not produce ourselves, we source it from the far-east countries like Indonesia, China and that's where the bigger part of the collection comes from (p. 1)</p> <p>And like I said we had our own production for resin furniture and also after the bankruptcy this production is still there, it's across the street if you look out of the window, but it's now a supplier of ours (p. 1)</p> <p>The Headquarters is situated here in Enschede and we also have subsidiaries in England, Germany and we have a sales office in Belgium and we have a subsidiary in Czech Republic, so that is where the main part of the businesses is going on, so mainly Western Europe (p. 1)</p> <p>Important customers for us are for example large garden centers (p. 1)</p> <p>We have suppliers which have their own models and then we try to get the exclusive selling right for Europe or the Netherlands (p. 1)</p> <p>It's all external designers (p. 2)</p> <p>Yes (we hire companies for the designs) persons as well (p. 2)</p> <p>And there are different suppliers actually; companies as well as persons as well as ideas from all managing directors who can ask a supplier to develop it for us (p. 2)</p> <p>It's more short-term I think at this moment. As far as I know we do not have a long-term relationship with any designers or design company (p. 2)</p> <p>Sometimes you develop a product together and you invest a lot of time and energy and money of course and then at the end it's not as successful as you hoped for (p. 2)</p> <p>So for example sometimes the designer has more knowledge on a special type of material or style, which are used for one year but next year you use another style and that's perhaps not his or her cup of tea (p. 3)</p> <p>We try to have stable relationships and especially with suppliers because you try to look for reliable partners and well and in the Far East it's really different culture and working attitude (p. 3)</p> <p>So we have a lot of fixed suppliers and I don't know how many but we do have a lot of suppliers there. But with suppliers in China you really should have a good relationship and maintain that relationship (p. 3)</p> <p>But we have a planning department that has to take care that all the stuff is coming from over there to here and they have a lot of contact by email, by phone and more and more by Skype and stuff like that. So year communication is very good (p. 4)</p>
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		<p><i>Weak</i></p>	<p>We have tried to work with Porsche designs, it's a very well-known designer, so we developed a model but at the end it appeared to be a too expensive consumer price (p.2)</p> <p>It's more short-term I think at this moment. As far as I know we do not have a long-term relationship with any designers or design</p>

			<p>company (p. 2)</p> <p>You can never tell because there also are other reasons of course. So for example sometimes the designer has more knowledge on a special type of material or style, which are used for one year but next year you use another style and that's perhaps not his or her cup of tea (p.3)</p> <p>And they do not learn very fast, they go back very easy to that the do not do it like this but do it on their way. That something you should really monitor. It's not that you say it once and they will do it forever, that's not the way it goes</p>
		<i>Strong</i>	<p>Sometimes you develop a product together and you invest a lot of time and energy and money of course and then at the end it's not as successful as you hoped for (p. 2)</p> <p>We try to have stable relationships and especially with suppliers because you try to look for reliable partners and well and in the Far East it's really different culture and working attitude (p. 3)</p> <p>So we have a lot of fixed suppliers and I don't know how many but we do have a lot of suppliers there. But with suppliers in China you really should have a good relationship and maintain that relationship (p. 3)</p> <p>But we have a planning department that has to take care that all the stuff is coming from over there to here and they have a lot of contact by email, by phone and more and more by Skype and stuff like that. So year communication is very good (p. 4)</p> <p>Yes of course we do have those QCs on the spot over there and they should do the checking (p. 5)</p>
	<b>Organizational creative ability</b>		<p>I think organization B (p. 8)</p> <p>I think in the business where we are in of course you try to develop new concepts and ideas but I think garden furniture is more stable. So it's not a product in which you can innovate endlessly. That's why think it's organization B and it's not an unstable environment. So I know it's my organization (p. 8)</p> <p>Yes I would say strongly agree. I totally agree (p. 8)</p> <p>If the managing director thinks it's a good idea then she can proceed and if he thinks that it's not a good idea that no chance. But it also depends on the money involved (p. 19)</p> <p>We have tried to work with Porsche designs, it's a very well-known designer, so we developed a model but at the end it appeared to be a too expensive consumer price (p.2)</p> <p>So at this moment we try something so for example we added cushions to our product line last year. It's a product that of course is in</p>

			<p>line with our furniture</p> <p>I think in the business where we are in of course you try to develop new concepts and ideas but I think garden furniture is more stable. So it's not a product in which you can innovate endlessly (p.8)</p> <p>So of course you use some knowledge from companies around you (p.9)</p>
	<b>Creativity</b>	<i>Expertise</i>	<p>Because we are not that big and because we have a lot of people that have been working here for a lot of years now so there's a lot of knowledge in here (p. 10)</p> <p>But we do not have the technological knowledge ourselves in the house (p.7)</p> <p>In China yes but it's all in China so they have the knowledge of the different material types (p.8)</p> <p>Most of the time I would say we are looking for people with the same skills</p>
		<i>Motivation</i>	<p>No nothing, not really at this moment (i.e. motivates employees to come up with ideas on how to improve processes and products) (p. 19)</p> <p>But if you asked me if it's really stimulated then no (i.e. improvements and innovation) (p. 20)</p> <p>because of that freedom you also are very flexible and it's nice for people to have this freedom because it's motivating (p.11)</p> <p>I think the main reason is a management style. I think they are not really into this. So it's not that they stimulated actively. It's not in their minds and it's also not in the focus at this moment (p.20)</p>
		<i>Creative thinking skills</i>	
		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	<p>No (we don't have designers in house). It's all external designers (p.2)</p> <p>And of course we are very seasonal business, so from February until June or July, we have some flexible employees mainly in the warehouse to get all of our stuff to our customers (p.1)</p>

III Coding Scheme of Case Organizations

			<p>Not so much (do we just external labor besides of the warehouse). How far does it go? I mean most of the people that work here do a lot and I mean of course we sometimes need legal advice or technical advice but it's not that we hire those people it's just cooperation (p.9)</p>
		<i>Design of labor contract</i>	<p>Yes persons as well. We have tried to work with Porsche designs, it's a very well-known designer, so we developed a model but at the end it appeared to be a too expensive consumer price (p.2)</p> <p>Well the website for example it's an ongoing project but it's not that we hire the services, from an HR point of view it's not that we hire them it's more that you use companies to get something you want or need (p.10)</p>
		<i>positions/ departments used for external labor</i>	<p>And of course we are very seasonal business, so from February until June or July, we have some flexible employees mainly in the warehouse to get all of our stuff to our customers (p.1)</p>
		<i>Reasons of use</i>	<p>And of course we are very seasonal business, so from February until June or July, we have some flexible employees mainly in the warehouse to get all of our stuff to our customers (p.1)</p> <p>Not so much (do we use external labor besides of the warehouse). How far does it go? I mean most of the people that work here do a lot and I mean of course we sometimes need legal advice or technical advice but it's not that we hire those people it's just cooperation (p.9)</p> <p>Yes more in an advising role (p.10)</p> <p>So the main reason (why we do not use external labor for other positions) is that most of the knowledge is already in-house and that you don't really need so much new knowledge (p.10)</p> <p>Yes definitely (we use flexible labor to save costs) (p.18)</p> <p>Not just that. Of course we are really busy during the whole year but you can imagine that for logistics it's really that specific period, so the first half of the year and that our customers should be delivered and after July then it's getting less. And I must say the warehouse activities are also becoming less because more and more goes directly to our customers from China. So no interference from us. Of course we do have a little bit of stock here for seasonal sales, so that we are able to supply our dealers so when the weather is good and all the people are running to the garden centers, but this year we didn't really had this yet but we still hope for nice weather (p.18)</p>

		<i>Influence on creative capital</i>	<p>Not really, no (we do not use external labor so we can get the knowledge ourselves) (p.16)</p> <p>I could imagine that sometime of course when you do something you do it a couple times and maybe it's no different than the times before then yes of course you can do it yourself. But normally I would say we still go get advised (p.16)</p>
		<i>Effects of using external labor</i>	<p>To be honest I do not think that we fear that information goes to our competitors. We really believe in ourselves and what we do. So I don't think that's a reason. I think the reason is more that the business we are in and the way we work and what we do it does not require a lot (p.11)</p>
	<b>Labor Market Intermediaries</b>	<i>Role of intermediary</i>	<p>Yes (we use job boards) (p.13)</p> <p>Yes we do. For example we just had a vacancy that we filled for an IT engineer and we tried to find one by ourselves first but we didn't succeed, so we had a recruitment agency to do it for us p.13)</p> <p>Yes correct the function was too specific that we could have found it on our own (p.13)</p> <p>We first see if it could be internally managed and then if that doesn't work we use Internet, social media etc. to post it on the Internet and if that doesn't work we go to a recruitment agency (p.14)#</p> <p>No I must say normally we can succeed ourselves. We just had a little bit of bad luck for the specific position I just told you about. Of course for board positions it's something different, we do not put advertisements out for that. We have a fix board now but for example if we were to look for another general manager then we would hire an recruitment office (p.14)</p> <p>if the position is really important that we use a headhunter because it's knowledge we don't have ourselves (p.14)</p>

COMPANY G		
Dimension	Sub-dimensions	Quote
Relationships	<i>Bonding</i>	<p>Yes in a number of cases they do but he sometimes also have a situation that one doesn't share with another guy so maybe it also depends whether or not they like each other and that's all human (p. 6)</p> <p>So at this moment we always look at guys who graduated in mechanical engineering science not the real product development and guys who have done R&amp;D and a complete different field for instant pharmacy or whatever (p. 9)</p> <p>yes (i.e. we are looking for people with same background, same knowledge and skills) that is what we are looking for and then you have the different levels that you have people from University and people from high schools and middle schools and the guys from the middle schools are much more into the drawing side and then the guy from the high school is somewhere in-between (p. 9)</p>
	<i>Bridging</i>	<p>We have a lot of knowledge in-house but we don't use outside networks for example the University of Twente, we hardly ever contact them to do some innovation or research (p. 2)</p> <p>And as a result of that we already started to tighten our relationships to Saxion Hogeschool and for us the next step would also be to get more in touch with the University because that is where a lot of new ideas start and where a lot of new talent is available and we would really like to have a closer cooperation with the University and also with Saxion (p. 2)</p> <p>Yes I think so and I think that's something we should also take more advantage of. If a look at it from my perspective, the front end and the sales team, there are a lot of possibilities for example also the government where we don't take advantage of (p. 2)</p> <p>It's a fixed group of people but it's a mix (p. 3)</p> <p>So from all the segments there somebody taking a part in this group together with the general manager and myself and the engineering manager and the production manager (p. 3)</p> <p>with sales it's a little bit different we have a lot of mechanical engineers but also business engineers, so I have quite a lot of people in my department that don't have any technical background (p. 14)</p> <p>I believe we need a certain level of quality people and to attract the right people were now working for example with Saxion to participate and they have career markets and we go there and show the company and tell about the company and what we do (p. 14)</p>
	<i>Internal</i>	<p>Yes I have to say that our networks externally are not that thick and what you see is that we have been a company that has been mostly focused internally (p. 2)</p> <p>What we do is that we have a product development group and we have a meeting once a month or every two months and in this group everybody can bring in proposals for new ideas and sometimes it's a new test of product or a new certificate on a product and sometimes it's also complete new product to let</p>



		<p>say open up a new market which is close to what we already doing that which is not in our current scope of supply (p. 2)</p> <p>It's a fixed group of people but it's a mix (p. 3)</p> <p>So from all the segments there somebody taking a part in this group together with the general manager and myself and the engineering manager and the production manager (p. 3)</p> <p>I think a number of people really do they that share ideas and they're willing to work together and there are also number of people that don't have that capability because they feel threatened or whatever (p. 5)</p> <p>Yes in a number of cases they do but he sometimes also have a situation that one doesn't share with another guy so maybe it also depends whether or not they like each other and that's all human (p. 6)</p> <p>Their position is changing little bit but in the past it was that they do a lot of engineering but there was always some internal fight or competition. So they were never willing to share thoughts with each other (p. 7)</p> <p>The engineers always thought of themselves as a separate department and of course they are responsible for the technical side but it can be that you design something that is not even used in the outside world (p.7)</p> <p>That's a difficult question (i.e. if there is no trust between departments) to answer to be honest with you because now I have to answer why somebody does not share ideas and this I cannot answer. I don't know if it's trust or maybe something else or maybe it has something to do with the competences of people, I don't know this is very difficult (p. 7)</p> <p>And you know we have examples but we have a new product that needs to be developed and we are working closely together with engineers and making all the reporting together but then we come to a point where we say hey we know a guy and he is in our group and he is setting somewhere else but contact him because he worked with a similar product, with a competitor's product, for 20 years. So we give the lead but then nothing happens (p. 8)</p> <p>So at this moment we always look at guys who graduated in mechanical engineering science not the real product development and guys who have done R&amp;D and a complete different field for instant pharmacy or whatever (p. 9)</p> <p>yes (i.e. we are looking for people with same background, same knowledge and skills) that is what we are looking for and then you have the different levels that you have people from University and people from high schools and middle schools and the guys from the middle schools are much more into the drawing side and then the guy from the high school is somewhere in-between (p. 9)</p> <p>I think it's very tight some people also very open but I think those are the people that came in not too long ago (p. 14)</p> <p>with sales it's a little bit different we have a lot of mechanical engineers but also business engineers, so I have quite a lot of people in my department that don't have any technical background (p. 14)</p>
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		<p>So the people here did not know anything until the contract was signed together with the general manager (p. 15)</p>
	<p><i>External</i></p>	<p>Yes I have to say that our networks externally are not that thick and what you see is that we have been a company that has been mostly focused internally (p. 2)</p> <p>We have a lot of knowledge in-house but we don't use outside networks for example the University of Twente, we hardly ever contact them to do some innovation or research (p. 2)</p> <p>And as a result of that we already started to tighten our relationships to Saxion Hogeschool and for us the next step would also be to get more in touch with the University because that is where a lot of new ideas start and where a lot of new talent is available and we would really like to have a closer cooperation with the University and also with Saxion (p. 2)</p> <p>Yes I think so and I think that's something we should also take more advantage of. If a look at it from my perspective, the front end and the sales team, there are a lot of possibilities for example also the government where we don't take advantage of (p. 2)</p> <p>Yes I think one thing you did not touch is if you see how they come up with the ideas because you ask of people bringing them up or they created out of the market and I think most of the time it's created by the sales force that comes into market and says this is what we need (p. 3)</p> <p>And we can even look at it from a broader perspective because we are part of a group, which is the AVK group where there's also a lot of knowledge and experience (p. 7)</p> <p>I believe we need a certain level of quality people and to attract the right people were now working for example with Saxion to participate and they have career markets and we go there and show the company and tell about the company and what we do (p. 14)</p> <p>For example we have a vacancy for an account manager and it is extremely hard to find people as our HRM is working with different agencies and you see it's still hardly possible to find the right people (p. 14)</p> <p>I do it now for the first time because I think that in my LinkedIn network I have at least 10 suitable candidates for the job but our HRM most of the time uses some agencies which we have good experience with but the quality of the resumes that I'm getting is too low for what I expect for my standards are not satisfied with that (p. 15)</p> <p>We have a couple of agencies that we always use. If I ask why we use them the answer I get is that we have good experience with them (p. 16)</p> <p>It's a little depending on what field we are talking about because some of the agencies also deliver very good quality persons now for example for the production they have the experience for that. And we even have an in-house agency, in-person is doing that for us and that's working out fine to what I'm experiencing (p. 17)</p>

		Yes (i.e. the relationship with the suppliers are stable and it is an on-going relationship) (p. 28)
	<i>Weak</i>	<p>So the people here did not know anything until the contract was signed together with the general manager (p. 15)</p> <p>Our networks externally are not that thick and what you see is that we have been accompany that has been mostly focused internally (p.2)</p> <p>We have a lot of knowledge in-house but we don't use outside networks (p.2)</p> <p>The engineers always thought of themselves as a separate department and of course they are responsible for the technical side but it can be that you design something that is not even used in the outside world (p.7)</p>
	<i>Strong</i>	<p>And as a result of that we already started to tighten our relationships to Saxion Hogeschool and for us the next step would also be to get more in touch with the University because that is where a lot of new ideas start and where a lot of new talent is available and we would really like to have a closer cooperation with the University and also with Saxion (p. 2)</p> <p>Their position is changing little bit but in the past it was that they do a lot of engineering but there was always some internal fight or competition. So they were never willing to share thoughts with each other (p. 7)</p> <p>I think it's very tight some people also very open but I think those are the people that came in not too long ago (p. 14)</p> <p>I do it now for the first time because I think that in my LinkedIn network I have at least 10 suitable candidates for the job but our HRM most of the time uses some agencies which we have good experience with but the quality of the resumes that I'm getting is too low for what I expect for my standards are not satisfied with that (p. 15)</p> <p>We have a couple of agencies that we always use. If I ask why we use them the answer I get is that we have good experience with them (p. 16)</p> <p>It's a little depending on what field we are talking about because some of the agencies also deliver very good quality persons now for example for the production they have the experience for that. And we even have an in-house agency, in-person is doing that for us and that's working out fine to what I'm experiencing (p. 17)</p> <p>Yes (i.e. the relationship with the suppliers are stable and it is an on-going relationship) (p. 28)</p>
<b>Organizational creative ability</b>		<p>If you look at our product ranges we are currently more working on improving our existent products and I think the number of completely new products developed quite limited (p. 1)</p> <p>The next step would also be to get more in touch with the University because that is where a lot of new ideas start and where a lot of new talent is available (p.2)</p>

		<p>We have a product development group and we have a meeting once a month or every two months and in this group everybody can bring in proposals for new ideas and sometimes (p.2)</p> <p>We discuss it in this group and if there's enough interest in this group then we will start an examination. So what we will do is that we further investigate the market and the potential and from there we go and build a business case to see if it is worthwhile to develop product (p.2)</p> <p>I think most of the time it's created by the sales force that comes into market and says this is what we need. We don't have an R&amp;D department that comes up with completely new ideas and then reintroduce them, so it's driven out of this product committee but then most of the time the salespeople have the lead in saying to enter into this market this is what we would like to have and then they start thinking what to come up with (p.3)</p> <p>We need out-of-the-box thinking. And if you've been a company for certain number of years that becomes more difficult (p.8)</p> <p>And now we're trying to change that focus to become more market-driven so that we look what is needed in the market to extend our lifetime (p. 7)</p> <p>That in the past these ideas came up very often but were hold back (p. 8)</p> <p>But if there are people, especially with a technical background, and we are able to interest that guy and he says can I take half a year at your company and then you get a spinoff and may you are not able to do that in one year's time, so maybe it will take a period of 3 to 4 years time. So we are more open to these things (p. 8)</p> <p>So a lot of ideas are already here and have been worked on in the past but implemented to finish it that was something that was very difficult (p. 12)</p> <p>And we also have a project right now where somebody's doing the internship for half the year and then he will also execute his plan for half a year. So we actually really hire him to execute his plan (p. 14)</p>
<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>We have a lot of knowledge in-house but we don't use outside networks for example the University of Twente, we hardly ever contact them to do some innovation or research (p. 2)</p> <p>So I think we sometimes lack to take advantage of all the knowledge that we have (p. 7)</p> <p>And we can even look at it from a broader perspective because we are part of a group, which is the AVK group where there's also a lot of knowledge and experience (p. 7)</p> <p>In the past we were able to fulfill all the requests from the market by internal people and we didn't had questions when we needed outside knowledge. So we said you know we can make a good product and we know how to produce it why even bother going to the outside network and that has changed with the whole labor market (p. 8)</p>

### III Coding Scheme of Case Organizations

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	<p><i>Motivation</i></p>	<p>Okay we used to have it (i.e. idea box) but in practice you can see that nobody's using it for these kinds of things (p. 4)</p> <p>Yes in the past but that was mostly related to improvements of internal processes, so we had a reward for that but never for products that were designed for outside markets. So it has not been that a guy had a good idea and it worked out and we gave him a reward (p. 4)</p> <p>So we do this (i.e. group reward) to get people more motivated to share ideas because sometimes people have something in mind but they don't know how exactly to formulate it and then it stuck because they cannot express their idea and just by talking to your fellow colleagues it might overcome the barrier they can say this is how we as a department see it (p. 5)</p> <p>So think it also depends a little bit how it is formulated from the floor managers and how they encourage people to think about it (p. 5)</p>
	<p><i>Creative thinking skills</i></p>	<p>so it's driven out of this product committee but then most of the time the salespeople have the lead in saying to enter into this market this is what we would like to have and then they start thinking what to come up with (p. 2)</p> <p>But we also have a number of cases where people say if we change the layout like this then you see benefits and more efficiency (p. 5)</p>
	<p><i>Problem solving capacity</i></p>	

COMPANY H			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	<p>This also has to do with the network in the company. So not only in Enschede but also in the UK and the States. For example if you take L'Oreal. Our plant in Chicago is a supplier for L'Oreal in the States. We want to start to produce the same products over here. So training, quality issue and quality agreements. We are sharing the ideas together. If want to start working for L'Oreal, these are the targets. So that is an internal network (p. 3)</p> <p>Ja, within the existing group (i.e. improvements of processes, quality standards and ideas) (p. 3)</p> <p>Ja, there is Martijn, a designer and he has weekly Google hangout with the team, to share ideas. And the hangout is the perfect way of communication, because you can show everything because it is very visual. At the end of the day you have a product in your hand. This is a weekly conference call they have (p. 5)</p> <p>Since last year we have every two month meeting with all general managers in Europe. There we show the results: illness rates, safety but also continued improvements. Which products is how running (example). We share the ideas and improvements (p. 9)</p> <p>Since last year we have every two month meeting with all general managers in Europe. There we show the results: illness rates, safety but also continued improvements. Which products is how running (example). We share the ideas and improvements. (p.10)</p> <p>Only inside the group, via Google (i.e. creative employee cooperate with other designers and engineers) (p. 20)</p> <p>It is a very close group, working a long term over here (p. 22)</p> <p>Yes, tight group with so much experience so that they are a bit averse to change (p.22)</p>
		<i>Bridging</i>	<p>Which you see also from media is special editions, collector items and these kinds of boxes. If there is a question for one of the customers about one of these products, they cooperate with use because we are the specialist. We are making the models for that. (p. 1)</p> <p>We got costumers in Germany and we got invited and they got a new idea and we are there from the start (p.3)</p> <p>Sometimes (we also get ideas from the market). they ask us for ideas and developments. Normally we create the questions for the costumers: Ok this is our product, how should we go with them to the market, with our product. Normally make 4 or 5 proposals to start the discussion with the costumer. (p.3)</p> <p>We work with the local authorities, to get people over here to get the service, extra service to the costumer (p. 4)</p> <p>We have one company, 4 weeks ago they started. Because we want to go to new markets and it is difficult for us to find the right</p>

			<p>companies, the right people to talk with. The company makes good appointments with the right costumers. So now focus on the German market. German native language, so they do the phone calls in the name of AG the Netherlands and they are making appointments for us (p. 4)</p> <p>It is big, it is HBO school here. Our HR lady is still in touch with Saxion and has a contact. (p. 5)</p> <p>We started in January/February with a lean team; from every department is one guy who is responsible for lean. Those are people from the floor. From the offices we have two people who do the lean in the office (p. 8)</p> <p>But for lean I have a complete different meeting with the complete staff, only about lean (p. 8)</p> <p>He is visiting a lot of expeditions and invites every week one or two suppliers to see what is new. And he makes some phone calls to get the knowledge of the market and the materials (p. 20)</p> <p>He (i.e. the creative employee) goes out for the customer and comes back and says the best solution is not board or paper, but the best solution is plastic or wood. Then there is work for another member of the group. We have the virtual factory so we have question from the customer, goes to London to the virtual factory and they purchase all over the world those kinds of products. (p. 20)</p>
		<p><i>Internal</i></p>	<p>This also has to do with the network in the company. So not only in Enschede but also in the UK and the States. For example if you take L'Oreal. Our plant in Chicago is a supplier for L'Oreal in the States. We want to start to produce the same products over here. So training, quality issue and quality agreements. We are sharing the ideas together (p.3)</p> <p>No ( we did not use externals for this). We got some specialist in the (our) group (p.3)</p> <p>We started in January/February with a lean team; from every department is one guy who is responsible for lean. Those are people from the floor. From the offices we have two people who do the lean in the office (p. 8)</p> <p>But for lean I have a complete different meeting with the complete staff, only about lean . (p. 8)</p> <p>We have still an in-house office from Randstad (I don't know why). Nearly based on high season and low season. We only had temporary workers from Randstad (p. 10)</p> <p>Only inside the company (he cooperates), via Google (p.20)</p> <p>We have the virtual factory so we have question from the customer, goes to London to the virtual factors and the produce all over the world those kinds of products. So that we don't have to say no to the costumer. But: 'I will take the question' (p.20)</p> <p>It is a very close group, working a long term over here (p. 22)</p>

			<p>We only get two plants in Poland, but it is really really good, quality level and knowledge of the people. Scary. We got a strong cooperation because we here in the Netherland, in our business, we should do the short runs, flexibility, quick delivery (p.23)</p>
		<p><i>External</i></p>	<p>Which you see also from media is special editions, collector items and these kinds of boxes. If there is a question for one of the customers about one of these products, they cooperate with use because we are the specialist. We are making the models for that. (p. 1)</p> <p>We got costumers in Germany and we got invited and they got a new idea and we are there brainstormed together with the marketing people involved (p. 3)</p> <p>Our plant in Chicago is a supplier for L'Oreal in the States. We want to start to produce the same products over here. So training, quality issue and quality agreements. We are sharing the ideas together. If want to start working for L'Oreal, these are the targets. So that is an internal network (p. 3)</p> <p>Ja, within the existing group (i.e. improvements of processes, quality standards and ideas) (p. 3)</p> <p>we want to see how big the market for this products in the Benelux, therefore we take somebody from the Saxion, for 5 month, to do the marketing research (p.4)</p> <p>We work with the local authorities, to get people over here to get the service, extra service to the costumer (p. 4)</p> <p>We have one company, 4 weeks ago they started. Because we want to go to new markets and it is difficult for us to find the right companies, the right people to talk with. The company makes good appointments with the right costumers. So now focus on the German market. German native language, so they do the phone calls in the name of AG the Netherlands and they are making appointments for us (p. 4)</p> <p>It is big, it is HBO school here. Our HR lady is still in touch with Saxion and has a contact. (p. 5)</p> <p>There was no attention to work together with other people because then you have to fill in, argument why. That is changing. The changing to cooperate with the university but this is now more and more changing. There is no reason not to work together. (p.5)</p> <p>Ja, there is Martijn, a designer and he has weekly Google hangout with the team, to share ideas. And the hangout is the perfect way of communication, because you can show everything because it is very visual. At the end of the day you have a product in your hand. This is a weekly conference call they have (p. 5)</p> <p>Since last year we have every two month meeting with all general managers in Europe. There we show the results: illness rates, safety but also continued improvements. Which products is how running (example). We share the ideas and improvements (p. 9)</p>



			<p>He is visiting a lot of expeditions and invites every week one or two suppliers to see what is new. And he makes some phone calls to get the knowledge of the market and the materials (p. 20)</p> <p>He (i.e. the creative employee) goes out for the customer and comes back and says the best solution is not board or paper, but the best solution is plastic or wood. Then there is work for another member of the group. We have the virtual factory so we have question from the customer, goes to London to the virtual factory and they purchase all over the world those kinds of products. (p. 20)</p>
		<i>Weak</i>	<p>There was no attention to work together with other people because then you have to fill in, argument why. That is changing. The changing to cooperate with the university but this is now more and more changing. There is no reason not to work together. (p.5)</p> <p>Most important is the evening shift. When the department is at home and then I go to the machines and talk to the operators, and they are very open with ideas: 'we mention that in the last department meeting but it never change. Not complaining but to be honest' (p.8)</p> <p>We have still an in-house office from Randstad (I don't know why). Nearly based on high season and low season. We only had temporary workers from Randstad (p. 10)</p>
		<i>Strong</i>	<p>Ja, there is Martijn, a designer and he has weekly Google hangout with the team, to share ideas. And the hangout is the perfect way of communication, because you can show everything because it is very visual. At the end of the day you have a product in your hand. This is a weekly conference call they have (p. 5)</p> <p>It is a very close group, working a long term over here (p. 22)</p>
	<b>Organizational creative ability</b>		<p>It is the same process and only different shape. So I think it is more B (p. 2)</p> <p>Since last year we got one creator guy here because we want to move the business to different customers, We don't want to compete on price and difference. We want to be special. We want to advise, we want to start and concept and not at the end (p.2)</p> <p>I think in terms of network that B more fit (p.2)</p> <p>Because we don't develop new products for the first raw. New products, new services and processes. Processes are the same, the service should be better, but are the same. The product the same (p. 2)</p> <p>What we normally do is when we got somebody in, a student, and then somebody is a mentor for that student. Weekly or two weekly meetings: how are you; how is your product running? At the end the report they write we will check if we agree on this or not and they do a presentation for the management team and the middle management team. And then we say this project we will continue with your idea, or no, thank you. We do not continue (p. 6)</p>

			<p>Every department here has a monthly meeting only with department and department head and then they go through different topics and one of the topics is new ideas and improvements and how they fit into it, projects. The idea starts and then we continue to make it a project. (p.6)</p> <p>The bad experience we had with the idea box, in my previous company. We paid 20% of the improvement/the cost savings of the project we pay to the people with the idea. But it doesn't work because one guy had an idea and the shift leader put this as his idea. He achieved nearly 11.000 Euros. After that there was a war in this department (p.6)</p> <p>Normally it starts with one person or two. They came with the idea and I start a project group. I always want the person with the idea in the project group. In most cases not only there department but also costumer service, finance etc. are involved and we make a project group. (p.7)</p> <p>It should be a culture, not a project with a culture to make for continued improvement. We share every two month with our people our continued improvement program. So if there is an idea to use different kind of pallets that are cheaper. (p.7)</p> <p>Most important is the evening shift. When the department is at home and then I go to the machines and talk to the operators, and they are very open with ideas: 'we mention that in the last department meeting but it never change. Not complaining but to be honest' (p.8)</p> <p>The idea is coming directly. When someone is coming into the office of the operation management and coming from the department meeting. Then we have every four weeks middle management meetings. You show the results and we are going through anyone: are there new projects? New ideas? Then they come with ideas for the project. And then we decide who is on the project (p. 13)</p>
	<p><b>Creativity</b></p>	<p><i>Expertise</i></p>	<p>No. We got some specialist in the group. We got here also someone with a black belt (...) one guy responsible for lean improvements in the group (p. 3)</p> <p>For packers you don't need any education, no that's not true, but very low. For operators you need more technical skills (p.21)</p>
		<p><i>Motivation</i></p>	<p>Every department here has a monthly meeting only with department and department head and then they go through different topics and one of the topics is new ideas and improvements and how they fit into it, lean projects. The idea starts and then we continue to make it a project. And at the end they get a reward on that (p. 5)</p> <p>Every two month we have a meeting in the canteen for the complete company and there are also mentioned the new ideas and products and I mention who came with this idea. That was the result (p. 5)</p> <p>Sometimes financial, sometimes a bottle of wine or some chocolate or something like this (p. 5)</p> <p>If somebody from the production floor has an idea it is also a reward to take him in the project group, not to work on the machine. Do the project, discuss with other people. He doesn't have to work on the floor, just here in this room and to make a presentation for</p>

			<p>everyone. (p.7)</p> <p>But we show that to everybody, every month: What are the savings. As an idea from improvements (p. 7)</p> <p>People are really focused to continue with their job and to make improvements and cost savings. So that we can make money. (p. 9)</p> <p>Absolutely (i.e. employees are motivated to come up ideas in order to stay within the company) (p. 9)</p> <p>Not strong enough, I think (i.e. motivated to come up with ideas) (p. 12)</p> <p>Just during the department meetings, to share the ideas continues improvement projects in the company. Also mentioned we a got quality problems. We got 9 complains from the customer and this is coming from that machine and that product. Where can we improve? Has anybody an idea how to improve? Anybody has an idea how to improve? That is how they want to get the people more involved in the improvements (p. 12)</p> <p>If you are operator and you have to work on the machine. You are in this room for the project, with the beamer, a lunch with sandwiches, they feel great about that because they don't have to work at a machine, they can share their knowledge with other people and finally to come to the project statement. To be in the project group is also reward for them (p. 12)</p>
		<i>Creative thinking skills</i>	<p>Ja. I have also young people in the company and they have new ideas to us and asking: why are you doing is. We already do it 10 years. That is the reason why we do that (p. 5)</p> <p>One of the ideas of the packers was to change the layout. So you can reduce the staffing by one person. That is a huge cost saving. (p.9)</p> <p>People are really focused to continue with their job and to make improvements and cost savings. So that we can make money. (p.)</p>
		<i>Problem solving capacity</i>	
<b>External labor</b>	<b>Use of external labor</b>	<i>Strength of use</i>	<p>This business model was based on three month high season. September, October, November, was high season for Christmas. That is amazing. Extra temps were coming in the factory (p.1)</p> <p>Four of Five years ago Randstad did 2million Euros a year and last year it was 200.000 Euros. (p.10)</p> <p>We have still an in-house office from Randstad (I don't know why). Nearly based on high season and low season. We only had</p>

			<p>temporary workers from Randstad (p.10)</p> <p>Two years ago we start to hire contract workers, for 6 month, to make a balance between temps and contractors (p.10)</p>
		<i>Design of labor contract</i>	<p>We have still an in-house office from Randstad (I don't know why). Nearly based on high season and low season. We only had temporary workers from Randstad (p.10)</p> <p>Two years ago we start to hire contract workers, for 6 month, to make a balance between temps and contractors because contractors are 11euros and Randstad cost 18 Euros. Randstad is given a lot of fee, even if we hire 58 year old people. Randstad is making a lot of money. We are now more balancing contractors and temps. We are now on a level that Randstad wants to stop with the office but I still postpone every time the meetings with Randstad. So they are still here (p.10)</p> <p>Yes most as the contractors were here before as temps (p.11)</p>
		<i>positions/ departments used for external labor</i>	<p>No, ( we only use external labor for ) only producing (p.15)</p> <p>For production we gets the temps in, after one hour training and a buddy for two days they can work very independent and can start working directly. To have extra people for marketing and external people for marketing, that cost much more and you need a longer training period. And what is the pay-back of that? This is always difficult. A temp on the machine is much easier to save cost and pay-back (p.15)</p>
		<i>Reasons of use</i>	<p>This business model was based on three month high season. September, October, November, was high season for Christmas. That is amazing. Extra temps were coming in the factory (p.1)</p> <p>No ( we did not use externals for this). We got some specialist in the (our) group (p.3)</p> <p>we want to see how big the market for this products in the Benelux, therefore we take somebody from the Saxion, for 5 month, to do the marketing research (p.4)</p> <p>. But because of the restructuring last year we had a very flat organization. It is a knowledge but also the extra help from outside. (p.6)</p> <p>I have also young people in the company and they have new ideas to us and asking: why are you doing is. We already do it 10 years. That is the reason why we do that (p.6)</p> <p>For production we gets the temps in, after one hour training and a buddy for two days they can work very independent and can start working directly. To have extra people for marketing and external people for marketing, that cost much more and you need a longer training period. And what is the pay-back of that? This is always difficult. A temp on the machine is much easier to save cost and pay-</p>

			<p>back (p.15)</p> <p>That is done by the agency, and then sometimes department is involved. They make a pool for us. That I easier because if they don't fit we can call the same day that tomorrow we want somebody else. With a contract with a half year that would be more difficult in the Netherlands to stop the contract. (p.18)</p>
		<i>Influence on creative capital</i>	<p>No, not that I know (that a temp came up with an idea) (p.11)</p> <p>If you look at the department where we have the temps. It is people have nearly no education. So what important for these kind of people is that we have a clean floor, clean area, radio, smoke cigarettes during the breaks, colleagues that are nice to you. Those are the most important things and that they get paid for their work. Going deeper in the process for improvements: No. Previous I had the meeting with the complete staff about results, the temps and the contracts were never there. (p.11)</p> <p>We got now two young operators who start as temps. They proved during their working as temp, that they are flexible, have great ideas. But if you get the temps, the contractors, then you get the operators. But when the temp is not coming in and says to the operator: You are doing the wrong for the last 10 years. He will be getting killed the day after. It is also difficult for the temps where to go with their ideas and where to share their ideas. (p.12)</p> <p>Yes (its not the problem that the temps do not have ideas but that they don't know how to communicate it and that they are not motivated to do so) (p.12)</p>
		<i>Effects of using external labor</i>	

	<p><b>Labor Market Intermediaries</b></p>	<p><i>Role of intermediary</i></p>	<p>No, (we do not use <i>uitzendbureaus</i>) only in-house because Randstad made a contract about it and we are not supposed to use others. But Randstad also did some improvements(...)So Randstad made a scan to make it more efficient (p.10)</p> <p>Ja, because she comes in talks to the department head, mostly for a few hours to see the company, what is the type of work, a lot trading sessions for safety, quality. (p.10)</p> <p>We have still an in-house office from Randstad (I don't know why). Nearly based on high season and low season. We only had temporary workers from Randstad (p.10)</p> <p>Not, between the temps and contractors. But what you see with Randstad and every other agencies, when it is really busy for them, e.g. on the main holiday, the quality of the people goes down. Because every company wants to hire temps and you need to fight for the best one. That is also the reason why we have a contract. ' Last week was terrible, you need to improve next week'. Otherwise, we will stop with the contract. Few times a year you see the quality going down. If people work 26 hours for Randstad we can hire them for contract. So we know the illness of the people, how their communication is, on which department they can work, is they flexible for working on Saturday/Sunday. (p.10)</p> <p>Yes most as the contractors were here before as temps (p.11)</p> <p>We got two different headhunters p.16)</p> <p>No we change. Because the last headhunters had deliver two sales managers here and I fired both because they are not bringing any new jobs in. And you pay a lot for headhunters. There is no guarantee. I found out there is only six month guarantee. (p.16)</p> <p>We got a job description: Skills that we need. And then they start searching and they come with 6 or 7 candidates and then we skip and I go back to my top 3. And then we go for an interview. First and second interview (p.16)</p> <p>Until now we only use the agency (no job boards or so) (p.16)</p> <p>For the temps we do just 'yes' or 'no'. So we agree with Randstad and you should speak and read Dutch. (p.17)</p>
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