

THE EFFECT OF SELECTION AND RECRUITMENT ON CREATIVE CAPITAL

Bachelor Thesis Business Administration
University of Twente, School of Management and Governance
Department of Business Administration
July 2013

Author
C.M.L.F. van Zijp

Supervisors
Ir. A.A.R. Veenendaal
Dr. T. Bondarouk

Preface

During five months I have worked hard and with much pleasure on this research, which completes my Bachelor on Business Administration. This thesis is a qualitative research that focused on the effect of the HR practice selection and recruitment on creative capital. During these five months I started by studying the literature on creative capital, continued by designing the theoretical framework and choosing the methodology as a fundament for my research, followed by conducting interviews, analyzing the transcriptions and finally formulating the findings and making my conclusions. This thesis is a full report of all these steps and a culmination of all my findings, conclusions and recommendations.

There are some people, who have assisted me during the process of this research. Without them, the final results of this research would not have been the same as it is at this moment. Therefore I would like to thank them. First of all, I would like to thank my supervisors André Veenendaal and Tanya Bondarouk for giving me the opportunity to become part of the research program, giving constructive feedback and for answering all my questions. Moreover, I would like to thank Marina Joosten and Roy Noordhoek for all the discussions that we had and for the collaboration within the research program. I would also like to thank Co de Smalen, Floris van Zijp and Wim van Zijp for critically reading my thesis on spelling and content. Finally, I would like to thank all the managers that I have interviewed, for being part of this research and for giving all the information I needed.

Enschede, June 2013
Céleste van Zijp

Abstract

The results of this research are valuable for organizations. More precisely, creativity and thereby creative capital is needed for innovation and innovation is important for organizations in order to survive. However, this research was the first to conduct data on the concept of creative capital on organizational level. This makes this research a starting point for further research on this subject. This research is part of a research program, which consists of four researches that are all focused on the effect of a HR (human resource) practice on creative capital on organizational level. Besides, this research introduces the definition of creative capital on organizational level.

Objectives

The purpose of this exploratory research is to make a comparison between high and low creative capital organization and the influence of the HR practice selection and recruitment on the level of creative capital.

The main research question of this report is:

Which components of selection and recruitment influence the creative capital in organizations the most?

Propositions

The propositions of this research stated that organizations using job descriptions that consist of the chief objectives and key attributes and external recruitment for the recruitment process will have high creative capital. Organizations using job descriptions that are based on the current job holders and internal recruitment for the recruitment process are expected to have low creative capital. The propositions also state that organizations using selection criteria that are based on task analysis and use a modern method (e.g. assessment centre) as selection method during the selection process will have high creative capital. At last, organizations using competency-based selection criteria and a traditional method (e.g. referencing) during the selection process are expected to have low creative capital according to the propositions.

Design

For this thesis interviews were conducted with managers at four different organizations. Questions were asked about creative capital and the HR practice selection and recruitment. The interviews are literally transcribed and analyzed by using open coding. Eventually the results of creative capital were compared with the results of the propositions related to HR.

Results

Selection criteria have the strongest effect on the level of creative capital, measured in three out of four organizations. More precisely, selection criteria based on task analysis has a positive effect on creative capital. A job description that consists of the chief objectives and key attributes also has a positive effect on the level of creative capital. However, the proposition of job description was only positively related to the measured creative capital at two out of four organizations.

Propositions related to internal / external recruitment and the selection method were only corresponding with the results in one out of four organizations. This indicates that they hardly have any influence on creative capital.

Recommendations for further research

Several recommendations are given at the end of this report. One recommendation is the combination of the propositions regarding job description and selection criteria is a candidate for further quantitative research. For this research has showed that the propositions regarding these components of selection and recruitment have an influence on creative capital. In order to know the mechanisms behind this influence, a more detailed research is useful. For generalizing this result, these propositions should be measured within a greater amount of organizations.

Another recommendation for further research is to look whether it is possible that the creative capital for one or two vital departments is sufficient for an organization to act as an innovative organization. Further research is needed on this subject.

For the moment there is no information based on research on other HR practices yet, which makes it too early to make final conclusions, even for the HR practice selection and recruitment. So, this should be done at a later stage in this research program.

Furthermore, it could be useful to measure the innovativeness of companies evolved in the program to find the business relevant influence of HR practices on creative capital and their effect on the innovativeness of companies.

Table of Contents

Preface	2
Abstract	3
1. Introduction	6
2. Creative capital on organizational level	8
2.1 Definition of creative capital on organizational level	8
2.2 Intellectual capital	8
2.3 Creative capital related to creative ability, human capital and social capital	10
3. HR practices and creativity: building propositions	15
3.1 Recruitment process and creative capital	18
3.2 Selection process and creative capital	20
4. Methodology	22
5. Findings	28
5.1 Findings on Creative capital	28
5.2 Comparison regarding the HR practice Selection and Recruitment	33
6. Discussion	36
7. Conclusion.....	38
7.1 Categorizing the propositions.....	38
7.2 Answering the main research question.....	40
7.3 Recommendations for further research	42
8 Reference list.....	43
Appendix A - Creative capital in literature	45
Urban literature/creative class	45
Research findings on the creative class of Florida	46
Appendix B - Interview protocol.....	51
Appendix C - Interview summaries.....	58
Appendix D - Codebook Creative capital	66
Appendix E - Codebook Selection and Recruitment.....	84

1. Introduction

This research is part of a larger research program, conducted by four researchers. The aim of the research program is to see how the different HR (Human Resource) practices have an effect on creative capital. In order to do this, creative capital on organizational level is defined. The differences of selection and recruitment practices in place will be analyzed and discussed in this report. This makes it possible to see the differences between the HR practices of the organizations looked at.

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). He argues that creative people are key drivers of urban and regional growth, because they attract creative businesses, generate more innovations and have a higher level of entrepreneurship.

Since its introduction, research on creative capital has been concentrating on the urban level, where creative capital is considered a key predictor of economic growth of urban cities and regions. Research on the implications of creative capital on the organizational level has been argued to be underdeveloped (Straatman, Veenendaal & van Velzen, 2012). Organizations are the places where creative people work together and create economic value for the organization. Organizational creative capital seems to be an important topic for further research. In the end, it is the performance of the 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. Also, it is expected creative capital contributes to the organization's performance as it does on the urban level (Straatman et al., 2012).

This paper identifies the shortcoming in earlier definitions from (Florida, 2005) and (Straatman et al., 2012) in chapter 2.

Therefore we defined creative capital on organizational level as:

the aggregated organizational creative ability, which is the enactment of organizations to integrate and aggregate the creativity of individuals, embedded in their relationships into something valuable for the organization.

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 the definition used in this research, 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 the 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, it could be argued that creative capital is difficult to replicate by competitors. Further, creative capital is valuable for innovation (Florida & Goodnight, 2005). Consequently, creative capital fulfills the VRIN criteria and might therefore lead to competitive advantage to organizations.

Amabile, Conti, Coon, Lazenby and Herron (1996) also stated that creativity is not the same as innovation, they describe "innovation is the successful implementation of creative ideas within an organization" (p. 1155).

Innovation is important for organizations in order to have a competitive advantage. Figure 1.1 shows the interdependency of creative capital and innovation, which makes this research interesting for organizations. This figure will be extended throughout the report.



Figure 1.1 The interdependency between creative capital and innovation

The third chapter of this paper explains the relationship of Human Resource Management (HRM) to creative capital. Based on research, connection between HRM and creative capital will be explained and the necessary further research is pinpointed. It is therefore of utmost importance to study the concept of creative capital and how Human Resource Management practices and strategies might facilitate it. Because HRM is a broad concept, this research focuses on the HR practice selection and recruitment. The research question of this research is: *Which components of selection and recruitment influence the creative capital in organizations the most?*

The other HR practices that will be looked at within this research program are Job design, External labor (which is part of the HR practice selection and recruitment) and Training. Figure 1.2 shows the HR practices in the middle and the main subject ‘creative capital’ surrounding the researches within the research program.

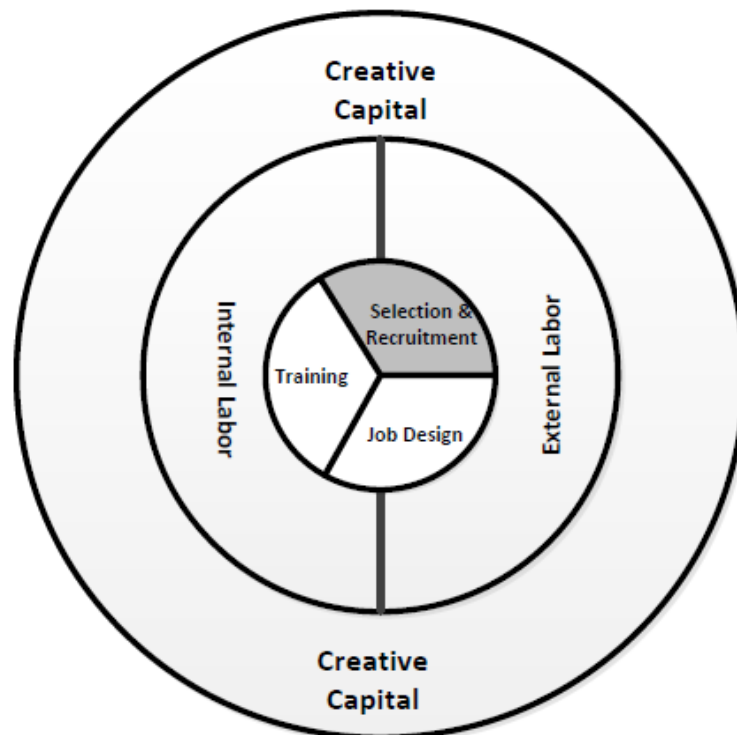


Figure 1.2 Research program

2. Creative capital on organizational level

2.1 Definition of creative capital on organizational level

One of the first attempts to define organizational creative capital is by Florida and Goodnight (2005) who argues that it is “*an arsenal of creative thinkers, whose ideas can be turned into valuable new products and services*” (Florida and Goodnight, 2005, p. 2).

Straatman et al. (2012) extended this definition by arguing that organizational creative capital is the “*the aggregated creative ability of the organisation, embedded in the individual employees and in the relations between employees*” (Straatman et al., 2012, p.5). This definition used by Straatman et al. (2012) for creative capital has some flaws. First, salient improvement introduced in this paper is that organizational creative ability is defined, while Straatman et al. (2012) only incorporates the definition of regional creative ability without transforming it to a definition of organizational creative ability. Second, it is not only about the relations which are possessed between the employees but also about the relationships of the employees outside the organization. This means that it is about the internal and external relationships of the employees.

Therefore we defined creative capital on organizational level as:

the aggregated organizational creative ability, which is the enactment of organizations to integrate and aggregate the creativity of individuals, embedded in their relationships into something valuable for the organization.

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.*

This definition was generated by reflecting the origins and existing empirical evidence of creative capital, which can be found in appendix A. One of the main critiques regarding Florida’s (2002) concept of creative capital, is the argue 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). In the next paragraph, the differences and similarities of creative capital and other capitals are discussed, after which the concept of creative ability and the relation between creative capital and human- and social capital are clarified.

2.2 Intellectual capital

Intellectual capital can be understood as all knowledge stocks, firms utilize for competitive advantage (Kang & Snell 2009). Intellectual capital as consisting of (1) human capital, (2) social capital / relational capital, (3) organizational / structural capital and (4) customer capital (Stewart 1997; Kang & Snell, 2009; Yang & Lin 2009).

Human capital (1)

Human capital is defined as the “*core asset of an organization, including knowledge, skills, experiences, competences, attitudes, 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 (Schultz 1961; Edvinsson and Malone 1997), most scholars define human capital as the knowledge, skills, abilities and other characteristics (KSAO’s) 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). The human capital within an organization can either be homogeneous or heterogeneous (Willis, 1986; Gong, 2003). While heterogeneous organizational human capital consists of employees with differences in KSAO’s, homogeneous organizational human capital refers to employees with more or less the same KSAO’s.

Social capital (2)

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 knowledge exchange within an organization (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 (Straatman 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 homogeneous groups, bridging social capital refers to relationships between heterogeneous groups (Putnam, 2000). A further differentiation of social capital is by Kang and Snell (2009), who distinguish between cooperative social capital and entrepreneurial social capital.

Kang and Snell (2009) argue that three main dimensions influence social capital: 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. At last, the cognitive dimension relates to the importance of shared values and norms among groups. Based on these three dimensions, Kang and Snell (2009) conceptualised two archetypes of social capital. The first one, cooperative social capital, is characterised 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.

Organizational capital (3)

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 when all employees leave (Kang & Snell, 2009). Thus, organizational capital is possessed by the organization and is not influenced by employees.

Customer capital (4)

Customer capital can be understood as “the value of an organization’s relationships with whom it does business” (Stewart, 1997). The essence of customer capital is therefore the knowledge embedded in the market channels and customer relationships of organizations (Bontis, 2004). Consequently, it could be argued that customer capital is related to social capital as the focus is on an external relationship of an organization.

Intellectual capital and innovation

Based on these understandings of the concepts, scholars argue that intellectual capital is related to knowledge management and innovation (Stewart, 1997; Subramaniam & Youndt, 2005; Ling, 2012). 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 human capital as well as social capital.

2.3 Creative capital related to creative ability, human capital and social capital

Creative ability

As argued by Veenendaal et al. (2012) creative capital on organizational level concentrates on the creative ability instead of the creative thinking ability. The creative thinking ability is the manner in which 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 creative thinking ability is important for creativity, but expertise and motivation are also essential for creativity. Creativity can be understood as the development of new and valuable ideas in any domain (Amabile, et al. 1996). Creativity can therefore relate to products, processes and people. Creativity is not the same as innovation, as Amabile et al. (1996) describe “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 knowledge, skills and abilities of that individual will not be used when he or she 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.

This definition of creativity is on a rather individual level, while Woodman, Sawyer et al. (1993) argue that group creativity is influenced by the constitution of the group in terms of its diversity and 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 realise the required performance as argued by the AMO-framework (the three prerequisites are ability, motivation and opportunity). The AMO-framework states 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 a HRM system is in place that serves the interest of employees, their motivations and the quality of the jobs (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 HR 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, Dietz et al., 2005). Concerning creativity, creative thinking and expertise can be regarded as the human capital of an individual and the motivation as the promoter for creative performance. 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 at least contain 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 behavioural 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 student 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 student combines or integrate different perspectives, ideas or materials in a manner that can be regarded as constructive. These measures are used in both studies of Choi (2004a; 2004b) 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, and 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). 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 Straatman 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 (Vartanian, Martindale et al. 2009; Baer 2010). This definition can be converted to an organizational definition of creative ability. This paper defines organizational creative ability as *the ability of organizations to integrate and aggregate the creativity of individuals into something valuable for the organization.*

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.*

The definition given for organizational creative ability positively extends the concept of organizational creative capital as defined by Straatman et al. (2012). In order to measure which organizations have high creative ability and thereby high creative capital, there must not only be looked at the possession

of creative capital but also at 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). 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 creative individuals.

Human capital

It could be argued based on the definition of creative capital used by Veenendaal et al. (2012) that creative capital is the same as human or social capital. Human capital includes the KSAO's 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.

Besides, we earlier discussed the definition used by Wright and McMahan (2011) that human capital 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. 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. 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 the organization, which makes innovation possible.

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, which is the case when an organization is focused on exploitation.

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 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, all relationships belonging to this employee might end as well.

A further argument for the need of creative capital was given by Veenendaal et al. (2012), who argue that the term social capital is overstretched and should therefore not be used to explain the concept of creative capital. While it might be the case that social capital is overstretched, it does not change the fact that there is a large resemblance between creative and social capital.

Consequently, rather than arguing for a difference between these concepts, this paper aims at positioning creative capital within social capital theory. Relating creative capital to the concepts of bonding and bridging social capital, it could be argued that creative capital requires bridging social capital, as a heterogeneous workforce might lead to creativity (Veenendaal et al., 2012). Consequently, in order to establish relationships despite the diversity, bridging social capital is needed. Relating creative capital further to the social capital archetypes by Kang and Snell (2009), it could be argued that social capital can be positioned within entrepreneurial social capital as the weak social system facilitating the flexibility needed for exploration and innovation (Kang & Snell, 2009). This was found by Pullen et al. (2012), who researched the required network characteristics for open innovation. The study found that organizations should share the same goals, have a common level of trust in terms of fairness and reliability and have high resource complementarities, while having weak network ties. 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. Thus, creative capital could be positioned within bridging social capital and entrepreneurial social capital. However, even if an organization has a diverse workforce, it is crucial that there is one common company culture and shared goals and norms. Thus, it could be argued that in order to enable bridging social capital, a certain level of bonding social capital is needed. This is in line with the study of Pullen et al. (2012), in which a shared objective and trust was found to be of importance.

At last, as discussed earlier, social capital can consist of internal and external relationships. Consequently, this paper argues that organizational creative capital encompasses both organizational internal relationships as well as external relationships to other stakeholders.

The main interdependencies of creative capital in this research can be seen in figure 2.1. In table 2.1 the characteristics of the capitals are described.

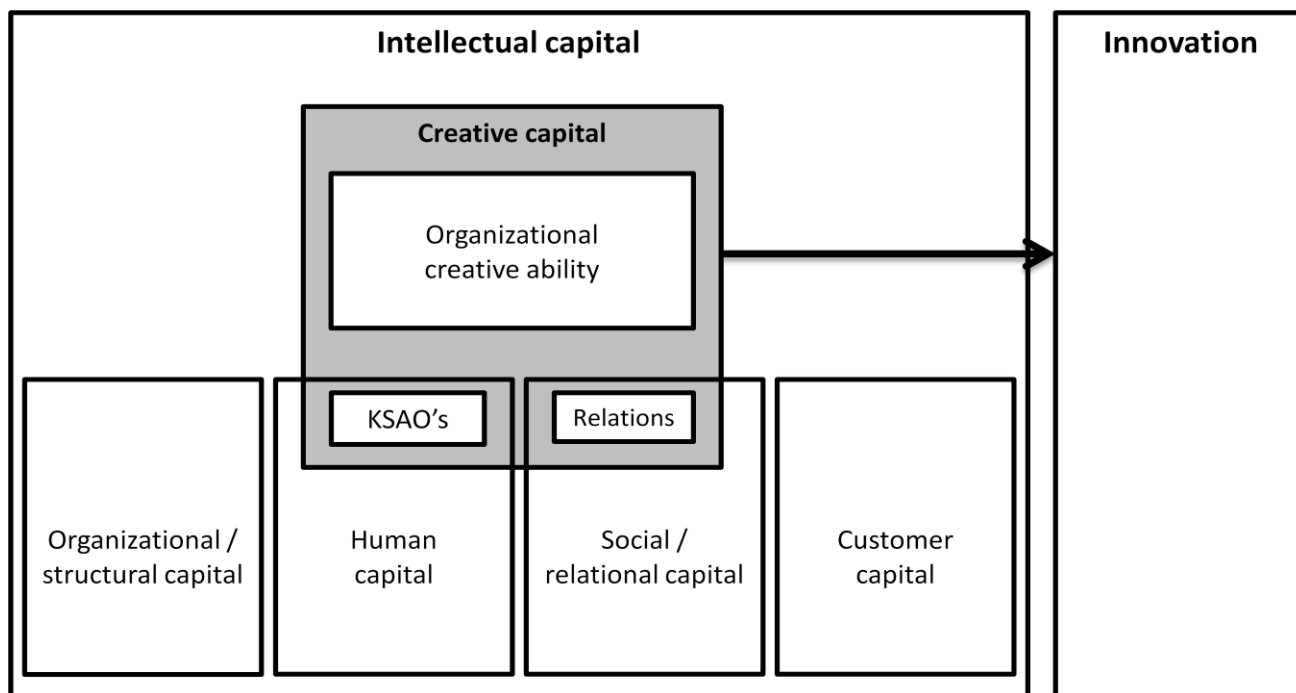


Figure 2.1 The main interdependencies of creative capital

Capital	Organizational / structural capital	Human capital	Creative capital	Social capital	Customer capital
Essence	Organizational routines	Human intellect	Creative ability	Internal and external relationships	Market relationships
Definition	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.	Knowledge, skills, abilities and other characteristics that might be utilized to create value.	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 for the organization.	The value created and embedded in both internal relationships among employees and external relationships such as with stakeholders.	The value of an organization's relationships with whom it does business with.
Scope	Internal organizational links	Internal within employees	Internal within employee node, internal within employees, internal organizational links, external organizational links	Internal and external	External organizational links

Table 2.1 The characteristics of the capitals

3. HR practices and creativity: building propositions

One of the researches that empirically tested the effect of HRM on the creativity of the employees of an organization and whether this has led to innovation is the research of Jiang, Wang and Zhao (2012). Their research precisely looked at whether the HR practices job design, performance appraisal, recruitment and selection, reward, team work and training facilitate employee creativity and organizational innovation (Jiang et al., 2012, p. 4025). Another research, done by Shipton, Fay, West, Patterson and Birdie (2005) also looked at HRM as a facilitator for organization's performance. Instead of looking at the individual employee creativity, here it is argued that HRM promotes innovation to the extent that people and the (external) networks they belong to are enabled to create, transfer and implement knowledge (Shipton et al., 2005, p. 118). The first of these two researches is more focused on the human capital side of employee creativity, while the second research is more focused on the social capital side.

Research of Jiang, Wang and Zhao

The research of Jiang et al. (2012) included 106 Chinese firms that are located in regions of China, having a high level of economic development and for whose industry it is important to innovate. Before starting the research, they defined employee creativity as "people who develop ideas and have the courage to propose, support and implement them in the face of possible resistance by their colleagues" (Jiang et al., 2012, p. 4028). With all their propositions they stated that all the HR practices (job design, performance appraisal, recruitment and selection, reward, team work and training) are positively related to employee creativity. These positive relationships will also have a positive impact on the organization's administrative and technological innovation. Administrative innovation includes management, marketing, purchases, sales and staff policy, where technological innovation is a company's ability to adapt new technologies and basic work activities (Jiang et al., 2012).

The control variables that were used for this research are firm age, firm size, industry, firm profitability and firm ownership (Jiang et al., 2012). To make sure that single-source bias was ruled out, different questionnaires were sent out to the organizations for different respondents. This meant that the HR manager filled out a questionnaire on HR practices, the production or operations manager on technological and administrative innovation and other employees were randomly selected to complete a questionnaire on employee creativity (Jiang et al., 2012, p. 4032).

When measuring the HR practices that are mentioned earlier different scales were used. Each practice was measured by a two, three or five item scale and each item was categorized by a five-point Likert scale for the responses, with 1 being strongly disagree and 5 being strongly agree. An example for such an item is: 'We use many different recruiting sources' for the HR practice selection and recruitment. (Jiang et al., 2012, p.4033). For the measurement of employee creativity a 10-item scale was used, from which five items were used to measure creative thinking ability and five items were used to measure creative personality and motivation. Technological innovation and administrative innovation were measured with a five respectively an eleven item scale.

The conclusion of this research stated that the six HR practices are all positively correlated with employee creativity and administrative and technological innovation. Besides, it was found that creativity and innovation were positivity correlated. However, the propositions of training and performance appraisal were not supported because they were both not significantly correlated with employee creativity.

The other four practices have a significant impact on both the ability and the motivation of the employees to be creative. Extensive search and intensive selection in particular gives the organizations more choice for selecting creative people. Hereby the creativity of all employees within the firm increases.

Research of Shipton, Fay, West, Patterson and Birdie

Like Jiang et al. (2012) Shipton et al. (2005) is focused on the creativity of employees, but looks at how knowledge is transferred through networks too. In order to support the process of creating, transferring and implementing knowledge, exploration has to be the dominant approach for the operations of the organization. For then learning is likely to give rise to organizational innovation (Shipton et al., 2005, p.119).

For the first stage of the organizational learning cycle, the creation of knowledge, HRM systems have to make a framework that makes knowledge available to individuals and motivates them to experiment with new ideas. This framework starts with recruiting people who have the skills and knowledge required to meet identified gaps. This will be achieved when organizations use relatively sophisticated practices such as psychometric tests, assessment centers and work sampling activities (Shipton et al., 2005, p.119). Extensive training in a variety of jobs or skills gives an employee the knowledge for connecting different stimuli (Shipton et al., 2005, p. 119). Another HR practice that can be used during this stage is reward systems, which can act as a facilitator or barrier for the creativity of individuals.

The second stage of the cycle is transferring knowledge. This stage is about developing shared understandings between the employees. HRM systems can help during this stage by giving the transferring of knowledge a collective dimension and let the organization focus on teamwork and horizontal processes.

The third and final stage of the cycle represents the enactment of the innovations. This will only happen when the organization is committed to this stage.

The organizational learning cycle of this research has been measured with a longitudinal study that consisted of interviews with senior managers, HR managers and CEO's at 111 UK manufacturing companies. The research was conducted during two periods in time. The researchers measured the 'sophistication of HRM' by the interviews. Later on, the learning climate and appraisal linked to a pay system and the innovation of products, production technology and production processes were measured by a survey that was sent to all the senior managers. The control variables used in this research were organizational size and profitability.

The findings of this research stated that the 'sophistication of HRM' positively predicts product and production technology innovation (Shipton et al., 2005). The conclusion that was drawn "that HR practices effectively designed and synchronized, enhance learning and empower people at all levels to instigate change and innovation" (Shipton et al., 2005, p.127). They also stated that "managing people to promote innovation is necessary if we are to release the full creative potential of our work organizations" (Shipton et al., 2005, p.127).

How HRM influences creativity

The two researches that are described above both prove that HR practices (job design, performance appraisal, recruitment and selection, reward, team work and training) have a positive influence on

innovation. All the six HR practices have a positive relationship on the creativity of employees and their networks and the innovativeness of an organization.

The research of Jiang et al. (2012) found that the HR practices job design, team work, reward and selection and recruitment all have an impact on both the ability and the motivation of employees to be creative. This means that these HR practices will have a great influence on creative capital, because the creativity of employees is the human capital part of creative capital. The reason why organizations would pursue creative capital is because they would like to focus or are focused on innovation. Creativity was found to be positively related to organizational innovation. So the impact of the human capital part of creative capital on innovation is relevant and proven.

The research of Shipton et al. (2005) stated that HR practices can only promote innovation through the creativeness of the employees and its networks when a company is focused on exploration. This is in line with the human capital and social capital part of creative capital. As described before, a heterogeneous workforce uses exploration and is about risk taking, variation, experimentation etcetera (March, 1991). Within a heterogeneous workforce the KSAO's (human capital) of the employees are different, which makes innovation more likely. We also argued that a heterogeneous workforce has bridging social capital, the connection between the diverse individuals. In order to enable bridging social capital, an organization needs to have a certain level of bonding social capital, at least shared norms and values. The combination of bridging and bonding social capital is used by Shipton et al. (2005). They stated that for transferring the 'creative' knowledge the organization needs a collective dimension that focuses on teamwork. The human capital side is also proven within this research for it was found HR practices enhance learning and empower employees to instigate change and innovation.

With these two researches it is obvious creative capital can be influenced by several HRM processes. Therefore this research program focuses on the relationship between a HR practice and creative capital, each research for its own HR practice. This research is focused on the HR practice selection and recruitment and the methods within this practice that are useful for organizations aiming at obtaining or maintaining high creative capital. I have chosen this HR practice because during the selection and recruitment process the organization has the opportunity to focus on creativity for the first time. This means that organizations can choose which abilities they want to acquire and whether these abilities focus on creativity. When a firm selects creative people the creativity of all the employees, and thus the creative capital of an organization, increases as stipulated in the research of Jiang et al. (2012).

Figure 3.1 shows the supposed effect of HR practices on creative capital, based on the research findings of Jiang et al. (2012) and Shipton et al. (2005).

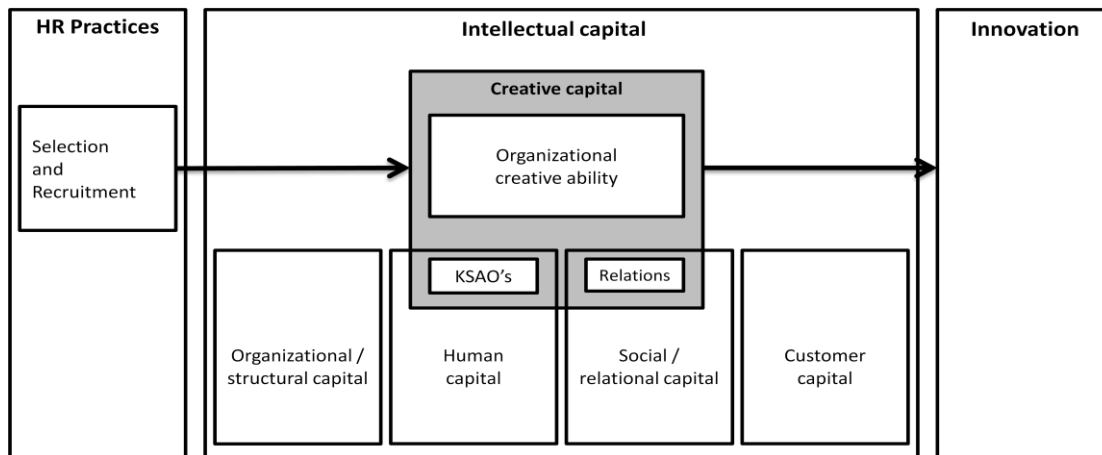


Figure 3.1 The supposed effect of HR practices on creative capital

3.1 Recruitment process and creative capital

When an employee leaves an organization or an organization is growing or when a new project will be started for which the KSAO's of the employees are inadequate, the organization will be looking for new employees. Before hiring a new employee, the organization has to go through a process, called recruitment. Recruitment can be defined as “those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breaugh & Starke, 2000, p. 407).

Job description

The recruitment process consists of two phases. The first phase starts with the vacancy and produce of a good job description and personnel specifications (Torrington, Hall, Taylor & Atkinson, 2011). A job description can be written in two different ways. The first approach is breaking the job down into its components, working out the chief objectives and listing the required key attributes essential for the job (Torrington et al., 2011, p.160). The alternative approach is focusing on the characteristics of current job holders who are judged to be excellent performers (Torrington et al., 2011, p.161). The latter has a great disadvantage, it creates a workforce of employees with similar KSAO's (Torrington et al., 2011). When an organization starts recruiting individuals with similar KSAO's as the current employees, the workforce will become and stay homogeneous. For creative capital, we stated the workforce needs to be heterogeneous. When a workforce is heterogeneous, fewer boundaries exist and the creative ability of employees will rise (March, 1991). So it is expected, that organizations using the first approach will build high creative capital, where organizations using the second approach end with low creative capital.

Propositions on job description

Proposition 1a: Organizations using job descriptions based on the characteristics of current job holders executing their job excellent, have low creative capital.

Proposition 1b: Organizations using job descriptions, based on the chief objectives and a list of key attributes needed for the job, have high creative capital.

Internal and external recruitment

The second phase of the recruitment process is to decide whether to recruit internally or externally. Recruiting internally has certain advantages, like saving costs for job advertisements and recruitment agencies. Another advantage is that the motivation of the current employees will grow. The employees feel they are valued, which makes them work harder showing their commitment.

Next to the advantages, a limited list of candidates to choose from is a disadvantage. It is possible that the ‘best person for the job’ is someone from outside, who will not be taken into account. So by recruiting internally it is difficult to diversify the workforce (Torrington et al., 2011).

When an organization decides to recruit externally, the method that will be used needs to be selected before starting. An organization can decide to use advertising, online recruitment and employer branding. When using advertising, organizations can hire a recruitment agency or have a contract with such an agency. Because using advertisements is expensive, an organization needs to consider what is in the advertisement and is out. This can be a disadvantage, because it is possible that an organization needs to leave an important part of the description out of the advertisement because it does not fit. A great advantage of this recruitment method is agencies can compile statistics of the people reacting on the vacancy.

The second method that organizations can use for external recruitment is online recruitment, which can be done in two ways. The vacancy can be put on the website of the organization itself or on a commercial website of newspapers or agencies. This method is less expensive than contracting an advertising agency and it also takes less time for applicants to send their curriculum vitae (CV). However, this ensures more people will react on the vacancy, including people who do not fit the application. This high amount of applicants will cause a search method based on key words, which can exclude people who can be the best fit for the job.

The last method of external recruitment is employer branding. Employer branding is making the organizations attractive for potential employees, encouraging them to send in unsolicited applications. This method is the least expensive, because an add is unnecessary, having enough unsolicited applicants. On the other hand, it is possible that extra time and effort for attracting new people needs to be put in, especially when the process is not done efficiently (Torrington et al., 2011).

Many organizations use a mix of these methods. It is possible to use different methods for the same kind of vacancies and it can also depend on the kind of vacancies. As stated before, an organization that prefers to have high creative capital looks for people with KSAO’s differing from the current employees. In order to find people with these different KSAO’s they need to use external recruitment, for internal recruitment only leads the workforce to become even more homogeneous.

It is expected that organizations using external recruitment attract creative people with KSAO’s that differ from the current staff. They are expected to use advertising recruitment via an agency, because the chance of leaving out the best person for the job will be lower. Besides, employer branding can take a lot of time and effort, especially when you are not attracting the right persons. At last, I expect organizations using internal recruitment are less focused on attracting people with different KSAO’s, so will have low creative capital. Internal recruitment in this case will be less expensive and takes less time than using external recruitment, mainly when the best person for the job is already among the employees. Otherwise, organizations using external recruitment end with low creative capital as well.

Propositions on internal / external recruitment

Proposition 2a: Organizations using internal recruitment by the most applications will have low creative capital within the organization.

Proposition 2b: Organizations using external recruitment by the most applications will have high creative capital within the organization.

3.2 Selection process and creative capital

Next to the recruitment process an organization has to select one of the applicants. Selection is also divided in two phases. These phases provide the information that the organization and the applicant need for making their decision. Organizations need to decide which applicant they would like to hire and the applicant needs to decide whether or not to accept the offer and the provided work environment.

Selection criteria

The first phase of the selection process is defining the selection criteria which can be individual job criteria or competency-based criteria. Individual job criteria can either be focused on analyzing the task first and decide which competencies are needed for the particular job or the persons who are successful in this particular job will be identified and the competencies they have will be described. The competency-based criteria define the competencies as the underlying characteristics which are needed for the best performance. These competences include personal skills, knowledge, motives etc. There has been argued that organizations are increasingly likely to focus on more general attitudes (Torrington et al., 2011).

Like the first phase of the recruitment process (clear job description) organizations that use job characteristics where the task has been analyzed first and it has become clear which competencies are needed as selection criteria are expected to have high creative capital. With the competency-based criteria organizations would probably get quite the same types as their current employees, which means that the workforce would become homogeneous. This is the opposite of a heterogeneous workforce that is needed for creative capital. So, organizations using competency-based criteria will end with low creative capital because they are not focused on finding the needed diversity.

Propositions on selection criteria

Proposition 3a: Organizations using competency-based criteria as the selection criteria will have low creative capital.

Proposition 3b: Organizations using individual job characteristics, for which the task has been analyzed first and it has become clear which competencies are needed as selection criteria will have high creative capital.

Selection methods

The second phase of the selection process is choosing the right selection method(s). The traditional methods that can be used are application forms, (telephone) interviewing and references. Application forms are used to standardize the applicant's history. The characteristics of all applicants can easily be compared with the characteristics of current successful employees. This method of scanning through many applications is mostly used by large organizations. Telephone interviewing is mostly used as a pre-selection before a job interview and can be used when timing and place is important. The disadvantage of telephone interviewing is the lack of non-verbal communication, but this is not the case when someone comes on a job interview at the organization. The third form of traditional method is using references. Organizations will contact the former employers of the applicants and ask about the recommendations (Torrington et al., 2011).

Self-assessment, testing, group methods and assessment centers are examples of more modern methods that can be used during this section of the selection process. With self-assessment the applicant is given a realistic job preview in which the applicant can determine whether he or she is suitable for the job. The second method, testing, is for example the determination of the intelligence or the personality of a person via questions. One of the problems with this method is that it is not a good

predictor for the future and people can exceed expectations. The opposite of testing is using the group method. With the group method people will be put together and have to solve a case.

A great advantage of this method is that the behavior of the applicants can be monitored as well, but the contribution of an individual will be difficult to assess. Assessment centers use group-selection, work-simulation exercises, tests and a variety of interviews interchangeably (Torrington et al., 2011). With the use of both group methods and assessment centers, organizations can determine what the KSAO's of the applicant are and how creative he or she is in solving a case. For this reason the combination of these two methods will be a good option for organizations that demand high creative capital. It was also stated in the article of Shipton et al. (2005) that the recruitment of people having the skills and knowledge that is required to meet identified gaps, is achieved with practices such as psychometric tests, assessment centers and work sampling activities (p. 119). When an organization is using one of the traditional methods, because these methods are less expensive and require less time, or because the organization is not focused on the creativity of new employees, the creative capital within the company is expected to be low.

Propositions on selection methods

Proposition 4a: Organizations using traditional methods for the selection process will have low creative capital.

Proposition 4b: Organizations using group methods for the selection process will have high creative capital.

The coherence of the propositions is presented in figure 3.2.

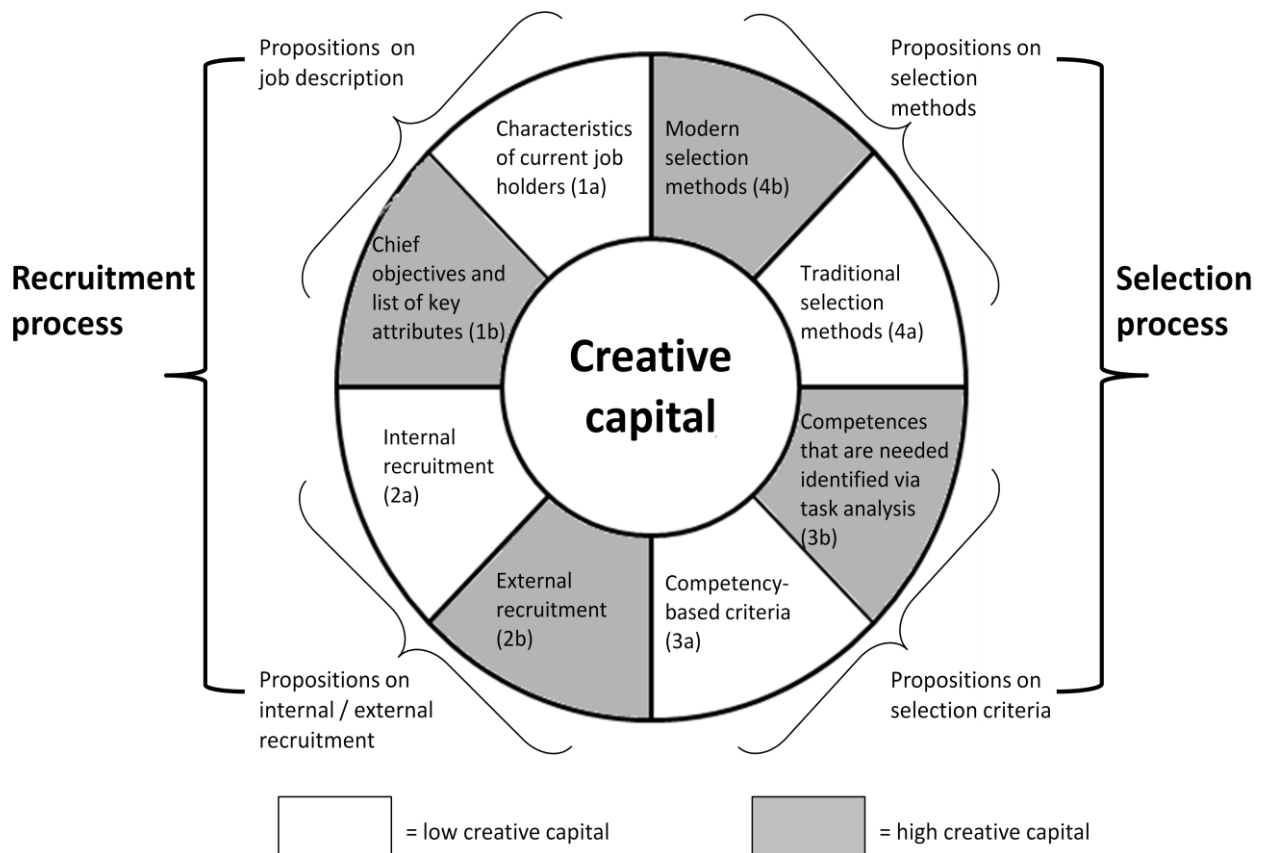


Figure 3.2 The coherence of the propositions

4. Methodology

This research is a qualitative field research and its purpose is to gain understanding in what way HRM can contribute to creative capital. For this research, in-depth interviews were conducted with managers of four different organizations. In-depth interviews were chosen as method for collecting data, because the information richness is very high (Babbie, 2007). The reasoning behind the answers will also be known and can be used to analyze the results of the research. We could also see the non-verbal signs to know whether the interviewee understands the question or not, in order to get the right information and whether he or she is (not) willing to answer.

Because I and my fellow researchers did all interviews at four different companies together and the information of the interviews was compared at the end, it can be stated that this is a comparative multiple case study. The content of this research has an explorative approach (Babbie, 2007). This means that the research is conducted to explore a topic, which makes a start to familiarize with that topic (Babbie, 2007, p.92). The purpose for doing it this way is to test the feasibility, so more extensive study can be done in the future.

The process for this qualitative (interview) research has seven stages according to Babbie (2007). These stages are the following:

1. Thematising

The topics that are discussed during the interviews are creative capital, selection and recruitment, job design and external labor. The latter two topics are not discussed in this thesis, rather are part of the research program and reported in separate documents.

2. Designing

Before we started with the interviews, a list was made with some characteristics of the organizations and thoughts about whether the organization had high or low creative capital. This list can be seen in table 4.1 on the next page.

To structure the interview, we made an interview protocol, which can be found in appendix B. The interview protocol was based on the operationalization of creative capital (table 4.2) and the operationalization of the HR practice selection and recruitment (table 4.3). Table 4.2 shows the dimensions of creative capital that are discussed in chapter 2. The dimensions “relationships” and “creativity” have six respectively three sub-dimensions. Questions were asked about all these dimensions in order to measure whether an organization has high or low creative capital. This was as well for the components of the HR practice selection and recruitment in table 4.3.

We had chosen to do the interviews with managers from organizations that are located in the region of Twente, because we had contacts with organizations within this region, which made it easier to arrange appointments. We tried to interview the HR manager or a person with expertise on the HR practices at the organization in order to get real answers. All the organizations that we researched are in the production, engineering and design industry, which we choose for two reasons. Having all organizations within the same kind of industry provides a certain basis for comparison. Besides, the chosen kind of industry is familiar with innovation and so it is expected that at least one organization has an innovative drive, which is good for creative capital.

Table 4.1 List of characteristics of the organizations

	Industry	Number of employees	Innovation strategy	High or low creative capital and why
Company A	Supply Block cutters Pipe grinders / notchers	45	Continual production innovation in order to maintain the low prices.	Low creative capital Company A has strong relationships and very little outflow of employees. New employees come from their own network. They operate in a stable environment and produce according to specifications. This means that creativity is not needed.
Company B	Medical cure Human care E-Mobility	43	Creating products people can rely on. These products need continuous improvement and demands creativity	High creative capital Company B looks at what the market needs and tries to come up with a concept. In order to develop a new idea or concept the employees need to be creative. Company B controls the entire lifecycle, from the concept phase to the supply of high quality products. However they are a medium size organization, probably hiring external parties when certain knowledge is needed during certain phases of the lifecycle.
Company C	Tires	1800	Manufactures and sells high-quality tires. Is mostly focused on exploitation / production	Low creative capital Company C is mainly focused on day to day business. Besides, they also try to be innovative, but this is a slow and incremental process.
Company D	(Movable) walls systems	131	Their R&D department is looking to find new ways to improve suitability, applications and durability. According to them these are the innovations of the future	Low creative capital Company D produces according to the specifications of the project. They try to be innovative on the products they use for making the walls. However this is only done by the R&D department.

Table 4.2 Operationalization of creative capital on organizational level

Creative capital - the aggregated creative organizational ability, which is the enactment of organizations to integrate and aggregate the creativity of individuals, embedded in their relationships into something valuable for the organization			
Dimensions	Sub-dimensions	Topic	Example question / interview item
Relationships - relationships within an organization and outside to its stakeholders that are both aimed at strengthening existing relationships and building new ones	Bonding	Relationships between homogeneous groups (Putnam, 2000)	Relationships exists mainly between groups that are familiar to each other
	Bridging	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
	Internal	Relationships between employees within the organization	The organization has a strong internal network, which means that we give our employees the opportunity to use their creativity together.
	External	Relationships between the employees of the organization and the organizations external stakeholders	The organization has a wide and external network that is useful for idea generation
	Weak	Weaker relationships, those involving comparatively low levels of closeness and interaction (Granovetter, 1973)	The relationships are characterized by relatively low levels of interaction
	Strong	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
Organizational creative ability - the ability of organizations to integrate and aggregate the creativity of individuals into something valuable for the organization			The main activity of the organization is developing new products, services and processes versus the main activity of the organization is focusing on our current product portfolio and improving
Individual creativity - the ability of employees to make a valuable combination of previously unrelated concepts, ideas, knowledge or experience for the organization	<i>Expertise</i>	Knowledge and experience of an individual (Amabile, 1998)	People developing new ideas and concepts by combining existing ideas, knowledge and concepts
	<i>Motivation</i>	The driver to execute a certain behavior	Employees are motivated to be creative / are encouraged to combine different ideas, knowledge and concepts
	<i>Creative thinking</i>	How flexible and imaginatively people approach problems (Amabile, 1998)	Generate new ideas and think outside the box

Table 4.3 Operationalization of selection and recruitment

Concept	Concept definition	Components	Approaches	Example question / interview item
Recruitment	“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breaugh and Starke, 2000, p. 407)	- Job description	List of chief objectives and key attributes - Description that consists of the characteristics of a current job holder	When a new job is available, on which criteria is the job description based? Ideal situation in the eyes of the chief, current job holders?
		- Internal recruitment	- Vacancy on the intranet	When a new job is available, in which place is the company seeking for employees first? (Internal or external)
		- External recruitment	- Online recruitment - Recruitment agency - Employer branding	What are the main reasons to focus internally / externally? Which advantages does the company seek for when recruiting internally / externally?
Selection	“Selecting the perfect person for the job based on certain criteria”	- Selection criteria	- Competency-based - Individual job characteristics via task analysis	Which criteria are used for the selection process? Does it depend on the task or are there some general competencies that you are looking for?
		- Traditional methods used for selection process	- Application form - (Telephone) interview - References	What are the methods used for selecting the best person for the vacancy? And who are carrying out the methods used? (e.g. assessment centers) Who is / are responsible for the decision of the selection?
		- Modern methods used for selection process	- Self- assessment - Group methods - Tests - Assessment centers	On which criteria is the decision made? Do the criteria changes over time when new staff is hired (to keep the staff heterogeneous) and does everyone has the same criteria?

3. Interviewing

The first stage in the interviews consisted of questions on our main topic, creative capital. As a start we gave the interviewee two descriptions, one of organization X, a high creative capital organization and one of organization Y, a low creative capital organization. These descriptions can be found in the interview protocol in appendix B. In the interview protocol, a description of a medium creative capital organization can be found, however this was left out during the interview, in order to prevent the interviewee from choosing for the safety of the middle. When the interviewee had chosen between the two descriptions we gave a five point Likert scale that goes from strongly disagree to strongly agree in order to find out how good the company fits the description according to the manager. In order for us to see whether the interviewee is consistent we asked some questions about the (sub) dimensions of creative capital (table 4.2). During the whole interview we discretely made some notes.

The second stage in the interviews consisted of questions on selection and recruitment. It also happened that during the introduction the interviewee already made some statements. If so, we fell in more detail and after a while we got back to the original script. This was possible because the interview had a semi-structured form. Besides, during another interview, we made a note of the statement and referred back to the subject later on. All the interviews took approximately 60 to 90 minutes.

4. Transcribing

After an interview, one of us directly transcribed the interview and this transcription was finished within one or two days. We literally transcribed the entire interview, which took about 10 hours per interview and a colleague researcher checked whether it was done correctly. After the transcription was checked, a summary of the transcription was made and also checked by a fellow researcher, in order to send it to the interviewee for feedback. These summaries are in appendix C. Two interviewees replied to our summary, one of them had minor comments.

5. Analyzing

The analyses of the four interviews can be found in the chapter 5. For coding the transcriptions, we used open coding. This means that we went through the interview line by line and when there was something interesting stated in a sentence, we put that in a codebook that was based on the framework used for the operationalization. After coding separately, we compared and discussed our findings of the coding. This codebook gives a clear overview and makes it easier to draw a conclusion on whether a company has high or low creative capital and which selection and recruitment process the organization uses. These codebooks can be found in appendices D and E.

6. Verifying, concerning validity and reliability

Validity tells whether you have measured what you wanted to measure at the start of the research. To improve the validity of the research the next steps were taken:

- Asking the interviewee whether the interview should be anonymized so the interviewee could speak freely.
- Structural coding and analyzing the interview independently.
- Sending a summary of the transcripts to the interviewee to be reviewed.
- Structurally discussing the preliminary findings of the codings between the researchers of the program.

Reliability means that the study is consistent, the same result will be found repeatedly. To improve the reliability of the research the next steps were taken:

- Describing the whole process in detail.
- Transcribing the interview by one researcher and checking by a colleague of the research program.
- The transcribed interviews coding independently by three researchers.
- Making the summaries of the interview by one researcher and checking by a colleague of the research program.
- Structurally discussed the preliminary findings of the codings between the researchers of the program.

7. Reporting

The report of the research findings, conclusions and my recommendations for future research are discussed in the next chapters.

5. Findings

In this chapter the results of the four interviews are presented. In order to answer the main research question, this chapter will start by determining whether the organizations that were interviewed have high, medium low creative capital. After that a comparison will be drawn between the just defined high, medium and low creative capital organizations regarding the HR practice selection and recruitment.

5.1 Findings on Creative capital

Company A

At this moment company A is changing their HR practices. The employees are getting the freedom to choose for themselves how long they would like to work each week and how they divide their hours within the week. With this change company A is trying to create flexibility according to the interviewee. The interviewee also stated that the reason for changing this is the non-stable market, requiring the delivery times to be shortened, for which flexibility is needed. Now the organization lays the responsibilities of producing on time with the craftsman. In general, this responsibility has been taken. The employees can also decide which working method they use and when the demand of the customers becomes complex, there will be counsel amongst employees. Apart from trusting the employees by giving them more responsibilities, company A also sporadically lets her employees work for other organizations. Employees detached to other organizations will however continue to work in the same sector, as a mutual exchange exists based on workload.

The interviewee is really embedded in networks and he stated that he is always looking for new business opportunities. An example being that, two years ago, the manager and director of company A were invited by BMW München to see their production chain and look whether company A can use their valuable methods within their own organization. Next to being invited to come to other companies, the interviewee also has a seat in some boards of directors, with which he organizes master classes and other meetings for knowledge exchange. The external network is also used for finding partners that can complement company A, thus enabling company A to focus more on their core competences. One example given by the interviewee was the collaboration with a carpeting company, which allows company A to solely focus on their core process and have a direct supply of quality made-to-measure wood. According to the interviewee company A usually relies on informal relationships. Sometimes a written contract is used, but the long lasting relationships mainly happen on a personal trust based relationship.

Most of the external relationships of company A are with organizations who are operating in another sector. These relationships are based on increasing the knowledge, thereby being bridging relationships. When looking at internal relationships, difference can be found between the board-employee relationship and the relationships amongst employees within company A. Although both relationships are bonding, the board-employee relationship focuses on trust and delegated responsibility, while the relationships amongst employees are formed naturally by cooperation in project based teams and team spirit. However, both internal and external relationships have one attribute in common, they are all strong, because they are based on trust and there is frequent interaction.

As said before, the interviewee of company A is always trying to learn something new from meetings or master classes. This could be seen as a way to create value at managerial level by company A.

Company A is focused on improving their current products and processes continuously and according to the interviewee they try to think outside the box in order to make this happen. Sometimes the interviewee will motivate the employees and literally say “let’s start from scratch and come up with a way to make the same product, but in a totally different manner than we do at this moment”. However, because employees are not involved in the external relationships and in the exchange of knowledge at managerial level, most of the ideas come from the interviewee himself. For example, it is the interviewee who goes to meetings to learn something new and he combined different techniques like robotics, RFID and software. For this reason it can be stated that company A is trying to be creative, but their ability to motivate people so their creativity can be turned into something valuable is not at the level of where it could be. This was shown by the fact that most of the valuable ideas discussing during the interview came from the interviewee.

In summary, company A only has strong relationships and most of the relationships which are external exist at managerial level. When external relationships would be formed at all levels, by letting employees be involved at these meetings and master classes, their expertise will grow and hereby the creativity of the company as a whole can grow because the workforce will stay heterogeneous. Taking all of this into account, the conclusion that can be drawn is that company A has low creative capital.

Company B

Company B focuses on the innovation and product development for high tech end-consumer industries. The vision of company B is “creating products people can rely on”. This asks for creativity and using the technology in the right way for the market according to their website. Company B works as a contract development company, which means that they are ordered by other companies to develop a product and that they need business relationships in order to survive. By working closely together with their business partners, company B embraces open innovation.

At this moment company B is focusing on their business relationships with companies who are strong at marketing and sales and who want to outsource the innovation or product development. Combined with the technology of company B, a strategic collaboration is a good fit. An example of such collaboration, given by the interviewee, is with a university hospital. The hospital designs a concept and company B assesses the concept and examines the possible market. Next to universities, company B also collaborates with suppliers. Company B outsources all their assembly, saving both time and money according to the interviewee. However company B does keep a close eye on quality. With these examples it is clear that company B has a strong external network. Within this network, company B bridges by acting as a conductor. This can be shown by the following example that was given by the interviewee: “We start with being the preferred customer and then we can ask for the best engineers of the other organization for the projects. Then we bring in our own best engineers, who are trying to find out what the competence level of the fellow organization is and then we know which people of the other organization we need to get on the project too.”

Next to a very strong external network, company B also has strong internal relationships. The employees work in teams, using both an innovation and a production management team. Within these teams there are people with different backgrounds, ensuring that there is a lot of bridging social capital. Besides, company B challenges the teams so they would have a common focus within the teams. The interviewee stated that this is done by telling them that the other team is doing it better. This creates bonding within the teams, but competition between the teams. Next to being challenged the bonding is also created by walking around and standing at the coffee machine by the innovation team, which will sometimes even lead to the discovery of a new idea.

Another bonding example was giving by the fact that the interviewee stated that “when in Holland everybody understands the goal and wants to achieve it, everybody will cooperate”. This is in contrast with the office of company B in China, where strict hierarchical structures are present according to the interviewee. The relationship with their office in China is also an internal relationship. This relationship first started out as a bridging relationship, because the employees that work in China had to learn a lot from the employees in Enschede. However, the interviewee stated that this has changed now, because the Chinese have been working for company for years now and are considered to be company B-people. This means that this relationship started out as bridging one and has become a bonding relationship.

During the interview it was stated by the interviewee “when you innovate products in the market it is also important to maintain products and to do more incremental innovation and improvements”. This means company B is changing the focus of its strategy from only exploration to both exploration and exploitation. The interviewee also said that the core competency of company B is being creative in finding needs in concepts and to see if with these concepts can be coupled with a business model. In order to be creative, it was argued that expertise and motivation are essential according to Amabile (1998).

Company B is looking for expertise by recruiting people with a certain skills set and people with diverse backgrounds, because they do not only want people who are very technical but also people who can communicate between different “environments in the team” according to the interviewee. Furthermore, next to recruiting new employees, the current employees are challenged by taking extra education or going in-depth in a technical problem while discussing it. These two things are done, by company B, in order to increase the thinking process of the employees according to the interviewee.

The employees will use their expertise when they are motivated. The interviewee said that the employees of company B are motivated when they can learn from someone within the team who has certain knowledge or when someone who has the knowledge that is needed within the team to complete the project is put in the team by the team manager or the board. By bringing in people who have knowledge that differs from the current employees, the workforce will stay heterogeneous. The board also motivates their employees by creating challenging projects. According to the interviewee, these challenging projects have to be based on something that (potential) customers really want to have, because then employees really want to get out there and test the concepts that have been created to fit the needs of the customers.

Company B makes sure that their employees have the expertise and are motivated to be creative. This means that the organizational creative ability is high. Next to this they also have many internal and external relationships, which have a bonding and bridging character and are all strong ties. However, it must be acknowledged that the ties within this strong network are loose. As said before, company B is the conductor within their network, which means that whenever they need something (e.g. a certain competence) they use their network, go out and get what they want. Taking all of this into account, it can be concluded that company B has high creative capital.

Company C

In their social statement company C states that working at their organization means having a high degree of autonomy, versatility and multidisciplinary collaboration. According to this report, the competences that go with this are passion, drive and creativity (“Sociaal Jaarverslag”, 2012, p. 5).

At this moment company C is more focused on its current products than on making new products, which is stated by the interviewee and on the website of the company. This means that the

competences they mentioned are more used for exploitation than for exploration. However, it was stated that company C is also trying to shift focus to new products in order to survive on the long term. During the interview it was stated by the interviewee that tires continuously need to be improved and at this moment the tires they produce today will not pass 2016 test requirements, nor will be in the top 10 worldwide. The interviewee said that the improvements of the tires are done by the R&D department of the organization, but they also have an idea box to give the employees of other departments the opportunity to come up with ideas to improve the production process. When there is a good idea, an interdisciplinary team will further develop the initial proposal before discussed at managerial level. There is a lot of collaboration between these interdisciplinary teams and (sub) departments according to the interviewee. Furthermore collaboration between colleagues is highly present. This was made clear by the interviewee with the next example, “when there is a big machine and there are four people needed for handling the machine, the employees help each other”. In order to have such good internal relationships, there is on average level a lot of trust in people within the organization according to the interviewee.

In order to improve, company C is looking outside the company and works together with other companies in the field to benchmark themselves on the product level and how to learn from them. They are also trying to recruit new people with a different mindset in order to make the workforce more diverse. However the interviewee also stated that for the company it is a hard challenge to not let new employees drown in the organization’s way of working and culture. With this being said, it becomes clear that even though company C tries to bring in different people to create fresh thoughts, the workforce might slowly become homogeneous over time. When this is the case it will be harder for the creative capital to flourish within company C, because according to March (1991) it will be more difficult for employees to look outside the boundaries of the organization.

Next to their internal relationships company C also has external relationships. One of these is their collaboration with Italian designer Giorgeto Giugiaro, as well as their business relationships with universities and the NRK (national rubber group). Although these relationships are all strong, company C also has one weak relationship, namely with their recruitment agency. The interviewee clearly states that he prefers not to work with them. With this taken into account, it has become clear that company C has internal and external relationships in which the internal have a bonding nature and the external a bridging nature. The external relationships have a bridging nature, because they operate in a different market. The internal relationships have such a strong bonding nature, because the culture is very important within company C.

However, as said before, the organization realized that innovation is important for the future, so they try to focus on organizational creative ability by motivating people and bringing in the expertise that is needed. Next to having an idea box, they give the employees who have come up with good ideas a stage and they have a meeting with these employees to reward them according to the interviewee. After a successful presentation a picture will be made which will be put in the organizations internal magazine and the employees can follow their ideas in the quality corner, which is on the screens on the work floor. The interviewee also stated that another way of motivating their employees is bringing in expertise from outside the company so the employees can think different and clearly say “yeah, I did not see that”, before working on their ideas.

Next to bringing in external consultants the organization also educates employees to become an operator. However, as stated before, it remains a challenge to not let the people with a fresh look drown in the organization’s way of working and the culture, because then bringing in expertise would

not help in the long term. This means that the creative ability of the organization is not as high as it could be at this moment, with the major threat being that the workforce might become homogeneous again.

It is clear that company C is trying to get higher creative capital, but they should make better use of their (external) network and work hard on not letting new people drown within the way of working and the culture. Besides, the good internal and external network is mainly focused on their current product portfolio and improving their current products, services and processes. However, by educating current employees, giving a stage within the company to employees that come up with new ideas and bringing in external expertise, the organization tries to improve the creative ability. For these reasons, the conclusion that can be drawn is that company C has medium creative capital.

Company D

Two years ago a new board was formed at company D and they are changing the processes in order to have a lean system. When looking at the both descriptions that were given during the interview, according to interviewee company D can be compared to organization Y (low creative capital organization). However the company would like to be organization X (high creative capital organization). This is a big transition for their employees, because most of them have been working at the company for 25 years and they do not understand why anything should be changed when it always has been this way and works out well according to the interviewee. During the interview it was stated by the interviewee that “this thinking pattern makes the innovativeness stagnate” within company D. Because the organization is relying on old certainties and is making the workforce more efficient through standardization, it can be stated that the workforce of company D is homogeneous according to March (1991). It is also an advantage because of the fact that their employees have been working for them for so many years, because they are closely related to each other. This means, according to the literature, that there is bonding social capital within company D.

The communication within company D is now changing and is becoming more horizontal than before where every department was an island with regard to communication. Another example of an internal change that was mentioned by the interviewee is that “when something does not go very well, the project group writes down what went wrong and what needs to be done, instead of hiding the mistakes”.

Next to changing the communication, the new board is also motivating the employees to come up with ideas by having an idea box and by letting the employees take part in meetings where their opinion is asked on specific topics. When an employee has a good idea, this will in theory be mentioned during their appraisal and it will be rewarded. However in practice, according to the interviewee, this is only done sporadically. This means that they are motivating their employees to tap their creativity, but when someone has a good idea this person will not take place in the team that will develop it. The new board is also trying to motivate their employees by changing the working methods. The employees are now educated so they can rotate within and between departments. The main benefit of this is that company D does not have to hire external labor anymore, keeping all the knowledge within the organization. However, the interviewee also stated that the main reason for not hiring external labor is money.

Company D also generates knowledge to come up with creative ideas by, for example, having a cradle to cradle café meeting once every two months with its external relationships. This café invites architects, interior designers and other specialists from other companies, but only the R&D department of company D. Thereby excluding their other employees according to the interviewee. The idea of this

café is to come up with ways to make the durability of the organizations methods better and to establish and maintain a business network. However, the interviewee stated that when an idea comes out one of these meetings, company D is going to develop it without collaboration of the organization that came up with the idea. For this reason, the cradle to cradle café is the only strong external relationship company D has, especially since the organization has changed their strategy and only wants to discuss with different parties every time instead of cooperating with the same parties as before. This change is good for creative capital, because then there are no boundaries set.

At this moment, the organization's workforce is homogeneous and the company does not collaborate much or uses external labor to bring in new knowledge. It only collaborates via the cradle to cradle café on the level of R&D and is still very protective when it comes to working on an idea together, even one springing from the café. However, company D is trying to motivate their employees to be creative by educating them and by involving them in internal meetings, but this could be explored in more depth when the workforce becomes heterogeneous and when the employees would have a bridging external network. Taking all of this into account, the conclusion that can be drawn is that company D has low creative capital. However, company D is just starting with motivating their employees, so this conclusion may differ in a few years by the result of this change.

5.2 Comparison regarding the HR practice Selection and Recruitment

After the companies have been classified as high, medium or low on creative capital, it is possible to compare the selection and recruitment practices of the set companies. Two of the four companies have low creative capital and they will be compared first. After this comparison has been made they will be compared to the organization with medium creative capital and finally those three will be compared with the organization that has high creative capital according to the findings of this research.

As stated in paragraph 5.1, company A and D have low creative capital. When looking at the recruitment process company A uses a short description and company D uses a general description for the job description that will be sent out when there is a vacancy. Eventually, the companies will make the descriptions more specific. The reason why company A uses only a short description is that the recruitment agency knows the organization very well, so they know what the organization demands. Within company D, the description becomes more elaborate when a manager decides which additional competences the applicant needs to have, not described in the initial job description. After which the recruitment agency will be contacted and asked to add the 'new' competences.

It has become clear that both companies use a recruitment agency. However there is a difference in how they make use of the agency. Company A uses external recruitment and thus a recruitment agency "in 99 of the 100 the cases" according to their interviewee. They make use of a recruitment agency as being their back office with regard to recruitment, letting them handle all the red tape. This allows for greater flexibility according to the interviewee. Company A knows that a recruitment agency costs money, but they value their expertise and their subsequent flexibility. Although company D also uses a recruitment agency for external recruitment, the company starts by recruiting internally and go external when no one has applied or none of the applicants was suitable.

When looking at the selection criteria of company A and D, both companies use competency-based criteria. Company D has function profiles which are still very general at this moment, but according to the interviewee they are changing the profiles on management level at this moment and eventually the criteria for the entire company will be changed. However, when the manager comes up with a new or extra competence for the job it will be added during the process. When company D looks at the resumes, the manager will give them a plus, plus minus or a minus. After this, the persons who had a

plus or a plus minus are all invited for a job interview during which they can introduce themselves. A second interview will focus on the job tasks and during this stage someone from another department shall be present to give his or her judgment. For the last interview, the interviewee stated that the working conditions will be discussed. This whole process goes slightly different at company A, because company A also invites valuable applicants for an interview to look at the knowledge level of that person and whether he or she fits within the company or not. However, in most cases the organization is looking for new craftsmen, who are attracted from their own network, the interviewee stated that for those applicants the former employee is contacted to check whether the applicant has the capacity of handling a complex machine or not. Beside interviewing and looking at references, company A also lets young people have trial periods to see whether they are motivated to learn new methods and they let people being tested by external parties.

The selection and recruitment processes of the two low creative capital companies have been compared with each other and will now be compared to the company that has medium creative capital according to the findings of this research, company C. The job description of company C contains of the chief objectives and “eight standard competences” in which creativity, flexibility, interdisciplinary cooperation and more are included. Like the two companies with low creative capital this job description is very general. After the job description is made company C starts with putting out this vacancy internally and when no one has applied or no one has applied that fits the job after ten days, the description will be put on LinkedIn and will be given to the recruitment agency. This is the same as company D, but differs from company A. The reason for the difference will probably be that the interviewee, who recruits new employees for the company, stated that he is not a fan of recruitment agencies and rather does the process by himself. The reason why companies C and D have another recruitment channel than company A is that both companies C and D have also a lot of office personnel, where company A focuses more on craftsmanship in the production workforce. This difference became visible due to the fact that the interviewees of companies C and D were recruiters for the office personnel within their own organizations, where the interviewee of company A was overall recruiter and focused mainly on craftsmanship.

The selection criteria used in company C for selecting the best person for the job are at first competency-based, like company A and D. However, the interviewee stated that he mostly makes up his mind about the competencies during the interview with the applicant. According to the interviewee this is because he needs to see and feel whether someone has the competencies or not. The interviewee said that creativity is a selection criterion for the company, but it depends on the discipline whether it is on the top of the recruiter’s list or not. Some departments, with their long time employees, have very few vacancies over the years and thus might need to update their criteria. Next to these recruitment and selection processes it is also possible that when external labor has been working at company C for several months and performs good that the organization can decide to give that person a contract. When looking at the selection methods used, the fact that company C uses interviews and looks at the competences of the applicant during these interviews makes them no difference from company A and D.

At last, the company that has high creative capital according to the findings of this research, company B, will be compared with the other three organizations. The interviewee explained that at this company the job description that will be used when the organization needs to recruit will consist of a short story about the organization, three or five key tasks that the new person will be doing and it will consist of a profile of the knowledge, education and the experience someone has to have in the team’s eyes. This means that the job description is made out of the chief objectives and a list of some key attributes

which are required for the job. This job description is the opposite of the job descriptions of the three other companies. This difference is caused by the fact that company B is focused on getting the competences that are missing within the team or organization and needs these competences at that moment in order to finish a project. They acknowledge that they need someone with different competences instead of someone who meets the standard competences but does not bring anything new to the organization. In this way the rest of the team can learn from this new employee in order to finish the project properly. An explanation for this difference can be that company B is open-minded and that all the employees are willing to learn. The research of Boschma and Fritsch (2009) on creative class showed that a climate of tolerance and openness are important for attracting creative class. The fact that the culture of company B is tolerant and open would make it easier for them to hire people with totally different backgrounds and make it improbable for new employees to drown in the culture of the organization, because this culture is very open. The workforce will stay heterogeneous because of this.

In order to get the missing competences company B start with recruiting internally, but when specific competences are needed on short notice they start looking externally and put the vacancy online on LinkedIn or in the paper. However, for some positions it is really difficult to find someone and then the vacancy will be announced within company B's network. The reason for recruiting outside so quickly is because an employee will first have to grow for three years to have the knowledge that is needed for the position and most of the time company B does not have the time for this, according to the interviewee. However, this approach is still different from the approach of company A, because company B prefers to start internally and only recruits outside when it is necessary for the vacancy. This difference will probably be caused by the fact that company B is the smallest organization of the four and works in teams, what makes it easier to see a competence that is needed and not available in the current organization.

When some candidates apply for the vacancy of company B, this applicant will be invited for an interview and these interviews will be done by someone from the team and reviewed by someone from the HR department. After the interview a final review will be done by the management, according to the interviewee. The selection criteria during this phase of the process are based on which competences are missing in the team and are thus needed for the task the new employee will execute. Apart from inviting the candidates for an interview, company B also offers talented students internships, during which the company can directly experience the fit between the interns and the organization and contemplate possible future employment. This method of recruitment and selection differs from the other three companies, which all use competency-based criteria. The reason for this difference could be caused by the fact that company B is a small organization which knows exactly what it needs and already has, so they know what to look for.

6. Discussion

Within this chapter the findings will be critically discussed. During the conduction of this research certain assumptions were made and a few limitations showed up. These assumptions and limitations are discussed in this chapter, so they could be taken into account when reading the conclusion of this paper.

Assumptions

Preparing the research question, we assumed a relationship between selection and recruitment and creative capital on organizational level. The findings did conclude that there are some differences between high and low creative capital organizations during certain stages of the selection and recruitment process. However, it cannot be stated that there is a causal relationship between these variables. A longitudinal study at which for example during the first period only internal recruitment and during the second period external recruitment will be used can help for exploring this.

It is not for sure a change in the selection and recruitment process will actually give the organization higher creative capital. Selection and recruitment is just the first HR practice that is used by an organization, there are many practices to follow, which all together will eventually determine the level of creative capital for an organization and its outcome, the innovation of the organization. During one interview it was stated that it is difficult to not let people drown in the organizations way of working and culture. This gives a clear view on the fact that probably more HR practices need to be used in certain ways in order to have high creative capital.

Findings related to the literature

During the literature study for this paper it was stated Florida (2004) had identified three critical conditions in order to make creativity and the attraction of creative class members happen within a city or region. These three conditions are technology, talent and tolerance. Technology is related to innovation, talent includes the people with a bachelor's degree and above, and tolerance stands for openness, inclusiveness etc. This statement is true for whether an organization has high or low creative capital. It became clear that the organization with high creative capital meets these conditions and the other three organizations not having high creative capital do not meet all of these conditions. The big difference between the high creative capital organization and the others is the condition tolerance. The high creative capital organizations is more focused on getting new and different competences and makes sure that the entire organizations learns from the new employees. They make sure that the culture is open and focused on learning, in order to be creative.

In chapter two we discussed organizations should have weak network ties, because this might facilitate exploration. However, during the interviews it became clear that this might be stated to hard. The organizations had strong relationships, but this does not necessarily mean that they are focused on exploitation. The relationships of company B were strong, but also loose. Company B could be seen as the conductor within its network, which makes having strong relationships also good for exploration.

Three out of the four organizations start with recruiting internal. However, an explanation for this could be the economical crisis and therefore organizations need to be aware of the amount of money they spend. This could be the reason for first trying to fill in a vacancy internally, instead of paying a recruitment agency and ending up with more employees. It was stated by one interviewee that the organization does not make use of external labor because of the extra costs. When making the propositions the economic crisis was not taking into consideration.

None of the interviewees knew the vacancy ratio of internal recruitment versus external. For this reason, it is not clear how many vacancies are filled internally or externally and since we have no data on this subject, it is still possible the organizations only start recruiting internal because it is the organizations policy, while they hardly fill a vacancy internal.

Limitations

The first limitation of this research is the subject creative capital itself. Empirical research on creative capital on organizational level has never been done before and for that reason limited literature is available. Besides, the relationship between the different HR practices and creative capital are hard to find in literature. Therefore the main focus was on literature regarding creative class which is an urban form of creative capital.

This research is based on only four interviews. This small number of respondents limits the representativeness of this research and makes it difficult to generalize the findings. The four organizations have different sizes that vary between 43 employees and 1800 employees, so combining the findings into general statements has its limitations.

When interviewing only one person of an organization, the results are based on that single view and opinion, where other employees in the organization can have different views and more specified opinions on the different approaches. Not all interviews were done with the HR manager of the organization, for which reason the questions related to the HR practices have not always been answered in detail.

In the next chapter I conclude that a partial effect of selection and recruitment on creative capital can be seen, but no proof is given by this research or previous. Besides, assuming job description and selection criteria can be seen as separate parts under the HR practice selection and recruitment should be proven too.

7. Conclusion

In this section the propositions will be compared with the findings of the interviews. The approaches of the four organizations on the different propositions will be categorized into part a, part b or a mix of both parts of each proposition. By this categorization an expectation can be drawn on the level of creative capital per proposition according to the research findings. This expectation will be compared with the conclusion of the analyses of creative capital per organization, which is made in chapter 5.1. After this the main research question can be answered. Finally, some recommendations for further research will be discussed.

7.1 Categorizing the propositions

Table 7.1 gives an overview of all results and outcomes of the propositions and the conclusion on creative capital.

Propositions on job description

Proposition 1a: Organizations using job descriptions based on the characteristics of current job holders executing their job excellent, have low creative capital.

Proposition 1b: Organizations using job descriptions, based on the chief objectives and a list of key attributes needed for the job, have high creative capital.

Regarding the job description, company A, C and D all have a mix of objectives based on current job holders and a list of key attributes required for the jobs especially. Company A sends a short job description that states what they are looking for to the recruitment agency. The short description is focused on the chief objectives and what the recruitment agency adds is based on what they know of the organization, which means based on the current job holders. Company D has a very general description which becomes more specific. They have standard function profiles, but when the manager decides that the new employees needs to have other competences that are not written on the profile for the job, the profile will become more specific by also containing a list of key attributes. Company C has a short description of the job, which contains the chief objectives of the job and “eight standard competences” which are focused on the attributes of the current job holders. For this reason, all three companies have a mix of both parts of the proposition and are expected to have medium creative capital.

Looking at the job description of company B, this description consists of a list of key attributes that are ideal in the team’s eye. For this reason, the job description can be categorized under proposition 1b.

For two out of four organizations, the expectations of the propositions are congruent with the results found on creative capital based on the variables relationships, organizational creative ability and creativity.

Propositions on internal / external recruitment

Proposition 2a: Organizations using internal recruitment by the most applications will have low creative capital within the organization.

Proposition 2b: Organizations using external recruitment by the most applications will have high creative capital within the organization.

Where the companies A, C and D have the same approach on job description, they use different channels for the recruitment process. Company A makes use of external recruitment “in 99 of the 100 cases”. This is not in line with the expectations of the propositions, because external recruitment is expected to lead to high creative capital. However, the other two organizations use internal recruitment first. When a vacancy cannot be filled, companies C and D then continue to external recruitment. For this reason, the recruitment process of these organizations can be regarded as internal recruitment only.

At company B the channel of recruiting new employees is both internal and external. When a vacancy occurs, this vacancy will be placed internally first. Only when specific competences are needed on a short notice, the vacancy is placed external on LinkedIn or in the newspaper. At last, when neither of this options work out, the company is recruiting within their own network. This is not in line with the expectation, because a mix of both channels will have the expectation of medium creative capital within the organization.

For one out of four organizations, the expectations of the propositions are congruent with the results found on creative capital based on the variables relationships, organizational creative ability and creativity.

Propositions on selection criteria

Proposition 3a: Organizations using competency-based criteria as the selection criteria will have low creative capital.

Proposition 3b: Organizations using individual job characteristics, for which the task has been analyzed first and it has become clear which competencies are needed as selection criteria will have high creative capital.

Looking at the selection criteria, company A, C and D use competency-based criteria. Although company C becomes more specific in these selection criteria during the selection method, all organizations use competency-based criteria, which is in line with the expectation of the proposition for companies A and D. When an organization is focused this way, the expectation of the level of creative capital is low.

Regarding the selection criteria of company B, the organization analyses the task for which a vacancy is granted first. After this, a decision is made which competences are needed for the job and these are the basis for the selection criteria. In this way, the approach of the organization on the selection criteria can be categorized in the second part of proposition 3. This is in line with the expectation of leading to high creative capital.

For three out of four organizations, the expectations of the propositions are congruent with the results found on creative capital based on the variables relationships, organizational creative ability and creativity.

Propositions on selection methods

Proposition 4a: Organizations using traditional methods for the selection process will have low creative capital.

Proposition 4b: Organizations using group methods for the selection process will have high creative capital.

At last, the selection methods used by the organizations differ between company A and companies C and D. Where company A uses a mix of both traditional methods and methods like tests and trial periods, companies C and D only have interviews as selection method. For company D only, this is in line with the expectation of the proposition.

Company B uses a mix of both traditional selection methods and methods, like interviews (traditional) and like tests in the form of internships (modern). This is not in line with the expectation of the proposition, in which only the use of modern methods leads to high creative capital.

For one out of four organizations, the expectations of the propositions are congruent with the results found on creative capital based on the variables relationships, organizational creative ability and creativity.

7.2 Answering the main research question

The conclusion based on the propositions was drawn in last paragraph. The next step is answering the research question of this paper, which is: *Which components of selection and recruitment influence the creative capital in organizations the most?*

Since the expectations formulated in the propositions seem not to be valid in most cases, I found only a partial effect of the HR practice selection and recruitment on creative capital within an organization. Based on the findings of this research, it can be stated that propositions 2 and 4 do not hold in most of the cases. However, proposition 1 holds for two of the four organizations and proposition 3 even for three of the four organizations.

So, selection criteria have the strongest effect on creative capital with a match on three out of four organizations. More precisely, criteria based on task analysis have a positive effect on the level of creative capital within an organization, where competency-based criteria have a negative effect on this level.

A job description has a certain effect on the level of creative capital. At two out of four organizations, the job description was positively related to the measured creative capital. More precisely, job descriptions consisting of the chief objectives and key attributes have a positive effect on the level of creative capital, were job descriptions consisting of the competences of the current employees have a negative effect on creative capital.

Looking at the organization that scores high on creative capital, they are focused on exploration and getting new competences within the organization in order to achieve this. This means that the effect could be that when an organization focuses on the competences that are missing and really needed, the creativity of the whole organization will rise when the organization is focused on using this creativity. So there is the need to be successful in hiring new fresh blood to lift the creative capital in the organization.

Proposition 2 and 4, are only corresponding with the results in one out of four organizations. This indicates that whether an organizations recruits internal or external and which selection method an organization uses, hardly have any influence on creative capital based on this research.

Table 7.1 on the next page includes the conclusions on creative capital.

Table 7.1 Overview of all results and outcomes of the propositions and the conclusion of creative capital

Company		1 Job description	2 Internal / external recruitment	3 Selection criteria	4 Selection method	Conclusion on creative capital based on research findings
A	Approach	Short description, because agency knows them	External (99%)	Competency-based	Interview Referencing Trial period Test	
	Expectation of high / low creative capital according to propositions	Mix of proposition → Medium NM*	Proposition 2b → High NM	Proposition 3a → Low M*	Mix of proposition → Medium NM	Low
	Overall expectation creative capital according to propositions	Medium				NM
B	Approach	List of chief objectives and a list of the key attributes	More internal, but also external when specific competences are needed	Analyzing the task and decide which competences are needed	Interview, internships (students)	
	Expectation of high / low creative capital according to propositions	Proposition 1b → High M	Mix of proposition → Medium NM	Proposition 3b → High M	Mix of proposition → Medium NM	High
	Overall expectation creative capital according to propositions	High				M
C	Approach	Eight standard competences	First internal and then LinkedIn/ recruitment agency	Competency-based, and becomes more specific during the interview	Interview	
	Expectation of high / low creative capital according to propositions	Mix of proposition → Medium M	Proposition 2a → Low NM	Proposition 3a → Low NM	Proposition 4a → Low NM	Medium
	Overall expectation creative capital according to propositions	Low				NM
D	Approach	General competences → becomes more specific	First internal, and then external	Competency -based	Interviews (three)	
	Expectation of high / low creative capital according to propositions	Mix of proposition → Medium NM	Proposition 2a → Low M	Proposition 3a → Low M	Proposition 4a → Low M	Low
	Overall expectation creative capital according to propositions	Low				M
Number of matching cases		2 out of 4	1 out of 4	3 out of 4	1 out of 4	2 out of 4

* NM = no match
M = match

7.3 Recommendations for further research

The combination of the two propositions 1 and 3 is a candidate for further quantitative research. For this research showed that these propositions have an influence on creative capital. In order to know the mechanisms behind this influence a more detailed research is useful. For generalizing this result, these propositions should be measured within a greater amount of organizations.

When this further research will be done at organizations of the same size and within the same departments the results will be easier to generalize. It is of special interest for generalizing the results to conduct a research on these propositions for other lines of industries too.

Furthermore, it could be possible that the creative capital for one or two vital departments is sufficient for an organization to act as an innovative organization. Further research is needed on this subject.

At last, selection and recruitment is the first HR practice in the research program. Having no information based on research on other HR practices yet, it is too early to make final conclusions. For the program I recommend to make an overall conclusion on the influence to the level of creative capital. Besides, it could be useful to measure the innovativeness of companies evolved in the program to find the business relevant influence of HR practices on creative capital and their effect on the innovativeness of companies.

8 Reference list

- Amabile, T. M. (1998). *How to kill creativity*: Harvard Business School Publishing.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management*, 39, 1154-1184.
- Anonymous, (2012). *Social Annual Report 2012*
- Babbie, E. (2007). *The practice of social research*.
- Baer, M. (2010). The Strength-of-Weak-Ties Perspective on Creativity: A Comprehensive Examination and Extension. *Journal of Applied Psychology*, 95(3), 592-601.
- Bailey, T., Berg, P., & Sandy, C. (2000). Effect of High-Performance Work Practices on Employee Earnings in the Steel, Apparel and Medical Electronics and Imaging Industries. *Industries and Labor Relations Review*, 54, 525.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17, 99-120.
- Batabyal, A. A., & Nijkamp, P. (2012). Richard Florida's creative capital in a trading regional economy a theoretical investigation. *The Annals of Regional Science*, 44(2), 241-250.
- Bontis, N. (2004). National Intellectual Capital Index: A United Nations initiative for the Arab region. *Journal of Intellectual Capital*, 5(1), 13-39.
- Breaugh, J. A., & Starke, M. (2000). Research on employee recruitment: So many studies, so many remaining questions. *Journal of management*, 26(3), 405-434.
- Boschma, R. A., & Fritsch, M. (2009). Creative class and regional growth: empirical evidence from seven European countries. *Economic Geography*, 85(4), 391-423.
- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Research Management Journal*, 15(3), 67-94.
- Choi, J. N. (2004a). Individual and contextual factors of creative performance: The mediating role of psychological processes. *Creativity Research*, 16, 187-199.
- Choi, J. N. (2004b). Person–environment fit and creative behavior: Differential impacts of supplies-values and demands-abilities versions of fit. *Human Relations*, 57, 531-552.
- Coleman, J. S. (1990). *Foundations of Social Theory*. Cambridge: Belknao Press of Harvard University Press.
- Edvinsson, L., & Malone, M. S. (1997). *Intellectual Capital*. London: Piatkus.
- Florida, R. (2002). *The Rise of the Creative Class*. New York: Basic Book.
- Florida, R. (2003). Cities and the creative class. *City & Community*, 2(1), 3-19.
- Florida, R. (2004). *The rise of the creative class* (Revised Edition ed.). New York: Basic Book.
- Florida, R. (2005). *The Flight of the creative class: The New Global Competition for Talent*. New York: Harper Business.
- Florida, R., & Goodnight, J. (2005). Managing for creativity. *Harvard Business Review*, 83(7), 124.
- Foss, N. J., Klein, P. G., Kor, Y. Y., & Mahoney, J. T. (2008). Entrepreneurship, subjectivism, and the resource-based view: toward a new synthesis. *Strategic Entrepreneurship Journal*, 2(1), 73-94.
- Glaeser, E. L. (2004). Review of Richard Florida's The rise of the creative class. *Regional Science and Urban Econocmics*, 35, 593-596.
- Gong, Y. (2003). Subsidiary staffing in multinational enterprises: agency, resources, and performance. *Academy of Management Journal*, 46(6), 728-739.
- Hackler, D., & Mayer, H. (2008). Diversity, entrepreneurship, and the urban environment. *Journal of Urban Affairs*, 30(3), 273-307.
- Hansen, H. K., & Niedomysl, T. (2009). Migration of the creative class: evidence from Sweden. *Journal of Economics Geography*, 9(2), 191-206.
- Hoyman, M., & Faricy, C. (2009). It Takes a Village A Test of the creative Class, Social capital and Human capital Theories. *Urban Affairs Review*, 44(3), 311-333.
- Kang, S. C., & Snell, S. A. (2009). Intellectual Capital architectures and ambidextrous learning: A framework for Human Resource Management. *Journal of Management Studies*, 46, 65-92.

- Jiang, J., Wang, S., & Zhao, S. (2012). Does HRM facilitate employee creativity and organizational innovation? A study of Chinese firms. *The International Journal of Human Resource Management*, 23(19), 4025-4047.
- Landry, R., Amara, N., & Lamari, M. (2000). *Utilization of Social Science Research Knowledge in Canada*. Research Policy.
- Lee, S. Y., Florida, R., & Acs, Z. (2004). Creativity and entrepreneurship: a regional analysis of new firm foundation. *Regional studies*, 38(8), 879-891.
- Ling, Y. (2012). The influence of intellectual capital on global initiatives. *VINE*, 42(1), 129-144.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Marlet, G., & van Woerkens, C. (2007). The Dutch creative class and how it fosters urban employment growth. *Urban Studies*, 44(13), 2605-2626.
- Powell, W. W., Kenneth, W. K., & Lauren, S. D. (1996). Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology. *Administrative Science Quarterly*, 41, 116-145.
- Pullen, A. J. J., de Weerd-Nederhof, P. C., Groen, A. J., & Fisscher, O. A. M. (2012). Open Innovation in Practice: Goal Complementarity and Closed NPD Networks to Explain Differences in Innovation Performance for SMEs in the Medical Devices Sector. *Journal of product innovation management*, 29(6), 917-934.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*: Simon & Schuster.
- Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and innovation management*, 14(2), 118-128.
- Schultz, T. W. (1961). Investment in human capital. *American Economics Review*, 51(1), 1-17.
- Stata, R. (1986). Organizational learning: the key to management innovation. *Sloan Management Review*, 30(6), 63-74.
- Stewart, T. (1997). *Intellectual capital: the new wealth of organizations*. New York: Doubleday.
- Straatman, S. F. E. (2011). *Organizational Creative Capital: Are we there yet?* Master of Business Administration, University of Twente.
- Straatman, S. F. E., Veenendaal, A. A. R., & van Velzen, M. J. T. (2012). *Are we there yet? Towards a conceptualisation of organizational creative capital*. In Proceedings of the British Academy of Management 2012 Conference, Cardiff, UK.
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463.
- Torrington, D., Hall, L., Taylor, S., & Atkinson, C. (2011). *Human Resource Management*. London: Pearson.
- Vartanian, O., Martindale, C., & Matthews, J. (2009). Divergent thinking ability is related to faster relatedness judgments. *Psychology of Aesthetics, Creativity and the Arts*, 3(2), 99.
- Veenendaal, A. A. R., van Velzen, M. J. T., & Looise, J. K. (2012). *Human Resource Management for Innovation: The role of human, social and creative capital*. University of Twente. Paper prepared for submission to 'Creativity and Innovation Management'.
- Willis, R. J. (1986). *Wage determinants: A survey and reinterpretation of human capital earnings functions* (Vol. 2). Amsterdam: Elsevier Science Publishers.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18, 293-321.
- Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: putting 'human' back into strategic human resource management. *Human Resource Management Journal*, 21(2), 93-104.
- Yang, C. C., & Lin, C. Y. Y. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspective of a healthcare industry in Taiwan. *International Journal of Human Resource Management*, 20(9), 1965-1984.

Appendix A - Creative capital in literature

Urban literature/creative class

According to Florida (2002), who coined the terms creative capital and creative class, creative class is the main force behind the economic growth and 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). Creative core members can be found “in science and engineering, architecture and design, education, arts, music and entertainment” (Florida, 2004). Creative professionals “engage in complex problem solving that involves a great deal of independent judgment and requires high levels of education” (Florida 2004) and work in “business and finance, law, health care and related fields” (Florida 2004). 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 is can be seen as the function of innovation and high- technology concentration in a region. Talent stands for 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).

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. (Florida, 2004) These indexes say something about the diversity of a region. The gay index looks at the number of gay people that live in a high-technical concentration in a region. This says something about what the about the tolerance and openness towards other people. The bohemian index measures the number of writers, designers, musicians, actors, directors, painters, sculptors, photographers and dancers within a region. This will says something about 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). The opposite of a people’s climate is a business climate which stands for 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 postulated that certain areas are better able to retain and attract creative people because of their type of 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.

Research findings on the creative class of Florida

One of the researches that empirically test the ideas of Florida (2004) is the research by Boschma and Fritsch (2009). Their research focused on the “differences in the share of the creative class across European regions” (Boschma & Fritsch, 2009) and on the concentration of this distribution. For this they used the creative occupations from Florida (2004) namely the creative core, creative professionals and bohemians which together form the creative class. To determine which occupations belong to the different groups of the creative class they used the internal standard classification of occupations (ISCO 88). These classifications are then used in the national data sources in order to make the data suited to generalize across countries. The countries included in the analysis are The Netherlands with 40 regions at NUTS 3 level, England and Wales with 106 regions at NUTS 3 level, Germany with 93 planning regions, Sweden with 70 city regions, Finland with 82 labor market regions, Norway with 77 city regions and Denmark with 35 functional city regions. For the analysis on the differences in regional share they looked at the spatial distribution in these countries. The share of the creative class is measured as the creative occupations on the total population. For the degree of spatial distribution they used the Gini coefficients, which takes a value between zero and one, where one stands for an extreme concentration. Secondly, they focused on the factors that possibly determine the portion of the creative population within these European regions. For this they used regression analysis on six countries, one country is excluded due to insufficient cases and that is Denmark. In these regression analyses creative class is used as the dependent variables and the independent variables are regional culture, regional facilities and economic condition. Regional culture includes the “share of the regional population in bohemian occupations” (Boschma & Fritsch, 2009) and “share of foreign-born people” (Boschma & Fritsch, 2009). Regional facilities are measured via two indicators namely public provision index and the cultural opportunity index. The former measure is about the representation of the labor workforce in the public education and health care and the latter is about the representation of the workforce in recreational and cultural activities. The economic condition is measured via the annual employment growth rate covering the years 1993 till 2002. The last variable included is the population density. Thirdly, they investigated how entrepreneurship, innovation and regional growth is affected by the creative class (Boschma & Fritsch, 2009). For the effect on regional growth regression analysis are conducted only for Germany and The Netherlands due to data limitations. In this regression analysis on they also used education as an independent variable, measured with the international standard classification of education. Moreover, for the effect of education and creative class on start up rates they conducted regression analyses for Germany, Norway and Sweden. The startup rate is about the number of formation of new businesses per thousand inhabitants. In addition, the effect of higher education and creative class on innovation is measured by the number of patents per ten thousand inhabitants.

Another research by Hansen and Nedomysl (2009) centered also around the proposition that the creative class is selective in the destination location. In addition, they looked if the creative class moved more often and if the reasons to move differ from other migrant groups. To investigate if the creative class, measured with the education level, indeed moved more often they used a database that covers the Swedish population in the period from 1990 till 2004. The migration is measured by dividing Sweden into seventy regions according to the definition of labor markets from Statistics Sweden. To explore the possibility that people climate is a reason for migration they used they used people climate as independent variable while dependent variable is the education measure which is used as a proxy for the two groups of the creative class namely the creative core and creative

professionals. The independent variable is measured with the bohemian index and the openness index, however without the gay index due to data limitations. They added the integration index as another proxy for tolerance. This measure is about the difference between Swedish born population and foreign born population in their employment rates. In addition, to explore the reasons for migration they surveyed ten thousands stratified migrants who moved more than 20 km in the year 2006. They received a total response from 4909 migrants. The questionnaire constitutes forty different questions covering different aspects of the migrants and motives for migration.

As argued by Glaeser (2004) the creative class does not differ much from the human capital because the members of the creative class are mostly highly educated and skilled. This means that the creative capital theory is not much different from the human capital theory. Marlet and van Woerkens (2007) investigated this notion, they compared the creative capital theory in relation to the human capital theory. More specific they looked if the creative class does have an effect on the growth of a region as is argued by Florida's creative capital theory. Therefore they included all the occupations from CBS that are used by Florida for his creative class while excluding several managerial, administrative, governmental and educational occupations based on the definition used by Florida for creative class. To investigate the effect of the creative class on growth they used data from fifty largest municipalities in the Netherlands due to data limitation. In addition the used thirty one Dutch core cities which are based on regional function. Marlet and van Woerkens (2007) used employment growth as the dependent variable and share of creative class and population growth as the independent variables. As control variables they used sectoral diversity, concentration, unemployment rates. The first control variable is measured as the squared sum of the shares of different sectors. The second control variable is measured as the share of employment in industries, financial and business services. The last control variable is measured as the percentage of unemployed people in relation to employed people. Moreover, they counted for all congestion forces of agglomeration by using congestion as proxy. In order to exclude the possibility that firms and creative class are moving towards areas because of certain amenities instead of firms moving towards areas because of the creative class they included several variables in their analyses. These comprises "the amount of theatre and music performances, proximity to nature, number of students, share of privately owned houses, number of pubs and museums, quality of restaurants and secondary schools, share of historical buildings, crime and ethnic diversity" (Marlet and van Woerkens 2007). Secondly, to investigate the difference between the human capital theory and creative capital theory they replaced the creative class by education levels.

Hoyman and Faricy (2009) research is in line with the research of Marlet and van Woerkens (2007) and focuses on the effects of social-, human- and creative capital on economic growth. Therefore they tested the effect of these three theories on job growth, average annual wage change and average annual wages in two hundred six American metropolitan statistical areas in the period from 1990 till 2004. Besides For creative class they take all occupations that are considered to be creative like "mathematical, computer, architecture, engineering, life science, physical science, social science, education, training, library, arts, design, entertainment, sports, media, business management, financial, legal, healthcare and sales management" (Hoyman and Faricy 2009). Human capital is measured as the percentage of the population with a bachelor's degree or higher and who are older than 25 years old. Moreover, for institutional human capital they used the Carnegie Classification from 2000 in order to code a MSA on its density and quality of education systems. Social capital is measured with the density of voluntary organizations per capita. They make a distinction between bonding and bridging social capital. Bridging social capital is measured as the percentage of evangelical Christians and bonding social capital is measured with the religious herfindahl index. In addition, they

investigated the relationship between the creative class and talent, technology and tolerance. Concerning tolerance they used the gay index, bohemian index and melting pot index.

Research findings on people's climate

The research by Boschma and Fritsch (2009) indicate 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 & 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 contra-dictionary 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.

Research findings on 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 (Lee, Florida & Acs, 2004; Hackler & Mayer 2008) 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.

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 & 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 & Niedomysl, 2009). The regional hierarchy in Sweden can be regarded as a strong one this means that 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, oldness 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 be a characteristic of the creative class. Third, research on the creative class is context dependent for example on countries this means that findings cannot easily be generalized to other countries.

Appendix B - Interview protocol

The interviews will be conducted in conclusion with the creative capital research group, indicating that 3 students will together interview each respondent, which will be the HR manager. The interviews will be semi-structured and last about 60 to 90 minutes. The semi-structured nature of the interviews allows 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 has been discussed previously and no further information is required, the question might be skipped in order to ensure the flow of the conversation. All interviews will be recorded and fully transcribed at a later stage. In addition, handwritten notes will be taken.

The interviews will be divided into six segments- general introduction, creative capital, selection and recruitment, job design and externalized labor, end of the interview. The first segment will introduce the interviewee to the research and ensure that all necessary information is provided. The second segment focuses on determining if the organization has high or low creative capital. In order to do so, the interviewee will be presented with descriptions of an organization with each high and low creative capital and is then asked to describe which description fits the organizations best and why. This will be further investigated with follow up questions. Then the individual sections will follow in which each group member asks interview questions about their approach. The final section is 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.

Part I- Introduction (approx. 5 minutes)

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

- Test if recording device is working properly

Example introduction:

Welcome and thank you for taking part in our research. We are Roy, Céleste and Marina and as you 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, which is introduced by Richard Florida, an American 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. In addition we will also ask questions related to 3 HR topics- selection and recruitment, job design and externalized labor. We therefore want to investigate the relationship between these HR topics and creative capital. Céleste 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. Would it be ok with you if we use your organization in our report or do you prefer to stay anonym? 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, Céleste and Marina en zoals u al weet studeren wij Human Resource Management aan de Universiteit Twente.

Dit onderzoek is voor onze afstuderenden. Het onderwerp voor vandaag is creatief kapitaal, een term geïntroduceerd door Richard Florida, een Amerikaanse 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 werkkrachten. Wij doen onderzoek naar het effect van elk van deze onderwerpen op creatief kapitaal. Céleste zal zich richten op werving en selectie, Roy zal zich bezig houden met job design and Marina op het gebruik van externe werkkracht. Ondanks dat ieder van ons verantwoordelijk is voor zijn eigen onderdeel zal ieder van inspringen indien er iets interessants voor diegene voorbij komt. Het interview zal ongeveer 60 tot 90 minuten duren en zal vervolgens uitgewerkt worden. Vindt u het goed als wij uw organisatie in ons verslag vermelden of wilt u liever anoniem blijven? 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 proces? ... 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? And why?

Description of a high creative capital organization/ Organization 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.

Description of a medium creative capital organization

An organization with medium creative capital fulfills some aspects of the description of an organization with high creative capital, while at the same time also showing signs of an organization with low creative capital. As an illustration, an organization might focus on creativity but also improving existing products and therefore mainly focus on internal relationships.

Description of a low creative capital organization/Organization 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.

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 organization needed for creativity?

1. Wat kunt u mij vertellen over de relaties van werknemers? Zijn deze relaties meer intern, extern 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 examples 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 organization? 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 organization 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 dien, kennis en concepten)?

Part III- Selection and 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:

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?

1b. 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:

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?

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 IV- 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 general questions 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 het werk?

Contents

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

2a. Iets specifiek, 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 kunt u mij vertellen over de moeilijkheid van het werk? Wat kunt u mij vertellen over de uitdaging van het werk?

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 voltooien 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 specifiek, 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 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 specifiek, wat kan u mij vertellen over de relaties?

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

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 kunt u mijn vertellen over de afhankelijkheid tussen werknemers voor het voltooiën 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 kunt u mij vertellen over de ondersteuning tussen werknemers? Wat kunt u mij vertellen over de ondersteuning door leidinggevenden? Heeft u een voorbeeld?*

Part V- Externalized labor (approx. 15 minutes)

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

Strength of use

1. Do you make use of externalized labor?

1. *Maak je gebruik van externe werkkraft / outsourcing?*

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

2. *Hoeveel gebruik maak je van de externe werkkraft / outsourcing?*

3. How would you describe the ratio of externalized 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 externalized labor you use? Can you give me examples? Could you tell me why you chose for those kind of externalized 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 labor?

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 labor? What are the 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 organization are?

7. *Wat zijn de belangrijkste kerntaken van de organisatie?*

8. Do you use external labor 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 kunt 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 chose against it?

9. Waarom maakt u geen gebruik van externe werkkraft voor de kerntaken? Als u het overwogen heeft om er wel gebruik van te maken, waarom heeft u er dan niet voor gekozen om dat te doen?

Labor Market intermediaries

10. When using externalized labor, do you rather hire an external employee directly for example with a short-time contract or directly contact a different organization 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 fulfill?

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 labor market intermediary exist?

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

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

Hoe lang maken jullie al gebruik van een uitzendbureau?

Part VI- 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 and 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.

Appendix C - Interview summaries

Company A

Profiel geïnterviewde

- Werkzaamheden: planmanager/bedrijfsleider bij bedrijf A
- Opleidingen: werktuigbouwkunde, MBA Psychologie (meerdere richtingen)

Organisatie X of Y

Beide omschrijvingen hebben onderdelen die van toepassing zijn op bedrijf A. Bedrijf A probeert namelijk creatief te zijn en wil haar huidige producten/processen voortdurend verbeteren. Ze zijn vooral bezig met het verbeteren van producten, en daarbij proberen ze out of the box te denken (vb. er voor zorgen dat steenknippers niet meer gelast hoeven worden). Wanneer de geïnterviewde een definitieve keuze moet maken dan kiest hij voor organisatie X.

Wanneer bedrijf A iets nieuws gaat bedenken dan wordt dat in teamverband gedaan. In zo een team neemt de directeur, een paar engineers en de geïnterviewde in plaats. Binnen dit team is het heel wisselend wie er met een idee komt. Ook wordt iedereen binnen het team gemotiveerd om ideeën aan te dragen.

Daarnaast zorgt bedrijf A ervoor om kennis te delen via hun netwerken, dit doen ze door het organiseren van master classes.

Werving en selectie

Er wordt gelet op de kennis die men in huis heeft en wat voor type persoon iemand is. Het is belangrijk dat iemand binnen de (flexibele) cultuur van de organisatie past. Om te kijken of dit zo is gaan nieuwe werknemers eerst meelopen voor ongeveer 3 maanden op de werkvloer, dan kan bedrijf A zien of diegenen hun vak verstaan. Naast een meelooperperiode laat bedrijf A nieuwe werknemers ook testen door externe partijen. Nieuwe mensen worden vooral door bedrijf A zelf binnen gehaald. Het is namelijk erg lastig om specifieke vakgerichte mensen te vinden. Bedrijf A probeert dan gebruik te maken van de netwerken van onder andere de werknemers of door naar buiten toe te laten zien hoe prettig hun cultuur is om in te werken. Wanneer het gaat om de functie van bijvoorbeeld een financiële man, dan maakt bedrijf A wel eens gebruik van wervingsbureaus.

De mensen op de markt, worden bereikt via uitzendbureaus. Bedrijf A moet wel betalen voor het contract met het uitzendbureau, maar ze krijgen er flexibiliteit voor terug. Dit wil zeggen dat ze elke moment kunnen stoppen met een persoon, zonder dat er kosten aan verbonden zijn.

Op het moment dat bedrijf A op zoek gaat naar nieuwe mensen wordt er een korte omschrijving naar het uitzendbureau gestuurd. Deze omschrijving kan kort worden gehouden, omdat de contactpersoon van het uitzendbureau bedrijf A heel goed kent. Zodra het uitzendbureau mensen heeft die aan de omschrijving voldoen worden hun CV's doorgestuurd. Mocht bedrijf A bepaalde opvallende dingen zien op dat moment, waar ze meer over willen weten dan gaan ze eerst een interview aan.

Externe werkrachten

Bedrijf A heeft ongeveer 10% aan inleenkrachten, ze hebben meestal vijf inleenkrachten werkzaam binnen bedrijf A. Wanneer bedrijf A externe werkrachten zoekt voor 3 à 4 weken in de productie, wordt er vaak gebruik gemaakt van vaste uitzendbureaus. Ook hiervoor steekt bedrijf A veel tijd en energie in één à twee uitzendbureaus, zodat zij goed weten wat voor een cultuur, werknemers en wat voor werknemers Bedrijf A zoekt.

Naast ingehuurd werknemers via een uitzendbureau, wordt er ook ingehuurd en uitgeleend aan en van andere bedrijven. Hierbij beperkt bedrijf A zich tot een paar bedrijven.

Taakontwerp

Medewerkers bepalen zelf de tijden en dagen waarop ze werken. Dit geeft de organisatie de nodige flexibiliteit. Daarnaast leidt het geven van verantwoordelijkheid aan werknemers ertoe dat het rendement hoger is, aldus Raymond

De kerntaken van Bedrijf A bestaan uit verspaning, lassen en dan zowel lassen met de hand als met de robot, assemblage, buislasertechniek en productie engineering. Ook netwerken wordt steeds belangrijker.

Voor het uitvoeren van de taken zijn de werknemers vrij om te kiezen welke methoden ze gebruiken om het product te vervaardigen. Daarbij worden ze ondersteund door de manager, diegene zal de werkzaamheden faciliteren. Hoe complex de (kern)taken binnen bedrijf A zijn, na het gebruik maken van (nieuwe) machines is afhankelijk van de functie. Ze hebben ook bepaalde taken die niet altijd uitgevoerd hoeven worden, zo hoeft er niet elke dag een nieuwe robot geprogrammeerd te worden. Dan komt het ook voor dat werknemers op een andere afdeling gaan helpen of dat ze uitgeleend worden aan een bedrijf die op dat moment een klus in zijn vakgebied heeft. Daarnaast worden bij Bedrijf A ook mensen verder opgeleid, dat zodra bepaalde taken geautomatiseerd zijn ze andere taken kunnen krijgen.

Om de functies van de werknemers te omschrijven, maakt Bedrijf A gebruik van de functieomschrijvingen vanuit de CAO maar recentelijk zijn ze gebruik gaan maken van CREBO nummers, die landelijk erkend zijn. Bedrijf A is momenteel ook zelf bezig met het maken van functieomschrijvingen gebaseerd op de CREBO nummers, maar vinden het belangrijker om te kijken naar wat iemand kan, dan wat de functieomschrijving zegt. Het is de bedoeling dat iedereen binnen bedrijf A een spinnenweb krijgt, waarin de competenties en het niveau van de taak en de persoon staan omschreven. Omdat het de bedoeling is dat iedereen meerdere functies moet kunnen, krijgen werknemers meerdere spinnenwebben.

Naast de functieomschrijvingen heeft bedrijf A een bedrijfsreglement, waarin de normen en waarden staan omschreven.

Company B

Interviewee and company profile

The interviewee is the founder of company B and has been the CEO for more than 25 years. The interviewee started out as an industrial designer after having studied industrial design at University of Delft. However, the current position has a stronger focus on entrepreneurship and therefore the interviewee is rather operating on the business creativity side than the product creativity side.

Company B is a company that is creating products that people rely on so, which means looking at the needs in the market and trying to find a concept that meets these needs. Company B then aims to create a demand and to fully develop that concept to a ready product and being in charge of the manufacturing management. At the moment company B is mainly focused on medical products for human care and the e-mobility sector. Company B basically operates as a contract development company with a focus on SMEs with an international focus as company B can present its full strength to those companies by managing the integral innovation process, the core activity of company B. However, lately company B also started to develop its own products for the consumer market.

Choosing between organization X or Y

Company B strongly fits the description of organization X, which means that there is a strong focus on developing innovative products. However, company B realized that in order to maintain competitive also incremental innovation is necessary and there with a focus on organization Y.

In addition to this, company B also matches the description of organization X as the core activity is to being innovative and creative. In order to do so, company B has a wide network to collaborate with, e.g. research institutes, universities, hospitals, market research, suppliers, specific service providers, single persons etc. Within this network, company B prefers to operate as the organizer.

Selection and Recruitment

When recruiting, company B is looking for applicants with a certain skill set, which often includes a technical skill set, e.g., industrial design, mechanical engineering, software engineering as well as entrepreneurial skills. Additionally, company B is aiming at recruiting employees with a more diverse background to add value. As the core activity of company B is being creative, a strong focus on creativity is also ensured during the recruitment process.

An often used way to recruit is by offering internships to talented students, which ensures that company B directly experiences if the applicant is a good fit. In addition, LinkedIn and the existing network, including the personal relationships of employees, are used to recruit. Generally, when creating a job vacancy, three to five key tasks are used to describe a job profile and the needed competences of applicants. Further, the required education and expertise are mentioned as well as the company culture in order to ensure that applicants can self check if they match the requirements.

When deciding on a certain applicant, the procedure is less formal but rather depending on the opinion of the existing employees as well as the fit of the applicant into the company culture.

Externalized labor

Company B makes widely use of external labor. As the time of the product to the market is crucial, company B tries to outsource as much as possible, while still being the organizer. The decision to use externalized labor is based on an analysis of the competences needed versus the competences available within company B. If this analysis outlines that competences are missing, Company B uses externalized labor as this saves money and costs. If needed externalized labor is therefore used for all functions within company B. The use of externalized labor has also the advantage that new knowledge can be integrated into the organization. While the use of externalized labor can also lead to tensions of

standard employees, e.g. employees fearing to lose their jobs, the positive effects outweigh those negative effects. Further, company B tries to rather use these possible tensions to further motivate employees. A further negative effect of externalized labor is the possible loss of knowledge and innovation, e.g. an external employee taking the knowledge of company B outside to another company. In order to prevent this, company B protects itself with patents and by not making all the knowledge available to external employees.

Job design

In order to motivate employees, company B differentiates between the departments. The technical team is rather motivated by having challenging projects, while the innovation team is more motivated by having their own room to maneuver, e.g. allowing them to create their own targets and to have their own business focus within the company. Additionally, while the technical team is rather top down managed and more structured, the innovation team is rather self managed and free in their working decisions.

Further, company B uses the concept of managing by objectives in order to ensure the alignment of team objectives, personal objectives and company objectives is given. A formal way of checking on these objectives is by implementing key performance indicators. When evaluating employees and deciding on performance and personal bonuses, 50% is based on company goals and 50% is based on individual goals. The individual goals are set by the team supervisor, therefore it could be that all employees of this team have the same goals, but it is the intention all the employees also have individual goals.

Company C

Profile interviewee

- Job: HR manager for marketing, logistics, sales, finance, IT and consulting.
- Studies: Bachelor human resource management and master business administration at University of Twente, specialization innovation management.

Organization X or Y

The description of organization Y fits company C best because they need to continuously improve their tires in order to make it through the tests in the future. Moreover, if they do not improve their tires they lose their position in the market.

Employees are motivated to come up with ideas to improve the production process. The company therefore uses incentives and recognition in the personal magazine. For the recognition in the magazine the director of production and engineering invites all the idea winners for a picture which is published. In addition, the names and ideas are placed on big screens so that employees can see if their ideas are approved or pending.

Concerning new products the company acknowledges that rubber from trees becomes scarce in the future and therefore they are looking into alternatives for these rubbers.

The company uses networking to improve their products but this is dependent on the discipline. Sometimes it comes from the head of the department and sometimes from the network of an engineer that is used by the company.

For example, they participate in the rubber research center of the University of Twente. Another project which resulted in the use of the flower in products is the outcome of collaboration with the University of Twente. Another group in which they participate is the national rubber group. The company uses these networks for innovation because innovation is not something they can do on their own.

These relationships are used few times a year but also continuously. For example the marketing guy is a member in the national rubber group and he tries to attend the monthly or quarterly meetings as much as possible.

The culture within company C is characterized as an informal culture. The employees are open. Every year during the appraisals the HR manager likes to see the voice of the employees on the appraisal. These appraisals include a measure of employees' satisfaction. These appraisals are used to send employees that they all are needed.

The ideas mainly come from individual employees. The organization organized it in such a manner that it stays with that person in order that he or she knows that the incentive is coming.

Selection and Recruitment

When the company needs a vacancy filled they first place the vacancy internally. After ten days when the vacancy is not filled, the vacancy is placed on for example LinkedIn. LinkedIn is used to recruit sales people as there are a lot of sales people on LinkedIn. For other people like mechanical engineers, they need partners who are able to find these persons. Company C has some contracts with recruitment agencies and they also have price agreements.

In addition, they go to company days at different Universities. These include the university of Twente, university of Delft and university of Eindhoven. Another way they present themselves is via guest speakers at college classes.

Information on the vacancies includes level of education, track and work experience, general competencies. During the face-to-face meeting the HR manager looks at the competencies of people because he needs to feel and see the competencies someone has. Education and work experience are

the hard criteria while the fit with the culture is taken into account when they have more candidates. Which candidate fits the culture best or which candidate has the highest potential or which candidate brings something new to the organization.

After several months of performance by externalized labor the leaders of production do have a good view of how that person performs and then the company decides if they give that person a contract.

The role of recruitment agencies is mainly to find the good candidate. They also take some HR functions like administrative part, and the real HR practices are with the leaders on the shop floor.

Externalized labor force

The organization works from the beginning of the 90s with Giorgetto Giugiaro, a famous Italian designer. The designer gives their tires a design edge. Performance like fuel savings, handling and sound goes before the design as the company likes to score A's on these performance indicators.

They also use temporary labor and this percentage is around 20%. The choice to have around 20% is mainly for the flexibility. When the company receives fewer revenues it is easier to cut costs.

For their finance department they hire consultants and for the engineering department they hire specialists. The use of external workforce is based on the gap between the actual and needed competencies.

There will be almost no use of external labor in the R&D department, only once in five years that someone with a detaching contract is used.

The use of external workforce leads to new insights for example when someone of Deloitte comes to company C this resulted in new insights which they then apply to their work.

If the company lacks certain knowledge for example to improve the machine they fly in engineers and technicians to improve the machine.

Job Design

Concerning job design the organization focuses on autonomy, career development and labor conditions. There are career developments and possibilities both horizontal as well as vertical. The organization provides above average labor conditions, these include good salary, good pension and holidays are higher than medium.

The leaders are responsible for the planning when and where employees are needed. They have the planning at what time and which machine employees are needed. Because not every leader is the same those employees rotate. This rotation makes it possible to replace someone who is ill because everyone is able to stand at several positions. Employees know every machine and every product. This leads to flexibility because employees are able to rotate jobs. The employees are responsible for the machine while the officer is responsible for the product. They get ownership of what they are doing.

The working times are strict for employees working in the production. The company has five shifts for this and dependent on the irregularities of the shifts whether they receive a bonus.

In dayshifts people experience flexible working hours. They can for example decide at which time between 07:00 hour and 09:30 hours they like to start. The organization has different development opportunities both horizontal as well as vertical opportunities.

Employees have to collaborate on the shop floor as some machines need four employees to use and they have to collaborate all the time.

There is also collaboration between departments and interdisciplinary teams. When an idea is submitted an interdisciplinary team is formed that assesses the idea and take it further into practice.

The person who comes up with the idea is not attending in this team.

Company D

Profiel

- werkt al 25 jaar bij bedrijf D, begon als administrateur en werkt nu als P&O manager of de HRM afdeling.

Bedrijf D

De core business van bedrijf D is verplaatsbare scheidingswanden. Dit hebben ze een aantal jaren geleden uitbereid en ze bieden nu het totaalpakket aan, dus ook plafonds, vloeren etc.

Bedrijf D is onderdeel van de European Partition Group (E.P.G.) holding en heeft 130 medewerkers. Naast bedrijf D heeft deze holding nog twee dochtermaatschappijen in Almere en in Duitsland. Twee jaar geleden is er een nieuwe directeur gekomen vanuit de holding en hij heeft o.a. alle ondersteunde afdelingen, zoals P&O eruit getrokken om te gaan faciliteren voor de werkmaatschappijen (Almere en bedrijf D). Ook gaat alles nu over naar het lean systeem, dit betekent dat er nagenoeg geen voorraad zal zijn en dat alles per project wordt ingekocht. Het is de bedoeling dat alles gestandaardiseerd wordt en dat er een efficiency slag gemaakt wordt. Deze andere koers van de nieuwe directie is erg lastig voor veel medewerkers aangezien het al 25 jaar op dezelfde manier gaat. Hierom stagneerde ook de innovatie bij bedrijf D, waardoor verandering nodig is.

Ten opzichte van de vorige directie, is deze directie bottom up gericht. Ze willen dat de medewerkers met ideeën komen en ze bij de vergadering betrekken om zo hun ideeën ter vertellen. Hiermee wordt ook de grootste verspilling, creativiteit, van het lean traject voorkomen. Zodra medewerkers een idee hebben kunnen ze deze deponeren in de ideeënbus en mocht het idee toegevoegde waarde dan zal zich daar een stuurgroep over buigen en er zal waardering over worden uitgesproken tijdens de functioneringsgesprekken en soms wordt een idee zelfs beloond. Deze functioneringsgesprekken zullen zelf ook een verandering ondergaan. Er is nu namelijk een standaardformulier voor die gesprekken en dat zal nu meer functiespecifiek gaan worden.

Naast het intern motiveren van werknemers om met ideeën te komen heeft bedrijf D ook een Cradle to Cradle café om met externe partijen te kunnen sparren. Het Cradle to Cradle café wordt een keer in de twee maanden georganiseerd.

Organisatie X of Y

Op dit moment past beschrijving Y het beste bij bedrijf B, maar ze willen naar X. De markt is op dit moment namelijk erg onstabiel.

Het gaat er nu bij bedrijf D heel erg om die nieuwe ideeën door de medewerkers van onderuit de organisatie uit de comfort zone te halen en ze mee te laten denken voor de organisatie voor innovatieve productie, verbeteringen en/of nieuwe concepten. Dit zorgt er allemaal voor dat B een beetje past, maar nu wil bedrijf D naar X toe, want ze willen ook nieuwe producten.

Werving en selectie

Het werven en selecteren is gescheiden tussen productiepersoneel en kantoorpersoneel. Voor het productiepersoneel is de productiemanager verantwoordelijk en gebeurt het bijna altijd via een uitzendbureau. Voor het kantoorpersoneel is de P&O manager verantwoordelijk. Wanneer het om technische functies gaat, dan worden er technische bureaus gezocht, maar er gaat ook een omschrijving naar het uitzendbureau waar ze veel mee werken.

Voordat er contact wordt opgenomen met het uitzendbureau zal de vacature eerst intern worden uitgezet. Mocht er dan niemand op reageren of geen geschikte persoon voor de baan worden gevonden dan zal er extern worden geworven.

De omschrijving van de banen die gebruikt worden zijn momenteel erg algemeen en worden nu specifiek. Bedrijf D heeft op dit moment ongeveer 86 functieprofielen voor 280 mensen. Het is nu zo dat zodra ze gaandeweg een toevoeging hebben voor een functieprofiel dan sturen ze dat door naar het uitzendbureau.

Zodra er gegadigde zijn worden de CV's van hen door onder andere de leidinggevende beoordeeld met een plusje, plusminnetje en een minnetje. Vervolgens worden de plusjes en plusminnetjes allemaal uitgenodigd voor een gesprek. En dan is het eerste gesprek een kennismakingsgesprek en het tweede gesprek zal meer inhoudelijk over de taken gaan, waarbij ook iemand van een andere afdeling zal aanschuiven om ook een oordeel te vellen. Bij het derde gesprek is het vaak al rond en zal het vooral gaan over de arbeidsvoorwaarden. Welke persoon uiteindelijk de baan krijgt wordt besloten door de leidinggevende, de medewerkers van de afdelingen P&O en HR hebben vooral een adviserende rol in dit traject.

Externe werkrachten

Bedrijf B maakte altijd gebruik van gemiddeld 5 à 6 uitzendkrachten, maar dat is nu veranderd. Sinds 1 januari 2013 maakt bedrijf D in principe geen gebruik meer van uitzendkrachten. De redenen hiervoor zijn geld en het binnen huis houden van kennis en kunde. Er loopt nog één uitzendkracht rond, die een Excel bestand maakt waarin het inklokken van uren mogelijk is. Mocht er in de toekomst toch nog uitzendkrachten nodig zijn, dan zal er niet meer automatisch met dezelfde uitzendbureaus gewerkt worden, maar zal er met alle mogelijk partijen onderhandeld worden.

Taak ontwerp

Bedrijf D maakt gebruik van functieprofielen. Alleen staan daar wel taken in waarvan men niet weet hoe ze dat moeten managen. Bedrijf D is nu een verandering aan het doorvoeren waarbij er meer horizontaal gecommuniceerd gaat moeten worden tussen verschillende afdelingen. Dit vraagt ook andere verantwoordelijkheden die niet in de functieprofielen zijn omschreven. Het komt ook voor dat een werknemer iets mist in de taakomschrijving, dan kan dit toegevoegd worden, mits het ook goed onderbouwd is.

Een andere verandering die nu wordt doorgevoerd is dat de leidinggevende een inzetbaarheidschema / vaardigheidsschema maakt van de werknemers op hun afdeling. Hiermee wordt duidelijk wie, wie kan overnemen of wie kan rouleren op de afdeling etc. Op deze manier is alles erg overzichtelijk en hoeft men niet snel meer een uitzendkracht in te huren.

Om ook wekelijks te kunnen rouleren buiten de afdeling, worden werknemers nu ook opgeleid voor andere taken.

De werktijden voor het productiepersoneel zijn niet flexibel. Zij beginnen om kwart voor 8 's ochtends en stoppen om half 5. Dit heeft te maken met de machines maar ook met het feit dat sommige taken door twee mensen gedaan moeten worden. De werktijden zijn voor het kantoorpersoneel wel flexibel, zij werken tussen kwart voor 8 en kwart voor 9 en stoppen tussen half 5 en half 6.

Appendix D - Codebook Creative capital

Company A			
Concept	Dimension	Sub-dimensions	Quotes
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 (p.19)</p> <p>I am busy to form a group of companies that supplement 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>

Creative Capital (continues)	Relationships (continues)	<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 (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>
		<i>External</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 (p.4)</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>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>Weak</i>	<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>

<p>Creative Capital (continues)</p>	<p>Relationships (continues)</p>	<p><i>Strong</i></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. 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>Creative Capital (continues)</p>	<p>Relationships (continues)</p>	<p><i>Strong (continues)</i></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>Organizational creative ability</p>	<p>-</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>Creativity</p>	<p><i>Expertise</i></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>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 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)</p>

Creative Capital (continues)	Creativity (continues)	<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>

Company B			
Concept	Dimension	Sub-dimensions	Quote
Creative capital	Relationships	<i>Bonding</i>	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)
		<i>Bridging</i>	<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>

Creative capital (continues)	Relationships (continues)	<i>Bridging (continues)</i>	<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 (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>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 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>Internal</i>	<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>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>Creative capital (continues)</p>	<p>Relationships (continues)</p>	<p><i>External (continues)</i></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>
--	---	------------------------------------	---

Creative capital (continues)	Relationships (continues)	<i>External (continues)</i>	<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</p>

Creative capital (continues)	Relationships (continues)	<i>Strong (continues)</i>	<p>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)</p> <p>So we have to trust them to do the right thing (p.13)</p>
	Organizational creative ability	-	<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>
	Creativity	<i>Expertise</i>	<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>

Creative capital (continues)	Creativity (continues)	<i>Expertise (continues)</i>	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)
		<i>Motivation</i>	By having challenging projects and within company B we have this method we call USEIT Industrial design (p.6) 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) It is also motivating for the employees if they have somebody with the knowledge (p.8)
		<i>Creative thinking skills</i>	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) Many products you see half what we call a leap innovation because there are ahead in the market three to five years (p.4) To create this position its actually the creativity we need (p.4)

Company C			
Concept	Dimension	Sub-dimensions	Quotes
Creative capital	Relationships	<i>Bonding</i>	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)
		<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>
		<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>
		<i>External</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>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>
		<i>Weak</i>	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)

Creative capital (continues)	Relationships (continues)	<i>Weak (continues)</i>	<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>
		<i>Strong</i>	<p>Since the 90s we are working together with Giorgetto Giugiaro and he is a famous Italian designer (p.2)</p>
	Organizational creative ability	-	<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>
Creativity	<i>Expertise</i>	<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</p>	

Creative capital (continues)	Creativity (continues)	<i>Expertise (continues)</i>	<p>and then we are starting to work on that it happens a lot (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 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>
		<i>Motivation</i>	<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>
		<i>Creative thinking skills</i>	-

Company D			
Concept	Dimension	Sub-dimensions	Quotes
Creative capital	Relationships	<i>Bonding</i>	<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&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&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>There are for example three architects in <i>the cradle to cradle</i> café. 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>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 it is not without doubt that the cooperation with Tempo Team continuous (p.2)</p>

Creative capital (continues)	Relationships (continues)	<i>External (continues)</i>	<p>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)</p> <p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&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>
		<i>Weak</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 it is not without doubt that the cooperation with Tempo Team continuous (p.2)</p>
		<i>Strong</i>	<p>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)</p> <p>We are also the founders of the cradle to cradle café. There are a lot of architects, our R&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>

Creative capital (continues)	Organizational creative ability	-	<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>The market is really unexpected. That is a really burden for us (p.15)</p>
	Creativity	<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&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>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>	The board indeed tries to motivate employees to come up with ideas, different working methods (p.2)

<p>Creative capital (continues)</p>	<p>Creativity (continues)</p>	<p><i>Motivation (continues)</i></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>	
		<p><i>Creative thinking skills</i></p>	<p>-</p>

Appendix E - Codebook Selection and Recruitment

Company A				
Concept	Concept definition	Components	Approaches	Quotes
Recruitment	“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breaugh & Starke, 2000, p. 407)	<ul style="list-style-type: none"> - Job description - Internal recruitment - External recruitment 	<ul style="list-style-type: none"> - List of chief’s objectives and a list of the key attributes - Description that consists of the characteristics of a current job holder - Vacancy on the intranet - Online recruitment - Recruitment agency - Employer branding 	<ul style="list-style-type: none"> • Nee, dat doen wij wel via het uitzendbureaus. Dan bellen wij bijvoorbeeld uitzendbureaus op van daar en daar naar zijn wij naar op zoek. Je kunt dat al in een hele korte omschrijving wel aangegeven dan is het eigenlijk hoofdzakelijk productie, dat wij mensen zoeken. (p.16) • Ja, want kijk bij een uitzendorganisatie heb je ook het contract. We betalen veel meer, maar we zijn wel heel flexibel. Flexibel in de vorm van dat we al dan niet kunnen stoppen met iemand. Zonder dat ons dat enige kopzorgen kost, geld kost. Daar betaal je voor. Je betaalt in factor twee zeg maar. (p.17) • De mensen die op de markt zijn, zijn makkelijk te bereiken, via uitzendbureaus. (p.5) • Ja, zij hebben veel mensen, en nogmaals het is heel sterk afhankelijk van het type werk waar je iemand voor zoekt. (p.17) • Als iemand ons bedrijf heel goed kent die weet precies wat we zoeken, die komt dan met veel betere mensen. Dat merken we ook. Dus degene die hier vanmiddag was, dat was iemand van het vaste uitzendbureau. Die weet precies wat we zoeken. Zo hebben we nog een stuk of drie waar we veel mee doen. (p.5)
Selection	“Selecting the perfect person for the job based on certain criteria”	<ul style="list-style-type: none"> - Selection criteria - Traditional methods used for selection process - Modern methods used for selection process 	<ul style="list-style-type: none"> - Competency-based: becomes more specific - Individual job characteristics via task analysis - Application form - (Telephone) interview - References - Self- assessment - Group methods - Tests - Assessment centers 	<ul style="list-style-type: none"> • We letten op een aantal punten, we letten natuurlijk op de kennis dat ze in huis zouden en moeten hebben op hun vakgebied, ondanks goede papieren wil dat niet zeggen dat het altijd zo is, daar zijn we al achter gekomen al wel langer achter gekomen trouwens. Daarnaast is belangrijk wat voor type persoon is het. Je hebt een bepaalde cultuur in je organisatie, dus die man of het ook prettig vindt en het ook zo ervaart. Ik ben er ook wel achter dat niet iedereen het even leuk vindt, er zijn mensen die doen niets liever van ik ben klaar en legt het bij zijn leidinggevende en wat moet ik nu doen. Dat is wat je heel veel ziet, dat zijn gewoon mensen die passen hier niet. Dat zijn ook mensen waar we afstand van hebben genomen, mensen die hier niet mee om kunnen gaan. Als je een bepaalde cultuur in je organisatie wilt hebben dat je ook mensen moet hebben die daar in passen. Dat wil niet zeggen dat je allemaal jaknikkers nodig hebt, maar mensen die het prettig vinden. En ik ben een man van de voorbeelden: ik heb een paar weken geleden een oudere werknemer die is over de vijftig die heel goed verspanen kunnen, heel goed hun vakgebied beheersen, ik heb er wel mijn twijfels over maar hij mag een week meelopen en als het goed gaat, ... (continues on the next page)...

<p>Selection (continues)</p>	<p>“Selecting the perfect person for the job based on certain criteria”</p>			<p>gaat het niet goed of als er twijfels zijn en hoe we omgaan met die tijden. Dat ben ik wel gewend, dat is heel normaal. Dat vind ik bijzonder, ik hoor het bijna nergens. Dan merk je gewoon aan het eind van die week heb je een evaluatie, hij verstaat zijn vak gewoon niet. Hij heeft gewoon te weinig kennis van, daar is het op gestrand... Hij had heel veel commentaar op dat moment. Iemand is dan geïrriteerd, dat vind ik niet leuk, die werkt die tijden dat slaat toch nergens op, waarom moet ik het zelf bepalen, dat kunnen jullie wel bepalen. Dat is de tweede reden waarom we hem laten weggaan. Hij kan er niet mee over weg gaan dat is niet voor iedereen even makkelijk. (p.3)</p> <ul style="list-style-type: none"> • Nee, dat was toevallig een voorbeeld. Laatst heb ik, dat ze wel echt meelopen voor langere tijd wel, dat we gewoon kijken of ze passen. We hebben ook jongere werknemers gehad, ze krijgen dan een periode van drie maand om te zien of ze bij ons passen of ze inderdaad gemotiveerd zijn om kennis op te doen. Vooral de kennis op doen dat willen ze vaak niet, ze zeggen van wel, ze vinden het heel belangrijk dat ze zo snel mogelijk naar huis kunnen en andere dingen kunnen gaan doen. Dat geeft niet, dat is een keus van iedereen op zichzelf. Maar ook dat ze door externe partijen gewoon getest worden, kijken of dat niveau er in zit. Zorgen dat ze het kunnen halen. (p.4) • Waar jullie op aansturen heeft vaak met andere functies te maken, de meeste mensen zijn in de productie dat zijn mensen die van een materiaal ergens inleggen voortdurend tot mensen die complexe machines moeten aansturen. Die redelijk complexe machines daar kijk je vaak wat voor ervaringen heeft die iemand, waar heeft die gelopen, de metaalwereld is redelijk klein. Heel toevallig werd er vanmiddag aangeboden die redelijk complexe machines kan bedienen, het enige wat ik doe is dan bel ik even naar waar die gewerkt heeft, ik ken heel veel mensen, dan hoor je snel genoeg heeft iemand de capaciteiten, kan hij werkelijk wat op papier staat. Dat moeten ze waarmaken. Je kan wel een assessment in gaan, iedereen kan het vertellen, maar dat zie je pas in de praktijk. Als je inderdaad een assessment dat hebben we ook wel gedaan voor de financiële man, dat soort functies is iets anders. We hebben een bedrijf van 45 medewerkers, er komt niet één keer per jaar een nieuwe financiële man erbij of die wisselen. Dat is een nadeel hoor dat je zo een cultuur krijgt dat mensen het heel leuk vinden om hier te werken, dat ze niet meer weg gaan. Dat is ook goed, maar kan ook soms slecht zijn. (p.4)
------------------------------	---	--	--	--

Company B				
Concept	Concept definition	Components	Approaches	Quotes
Recruitment	<p>“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breugh & Starke, 2000, p. 407)</p>	<ul style="list-style-type: none"> - Job description - Internal recruitment - External recruitment 	<ul style="list-style-type: none"> - List of chief’s objectives and a list of the key attributes - Description that consists of the characteristics of a current job holder - Vacancy on the intranet - Online recruitment - Recruitment agency - Employer branding 	<ul style="list-style-type: none"> • I actually don’t really know the answer because it’s not something I do myself. But what we normally do is that we make the job description and I think we try to have the three or five key tasks people are doing and try to get some profile like okay this is what you need to have in your backpack like knowledge, education, experience and we try kind of make the description and we say what kind of company we are to find people that are attracted to the kind of company and profile. (p.14) • What the team thinks are the key tasks for that person. (p.14) • 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) • 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) • We have a professional HRM person, actually somebody working one or two days a week was in the company and we used different methods. We offer lots of internships and really try to find fresh people from University and our experience is that it works really well when people have an internship with us and we select the best ones that’s a good way and luckily we are still able to attract a lot of talented students that way. And for hiring we also use Internet and paper advertisement for people in the mid-30s looking for the third or fourth job, skilled people. For some positions it’s really difficult to find people so we also use our network. So we use LinkedIn and we ask everybody in our company to post a job profile in the network and we make some funny promotions like to get a weekend away if you are successful so people have some attention to that. And it also works quite well. (p.4)

Recruitment (continues)	“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breugh & Starke, 2000, p. 407)			<ul style="list-style-type: none"> • We have a professional HRM person, actually somebody working one or two days a week was in the company and we used different methods. We offer lots of internships and really try to find fresh people from University and our experience is that it works really well when people have an internship with us and we select the best ones that’s a good way and luckily we are still able to attract a lot of talented students that way. And for hiring we also use Internet and paper advertisement for people in the mid-30s looking for the third or fourth job, skilled people. For some positions it’s really difficult to find people so we also use our network. So we use LinkedIn and we ask everybody in our company to post a job profile in the network and we make some funny promotions like to get a weekend away if you are successful so people have some attention to that. And it also works quite well. (p.4)
Selection	“Selecting the perfect person for the job based on certain criteria”	<ul style="list-style-type: none"> - Selection criteria - Traditional methods used for selection process - Modern methods used for selection process 	<ul style="list-style-type: none"> - Competency-based: becomes more specific - Individual job characteristics via task analysis - Application form - (Telephone) interview - References - Self- assessment - Group methods - Tests - Assessment centers 	<ul style="list-style-type: none"> • Basically our decision is that we have a number of supervisors that a managing the team and we have like a year plan and budget so supervisors can take the decisions was in their own budget and your plan and if we have candidates for job interviews we normally have people from the team during the interview and we have somebody from our HR doing a review and then we want to have a final review with somebody from the management. So that’s actually deciding about the candidate and if we have a vacancy basically it’s a supervisor if he sees a neat and it fits within the strategy he can assert himself and if it’s outside the plan we can still take the decision but then it’s really a board decision and it’s decided on board level and we have to discuss okay why we do this. (p.15)

Company C				
Concept	Concept definition	Components	Approaches	Quotes
Recruitment	<p>“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breugh & Starke, 2000, p. 407)</p>	<ul style="list-style-type: none"> - Job description - Internal recruitment - External recruitment 	<ul style="list-style-type: none"> - List of chief’s objectives and a list of the key attributes - Description that consists of the characteristics of a current job holder - Vacancy on the intranet - Online recruitment - Recruitment agency - Employer branding 	<ul style="list-style-type: none"> • The philosophy that we have is to keep it simple. There are eight competences as a management level and there are eight competences on operational level. (p.6) • We first start internal, those two on top you can see sales controller and area manager those are internal vacancies and then we wait for 10 days and then we hope that we have at least 10 good candidates internal and that we are finished but sometimes it doesn’t work and we have no applicants or there is no match and then we need to go outside and for example for sales I can put it on LinkedIn and then probably it will be successful. But if you looking for researcher all mechanical engineer it will be very difficult and we cannot put it on LinkedIn because it’s very specific or yes we can but it won’t work no one will probably even see it because LinkedIn there a lot of sales people on it. So there we need to find partners who can search for those guys and goats and find them. (p.6) • Yes very often. We do have vacancies that are very difficult for example technical vacancies, is very difficult to have them filled up by internal people or it should be a horizontal move but then we are tending to go outside quite quick. (p.16) • No not a lot. We have price agreements, also purchasing department is involved, but there’s also a lot of flexibility. My personal stylist 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) • 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)

Selection	“Selecting the perfect person for the job based on certain criteria”	<ul style="list-style-type: none"> - Selection criteria - Traditional methods used for selection process - Modern methods used for selection process 	<ul style="list-style-type: none"> - Competency-based: becomes more specific - Individual job characteristics via task analysis - Application form - (Telephone) interview - References - Self- assessment - Group methods - Tests - Assessment centers 	<ul style="list-style-type: none"> • Well competences really, if you ask me I make up my mind about competences when I talk to someone face-to-face, not on paper. So you can put down on all your competences but I won't believe it. I need to feel it and see it. (p.7) • So we look into a resume and we thinking hey these guys have the hard criteria and it's more the education and work experience is the most important. If you do not have those then culture is not an issue. 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 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) • It (creativity) is a selection criteria but I'm not sure of really talking about it. And it also depends very much on the discipline. 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. For example somebody who is in e-commerce and has thoughts about using that in the supply chain as well. But it depends it is not on top of my list. Because we have so many different disciplines that is not one way recruiting. (p.15) • For me it is. You could also call but it's not my style I don't like to call I like to do it face-to-face because then I can see what happens. (p.7) • Of course it's up to the leader then to assess them and to follow his performance and should he be for example not very creative then it needs to be discussed with him and not only in his appraisal because the appraisal is only a summary of what you've already discussed throughout the year but then you have to talk about it earlier and that is happening of course. In my opinion during the recruitment and selection process you cannot take out all the risk. It's never a black-and-white story it's always an individual and an individual is unique, and that's a good part of it and the dark part of it is that you cannot put a one-story structure on it. But that's what I like personally because then I can use my brain. I don't know if there are still a lot of questions unanswered or anything I said that needs to be discussed further. (p.16)
-----------	--	---	--	--

Company D				
Concept	Concept definition	Components	Approaches	Quotes
Recruitment	“Those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees” (Breaugh & Starke, 2000, p. 407)	<ul style="list-style-type: none"> - Job description - Internal recruitment - External recruitment 	<ul style="list-style-type: none"> - List of chief’s objectives and a list of the key attributes - Description that consists of the characteristics of a current job holder - Vacancy on the intranet - Online recruitment - Recruitment agency - Employer branding 	<ul style="list-style-type: none"> • Ja, wij hebben ze heel erg algemeen en ja het wordt nu specifiek ook heel erg toegeschreven aan wat men nu nodig heeft. (p.8) • Ja, het is goed dat je dat zegt. Eigenlijk dat (intern zoeken) doen wij altijd eerst. Wij hangen het eerst op de borden. Iedereen krijgt dan ook de mogelijkheid om te solliciteren naar die vacature. Maar als het voor ons geen toegevoegde waarde heeft gaan wij extern werven. (p.13) • Ja, werven en selectie dat is gescheiden in productiepersoneel en kantoorpersoneel. Productiepersoneel is onze productiemanager verantwoordelijk voor het werven en selecteren en er gebeurt 99 van de 100 keer gebeurt het via het uitzendbureau. (p.8) • Kantoor werkt anders, daar ben ik verantwoordelijk voor. Wat wij doen als het gaat om technische functies zoeken wij technische bureaus om ons heen. Een aantal bureaus hebben wij om ons heen, een stuk of vijf. (p.8)
Selection	“Selecting the perfect person for the job based on certain criteria”	<ul style="list-style-type: none"> - Selection criteria - Traditional methods used for selection process - Modern methods used for selection process 	<ul style="list-style-type: none"> - Competency-based: becomes more specific - Individual job characteristics via task analyses - Application form - (Telephone) interview - References - Self- assessment - Group methods - Tests - Assessment centers 	<ul style="list-style-type: none"> • Ja, ik heb wel een heel leuk voorbeeld. Wij zijn op zoek naar een administratief medewerker. En in eerste instantie hebben we gezegd het moet iemand zijn die van onder af aan meegaat, die wat simpele dingen doet. Dus we hebben die functieprofiel weggezet. Gaandeweg, doordat de nieuwe financieel manager leert de afdeling kennen en zegt gaandeweg van nee ik zoek eigenlijk iemand met iets meer niveau. Ik wil toch iemand die HBO geschoold is, misschien accountancy, misschien universitair. Nou oke beginneling, ja beginneling. Dus heb je al weer een andere functieprofiel, terwijl onze eigen functieprofiel staat nog gewoon wat het is maar je zoekt toch iemand met wat meer bagage. Goed zijn we weer drie/vier CV’s verder is het hem nog niet. Uiteindelijk waar we nu op uit zijn gekomen is dat we gezegd hebben van wij zoeken en iemand die HBO of Universitair geschoold is met een goede achtergrond als het gaat om financieel met 2 à 3 jaar ervaring, want zegt zij nu ik zoek eigenlijk iemand die mij straks gaat vervangen zodat zij meer op holding niveau bezig kan zijn. Dus gaandeweg dat hele proces, dit is nieuw hoor, de aller eerste keer dat ik dit nu meemaakt, maar gaandeweg het proces hebben we elke keer bij moeten stellen. Maar dat heeft ook te maken met het inzicht dat de financieel manager gekregen heeft gaandeweg het proces. Zo van ja nee is toch niet handig. Ze was zelf ook nog erg aan het zoeken. (p.17)

Selection (continues)	“Selecting the perfect person for the job based on certain criteria”			<ul style="list-style-type: none"> • Nee nee, wij vragen ongeveer vier à vijf CV’s vragen wij dan voor die vacature en die worden beoordeeld door de leidinggevende en door ondergetekende met een plus, plusmin en een min meer is het niet. Min meteen afschrijven, plusmin bespreek geval en plus uitnodigen voor gesprek en tuurlijk zullen de leidinggevende en ondergetekende daar best wel wat verschil in hebben en alles wat men verschil in heeft dat wordt besproken en uitgelegd waarom jij diegene een plusminnetje en ik en minnetje. (p.8) • Ja, de plussen nodigen we uit voor een gesprek. Stel je voor dat van die vier dat dat er drie zijn dan willen we ze heel graag alle drie zien. Omdat we met z’n tweeën over al die drie kandidaten heel enthousiast zijn. En dan is het wel zo het eerste gesprek is een beetje kennismakingsgesprek, het tweede gesprek ga je meer de diepte in over taken inhoudelijk en dan kan het ook nog zijn dat iemand anders van de afdeling nog aanschuift om een oordeel te vellen. Maar met het laatste gesprek dan praat je veelal over arbeidsvoorwaarden en dat soort dingetjes. Meestal is het bij het derde gesprek vaak rond. (p.8) • Ja, ik moet wel zeggen dat ligt in de lijn. Onze leidinggevende zijn heel erg leading. Als P&O, HR zijn wij heel erg faciliterend, adviserend, dus wij hebben totaal geen bevoegdheid om te zeggen van ik neem jou aan en hem niet. Nee, als jij leidinggevende bent, ik adviseer jou, maar aan eind beslis jij. Zo is dat bij ons geregeld, de HR. (p.18)
--------------------------	--	--	--	---