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FACULTY OF BUSINESS ECONOMICS
Master of Management

Masterproef

The role of human resource management in open innovation: exploring the relation between HR practices and OI

Promotor :
Prof. dr. Anna ROIJAKKERS

Supervisor :
Prof. dr. Wim VANHAVERBEKE

Svenja Paul
Master Thesis nominated to obtain the degree of Master of Management

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Preface

With this master thesis I finalize my studies of Master of Management with the specialization in International Marketing Strategy at Hasselt University. I would like to give special thanks and acknowledgements to my promoters Nadine Roijakkers and Wim Vanhaverbeke for their support, guidance, and efforts throughout the whole process of writing the master thesis. They have stimulated my interest in open innovation and truly inspired me personally and academically.

I would also like to thank Harry Berry, Chris Winter, Lucienne van der Werff, Tom Coen, Marc Hufkens, and Patrice Vandendaele for sharing their experiences on human resource management in open innovation. I appreciate the inspiring conversations we had, their full support for the study, and their insights, which have added substantial value to the study.

Further, I would like to thank my parents, sisters, and friends for supporting and believing in me throughout my whole education.

Summary

How do human resource (HR) practices strengthen open innovation activities? This inductive study of six cases led to propositions exploring that question. I thereby investigated the role of human resource management (HRM) in open innovation, specifically the relation between HR practices and an employee's willingness to embrace open innovation.

The study is motivated by an increasing popularity of open innovation both academically and practically. The core of an organization's innovation capabilities has traditionally been thought of to be the own research and development (R&D) department, whereas nowadays many organizations open up their innovation activities to take advantage of an abundant knowledge landscape outside the organization's boundaries (Chesbrough, 2003a). This approach towards innovation has been coined open innovation. Despite the increasing attention on the topic, which is illustrated by a growing number of publications, special issues, and dedicated conferences, little progress has been made regarding the internal organization for open innovation. Specifically, the role of HRM has not been empirically investigated, yet.

Since empirical evidence on HRM in open innovation is scarce, the study is of exploratory nature, seeking to gain insights and to generate ideas. The applied methodology is theory-building based on case study research, a method described by Eisenhardt (1989). I investigated six case studies, including the perspectives of chief executive officers (CEO), HR managers, and experts from Belgium, the Netherlands, and the United Kingdom regarding HR practices in both small and large companies that actively pursue open innovation. Data were mainly collected through semi-structured, in-depth interviews. Based on the full transcripts of the interviews and field notes taken, first every case study was reviewed individually, after which findings were compared across cases, looking for patterns and contrasts. Based on the results, testable propositions were created. By enfolding literature from related fields such as psychology, a stronger substantiation of the findings was created.

The findings reveal that when implementing open innovation, many issues arise regarding HRM. It is people's thinking and attitudes towards open innovation that can strengthen open innovation activities. HR practices can influence peoples' behaviors

and attitudes towards open innovation by strategically selecting candidates, by rewarding employees, and by establishing a strategically focused climate in which employees are stimulated and feel comfortable being open, talking to others about their ideas, etc. Training practices were found to be negligible. The findings further reveal HR challenges that need to be overcome when organizing for open innovation.

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1 Introduction

Recently, Berkley Professor Henry Chesbrough (2013), the thought leader of open innovation, stated:

> If you want to move knowledge, ultimately you are going to have to move people, and human resource practices can enable that or they can stay in the way of that. So, I think this is an area where we don't have a lot of great research in open innovation, yet, but I think the premise that there is a lot to learn there is exactly right.

In this thesis I am going to investigate the human resource (HR) side in open innovation. In 2003, Chesbrough coined the term open innovation to describe that organizations open up their innovation activities to take advantage of an abundant knowledge landscape outside an organization's boundaries (Chesbrough, 2003a). Since its origination, open innovation has become one of the most popular topics in the field of technology and innovation management. Chesbrough's 2003 book has gathered more than 6,000 citations until 2013 (Google Scholar, May 2013). The popularity of the concept is illustrated by a growing number of publications, special issues, and dedicated conferences. Despite the increasing attention on the topic, little progress has been made regarding the internal organization for open innovation. In delineating important research themes that are currently underexplored, Vanhaverbeke and Roijakkers (2012) point to the need to investigate how open innovation is effectively managed and organized within companies. Of particular interest is the role of HR management (HRM) in open innovation. Golightly, Ford, Sureka, and Reid (2012) found that open innovation is seen as a people-driven process, concluding that individuals should be the focus when implementing it. They believe that there is considerable potential for further research into the people side of open innovation, including organizational development, HR practices, and performance management. From a practitioner's perspective, Goers (2011) states that for institutionalizing open innovation at Kraft Foods, developing the best tools, processes, and operating models is not sufficient. More than that, employees' behaviors need to be addressed and a culture focused on open innovation needs to be built. He sees open innovation as a mindset and a belief that everyone in the organization should embed into its work. Likewise, Martino and Bartolone (2011), based on their experiences at Unilever, emphasize that ultimately open innovation

is about people, relationships, and trust. One of the first studies that attempted to empirically investigate the people side in open innovation is the dissertation on innovation cultures by Herzog (2011). His study provides evidence of cultural differences between open and closed innovation units, whereby an employee's motivation and personality were studied. He argues that in terms of an employee's intrinsic and extrinsic motivation, there is no difference between open and closed innovation cultures. With regards to an employee's personality, however, he suggests that being proactive, creative, and results-oriented may be more relevant in open innovation settings. Further, du Chatenier, Verstegen, Biemans, Mulder, and Omta (2010) in their study on competencies for professionals in open innovation teams have contributed to the literature on individuals in open innovation. They found that the three most important competencies that individuals within the team need to possess are to combine, to show social astuteness, and to be socially competent. However, a gap remains in our knowledge regarding the consequences for HRM in open innovation. It would be of interest to learn how HR practices, such as selection, training, and rewarding, can support and strengthen open innovation activities. To the best of my knowledge, no study has attempted to empirically investigate the role of HRM relating to open innovation. If a relationship between HRM and open innovation activities could be revealed, it would add substantial value to our knowledge regarding open innovation management. This thesis seeks to address this gap in the literature.

Since empirical evidence about HRM in open innovation is scarce, the current study is of exploratory nature, seeking to gain insights and to generate ideas regarding HR practices in an open innovation context. The aim is to build a theory based on cases, a method described by Eisenhardt (1989). Instead of testing a theory and generalizing it to a population, which is a common approach in empirical research, the goal is to build a theory. I investigated six case studies, including the perspectives of chief executive officers (CEO), HR managers, and experts from Belgium, the Netherlands, and the United Kingdom regarding HR practices in both small and large companies that actively pursue open innovation. The diversity of cases allows a rich insight into the topic under investigation, bringing together various perspectives from different countries, industries, and firm sizes. Data were mainly collected through semi-structured, in-depth interviews.

Based on the insights from the cases, the paper seeks to address the following research question:

"How do HR practices strengthen open innovation activities of an organization?"

Specifically, the relation between HR practices and the employees' willingness to embrace open innovation is of interest. By giving insights and generating ideas regarding the research question, this thesis contributes to the literature on both open innovation management and HRM, and seeks to stimulate further research regarding the HR side in open innovation. It further attempts to give a guideline for HR managers by identifying associated problems that need to be tackled when organizing for open innovation.

The paper is structured as follows. First, respective literature is reviewed in chapter 2. In chapter 3 the research methodology is described. Subsequently, the results of the case studies are described and compared in chapter 4. Chapter 5 concludes with the discussion of the findings, implications for managers, limitations of the study, and recommendations for future research.

2 Research background

This chapter aims at reviewing literature regarding innovation, open innovation, and HR practices. It therefore draws on innovation management as well as on HRM literature. The review is structured according to an inverted pyramid approach. It starts with a broad perspective on innovation aiming at defining what it is. Consequently, the concept of open innovation is reviewed. Finally, more specific studies regarding HRM within (open) innovation are dealt with. The literature review shall demonstrate the importance of the research question in theory and for organizations and lead to a theoretical framework guiding the study.

2.1 Open innovation

Our economy today is not possible to imagine without innovation. In his book, Baumol (2002) points out that "… virtually all of the economic growth that has occurred since the eighteenth century is ultimately attributable to innovation" (p. 13). Likewise, Tidd and Bessant (2009) state that "… the key to creating – and sustaining – competitive advantage is likely to lie with those organizations which continually innovate" (p. 10). Especially in a time in which the environment is constantly changing, in which customers become more informed and more demanding, and in which technological advances create new opportunities, firms need to be capable to respond through innovation (Tidd & Bessant, 2009). A good example of what innovation is – and what it not is – is that of Thomas Edison's invention of the light bulb. He recognized that the invention itself was worth nothing without being able to putting it into practical use. Thus, his team designed lamp stands, switches, and wiring. Edison realized that innovation is about coming up with good ideas *and* making these ideas work technically and commercially (Tidd & Bessant, 2009). This understanding of innovation can be seen in various definitions, as cited by Tidd and Bessant (2009, p. 16):

- "Innovation is the successful exploitation of new ideas" – Innovation Unit (2004) UK Department of Trade and Industry.
- "Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced" – Peter Drucker (1985) Innovation and Entrepreneurship, Harper & Row, New York.

- "An innovative business is one which lives and breathes 'outside the box'. It is not just good ideas, it is a combination of good ideas, motivated staff and an instinctive understanding of what your customer wants" – Richard Branson (1998) DTI Innovation Lecture.

The authors themselves adopt these definitions by having the view that innovation fundamentally is about entrepreneurship, about the skill to spot opportunities, and to create new ways to exploit them (Tidd & Bessant, 2009). In the current study innovation is thus seen as the practice of spotting opportunities and creating ways to exploit these technically and commercially, with a resulting new product or service. The core of an organization's innovation capabilities has traditionally been thought of to be the own research and development (R&D) department, whereas nowadays many organizations open up their innovation activities to take advantage of an abundant knowledge landscape outside the organization's boundaries (Chesbrough, 2003a). This more open approach towards innovation has been coined open innovation.

Open innovation can be defined as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively" (Chesbrough, 2006b, p. 1). With the beginning of the 21st century, Chesbrough (2003a) observed that organizations have been shifting their innovation activities from a closed to an open innovation model. He attributes this shift to four major reasons: An increased mobility of talented and skilled people, a growing presence of venture capital, new outside options for ideas that are being stored but not developed within an organization, and an increasing capability of external suppliers. In addition to that, economic pressures such as rising costs of technology development and shorter product life cycles force companies to open up their R&D activities (Chesbrough, 2007). The differentiation between the two models is visualized in Figure 2.1. In a closed innovation model there are clear firm boundaries and all activities in the innovation process from idea generation to product launch are conducted within the firm (Chesbrough, 2003a). Organizations following a closed approach to innovation believe that to be successful, innovation requires control, you have to hire 'the best and brightest', and you have to do it yourself (Chesbrough, 2003b). On the contrary, in an open innovation model firm boundaries are more porous (Chesbrough, 2003a). It is based on the realization that "not all of the smart people work for us so we must find and tap in-

to the knowledge and expertise of bright individuals outside our company" (Chesbrough, 2003b, p. 38). In doing so, new external options arise for technologies and ideas that previously would have been sitting on the shelf[1] waiting to be developed internally. Start-ups, spin-outs, and external licensing of technology constitute these external options. By opening the organization up, not only do ideas leave the company, but external ideas also come into the company: In times of the internet, science and knowledge are widely distributed and easily accessible. In this sense, companies can explore new knowledge and get insights into future technology opportunities by investing corporate venture capital for funding and observing start-up activities, by sponsoring and accessing university research, and by collaborating with other organizations (Chesbrough, 2003a). The integration of external knowledge into the own innovation process is hereby called outside-in process, whereas the externalization of own ideas and technologies is called inside-out process (Gassmann & Enkel, 2004). Gassmann and Enkel (2004) go further by introducing the coupled process, which is a combination of the two processes.

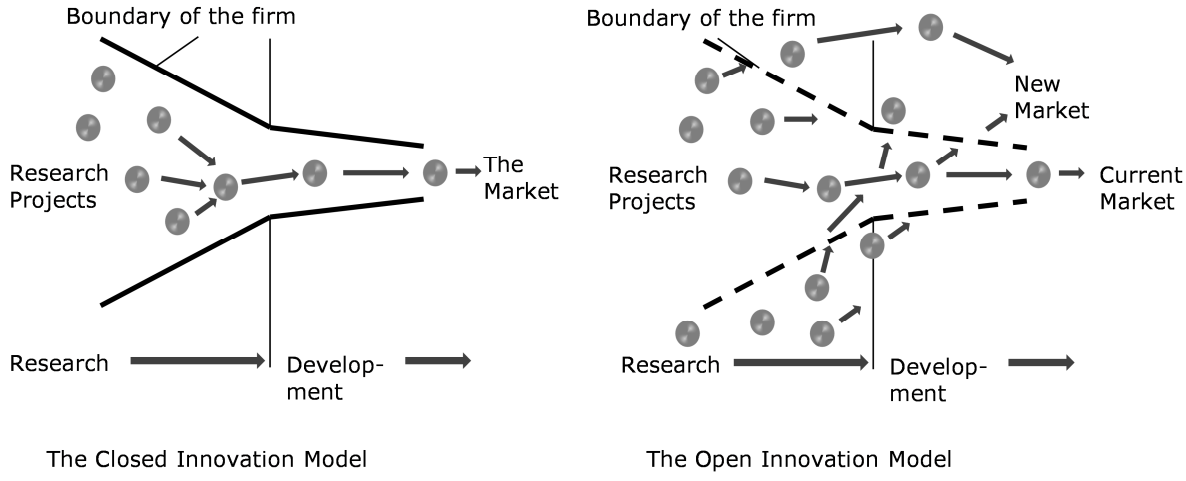

Figure 2.1: Closed and open innovation model. Adapted from 'The era of open innovation' (Chesbrough, 2003b, pp. 36-37).

[1] The expression on the shelf explains the phenomenon of projects that are no longer being pursued by the research department, nor being used by the business unit; see Chesbrough, Vanhaverbeke, and West (2006).

Some investigators may see open innovation as a buzzword (Manceau, Moatti, Fabbri, Kaltenbach, & Bagger-Hansen, 2011) and others may criticize the novelty and relevance of it. Trott and Hartmann's 2009 paper on the novelty of open innovation discusses the so called principles of closed innovation (Chesbrough, 2003a) from an industry perspective and come to the conclusion that the dichotomy between closed and open innovation is exaggerated or even false as many companies in the past have already been following open innovation principles in their R&D processes. They argue that open innovation may be old wine in new bottles. Similarly, Dahlander and Gann (2010) found that the idea of openness needs to be placed on a continuum, covering varying degrees of openness. Based on an extensive literature review, they likewise come to the conclusion that innovation has to some extent always been open. Huizingh (2011) has attempted to explain the reasons behind the attractiveness of Chesbrough's early 2000 works for both practitioners and academicians. He suggests that Chesbrough might not have come up with a novel concept, but that he assigned one single term to a collection of developments, making open innovation an umbrella for already existing activities, and combining two processes, the inside-out and outside-in process, which previously had been seen as separate ones. The author goes on to say that the timing was great and that Chesbrough's work offers opportunities for extension, which further fosters proliferation. Strikingly, none of the authors deny the importance of openness for innovation. Huizingh (2011) argues that even though the term open innovation may fade away in the next decade, this will be the result of a full integration of the concept in innovation management. He predicts that "open innovation is on its way to become innovation" (Huizingh, 2011, p. 8).

Being able to effectively organize and manage open innovation is therefore going to be crucial for many organizations, both large and small companies (van de Vrande, de Jong, Vanhaverbeke, & de Rochemont, 2009) operating in both 'low-technology' and 'high-technology' industries (Chesbrough & Crowther, 2006). So far, little progress has been made regarding the internal organization for open innovation in academic research. Based on a recent study on realizing the value of open innovation, Golightly et al. (2012) identified building blocks that need to be considered when organizing for open innovation: Open innovation strategy, organization, leadership, culture, tools/processes, metrics, ecosystem interaction, skills, and business models/intellectual property. They conclude that when developing open innovation, organizations need to "… focus first on getting individuals to realise the *potential*

value of open innovation, so that they can then put in place practices that realise its *actual* value" (Golightly et al., 2012, p. 62). While it is important to get the technical part right, the quality of people's thinking as they engage in this process will really make it work as they change their thinking, for example, from 'not-invented-here' to 'proudly-found-elsewhere' (Huston & Sakkab, 2007). Employees need to become open for external ideas and recognize the benefits from open innovation. Especially in large organizations, this mindset change presents one of the biggest challenges when organizing for open innovation (Mortara, Napp, Slacik, & Minshall, 2009). Because HR practices are seen as the primary means by which organizations can influence and shape the attributes and behaviors of employees in terms of a particular strategy (Wright & McMahan, 1992; Chen & Huang, 2009), it can be a valuable tool for strengthening open innovation activities.

2.2 Human resource practices

According to Brockbank (1999), HR practices can be divided into four broad categories, being operational or strategic in nature. On the operational level, these include operationally reactive HR activities, which focus on implementing HR basics, and operationally proactive HR activities, which seek to improve these HR basics. From a strategic perspective, these include strategically reactive HR activities, which support the implementation of a given business strategy by giving tactical support and by establishing a strategically focused culture, and strategically proactive HR activities, which focus on creating future strategic alternatives. Seeing open innovation as (part of) a given business strategy, the focus of this thesis is on strategic HR practices. Strategic HRM (SHRM) is defined as "the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals" (Wright & McMahan, 1992, p. 298). The link between the firm strategy, HR practices, employees' attributes and behaviors, and firm-level outcomes is visualized in Figure 2.2.

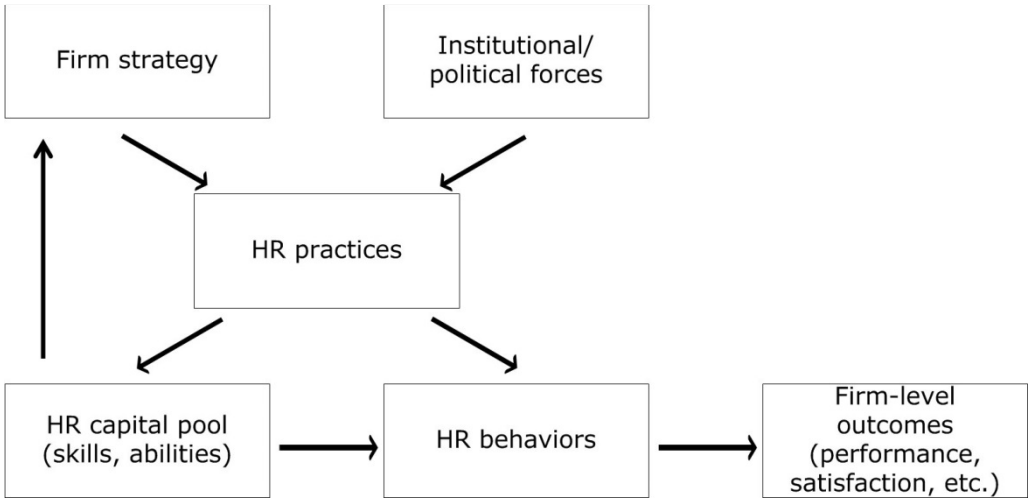

Figure 2.2: A conceptual model of theoretical frameworks for studying strategic human resource management. Adapted from 'Theoretical perspectives for strategic human resource management' (Wright & McMahan, 1992, p. 299).

HR practices can thus be described as tools that are used to manage the skills, abilities, and behaviors of employees, whereby the skills and abilities affect the behaviors of employees, which in turn have a direct effect on firm-level outcomes (Wright & McMahan, 1992).

Their role has not been empirically investigated in open innovation settings, yet. However, scholars have identified the effect of strategic and innovative HR practices on innovation performance and on knowledge sharing. As these are elements that are essential for open innovation, it serves as a guideline for establishing a theoretical framework relating HR practices to open innovation. Further, practical examples shed light on the relevance of specific HR topics for open innovation.

2.3 Towards a theoretical framework relating HR practices to open innovation

Several scholars have attempted to investigate the relationship between the adoption of HR practices and their influence on innovation performance (Ceylan, 2013; Chen & Huang, 2009) and knowledge sharing (Cabrera & Cabrera, 2005; Collins & Smith, 2006). Ceylan (2013) explored the relationship between a commitment-based HR system, which is a bundle of commitment-oriented HR practices, and product innovation activities. The items in the commitment-based HR system include selection, incentives, and training and development. The findings show that a commitment-based HR system has a positive effect on process, organizational and

marketing innovation activities, which in turn relate positively to product innovation activities. In investigating the effects of strategic HR practices on knowledge management capacity, Chen and Huang (2009) include staffing, training, participation, performance appraisal, and compensation. They found a positive effect on knowledge management capacity, which in turn relates positively to innovation performance. Cabrera and Cabrera (2005) attempted to identify specific HR practices that facilitate and encourage knowledge sharing. They did so along the following seven categories: Work design, staffing, training and development, performance appraisal, compensation and rewards, culture, and technology. Examples include the creation of cross-functional teams, hiring of people for who they are, not what they can do, making knowledge-sharing criteria critical for one's career success, and creating a caring and fair culture. Collins and Smith (2006) investigated the link between HR practices, knowledge exchange and combination, and firm performance. They demonstrate that HR practices affect the organizational social climate of trust, cooperation, and shared codes and languages, which in turn facilitates knowledge exchange. In Cabrera, Collins, and Salgado's 2006 study on determinants of individual engagement in knowledge sharing, the authors found that besides system-related variables, organizational and psychological variables predict the engagement level. For the latter, self-efficacy and openness to experience were the strongest predictors for engagement level. Among the organizational variables, perceived support from top management and co-workers significantly predicted engagement level, while rewards had a moderate direct effect on knowledge sharing. The authors go on by discussing that these findings may have implications for HR practices such as screening, training, and rewarding employees. In this sense, they suggest that an organization that seeks to foster knowledge sharing may screen candidates for having a high cognitive aptitude, being intrinsically motivated, and open to experience.

The reviewed studies reveal that there is a positive relationship between HR practices and innovative performance. Further, the organizational climate was, among other things, demonstrated to be a mediator between HR practices and employees' behaviors in terms of knowledge sharing and innovative performance. Likewise, in the open innovation literature, Wallin and von Krogh (2010) found a cooperative and positive organizational climate with shared values, norms, and attitudes supportive when organizing for open innovation.

For establishing a framework relating HR practices to open innovation, the conceptual model for studying SHRM is thus expanded by the *organizational climate*[2], illustrating a link between HR practices and HR behaviors, as depicted in Figure 2.3.

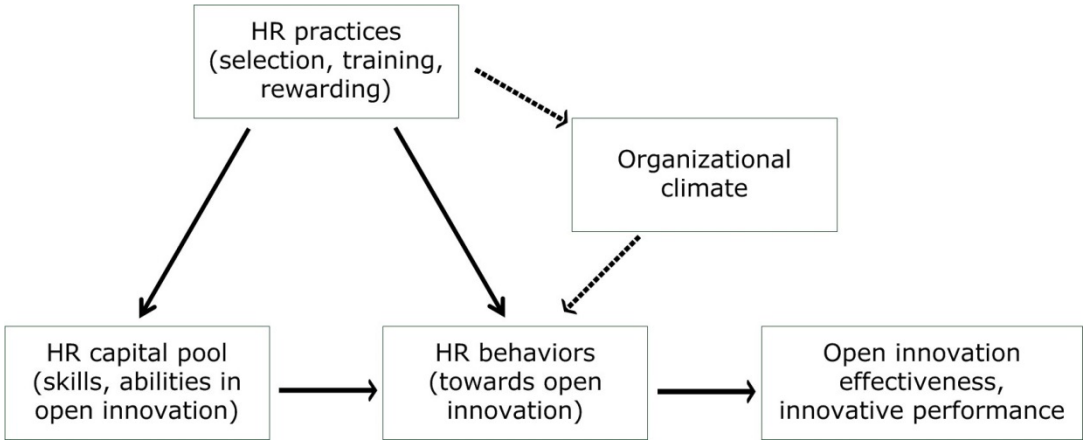

Figure 2.3: Towards a framework relating strategic HR practices to open innovation. Own illustration adapted from 'Theoretical perspectives for strategic human resource management' (Wright & McMahan, 1992, p. 299).

The specific *HR practices* differ across companies and studies, but they generally include selection, compensation, and training and development practices (Collins & Smith, 2006). From practical examples it can be derived that these three HR practices are relevant in open innovation, too. Regarding selection, one of the main principles of open innovation in contrast to closed innovation is the realization that not all the smart people work for one's company (Chesbrough, 2003a). Vanhaverbeke, in an interview with Starckx (2011), describes that within the process of open innovation, the traditional HR department needs to become a 'scouting division', not only looking for and hiring the best internal people, but going one step

[2] It has been shown that organizational contexts, namely organizational structure and organizational climate, have a great impact on the work environment and employees' behaviors. Hereby, an organizational climate is intangible and describes the creation of a supportive and innovative atmosphere through common practices, shared beliefs, and value systems, and through creating a work environment that is challenging, stimulating, creative, and risk-taking (innovative climate), and sociable, cohesive, relationships-oriented, and collaborative (supportive climate), see Chen, Huang, and Hsiao (2010). In this study it is thus defined as the organization's intangible practices to stimulate open innovation.

further by identifying the best people outside the company and cooperating with them. Kelley (2012) describes the process of attracting and managing talent outside the company as an 'external talent strategy', whereby organizations move from a talent ownership mindset to a talent attraction mindset. A similar theory is that of the 'long tail of expertise' explained by Bingham and Spradlin (2011). They describe that besides hiring experts with the right skills to solve an immediate problem, HR managers should also find ways of engaging experts from the outside who can work for the company without being employed by it, and tapping into 'the long tail', consisting of all smart people outside the company who can jointly solve any kind of problem that might arise in the future (Bingham & Spradlin, 2011). There is a link between the selection and training of people, as required attributes can either be found on the outside, or be trained in the inside. If people need the right attributes to flourish in open innovation, then these could probably be learned. However, among psychologists, openness is seen as a personality trait (Digman, 1990). More important than possessing the right attributes may thus be having the right personality, which is generally thought of as more difficult to train. Rewarding practices may be challenging in open innovation. Several managers have stated in interviews that is it essential to recognize openness to external ideas formally and informally, and to include it in evaluation and reward structures (e.g., Thoen, 2009; Byrum, 2012). As highlighted in the introductory quotation, ultimately people need to be moved when knowledge shall be moved (Chesbrough, 2013). This can influence rewarding practices as, for example, the pension scheme is given up when leaving a large company for a newly founded one. Therefore, I am going to include the three HR practices selection, training, and rewarding in my study.

HR skills and abilities, the next element in the model, are seen as one of the main issues that companies have to tackle when implementing open innovation, as the knowledge of the company and the right blend of skills of individuals can act as an open innovation enabler, while the lack of appropriate skills can act as an obstacle to open innovation (Mortara et al., 2009). With the implementation of open innovation, the traditional scientists needs to take a new role, integrating scientific knowledge, managerial expertise, and communication and coordination skills (Petroni, Venturini, & Verbano, 2012). A case study of Philips supports that researchers spend less time in laboratories and more time with business aspects of technology, including negotiating with partners and searching for external ideas (Hacievliyagil & Auger, 2010). Insights from a report on the pharmaceutical indus-

try, one of the most advanced industries regarding open innovation, underline that today, skills in developing and managing partnerships are most important for people in the R&D department (PricewaterhouseCoopers, 2013). Many managers in open innovation-driven companies stress the importance of soft skills like passion and optimism (e.g., Martino & Bartolone, 2011). Du Chatenier et al. (2010) identified a list of competencies needed in order to manage the collaboration and innovation process, to create knowledge collaboratively, and to overcome challenges associated with open innovation. They found that the three most important competencies that individuals within the team need to possess are to combine, to show social astuteness, and to be socially competent.

The desired *employee behavior* in open innovation is the openness of individuals, which as a group demonstrate the openness of the organization. As mentioned earlier on, employees need to be open for external ideas, recognize the benefits from open innovation, and behave accordingly.

The last element in the model, *firm-level outcomes*, in this study is innovative performance based on the effectiveness of open innovation. While HR practices are assumed to have an effect on the effectiveness of open innovation, they only explain part of open innovation success and many more variables have an effect on the outcome, which cannot and shall not be captured in the scope of this thesis. The focus thus lies on the individual level.

While applied examples reveal the relevance of the topic, the question remains as to how HR practices strengthen open innovation activities of an organization. The established model shall guide the study. Of particular interest is the influence of HR practices on the willingness of employees to embrace open innovation. To address this gap in the literature and to generate insights into the topic, the method theory-building based on case study research is applied.

3 Methodology

The research question is crucial for organizations that are involved in open innovation, but existing research does not offer an answer to it. Therefore, the goal of this paper is to build a new theory based on empirical evidence from cases. Thus, case study research is used. A case study can be defined as an in-depth investigation into a contemporary phenomenon within its real-life context (Yin, 2009). Eisenhardt and Graebner (2007) describe the concept as the usage of one or more cases to create testable and generalizable theoretical constructs, propositions and/or mid-range theory based on data. However, it is important to emphasize that the goal is to generalize towards theories, which is called analytical generalization, and not to generalize to populations, the concept of statistical generalization (Yin, 2009). Although case study research was for a long time not recognized as a distinct research strategy due to for example the lack of rigor of researchers (Yin, 2009), papers that build theories from cases are increasingly popular and the relevance can be seen in the large number of influential studies that are based on it (Eisenhardt & Graebner, 2007). It is crucial, however, that the research is done in a systematic way, so that validity and reliability are given (Yin, 2009) and that overly complexity and lack of simplicity are avoided (Eisenhardt, 1989).

In contrast to methods such as surveys, experiments, or histories, case study research is appropriate if the research question addressed the 'how' and 'why', the event cannot be controlled, and a contemporary issue is investigated (Yin, 2009). In line with this, Perry (1998) believes that the method is beneficial for postgraduate students researching complex, contemporary topics about which little academic research papers have been published. Eisenhardt (1989) describes the concept of building theories based on cases as an approach that is especially appropriate in new topic areas or to provide freshness regarding an already researched topic, leading to a resulting theory that is novel, testable, and empirically valid. The current study attempts to explore how HR practices strengthen open innovation activities, which is a contemporary and new topic. Although one may argue that open innovation literature does not constitute a new field of research as it has its roots in several well-established concepts and theories (Vanhaverbeke & Roijakkers, 2012), the term is new to organizations. Further, the relationship between HRM and open innovation has not been investigated, yet. Dahlander and Gann (2010) demonstrate that the majority of papers published on open innovation

in the last decade rely on case studies. The complexity of the concept and the associated varying interpretations relating to openness (Dahlander & Gann, 2010) further indicate the usefulness of case studies. Thus, given the exploratory nature regarding the research question and the lack of existing theories, doing case study research with the goal to build a theory is an appropriate and justifiable research method.

Based on Eisenhardt (1989), the process of building theories from case study research can be visualized using eight steps, whereby a constant iteration backward and forward between steps is involved. Figure 3.1 displays this roadmap. Early in the process, cases need to be selected. As the purpose of the study is to build a theory and not to test it, theoretical sampling, also referred to as purposeful sampling (Perry, 1998), is appropriate, meaning that cases are selected not randomly, but because of their particular suitability for the purpose of the research (Eisenhardt & Graebner, 2007). As stated previously, the goal of the study is not to generalize to a population. Thus, cases do not need to be representative of a population (Eisenhardt & Graebner, 2007). When doing case study research, single-case as well as multiple-case designs exist. Further, one individual case can be the unit of analysis itself, or there can be several units of analysis within one case (Yin, 2009). Reasons for choosing a single case lie in the uniqueness of that case and include critical, extreme, typical, revelatory, or longitudinal cases (Yin, 2009). On the contrary, reasons for choosing multiple cases do not depend on the uniqueness of an individual case, but on the fact that similar and/or contrasting outcomes are aimed at (Yin, 2009). In general, single-case designs are vulnerable and only allow an in-depth within-case analysis, whereas multiple-case designs provide the possibility of demonstrating replications and/or contrasts across cases, which can lead to more powerful analytical conclusions (Yin, 2009). For this reason, a multiple-case design with HRM in open innovation as the unit of analysis was chosen. Sub-units of analysis were not used to reduce complexity. In theory, there is no ideal number of cases. Eisenhardt (1989) suggests a number of cases between four and ten, as with less than four cases it might be difficult to generate theories, whereas with more than ten cases it might be difficult to handle the complexity and amount of data. Other researchers have supported this range (Perry, 1998). For the purpose of this paper and for time and financial reasons, an amount of six cases was chosen. Given the goal of the study, generating ideas and giving insight into the broader role of HR practices in open innovation, I chose cases from different countries and indus-

tries. Further, both perspectives on small and large companies, for which innovation is a priority and which actively pursue open innovation activities, were included. In that way, diversity and insight out of various perspectives are given. The final case compilation consists of three managers in small companies, one manager in a large company and two experts regarding both large and small companies (see Appendix A).

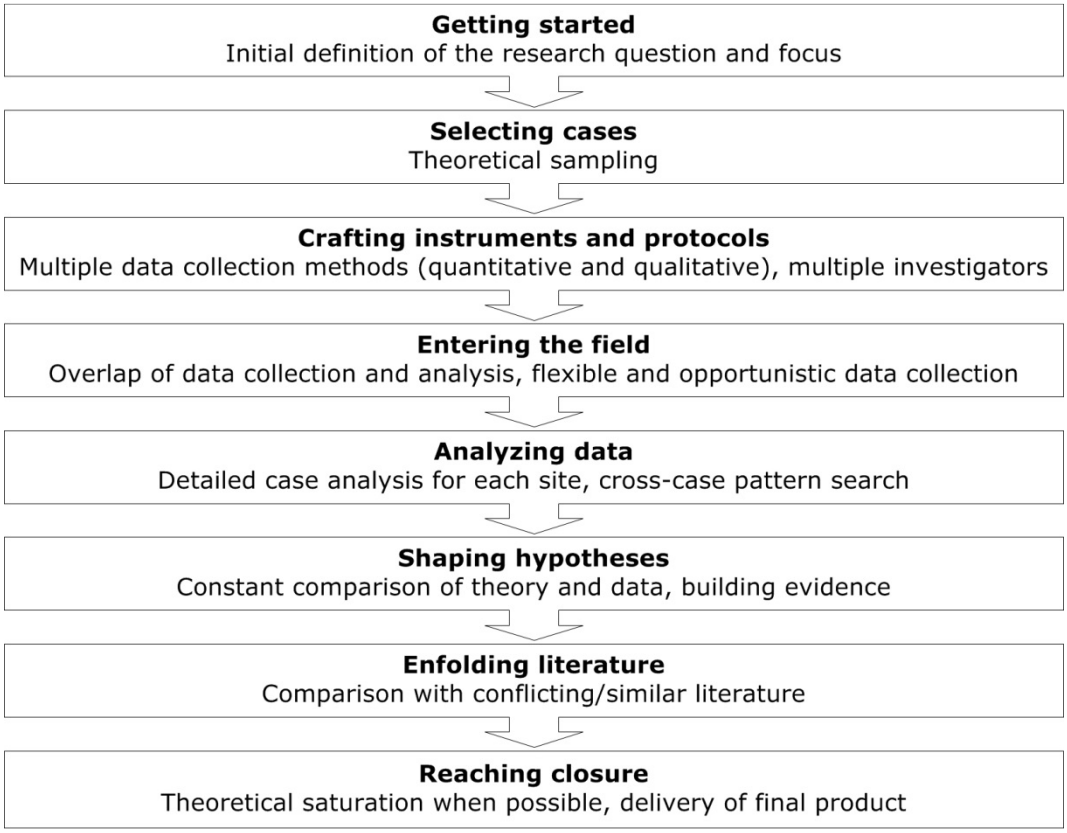

Figure 3.1: Process of building a theory from case study research. Adapted from 'Building theories from case study research' (Eisenhardt, 1989, p. 533).

Regarding the data collection method, several principles were applied that enhance the quality of the research. First of all, it is advisable to use multiple sources of evidence, which leads to a stronger substantiation regarding the resulting theory (Eisenhardt, 1989) and increases construct validity through the process of data triangulation (Yin, 2009). These can include documentation, archival records, interviews, direct observations, participant observation, and physical artifacts (Yin,

2009). For the purpose of this paper, I conducted semi-structured, in-depth interviews and used available documentation, such as companies' websites and brochures, if it helped explain the phenomenon. Besides the usage of multiple sources of evidence, multiple investigators were used to enhance both creativity and the confidence in the findings through the convergence of different observations (Eisenhardt, 1989). When applicable, the visits of the sites were therefore made in teams of two, including myself and a fellow master student who was familiar with the topic and the research method. For two case studies interviews were conducted via Skype. Further, a case study database was created, which gives increases the reliability of the study (Yin, 2009). The transcripts of the interviews (see Appendix B) and the field notes taken at the sites constitute this database. Additionally, a case study protocol (see Appendix C) was created prior to data collection including the overview of the study, field procedures, case study questions, and the guide for the case study report (Yin, 2009). Thus, the protocol points out the detailed operational procedures for the investigation. Thereby, reliability of the study is further enhanced. The protocol also served as guidance throughout the study and ensured a focused approached on the issues being studied. Table 3.1 gives an overview on the tactics that were used. Internal validity, which is a further test that is commonly used in empirical social research, is not applicable for exploratory studies (Yin, 2009). According to Yin (2009), it is advisable to conduct a pilot case study prior to data collection to gain more insight into the field of study and to refine the data collection plan. Here, the first case study served to gain more insight into the field of study and with every case added data collection procedures were refined, partly depending on the results from previous cases.

For the analysis, first every case study was reviewed individually by analyzing the full transcripts of the interviews and field notes taken, after which findings were compared across cases, looking for patterns and contrasts. Based on the results, testable propositions were created. By enfolding literature and theories from relating fields, a stronger substantiation was created.

Tests	Measurement	Case study tactic	Phase of research in which tactic occurs
Construct validity	Are correct operational measures and objective judgments used?	• Using multiple sources of evidence • Using multiple investigators • Having the case study report reviewed (by second investigator)	• Data collection • Composition
External validity	Are a study's findings generalizable beyond the immediate case study?	• Using replication logic in multiple-case studies	• Research design
Reliability	Can somebody repeat the study and arrive at the same findings?	• Using a case study protocol • Developing a case study database (constituting interview transcripts and field notes)	• Data collection

Table 3.1: Case study tactics for three design tests. Adapted from 'Case Study Research Design and Methods' (Yin, 2009, p. 41).

4 Results

In the following section the results of the investigation are delineated. The findings are first described for each case study individually. Consequently, data from the cases are compared based on the topics selection, training, rewarding, and culture[3].

4.1 Within-case analysis

Case 1: People's thinking in open innovation

Harry Berry is founder of the company Brightstar Innovations, which was established as the Corporate Incubator of British Telecoms in 2000, and Partner at New Venture Partners, a global venture capital firm dedicated to corporate technology spin-outs. He has been working for a long time in building new products and services both inside a large company and external to it as a venture capitalist. He sees the creation of new products and services as a three legged stool consisting of technology, business processes, and people. If one of the three legs is not functioning, then the stool as a whole cannot function either.

In his eyes, the people side of innovation and open innovation in particular is too many times neglected. He sees the lack of openness in people and organizations as one of the main reasons why open innovation sometimes fails. The key to open innovation in his view is creativity, passion, social articulation and interaction, and team work. People need to be involved, brave, and believe in what they are doing to make it happen.

Harry Berry believes that these ingredients exist in many people but that they are buried. One of the main challenges that need to be overcome by a large organization is seen in the fact that these personal attributes need to be stimulated by the organization. He holds the view that people can be trained to be more open, however, often company restrictions and rules imposed by the finance department and HRM do not allow people to believe in their ideas, express their ideas, talk about their ideas to others, and build on their ideas.

> *"They [the finance and HR people] built in all the rules which were there obviously to make the company work, but equally*

[3] Culture and climate in this context are used equivalently.

> *what they didn't realize, it was killing passion, emotion, and creativity … they are almost the enemy of trying to be creative and open."*

What Harry Berry observed is that many fantastic ideas exist in companies but are never used, which leads to frustration among people who came up with them. Frustration and passion, however, are not very far apart, which is an indicator for the potential that exists in people and ideas if the company can be unlocked, allowing employees to be much more involved in thinking. According to him, it is all about people's thinking that has to be changed to succeed in open innovation. For people to change their thinking it is crucial that the top management is supporting the change.

Regarding large organizations he considers two things that can make it more innovative: One is taking some projects out of the corporation and letting the creativity and people with the ideas go into these places; in that way a company's processes and thinking can be overcome. One danger though is seen in the fact that these people might get rejected by the rest of the company. The second thing is that if people are tied down to their daily jobs and routines, no room is given for passion and creativity, so you need to give them time.

When creating a start-up, two stages can be identified, the ideation and the execution stage. Two different profiles of people are needed. In the ideation phase you need passion and creativity, while in the execution stage you need skills to bring the product to market. The people issue is described as follows.

> *"The trick is of course, can you bring the founder along, does the founder at this point recognize that he brought his child to a certain point, but he wants to see his child grow up and he is not in the position to do that … the best way of doing that is bringing in a CEO who can."*

There are ways of managing this by for example letting the founder keep his title so that he is recognized as the person who created that business.

Case 2: HR issues when doing spin-outs

Chris Winter is Partner at New Venture Partners, a global venture capital firm dedicated to corporate technology spin-outs. He holds the view that HR issues are critical when doing spin-outs. The three main challenges he describes address the reward scheme, finding the right management, and managing failure.

In contrast to the rather safe environment in a big corporation, start-ups are highly risky. When founded it is hard to predict an eventual success or failure. As a consequence, reward structures need to be adapted accordingly. Usually, the team that is being spun out receives a share in the new start-up company while in turn giving up the pension scheme in the large organization. This leads to the fact that most of the people who are willing to spin out are younger than 35 years as employees who have already worked in a large organization for many years value their pension too much as to give it up. There are also cultural differences that need to be taken into account. In European countries it is difficult to get the balance right between pension and option schemes because Europeans in contrast to Americans seem to not have a good feel for the value of options.

Further, the reward and risk scheme is harder to explain to people left behind than to people being spun out. This leads to tension and jealousy.

> *"The perception was … that anybody spinning out was going to make the company a success and become a millionaire, and that somehow we [the venture capitalists] had enriched these guys at the expense of anybody else."*

One solution would be to reward the ones left behind for an eventual success of the new company; this, however, might be difficult to justify within the mother company as the ones left behind still do their daily jobs and are not involved in the high risk of the newly founded company. Also, middle managers often do not see what is in for them because the best and brightest engineers and favorite projects are being taken away from them. Thus, incentives need to be aligned for people who are spun out, people who are left behind but had developed the technology, and people who manage the spin-out process.

The right management team can be found either inside or brought in from the outside. When doing spin-outs, usually the core of the team consists of engineering

people who understand technology, but not customer and business-related matters. This leads to two issues. When being spun out, the mindset of the internal team needs to change from being technology-focused to being customer-focused. Further, entrepreneurial skills either need to be trained or an outside management team has to be brought in. Regarding the latter, following problem is depicted.

> *"You, the engineer team, the spin-out team, you have got to be passionate about doing this [spinning out], you got to be able to go through barriers; so here you are, this is your baby, that you are fighting to take it outside, you are granted permission to take it outside, and the first thing that happens is senior management takes it away from you by bringing in outside managers."*

It is not uncommon for the engineers who are being spun out to initially propose themselves for senior management positions. Thus, bringing in outside managers, fitting them into the team, and dealing with the aspirations of the former engineering team who may have wanted the senior positions is difficult. As it might be difficult to build an entrepreneurial management team around a corporate spin-out, it is good to have somebody in the project team who is passionate, energetic, and able to lead the start-up for at least the first one or two years. The closeness of a team and mutual respect become important issues in the success of the management of the team.

The third HR issue described is failure management. Looking at the R&D funnel of any company, many ideas come in and only a few ones are selected to be further developed. Two issues are described based on that. You have to have good people with knowledge, intuition, and experience to filter the ideas in order to identify the most successful projects. In practice, however, the best people only come into play when the one idea that is projected to be successful had been filtered out. The second issue is concerned with the way 'no' is said.

> *"… The way we say no is infinitely more important than the way we say yes … We should appraise people for the number of ideas they put forward, not the number that succeeded, we should be able to give anybody who has given us an idea at least one good*

learning point to take away from that idea, that they can use to refine their next one."

A further point regarding failure management is the way people are managed when start-ups fail. An automatic return to the parent corporation can lead to a decrease in commitment.

Regarding training, Chris Winter has the view that you cannot train a whole spin-out, but you can train individuals. Engineers have to have the right attitude, background, and personality, they have to be able to go through barriers, work under extreme pressure, and be energetic; then business skills to become a CEO can be trained. When being trained, however, engineers should also get the possibility to practice what they have learned to see if they could succeed.

Between an HR department of a large corporation and a start-up some conflicts may arise. HR departments treat individuals as replaceable, while in start-ups everybody matters. Further, in large corporations fairness is important, while start-ups are highly unfair places as the balance of risk and reward is completely different. Having somebody trained to leave the company on the budget of the HR department might also be difficult to justify.

Case 3: HR practices in a large innovation-driven company

Lucienne van der Werff is Vice President of HR and Communications at the DSM Innovation Center which was established in 2006. The role of this center is aimed at improving the innovation climate within DSM and next to that, building various future business platforms to secure DSM's longer term innovative growth. It comprises two main streams, 'business creation' and 'innovation enabling'. In her eyes, one of the most essential roles of HRM within innovation is to stimulate and support a truly innovative culture and attitude, give employees the opportunity to learn and develop, whilst at the same time realizing business results.

If for example a start-up is acquired, the knowledge that comes into the company is good, but to create value people must also be willing to share the knowledge and to collaborate. In addition to that, a lot of attention must be paid to the soft side of HR, the integration of people, and the way of working.

> *"We acquired it [the start-up] and then it is part of the Innovation Center and the Innovation Center is part of the DSM Corporation. So for the employees it was a big change in the way of working, in the sense of who makes the decisions, etc. They were used to do it by themselves, by a small team, but after the change in control, more people and more levels are involved in this process."*

In (open) innovation, a different way of thinking and looking to the environment and the world is required; you need to be curious to find new opportunities, you need to be open, you need to listen, and you have to respect others and learn from each other. Lucienne van der Werff believes that people can be trained to be more open, but it starts very fundamentally: People are willing to be open and are willing to share. Next to that, the organization has to appreciate these behaviors.

Training alone, however, does not seem to be sufficient.

> *"We have to stimulate that [open innovation] also, and you can stimulate that by rewarding them in terms of remuneration and personal development, to give them budget to perform this, etc. So it's not only training … you have to facilitate it also as an organization."*

People should for example be stimulated to go to conferences, workshops, or universities to acquire new knowledge, to expand its own network, and to look for opportunities everywhere. Most people show willingness to do that, but it has to be organized. When people come back from a conference or a workshop, they have to share what they have learned with their colleagues. This can be done within the respective department or globally via innovation and/or science communities.

Being entrepreneurial is thought of as more difficult to be trained as it's an active and risky profile. Entrepreneurs also experience some difficulties fitting in the corporate culture. For DSM it is good to have a few to learn from them and to make use of their skills in for example the venturing department, but mostly you see them leaving after a while to set up their own business.

The venturing department is one for which a specific remuneration plan needs to be created to stimulate long term engagement. It can take six to eight years until you see an earning from an investment, and you want engagement from day one until that moment when you achieve business results. Thus, a way has to be found to keep people motivated to stay long. For attracting entrepreneurs a specific remuneration plan could also be beneficial.

Innovation is also stimulated in talent management programs. Sometimes it is difficult because some talents may find open innovation risky, but by establishing some tools the right mindset can be stimulated, like a business plan competition with other talents of the organization or a specific assignment.

One of the main challenges regarding people in (open) innovation is seen in finding an inclusive and diverse team.

> *"If you really want to make progress especially in open innovation, you need an inclusive and diverse team with different mindsets, different thoughts, different opinions and different backgrounds. And it's not only in terms of gender or nationality; it's also the way of thinking. It's a challenge to keep that working: To respect and appreciate different opinions and ways of working and to find diverse people."*

Most often, large organizations tend to look for the same profiles that fit to the company because it is easier to manage.

Another challenge lies in the question of how far you can go with knowledge sharing, in what stage, and also how to get the most out of other companies who might be more defensive in sharing (e.g. because of intellectual property). You have to feel that a bit but also take time to agree upon it with a partner before starting a project, especially if the partner is an entrepreneur who is enthusiastic about something and who wants to get started right away.

Changing teams in between different stages in the innovation process also needs proper attention. New opportunities have to be found for people who have to let a project go as different skills are required in a next stage. New opportunities also need to be found for people who led a project that is being stopped.

"We have learned a lot from a project or venture, only it brings not what we thought or anticipated, but we learned also that we have to stop it now. It's not easy for the project manager to accept that, because they think in terms of a failure, not being successful. So it's a challenge to keep it positive and to find new opportunities for the team members."

Innovation is also seen as a way of believing, a belief that you really think you can learn from others by sharing and collaborating.

Case 4: An entrepreneurial perspective on leading people

Tom Coen founded the company Induct in 2009. With nowadays four employees it offers ideas and expertise mainly in the agriculture industry. The two main activities are designing and building test and measurement solutions and developing mechatronic products. Open innovation is in the DNA of the company whereby the main advantages are seen in cross-fertilization and risk-sharing both technologically and commercially. In this context, the company is collaborating and putting together complementary teams with customers and suppliers, seeing itself as a full service partner in technological innovation.

Being an entrepreneur, Tom Coen is leading the small team in an authentic style with faith, enthusiasm, passion, and a clear vision. He compares the leadership style with snowboarding.

"In order to be very good in it [open innovation] you have to have faith and really go for it, because if you are going too slowly then you will fail."

In his perspective, some aspects of being an entrepreneur can be trained, others not. Dealing with uncertainty as an example is seen as something that cannot be learned.

When recruiting people, he is looking for experts who are good in what they are doing. Related to open innovation he has to have employees who can collaborate with others in non-hierarchical contexts, so both with colleagues but also with people outside the company that they do not have a direct relationship to.

In his view, being open can be trained to some extent.

> *"If your question is "Can somebody be trained to function in an open innovation context?" the answer is yes, but if the question is "Can somebody be trained to create an open innovation context?", then the answer is no. So you can create followers but you can't create leaders."*

In the collaboration process, employees sometimes have to be taught to make sure that their own work is done before they start something else, which may imply that they have to be able to tell the customer that they cannot help with his problem. Saying 'no' to a customer might sometimes be difficult for an engineer.

Apart from training, communication is important. As the manager you need to communicate to your employees about how much they can tell. The biggest enemy of open innovation is seen in people who talk about everything with anyone. So, employees should only talk about projects after explicitly deciding to do so.

Before a meeting with a customer it needs to be clear what will be done, how it is done, and with which mindset negotiations should be entered.

> *"You can walk in and say the only thing that counts here in purchase is money … or you can say what's important is that we get a good price … [but] on the other hand we also want support."*

To prepare the employees for that, there are no procedures written down, but it is the everyday case that counts and about giving examples. When a new employee comes in, he learns from the experiences of colleagues based on these cases.

When you do open innovation and prepare your people for it, it is also crucial that you get everything right. This implies not only having to prepare people, but also to create a structure that allows openness. As a small company, open innovation is inspired by a person who tells people where to go, whereas in a large company the structure might implicitly tell people what to do and how to do it.

> *"Open innovation also means that part of your job is to make somebody else shine … if you have a company where remunera-*

tion is still based on how many ideas you brought to the table, then that won't work."

In a large organization a remuneration plan might be more relevant because someone higher in the hierarchy who is not directly involved in the project decides over it. In a small company, however, having a clear rewarding scheme is not seen as too relevant because the team leader decides over rewards and it is clear for everyone that open innovation is the focus.

When collaborating with large companies, another issue that arises regarding people management is that large organizations tend to internalize not only knowledge, but also employees. This is seen as a big problem that is sometimes hard to explain to the customer. As soon as employees work on a project on the customers site, they start thinking like other people around them instead of coming up with all kinds of new ideas; then it is no longer open innovation.

Case 5: HR practices in an innovative family business

Devan Chemicals was founded in 1977 by two families in Belgium. During the last 20 years the company evolved a lot. While in the beginning it was buying and reselling chemicals for the textile industry, in 1991 the managers decided that they wanted to grow and started developing own products. In 2000, Patrice Vandendaele, who has been leading the company in the second generation, found an antimicrobial not yet used in textiles, which the company decided to launch. To acquire the knowledge about this molecule, the company collaborated with institutes and from then on progressively moved towards an open innovation strategy.

Nowadays the company is known as a highly innovative company in the industry, with 10% of its turnover being invested in R&D. The company strongly believes that they cannot grow without collaborating with universities and other small enterprises. In being open and exchanging knowledge, the company believes that they can innovate quicker and cheaper. Besides the main location in Belgium, the company owns two further plants in the United Kingdom and in Portugal, which fosters a network of diverse people, different ways of thinking, and different cultures. The company managers hold the view that this network facilitates open innovation.

As the chief of the company, Patrice Vandendaele sees human resource management as his most important and most challenging task. Regarding open innovation he is looking for people with not only a technical background, but for people with an open mind, who can share ideas, recognize their limits, and accept that they are not the only intelligent people. In job interviews it is therefore evaluated if candidates are curious and if they like to look around and to ask questions. In addition to that, communication skills are assessed as it is important that the employees feel comfortable talking to others inside and outside the own organization. Negotiation skills, however, are not seen as necessary as this is not what the company expects and needs from a clever, young engineer.

The company manager believes that the profiles of young people in terms of communication and working in a team are very good nowadays, but that they have been educated to not share too much knowledge and to be very cautious about what expertise to give away. The management of the company believes that this open mind cannot be created by formal training.

> *"If you make training at a university or an evening school about that [open innovation], yes, I think if it is not in the culture of the company, it will be not much difference afterwards."*

Thus, a strategically focused culture has to be created which has to be shown to every employee. Everybody in the organization should feel and see the support and trust coming from the top management. Examples need to be given and it needs to be shown that there is a certain risk, but that the potential benefits are of much greater value.

Besides the skills and motivation of a candidate, the key issue being addressed in a job interview is if this person will fit into the group. For this reason, a candidate's fit is assessed my multiple people. New employees should not have too much work in the beginning, but enough time to get familiar with the culture, the ways of working, and the people.

Regarding rewarding practices, Patrice Vandendaele recognized that during the past years people were becoming less demanding in terms of money, but more demanding in terms of flexibility and freedom. By giving curious people the freedom to go to conferences or to publish a paper, open innovation can further be fostered. Thus,

there are financial rewards, time-related rewards, and intellectual rewards. Regarding failure management, the company does not talk of failures but of experiences that can be learned from. If somebody has a problem he is encouraged to communicate it, so that jointly a solution can be found.

Because of the size of the company the approach to innovation is focused. If ideas are not in line with the core business they are licensed out or given to the incubation center so that somebody else can make use of them. The management does not see HR issues evolving from that as people within the organization are rather happy about seeing their ideas not being stored away. A risk of people leaving the company together with their ideas is also negligible as a gap is seen between researchers who are risk-averse on the one side and entrepreneurs who are risk-taking on the other side. In addition to that, the coherence and trust within the company and with other small enterprises is assumed to be very strong. This does not apply for multinational companies, with which the management of Devan Chemicals as a small enterprise avoids collaborating with.

> *"The multinational is like a big black hole where you put information and then you don't know where it goes. This information could go from me in Belgium to somewhere in the US … and then you don't get feedback and you have the feeling that they are abusing us."*

Conflicts arise because you don't get feedback and lose control over where in the world your information goes to, because of differences in short-term and long-term thinking, and because people in large organizations change positions frequently for their own interest regardless of the partnership with the small company. Small enterprises, in contrast, share the same philosophy and know that only together they can grow much further.

Case 6: HR practices in a small, fast-growing company

Ridley Bikes is a small but fast-growing company founded 1990 specialized in developing and producing race bikes and mountain bikes. In 2011, when Jochen Aerts, the founder and CEO of the company, recognized that the structure and organization of the company was not following the growth of it, a wider management team was built. Marc Hufkens, deputy CEO and HR manager, decided that some

changes regarding HRM had to be made which up until then had just been a payroll administration. He realized though that it is the people who can make the difference between success and failure, not the product.

> *"You may have the best products in the world, in the hands of the wrong people, nothing will happen."*

From July 2011 on a complete HR department was built focusing on the three items commitment, integrity and entrepreneurship. Everybody in the organization, from cleaning personnel to top management, was expected to make use of these items.

In 2012, a survey was conducted in Flanders about socially innovative companies and Ridley Bikes was among the best three in Flanders. Without being aware of it, the company was doing very well in social innovation which describes smarter ways of working, a dynamic way of management, a flexible organization, and co-creation & open innovation. Regarding HRM the company recognized that it could from then on steer more towards these points by identifying and looking for soft skills in the recruitment and selection process. These skills were described as being more proactive than average, being able to seeing and noticing changes external to the company, having the ability to change, functioning in a team, being able to coordinate and relate one thing to another, and having an open mind.

Regarding product innovation the company had always had an open mind to external ideas, collaborating with professional riders since 2002 and working together with universities. After the survey in 2012, the company realized that they could further enhance open innovation by creating a group of five small companies for sharing experiences and working together in R&D. For the companies this collaboration was seen as beneficial for innovation as the time to market could then be much shorter and as credibility on the world market could be enhanced. A shorter time to market also protected the company from being imitated by companies in countries with cheaper manufacturing costs.

Besides, the companies saw advantages for HRM because as a small company it is difficult to attract the best talent in the world. Jointly, however, resources can be pulled together with which ambitious and highly skilled graduates can be attracted. In doing so, the HR manager has the view that talents can grow, develop, and ac-

quire and exchange knowledge much faster than they could do in an individual small enterprise.

Today, the company is, with 88 employees, worldwide technology market leader for race bikes. One of the key success factors lies in the way they manage people. Everybody in the organization should see mistakes not as failure but as a learning experience. Managers give enough trust and freedom to the people to try things out, to take risks, and to know that they can make mistakes. By giving people space to try things out they can grow which is seen as one of the best ways to keep the best people in the company. On the other side, however, the management is also of the view that you need to let people go.

> *"Some managers in HR they say … my job is only good when there is nobody who wants to go away. I say that's not correct, that's really not correct … When people are developing much faster than the company, you have to let them go."*

The same is true if the company is developing in a different direction than its people. The fact that people know that they can leave the company if they cannot apply their talent within it is seen as a further point of attraction.

As a manager, it is important to realize that you do not have to be smarter than your best engineer and that you do not have to understand everything, but to understand the risk which is involved in projects. Trusting in people and paying attention to their talents is important so that they have the energy they need. Regarding rewards, team-based and non-monetary rewards that integrate for example an employee's family are valued highly.

4.2 Cross-case analysis

Some findings are replicated across multiple cases. As the current study is exploratory with the goal to generate ideas and give insights out of different perspectives, naturally other findings are more specific for one particular case. Contrasting findings, however, were not found. I compared the findings based on the four dimensions selection, training, rewarding, and culture. Table 4.1 gives an overview on the findings.

		Case 1 – Harry (Brightstar)	Case 2 – Chris (NVP)	Case 3 – Lucienne (DSM)	Case 4 - Tom (Induct)	Case 5 – Patrice (Devan)	Case 6 – Marc (Ridley)
Selection	Profiles/ traits	Creativity, bravery, passion, involvement, open mind, functioning in a team, articulation, social interaction	Involvement, passion, energy, respect, trust	Always looking for opportunities, listening, respecting, sharing, technical expertise	Being able to collaborate in non-hierarchical contexts, technical expertise	Curiosity and communication skills → these people are expected to be open minded and able to recognize their limits	Being able to change, functioning in a team, having an open mind, being able to coordinate and relate one thing to another
	Recruiting process	n/a	n/a	n/a	Based on feeling, usage of multiple interviewers to quantify feeling, technical tests	Multiple interviewers, gut feeling, key question: will person fit	Recruiting by HR manager himself
Training	Openness	It's in people but it's buried; it's all about thinking → you need to change people's thinking	n/a	Willingness to share and collaborate, openness must also be stimulated	Open innovation context/mindset must already exist → you can train people to be followers	No formal training, but by establishing a culture → without culture, training doesn't help	By giving people freedom and trust in them they feel comfortable with being open
	Entrepreneurship	When people believe in what they are doing → passion and creativity is created	Right personality, attitude, drive and desire to believe that skills are necessary	It's difficult in a large corporation; it's an active word and a risky profile; in DSM they call it intrapreneur.	Some aspects can be trained, but things like dealing with uncertainty not	n/a	n/a

Rewarding	How and why is it important	Rewarding is important but also recognition which means a rise in esteem; pensions are given up when you leave a large company	When spinning out incentives need to be aligned, perceived unfairness, pension is given up for stocks	Different remuneration plans are needed for entre/ intrapreneurs; to engage, to stimulate result orientation, and to commit	Rewarding is important, but as a small company having a clear system is not so relevant as the focus is clear for everyone	Financial rewards become less important, time-related rewards and intellectual rewards become more important	Not only seen as money but also as free time; most rewards are team-based
Culture	How and why is it important	Open innovation is about culture and the thinking of people; support and belief has to be there from the top when thinking of people shall be changed, people need to talk to other people about their ideas	If you bring entrepreneurs in a large organization, culture will kill them; you should not create a safety net; you need to change people's thinking from technology to customer	Lots of attention has to be paid to soft issues, you need to stimulate openness, failure needs to be seen positively, you can learn from it	Open innovation is inspired by person, team leader much more important than systems	Crucial, what you demand from people you should allow and stimulate them to do	Crucial, you need to give people freedom, trust, space to grow, support
	Critical HR issues	Creativity, passion, articulation and social interaction, teamwork and shared vision	Recruiting the right management team, reward scheme, failure management	Inclusive and diverse team, changing a 'winning team' in time	Getting the context right	Trust, culture	Trust, culture

Table 4.1: Cross-case analysis. Own illustration.

Relating to the selection of people, different traits can be identified. Being curious, open minded, able to function in a team and to interact are the traits most frequently mentioned. Apart from that, creative, passionate, energetic, brave, and respectful people seem to be desirable in open innovation. Finding a diverse team with different thoughts, different backgrounds, different opinions and different mindsets was in one case stated as one of the biggest challenges in open innovation. The recruitment was in one case done by one manager himself, while in two other cases involving multiple persons was believed to be essential.

Regarding the question if openness can be trained, the majority of the managers stated that it can be trained, but that it starts fundamentally and that people need to be willing to be open. The finding that it is not only the employees who must be willing to share knowledge and be open to others' ideas, but also the organization that must facilitate and stimulate this behavior was replicated across multiple cases. Especially in small companies, creating a culture of trust is seen as more important for openness in contrast to having a formal training. Entrepreneurial skills seem to be more difficult to train as it involves dealing with uncertainty and risk.

In terms of rewarding practices, several managers stated that non-monetary rewards and being recognized are more relevant than monetary rewards. In large companies it is seen as crucial especially when doing spin-outs. One case specifically addressed this issue by saying that incentives of different people need to be aligned and that when being spun out people give up pensions in exchange for shares in the newly founded company. This sometimes leads to a perceived unfairness between people who are left behind and people who are spun out. In another case this issue was addressed by saying that entrepreneurs being employed by a large organization seek to be rewarded specifically. Apart from them, rewarding practices can be used to stimulate employees to embrace open innovation.

All in all, creating a strategically focused culture is seen as crucial. In particular, creating a climate in which people feel trust and support from the top, in which people respect and listen to each other and in which openness and knowledge sharing is facilitated and stimulated is seen as supportive for open innovation. Within the last row of Table 4.1, critical HR issues for each case are highlighted, whereby trust and culture are replicated across several cases.

5 Discussion and Conclusion

This investigation is designed to give insights and generate ideas regarding the role of HRM in open innovation. Specifically, the question on how HR practices can strengthen open innovation activities is of interest. The study presents a first attempt to empirically investigate the HR side in open innovation. Thus, in this section I discuss the findings with the purpose of highlighting and specifying research questions in form of theoretical propositions. A stronger substantiation of the findings is created by enfolding literature and theories from relating fields. Further, implications for managers are outlined. To conclude, limitations and recommendations for future research are described.

5.1 Theoretical contribution

Linking the findings to the theory

It can be deduced that a person's thinking and positive attitude towards open innovation in terms of being open, sharing, and talking to others about ideas is central. One manager, for example, listed communication skills as something that he is looking for in candidates, however, not in terms of being good in communicating, but in terms of how he behaves around others and if he likes to communicate with people inside and outside the own organization. Another manager stated that open innovation requires a different way of thinking and behaving in terms of how to learn from each other. Further, engineers need to change their thinking from being technology-focused to business-focused as a technology might present an opportunity outside of the organization. 'Hard skills' were scarcely stated to be critical for strengthening open innovation activities. In contrast, it was emphasized that being open often exists in many employees, but that it is buried and that people were educated not giving away too much knowledge. Thus, it is about peoples' thinking and attitude towards open innovation that will make it work. Much more relevant than possessing the right skills is thus an employee's willingness to embrace open innovation. It can be deduced that HR practices can strengthen open innovation activities by stimulating the behavior of employees. Linking this finding to the theory on HRM illustrated in Figure 2.3, it can be deduced that the influence of HR practices on HR behaviors is much more important than the influence on HR skills and abilities.

Further, it can be concluded that the strength of open innovation activities depends on the attitude of employees towards openness, which presents my first and most general proposition.

> *Proposition 1: Open innovation activities are most likely to be strong when the employees have a positive attitude towards open innovation.*

In addition to being open as a person, the results of this study demonstrate that the organization must also allow, stimulate, and facilitate people to be open. Based on the case studies' findings it can be derived that trust and respecting others is important for sharing knowledge. Establishing a culture of trust is not only important in terms of knowledge sharing, but also important in terms of failure management. Several managers stated that failure as a learning experience is an integral part in an open innovation culture. It is an issue of trust in people so that they know that they can try new things out and make mistakes. Respect was stated to be important in terms of recognizing ones limits, realizing that there are other intelligent people, and listening to others. In my opinion, trust and respect are things that are more difficult to find in one's personality, so the organization has to create an environment in which these norms and attitudes are fostered. Allowing and facilitating openness implies giving people time for exploring opportunities, talking about ideas, and going to conferences. Stimulating people to be open implies leading by example and actively influencing openness by rewarding people for it. However, the case studies' findings reveal that the HR function, which can utilize HR practices to strengthen open innovation activities, is sometimes also the one that seeks to keep control, which can lead to tension in an open innovation environment. Sometimes a company's culture created by HR is killing passion, emotion and creativity. People cannot believe in, express, and build on their ideas if they are tied down to a job and if rules and restrictions prevent them from doing so. So, the company has to be unlocked for employees to be open. One manager stated explicitly that the organization must facilitate and stimulate openness. In two other cases the managers held the view that training will not make a difference if it is not in the culture. Despite these different perspectives the notion stays the same that for employees to behave in a way that fosters open innovation, the organization must stimulate it. This can be done by creating a strategically focused climate of trust and respect that motivates employees to share knowledge and to talk about their ideas to others. Creating an organizational climate can thus been interpreted as the

openness of an organization. Linking this finding to the established model as depicted in Figure 2.3, it can be deduced that HR practices can influence an employee's behavior both directly and indirectly by establishing an organizational climate that allows, stimulates, and facilitates people to be open, which leads to my second proposition.

> *Proposition 2: Employees are most likely to embrace open innovation when the organizational climate is stimulating and facilitating openness.*

Taking the model and the case studies' findings into account, the question remains as to whether both the organizational climate stimulating openness and the individual's personality towards openness must exist for strengthening open innovation activities, whether one is influencing the other, or whether one is mediating the relationship between HR practices and the effectiveness of open innovation.

Training practices

The cross-case analysis delineates that there exists conformity in the notion that being open starts fundamentally, that people have to have the right attitude and personality, and that people need to be willing to become more open. Further, in small companies, the results reveal that training somebody for open innovation will not make a difference if it is not in the culture of the company. Thus, selecting people on the basis of one's personality, stimulating openness through rewarding practices, and creating a strategically focused culture is much more relevant than training people to be open.

Another issue is giving training on business skills to engineers for spinning out of a company. Again, the case studies' findings reveal that these skills can be trained, but that people need to believe in what they are doing, have to have the right personality, and believe that the skills are necessary. It remains difficult to train somebody being an entrepreneur as it is a risky profile and as it involves dealing with uncertainty. Being tolerant of uncertainty is a personality trait that can be screened for, as will be discussed later on. However, being able to deal with the uncertainty is even more difficult. One manager also pointed to the issue that training somebody to leave the company may be difficult to justify by HR managers. Thus, training practices for entrepreneurial skills may also be negligible.

Selection practices

The cross-case analysis shows that next to being open minded, being curious and able to interact are among the traits that are desirable in open innovation. Costa and McGrae (2000) suggest that instruments measuring personality may be used in personnel selection. Thus, when looking for people who are likely to be willing to embrace open innovation, HR managers may seek to identify people with the help of instruments that measure personality traits. Among personality psychologists and researchers there is an agreement that there are five broad factors of personality, each being highly complex and comprising many variables (Digman, 1990). Digman in his 1990 paper about the emergence of these five dimensions delineates several authors' interpretations revealing that the factors can be interpreted as extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Traits that are associated with openness to experience coincide most with the kind of people that are desired in open innovation from the managers' perspectives. These traits include being imaginative, cultured, curious, intelligent, and broad-minded (Barrick & Mount, 1991). Individuals who are open to experience are also perceived as being tolerant of uncertainty (McCrae, 1990) and capable of coping with change (Judge, Thoresen, Pucik, & Welbourne, 1999). As the case studies' findings show, a high level of risk and uncertainty is involved in open innovation, especially when start-ups or spin-outs are created. In one case study the manager explicitly mentioned the adaptability to change as the most important trait. This further indicates that openness to experience is a good predictor for an employee's willingness to embrace open innovation. This finding can also be linked to Cabrera, Collins, and Salgado's 2006 study on determinants of individual engagement in knowledge sharing. They found out that openness to experience is among the strongest predictors for engagement level in knowledge sharing. Likewise, it can be deduced from the case studies' findings that the willingness to share knowledge is essential in open innovation.

Traits that are associated with extraversion also coincide with the findings from the case studies in terms of interacting with others and functioning in a team. These traits include being sociable, active and talkative (Barrick & Mount, 1991). Being socially competent is also among the three most important competencies for individuals in open innovation teams according to a study by du Chatenier et al. (2010). However, two case studies also pointed to the fact that when implementing

open innovation, being social and talkative can also be an enemy as one cannot share everything at any stage in the innovation process. Thus, this has to be done in a guided and coordinated way.

Further traits relating to open innovation that can be derived from the case studies are being brave and passionate. These traits were mentioned for people pursuing one's own ideas through for example spinning out of a large organization. Herzog (2011) also found that in contrast to closed innovation units, being proactive and results-oriented are traits that are more relevant in open innovation units. These traits belong to the dimension of conscientiousness, also referred to as will to achieve (Digman, 1990).

Thus, it can be inferred that being open to experience, extraverted, and conscientious are good indicators for the inclination of employees to embrace open innovation, which is insightful for recruiting and selection practices. This leads to my second proposition.

> *Proposition 3: The higher employees score on openness to experience, extraversion, and conscientiousness, the more likely they are to embrace open innovation.*

Surprisingly, creativity as an important attribute in open innovation was only mentioned in one case study. On the one hand, this may be because creativity has always been important in innovation, also for closed innovation (Chesbrough, 2003a). On the other hand, Herzog (2011) suggests that being creative is more relevant in open innovation compared to closed innovation. In literature on psychology, research has shown that individuals who are judged as being creative score high on traits in the dimension of openness (McCrae, 1987). Interestingly, the author found that creative people similarly score high on traits in the dimensions of extraversion and conscientiousness, suggesting that creative people are more energetic, sociable, and achievement-oriented. Creativity in McCrae's 1987 study was measured, among others, by divergent thinking tests[4]. According to the author, divergent thinking abilities are associated with all forms of openness, including

[4] Divergent thinking tests assess a person's ability to think in many different directions. It can be assessed by asking for as many appropriate answers as possible and is seen as a measurement of creativity, see McCrae (1987).

intellectual curiosity and openness to ideas. As these traits coincide with the case studies' findings, it can be concluded that creativity is likewise highly desirable for an employee's inclination to embrace open innovation, which can further be used when selecting people for open innovation.

> *Proposition 4: The higher employees score on creativity, the more likely they are to embrace open innovation.*

While it can be assumed that openness to experience is unique for open innovation, extraversion, conscientiousness, and creativity may equally be relevant in closed innovation.

Rewarding practices

Getting the rewarding scheme right seems to be especially relevant when doing spin-outs. Here, incentives need to be aligned for engineers who are being spun out, for engineers who are left behind, middle managers who let go of engineers, and people who manage the spin-out process. This is linked with risk-taking behaviors. People who are spun out take the risk that is involved with a newly founded company, give up the pension scheme in the large corporation, and receive shares which reward them if they turn the business into a success. This scheme, however, is not easy to explain to people who are left behind, which leads to tension and jealousy. Middle managers may equally not see what is in for them as they let go of the best engineers. The question remains as to how to solve these issues. The pension scheme can be linked to the introductory quotation. If knowledge shall be moved, ultimately people need to be moved, and the pension scheme can stay in the way of that if employees have already been working for one company for a longer time.

In general, rewarding practices were found to be beneficial for stimulating an employee's behavior towards openness. For example, by giving curious people the freedom to go to conferences or to publish a paper, open innovation can be fostered. Several managers stated that non-monetary rewards, such as time-related or intellectual rewards, are more demanded than monetary rewards. However, the question remains as of whether this is unique for open innovation or the current trend. One manager pointed to the fact that if rewards are based on how many ideas you bring to the table, then this will not be beneficial for open innovation. On the

contrary, rewarding employees for the success in other companies can lead to a more collaborative and achievement-oriented behavior. Although the question remains as to how the relation looks like, it can be deduced that rewarding practices stimulate openness. This can also be linked to the established framework as it implies that the organization has to stimulate openness.

> *Proposition 5: Employees are most likely to embrace open innovation when rewarding practices stimulate openness.*

To conclude, the study reveals how selection practices strengthen open innovation activities by assessing one's personality. It also reveals that rewarding practices stimulate open innovation activities, but not how the relation looks like. Training practices were found to be negligible in terms of strengthening open innovation activities. It further reveals that by creating an organizational climate of trust and respect, employees are more likely to embrace open innovation. Thus, an employee's behavior in terms of his inclination to embrace open innovation is on the one hand determined by his personality and attitude towards open innovation, which can be screened for when hiring candidates, and on the other hand stimulated by the organization by rewarding practices and by creating an organizational climate of trust and respect.

5.2 Implications for managers

Importantly, the study reveals HR obstacles that need to be tackled when organizing for open innovation. From the case studies' findings it can be inferred that there are challenges around the following ten topics: Attitude, diversity, coordination, stimulation, integration, transition, forward-thinking, failure management, rewarding scheme, and retention. For each topic, the respective challenge is described in Table 5.1. It reveals that there are many challenges, which can serve as a guideline for organizations that seek to organize for open innovation from an HR perspective.

HR topic	Challenge
Attitude	Finding employees who have a positive attitude towards open innovation and are thus likely to embrace open innovation
Diversity	Finding an inclusive and diverse team not only in terms of gender and nationality, but in terms of different mindsets, thoughts, backgrounds, and opinions, while at the same time making sure that individuals fit into the organization; if diverse people come into an organization, sufficient attention must be paid on how to integrate them
Coordination	Open innovation exists when people talk about ideas to others, which sometimes has to be taught to people, but on the other hand it also has to be coordinated which knowledge leaves the organization and how knowledge that comes in is disseminated throughout the organization
Stimulation	Stimulating employees to embrace open innovation by unlocking the company, rewarding employees in terms of remuneration and personal development, and creating an organizational climate that fosters open innovation behaviors
Integration	As an HR manager being integrated in open innovation activities and emphasizing that to succeed, it needs technology, business processes, *and* people; as an open innovation manager paying attention to HRM and to respective HR practices
Transition	Managing the transition of teams along the innovation process by on the one hand recognizing people for results that they have achieved and on the other hand changing a 'winning team' as new skills are required at a next stage; managing the transition of spin-outs and associated obstacles
Forward-thinking	Supporting and stimulating open innovation while at the same time realizing business results; if for example spin-outs are part of a company's strategy, then engineers should be trained for business skills and need to be able to practice these; this implies giving them time for it outside of their daily jobs
Failure management	Making sure that 'failure' is seen as a positive learning exercise; ensuring that employees know that mistakes can be

	made; managing that a project/venture that is being stopped is not seen as a failure by giving employees new opportunities
Rewarding scheme	In the spin-out process, aligning incentives for people who are spun out, people who are left behind, middle managers, and people who manage the spin-out process; dealing with the fact that pensions are given up when leaving a large organization
Retention	Realizing that sometimes it is better to let employees go, especially if they are developing faster than the company or if the company is developing in a different direction

Table 5.1: HR challenges that need to be tackled when organizing for open innovation. Own illustration.

Will we thus observe a change in the traditional HR function?

On the one hand, Reid (forthcoming) holds the view that the HR function can, instead of running to keep up, even be leading the change towards an open culture. On the other hand, the HR department may sometimes be seen as one that finds it difficult to be open (Mortara et al., 2009). Instead of being creative and innovative, the HR department may in practice be safe and sober (Jacobs, 2013). In an article with the heading 'Why does HR too often kill innovation', LeNir and Creelman (2012) explain that the HR department seeks to have control over peoples' activities and any associated budget. Dr. Sullivan, an internationally known HR thought-leader, describes that almost every current HR function operates under 20th century principles of past practices, efficiency, risk avoidance, legal compliance, and hunch-based people management decisions (Sullivan, 2013). This does not encourage a risk-taking behavior, experimentation, or a positive attitude towards open innovation. I thus believe that for HR practices to be utilized effectively, HR professionals need to change their mindsets in order to see the benefits from open innovation and to overcome associated challenges depicted in Table 5.1.

5.3 Limitations and recommendations for future research

The focus of this study was the relation between HR practices and the employees' willingness to embrace open innovation. No doubt, other variables and relationships could be explored regarding the relation between HR practices and open innovation activities. As pointed out, the mobility of skilled employees has been increasing and as ideas and technologies come in and move out of an organization, so do employees. This has implications for large companies in terms of pension schemes and for small companies whose employees learn and acquire new knowledge faster by moving across companies. The role of HR practices regarding the mobility of employees thus presents a further area for future research.

Additionally, the research was limited to the investigation of HR practices. However, other variables such as leadership skills, top management support, and talent management programs can influence an employee's behavior towards open innovation and can thus be explored in future studies.

Moreover, the study has focused on shedding light on the topic from a broad perspective and is thus limited to a broad overview of HR issues in open innovation. Additional research is necessary for investigating specific relationships in greater detail. For example, it was found that many HR issues arise when spinning out companies. These addressed the reward scheme, finding the right management, and managing failure. It would be of interest to investigate the effective management of spin-out processes from an HR perspective in more detail. A further relationship that could be examined is the one between small and large companies.

A next limitation of this study is that it is based on a small amount of cases that are rather different from each other in terms of countries, industries, and firm sizes. Thus, it is difficult to replicate findings. It would be of interest to investigate similar companies to help clarify the extent to which the findings can be replicated.

The study is also limited based on the subjective analysis of qualitative data. Further research based on a larger sample and including quantitative data can help verifying the results.

A further limitation is the extent to which data could be triangulated. Despite efforts of trying to use multiple sources of evidence, which is a major advantage of doing case study research compared to other methods, hardly any documentation was

available for various reasons such as lack of formal procedures. So, the findings are solely deduced from the in-depth interviews.

This paper presents an initial attempt to investigate the relation between HR practices and open innovation. So, its purpose is to generate ideas and stimulate further research into the role of HRM in open innovation. I encourage investigators to systematically test the established propositions and to study the areas for which questions remained. It would be useful to test the propositions and research questions by comparing companies who failed regarding implementing open innovation with those that were successful. Further, closed innovation and open innovation units could be contrasted to shed light on the uniqueness for open innovation.

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Appendix

A. Overview of cases investigated

	Company	Country	Perspective from	Perspective on
Case 1	Brightstar Innovations	United Kingdom	Venture capitalist	Spin-outs, corporate incubator
Case 2	New Venture Partners	United Kingdom	Venture capitalist	Spin-outs
Case 3	DSM	The Nether-lands	HR manager	HR practices in a large organization
Case 4	Induct	Belgium	CEO/entrepreneur	HR practices in a small company
Case 5	Devan Chemicals	Belgium	Company owner	HR practices in a small company
Case 6	Ridley Bikes	Belgium	Deputy CEO & HR	HR practices in a small company

Appendix

B. Full transcripts of the interviews

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 21th of April, 2013, 10.00 am – 11.00 am, Interview on Skype

Interviewer: Svenja Paul

Interviewee: Harry Berry, Founder of Brightstar and Partner at New Venture Partners

Topic: HR issues is spin-outs

Transcript

(Introduction)

S: Can we start maybe by you giving me a brief background about yourself, what you are doing right now in terms of open innovation or maybe spin-outs specifically?

H: Ok, I think you have spoken to my partner Chris, haven't you?

S: Right, yes.

H: Yes, so some of that will be similar. I start with my background. I worked for many years in a large corporate, British Telecom. And I would guess in that experience I ended up as Director and always in the space of building new products and new services, so never in R&D and never in sales, but anything between that is where I operated, so product management, business processes, change and I even for a year was a what they called, they created several master coaches and I did a year training on the behavioral thinking and that's all about getting people to change their thinking. So that was sort of experience and I often put that together and think of it as a three legged stool and talk about these three pieces being essential if you like in successful projects and one of the legs is technology, the other one is business process and the third one of course is people and the way they think. When you are designing any new product, service, programs, projects then you need to look at those three things holistically. And if you do new projects, you would like them to succeed, and if you don't, because it's a three legged stool, it's not going to work, so let me give you some example of that. If you create a new product, you create a new technology that is something different, you don't understand the way it's applied in the business or in the market place, then maybe the existing processes and the existing way people work will stop that technology from being used or used efficiently. It might also be that you know you get the process right and you get the technology right but people reject it because of something social or something else, so let me give you an example. We created a, in BT we had 20.000 engineers who basically would fix anything on network, on stones, on anything you get the name, and those engineers usually be in vans and go out to customers and they used to be in a central place and then get in their van, they were given their jobs on the way they went, they used to do around 3 ½ jobs a day. The idea was that if we could give them a computer each, then their jobs could be given online, so they could do a job and then just log on, clear the job, save it and get the next job, this would be much more efficient, they could take that van home and log on every day from home and see where their next job is and so on and so on. So it's a much more dramatic and more efficient way of organizing the workforce, it meant that we didn't need all these regional managers and all these managers we had to allocate work, but all automatically. The problem was that they got to work, the software and the process was fine, but the engineers rejected it because they prefer a (…) now they got a job, the finished it and they got another one, so you can see how by developing a technology and a process and completely ignoring the fact that this has a major social impact on the workforce, it gives a major problem and it took five to six years to implement this program because of the problems, serious costs of the business. What we did by the way in the end

was rather than the engineers seeing as a …, what we did is we created several videos and we talked about engineers rather than being the bathroom boys, it were front-line people, and actually the customers really liked engineers and they them more than they did for example a sales force, so actually they were fantastic offices for the company and you could even actually in the end get them to sell, so if someone came along and wanted something different, let's say a printer is part of the system, there is no reason why the engineer couldn't point out the printers in the portfolio and they can order online, so we actually, what we did was, we created this video which showed engineers stepping up in value and being much more front-line in the company and potentially making more money because in this equation you know when it comes to people then reward is a big issue but not just reward, recognition and you know if you're not quite clear about the difference in that, reward is usually something were you are giving more money, but recognition is where your esteem rises, especially by your people because you did something well and it's not necessarily about money. Both of these things are good to change the image, and this is what actually happened today and I think you know rather than people resist a change you have to think about what's in it for them, how can it be a better thing, how can they embrace it rather than resist it, so that was being an example of that three legged stool.

Later on, so think about this as a big part of my life where I ran things like the launch processes of BT, so very big, all of BTs products and services, I had to make sure that people could make an order, could pay, if they had problems with it, to give them information to fix it, so I worked on some very big processes and very big you know things like that in the business.

A significant change I guess was in 1999, around 2000, I was off to go to an industrial park which is BTs research or R&D center and on any day there are about 5.000 engineers, and typically these people would have PhDs, one or two degrees in subjects, so very bright people and what happened there in the west coast in 2000 there were people spinning out start-ups, and some guy or engineer got rich very quickly. And in BT, in the industrial park, it was still like a university, people would rather write a white paper on a subject than you know create a business. They had an idea and didn't see that creating that is part of a business for changing the world like Bill Gates and these guys. So I was asked could I do something about that, and why they asked me, because I had never been in research establishment, I spent all my days in business, you know commercial, selling products, all that. And what they said was that they felt that it wasn't just a process thing cause they couldn't make it work, and they believed it was cultural and it has to do with the people, and of course I had all this training around process, people, I should have mentioned that the year that I spent being in the US, and that was all about training on how people think, why would they do something, and that all was that problem I described you earlier about the workforce. So I was asked could I go and do something, my initial reaction was well you know how do you know you got value there, and the guys who ran that place and he was in charge of 15.000 people to give you an idea of the scale, and he believed that we could create a lot more value for BT if these people could unlock their mind and were more open, so my question was well how do we know the value is there, so what I did was, I asked him to give me two weeks and I would go into industrial and I would go and see some of these people with their ideas and I would come back and said weather I thought that there was something there that was valuable and we could do something, and immediately he asked me, you know they would set up a large office, and these people could come along, and I said no, no, no; I don't want to do that, I don't want to be seen as a senior manager, I would just go along and see them at their desk, because I want them to relax and I want to hear about their ideas and not immediately create a barrier between myself and these people. And so I spent two weeks just with a mobile phone and they gave me about seven or eight projects and the outcome of that was very interesting, I found these people with fantastic ideas and very frustrated because most of the research and stuff that they worked on for two to three years would never be used by BT and the nature of an R&D lab is that 90% actually never gets into a product or service and so they were quite frustrated that things they worked on were absolutely simple but not being used by the company, and of course that was creating frustration, but what I was pleased about when I saw the frustration was that told be about the emotion and frustration and passion are not very far apart. It's the same ingredients by why someone is

excited about what they do and some are frustrated and upset about what they are doing, it's quite a similar emotion. So that was good. And the ideas were fantastic. And to some of them I said well what do you think what this idea will require and one of them answered well I see them in an international body and I know that nobody else is doing this in the world, so it was quite interesting. So, to put a long story short, I went back to the CEO and said I think you are right, I think you got fantastic stuff going on, I think you got people, they are creative, passionate, but they are not allowed to express themselves, they can't do what they want to do, it's all channels of the company, and so he said well what do you suggest? I said well I think we could build on these ideas and create something, but we couldn't do it across the path and I think what we need is an incubator and we need to give some of these people a chance to move into the incubator and express themselves and their ideas and we will help build on their idea, we got the marketing, the product, knowledge, we've got people with all those skills, but it needs these people to give their ideas. So interestingly enough the CEO said to me, well what's stopping you, so I said there is nothing stopping me. When would you like to see it? And he said well the chairman is coming in 6 weeks, could you have it ready by then? I said yes, that's no problem. And I needed the permission to get into the building, kick some people out, create a room, and the next thing is very interesting because I then had two assistants and they were both female and that was all I had who would join me, and one was my pa and the other one was working with me before, and I explained to them the task and what we were going to do. And one of the things we did early on, we found some reports in the US and they interviewed about 50 CEOs in the US, and they asked them what makes a successful company and they divided it into three things that were virtually the same things than they said, one was certainly culture, the second was employee involvement and the third was management and endorsement. And when we looked at that it was pretty clear that if somebody has an idea and it was their idea and they were allowed to build their idea, they act in a completely different way than being told what to do. They embrace it psychologically, just like doing something in their own home or in their own office at home. At the endorsement was really about managers needing to be seen as coaches rather than instruction or advise, and they have to support and encourage the confidence, passion, help, but not seen as the guy who is asking what to do next, so completely different as opposed to culture of that sort of thing. So we modeled everything we did around that thinking and so let me give you a little story.

So I explained to my assistant that we need this incubator to be ready in 6 weeks and we had nothing, so we sat down and I said well what do you think it should look like? And they both looked at me to describe this incubator and so I asked them what do they think? And they said well it should have coaches, it shouldn't have desks and chairs, it should be informal, it should be very colorful, it should have a coffee area, it should have, and before we knew where we were, a whole flow of ideas came out of my two people, so the end of an hour session we had a pretty good picture on how it should look like, just an emotional picture, and I said ok go and do it. So they said what do you mean? I said go and do it. Get what the two of you just described. And so later one of my people came back and said Harry we can't do this, I said why not, so a couple of things: The coaches and the seats that we want will not allow to have those, BT colors are grey and blue, and we can't have red and green and yellow coaches. And I said ok, well and what's the next problem. They say oh by the way, it takes 16 weeks to arrive. I said ok, where can we get green, yellow and red coaches? She said Ikea has got them. I said well go and get them. She said what do you mean? She said well that's not allowed. Yes it is, so I am telling go and get the coaches. She said well how would I pay for them? I said use my BT corporate card, so she got my card, off she went, came back 5 minutes later. Harry she said, I think this is not allowed and I think you can lose your job, I said go and get the coaches. So what they did was hire a van, I didn't know this, and this was Tuesday in the week. And they came in on a Saturday morning, which was something people in BT didn't do without being paid, hired a van themselves and put the coaches in. And I tell you that story because they were involved, they were passionate, it was their idea and they made it happen. Now can you imagine in a large organization if people could think like that and the reason I told you some of this is because whenever.. and now I move on to open innovation, for me the main reason why open innovation fails is you cannot have open innovation which is generally thought of as companies

sharing ideas, companies coming together, you cannot have open innovation unless you have an open mind. And seldom do I read that open innovation is about that, and so it's a big part of why open innovation sometimes fails. Companies are too closed, they want to protect their assets, they are not allowed to talk about this, they don't think that these people have information they could learn, and so on and so on. So if you are doing something around this project, you know a very big piece of what you are doing should be around this subject of people. And why they are not open. So shall I stop there and shall I just finish the story quickly?

S: You can very well go on with the rest of the story.

H: So what follows was we got our incubator, it's needless to say, and I tell you one more story, you know four or five weeks later the chairman of BT he came in an helicopter, it was about 12 or 14 people of the board walking in an entourage, you can imagine, and it was almost a barrier, probably it was the board members why the people didn't open up to them, but nevertheless, they came onto site, they finally ended up, and here is the scary bit for most people, they were going to end up in a way called, oh by the way we called it Brightstar, because if you think of the creation of a new start-up, it generally formed from a whole piece of matter which exists and us reformed and I liked the idea that the 15.000 patents in BT we would reform into new ideas and do business out of it, so I though the idea of a new star fitted quite nicely. So back to the chairman, so he came on site and of course everybody got nervous because here was I with an incubator, I flaunted all the rules, the coaches weren't corporate, and so on and so on, and you can imagine the battle I had with the finance people, and the HR people, cause they built in all the rules which were there obviously to make the company work, but equally what they didn't realize it was killing passion, emotion and creativity, I will come back to that subject if you like because I have an idea around processes, so the chairman came in the room and they all shuffled in and of course we didn't have what was a standard room in BT, we had all these coaches, all the walls, interesting diagrams and quotes, and he said on the coach and said to me, and I thought we would talk about the incubator and why it would work and what was different, and I talked about these things, about employees being open, and I told him what we needed to do was unlock the company to allow employees to be much more involved in the thinking and certainty in ideas, and I actually said seldom do good ideas come from the bottom of business. And he laughed, but the whole board didn't, and then I went on to talk about money endorsement and I said, we have the confidence that we know what to do and you setting the environment to be able to do it. And the end of this, there was silence, It think you know it was a second but it felt like a year, and he said Harry, you are absolutely 100% right, and then all of the sudden all of the board members suddenly all laughed and the room was filled with noise and everybody was happy and from then on Brightstar was accepted and so on and so on. So that was the bravery, and I should have mentioned bravery as well because when you are doing these things and you believe them to be right, then you know people have to do them and believe that in the end they will end up in a good place. It's difficult sometimes in an organization, it's so stiff, but if you believe that people on the top really do want to change in organization and you know it's possible to do that but it has to come from the top, so that was the experience of that.

We then might come to you know (…) believed in what we did, in the first year we created four businesses spun out, we used venture capital, we wouldn't spin a company out unless the market accepted it and was prepared to invest in it, so it was a very hard process, and I made sure for people to get in the incubator, that 60% of the people who helped were non-BT, so there was the open innovation, decisions went in and out, it weren't the old BT rules and the old BT people and the venture capitalist was external, so that had to where we could companies used as much external people and advise and I had a continue battle with HR to use external people that they had to contracts and you can imagine, but that was the incubator.

It was going very, very well, we were gaining fame, people were asking about it, why did it work, and of course everybody came and everybody looked at the process and very few peo-

ple looked at the culture. And they went away and try to replicate it and guess what, it didn't work. So that was the logic of it.

In 2001, if I just finish the story, remember the crash, the whole thing coming down, money was tight up, and then of course it gave me a major problem and I basically hadn't got a plan B because I expected the market to be, we might not be able to do that if the market wasn't there, so things got bad, BT started to retract back to its core business, I was almost managing the portfolio of start-ups inside of the corporate, so to put the story short, I had of course myself now and we could have folded the start-ups back in and I could have gone and took my company job as Director again, and get the pension back, but by now I thought all these rules, so I drank the same wine that I tell if you came in the incubator and found it was a one-way street basically, and so I decided that I needed to carry on with what I was doing, I was passionate about it and I needed to find a way to go out with these companies, to cut the story short, so basically I managed quite some people to fund, buy some of the businesses and raise a firm themselves. In the end they came back to raise a fund for BT and I took some of these businesses out and it became New Venture Partners, and that's what we are today, we are a global venture capitalist, mainly most of my partners are in the US, at the west coast, I head up the European end and we made our model corporate spin-outs and we decided that all the frustration that we have seen with creating business inside a corporate which were job rules, which didn't allow you to take the right people on to the job, finance, if the company needed some cash, if the company balance sheet was tight and the corporate wouldn't give you the money, so that didn't work, and just you know experience of allowing people to make decisions and drive the business in the direction is should be driven and remove all the restrictions and rules and everything else in a corporate, so our idea was that if we went in to all these corporate labs and those had all these restrictions which they did and as long as they trusted us, as long as we became a partner, then we could take that and build on, and we could hire people, we could pay the people, we could get the company acting like a start-up, no large corporate processes or rules and of course that's what we did and if you look today we've created over 55 start-ups and most of them are from corporate labs so all of that learning I talked about earlier we implemented in other labs around the world and we are probably, well I'm sure we are, the number one in the world of corporate spin-outs, so that's what we do today, and apart from me being a venture capitalist sitting along the board of start-ups we created, oh and by the way, one became, it was an Indian business, it was a public business, to give you an example, I used to fly to India, a 2 days round trip, and the board lasted one hour and the CEO gave a 20 minutes overview about what the company was doing, what I want you to think of is me sitting in a board like that, listening to all the committees which I you know didn't want to be there, what I was, what I do, complete waste of my talent, so sometimes what you find is that something you start off with being passionate about you have to prepare for that the very nature of process and business does not move you away from where you were and what you are, so needless to say at the end of this next month, I am not going to the fund, I am doing some small immediate stuff. Cause that's what I want to do, that's my passion, so beyond the thing of just making money, so did that give you a start at least?

S: Well that was a very interesting story and already gave a lot of answers to questions that I had. Maybe we can come back to all those skills that you mentioned like passion, emotion, creativity. Do you think this can be trained or would you say people have to have it?

H: I think you have to have, I am not sure you can create it, it's a good question, what I found is it exists in a lot of people, but it's buried. And the business of your idea, what is it that you want to do, why don't you do what you want to do, I think unlocks something what people certainly believe in what they are doing and that's where passion comes from, and then if they really want to succeed, then that's were creativity (…), but it needs to be a desire and passion to make it succeed that gets you talk to lots of people about how they might improve the idea, so the whole process about ideation is really about getting somebody with their idea to leave with that passion to keep building the idea and the idea gets built by talking to lots of people, that is really where the open innovation exists. And if you got people, so for example that's the basis of it, but sometimes you do have to teach people, I give you another little story, we accepted three guys into the incubator and they were working on a

personalized automatic secretary, and they came in this incubator and were given a cubicle with desks, well because we were taking this building over it wasn't properly built. Light was a problem, so we made the walls of the offices all glass. And then one day I walked past their office the following day, and from heads to floor ceiling, all the glass was covered with pieces of cardboard and completely shut out all the light with all this cardboard. So I asked what's going on, what are they doing? So I knocked on the door, you know good morning, how are you doing, and I said guys, what's all the cardboard about? And they said, well remember, we didn't have any rules, and they said that they felt that because of the glass if they were working on something, people would peer in and steal their secrets, so I said guys, we need to have a little chat, I said the one thing I am absolutely confident about, you will never ever grow a business of build a business unless you continue to communicate to the outside world about your business, what it is, how it works, it's not a secret, I said don't get me wrong, there might be some secrets around a patent, but you don't have to talk about those and you certainly can't copy those by walking past the window, I said so I am deeply worried about your whole idea of how secret you have you be. And so we had quite a few chats around, now I didn't expect that when I got people in I would have to explain what will be said is a articulation and how you need to conceive the things you need to conceive quite broad, 98% of it was about because you never built on your ideas, it was the opposite of open innovation, so they started to open up, to build up their ideas which wasn't perfect when they got in but it really got a lot better, so I would say that look for the excitement and the passion within, it does always exist I believe, by the way, I have a reason for that, remember all the BT coaching I did was, in some instances, it's always in people by the way, I honestly believe it's there, so sometimes it could have been severely regret, and the end of it that would be a reason they are not passionate, not creative, it's just simply that they were brought up in a world where they had suppressed them and didn't let them express themselves, their ideas were thought to be rubbish, or any time they tried to say something you know, they didn't believe they had ideas, they didn't believe they could be creative, and in the end of it, that's what happened, if people start up on the road and their project gets bigger and bigger, their passion and creativity grows, so what's happening, it's all about thinking. It's not about process, so you have to change people's thinking.

S: And would your point be that it's possible to change the thinking of people?

H: Yes, if you create a world where they are responsible for their ideas and their actions, yes.

S: And then how would you see it in relation to big corporations, would you think people can be stimulated to think creatively, in a big corporation, where the culture is not there?

H: Right, ok, good question, you can imagine, I give a lot of thought to. What I did with Brightstar was I created a bubble and created something magical inside the bubble, what I didn't do was (…) across BT, because that becomes very, very difficult. It is very, very difficult in large organizations where the people who are generally in control are the HR people and the finance people because that's how they monitor profit and generally that's what's making a change not going well. It's very hard for large companies to see are their innovations worth something, are they leading the world because they are innovative, or are they (…) so generally this is a battle of being innovative as opposed to being efficient, which is about stop spending money and all that. That is a battle that takes place. What do you see is where companies emerge and let their people grow and you have seen some very good examples of that, Apple in particular, you know Steve Jobs radiated the idea of you know you have an idea, you work on it, if it fails it fails, so he wants people to be innovative, that's almost a manager, and look what happened, he's gone, lots of people are taking over, so I didn't think in large organizations it is very, very difficult. If you would ask me, what would I do, to make a large organization innovative, and I thought long and hard about this, what I would say is that all in an organization it could be that you have strategic goals and those need to happen. What's possible I think is take some of your projects, take them out of your corporation, it could be called innovation center or whatever, and let the creativity and people with the ideas go into these places and then they become over company's processes and thinking. And that would be a way, the dangers, the big dangers is that people who go into

these places get rejected by the rest of the company, so it would be very, very important that people in the divisions of the company are involved and thought as their project. And that transition is the hardest bit, but it would be that you can accelerate the innovation speed, for sure, whereas if you don't do that then you don't and nothing happens, so one is to create possibly something like that.

The other thing is you can't be creative and you can't think of new ideas if you are in a day job where you are absolutely tied down 100% of the time in a process, so let me make it silly but if you go into a MC Donald's and you see one of these young people you know dishing out the chips, they are like a machine, you can't expect to look at that person while he is doing that and say be creative about a new idea how to do the chips, it probably won't happen, so you need to isolate some people and give them time, so that process is why I suggest you could remove some strategic projects and I think you would see acceleration, I think you would of creativity, I think you would see passion and I think you would see things to move more quickly. So that would be my answer, I don't think I've got an answer for a large organization, I just think the processes, the people will kill you in the end, and I talked to you earlier on about emotional processes, and one way could help is that when you are designing any process within your business, remember the workforce example, nobody ever thinks about the people, the processes exist because this will be you know 20% cheaper if you do it this way, therefore we do it. The fact that that 20% cheaper means that to the people are totally dissolutioned about what they are doing, nobody ever think of, and it could increase efficiency, but these people are empowered, so what have I thought about and often think about but I have not taken it further, remember I spent a lot of time in the business process world, you know re-engineering processes, and I think we should come up with something called an emotional process, so like the three legged stool, when we design a new process within a workplace, not only do we look at how does this technology impacts it and what process should we use for efficiency, we should also design in and empower that person to do that job on a daily basis and actually spend some time looking at how to make that point interesting. So let me give you an example, if you would be somebody in an office on reception and what would be the ways that a receptionist could be empowered? So rather than just directing calls, people come in, introduce people and so on and so on and I am convinced and take the time and understand it they will spend some time on that emotional processes and enrich the working life of people in these organizations, it is a big issue for me and it is an issue that creates innovation and certainly open innovation, so big area I think where there needs to be a lot of process before we create something, when we talk about open innovation, so I think today I am skeptical about open innovation, I think people share information it's not quite the same, and another key barrier is this social side that exists inside people.

S: Right, would you also say that, like I am a little astonished that lots of companies or corporations neglect the people factor, would you say it is also because of the HR management in corporations not having so much power? Or why is that that the people side is neglected?

H: Can be because of processes, the use of the HR, and I often joke when somebody says to be I want to go into HR I say well why do you want to do that because I thought you like people. And the joke is when you go into HR, rather than you being there to enrich peoples life, you generally embedded totally in the process or tools which stop people doing things, restricting pace for the company, the very thing that HR could be seen as a caring organization it's almost by management to lay down the rules of all the things to can't do, so that's why I think HR is a fundamental problem, you know, could you have an independent HR, could anybody be brave enough to say HR could be there as an independent business and beware to look after the peoples interest, just an idea. It could end up with something quite positive rather than negative, just think about pressures on finance and HR, and look at the job they do, and they generally are given all these jobs of making sure that the company runs and that rules exist, so my experience of HR and finance is, they are building on the rules, and they are not emotional rules, so there are almost the enemy of trying to be creative and open, remember the coaches, those were financed, does this make sense?

S: Yes, totally. So I don't have any further questions for now, but to sum it up maybe, if I want to concentrate on the main challenge, could you name it, or the main three challenges maybe regarding human resources in spin-outs?

H: Yeah I would say that things about what makes somebody be creative, it's quite an interesting subject. Remember I said it's very hard to be creative when you are working ten hours a day, it's difficult, so what is creativity, how can you make people more creative, generally what they end up is are these idea schemes, which is not what I am describing, give them a box, and they put their ideas in, and somebody goes away and listens to it, that's not what I am describing. So creativity would be an interesting subject to understand, and especially if you are in a creative business that means you are number one on the market and yet you are not investing in any way any environment to allow your people to be creative, that to me would say that you are not going to be there for very long, so creativity is key.

Passion, first thing I look for in a start-up or an investment, is the management team passionate? Why do I do that? They are going to come along problems, obstacles, their idea might not work, there might be some changes, if they are not passionate they are not going to make it happen whatever, and they are just going to give up on it, so passion is key to driving you on, it's a personal thing, what drives passion, what is passion, what require it to succeed, the whole cost is very important in the start-up business, most of the start-ups you see that succeed generally have passionate, autocratic type people heading them because they are going to succeed, so passion is the key. These are two of the ingredients I would say.

And of course you do need, there is no doubt, you do need something that is needed by the world, so you do need people who give themselves, so the trick is that if you make a product, and you think the company is going to grow big on this product, it needs to give customers a benefit, a price that they believe equals the benefit, so there is a great piece around social articulation, articulation is very important in managing teams, that they can explain why, what they are doing, why it's the best, so all the articulation and social interaction is very, very key.

And another one would be team work. These small companies have to work very close and very tight, so what would be key there would be, I talked about employee involvement, and then all the team, so do I see a start-up with a CEO who is passionate and articular who has got the team around him or ready to jump off a cliff within? You know he jumps of the cliff they all are going to jump; they all believe it, very important is team work and shared vision.

Does this give you some sense of it?

S: Yes, this last point maybe leads also to, one thing I also discussed with Chris about the management, if you have to bring it in from the outside or if it has to be already in the inside, what would your perspective be?

H: We generally see that the person, again a very interesting question, we have this issue with start-ups that you have founders and these founders have the passion that I just described and they will get the company to a certain point. Generally the founder is not the person who takes the company off, so in a lot of cases I in my mind compartmentalize businesses, and I call the ideation the first business stage, in other words you create the business, you create the product, customers use it and they love it, they want to buy it, that I all call stage one and that's where you need all these things I have described. The second stage of the company's life is go to market, or execute, so you no longer now looking, well you still need to but it's not the core thing now to be looking at, but the idea making it better, you build your product, you are going to sell it, so the execute stage doesn't need quite the same strength of kindness if you like, or passion, so sometimes what you end up there is you need a CEO who is very experienced in execution, the trick is of course can you bring the founder along, does the founder at this point recognize that he brought his child to a certain point, but he wants to see his child grow up, and he is not in a position to do that, the

best way of doing that is bringing in a CEO who can. That's the way you have to do it and the founder in the end sees that its baby will grow by bringing in the right skills and you do that over a period of time, but it can be done and you can make a graceful change, I think you do have to bring in external people and I am saying that it's a management thing you have to manage and none of the things we do and kill the core team. The good news is that a lot of the experienced CEOs understand that, so yes you have to bring in external skills cause you just need it, nobody will have a great idea and will build this product, he's not going to be the one with the market skills, and so on. So these are skills that you have to bring in.

S: Right and would you say that for the founder and the main people that created the idea in the beginning, for them it's a bigger recognition if they see it later successfully instead of doing it themselves?

H: Yes, yes, he keeps its title, let the founder keep his title, he might be in the organization, he might be on the board, you know he will continue with a title, he's continued to be rewarded, remember, it's a great reward to receive money, but he also wants to be recognized as the person who created that business, and that's why you see a lot of founder members. So there are ways of managing that.

(End talk)

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 2nd of April, 2013, 10.00 am – 11.15 am, Skype interview

Interviewer: Svenja Paul, Wim Vanhaverbeke

Interviewee: Chris Winter, Partner at New Venture Partners and Consultant

Topic: HR issues is spin-outs

Transcript

(Introduction, main points: (1) one of my general observations is that the HR issues seem to be misunderstood, minimized or trivialized when in fact they are major parts of certainly what I do which is spinning staff out of big corporations, and my observations are equally true on the acquisition side, (2) everybody sees business issues but seems to forget that most company's assets are people, (3) HR issues are different based on company's country and even industrial sector)

S: Chris, you already said in the email to Wim that HR issues are very critical in many spin-outs. So can we start maybe with what you see in general are the main challenges and problems?

C: Ok, so when I first started doing spin-outs, which was back in 2000 in British Telecom (BT), and it was at the R&D division, my view at the time was if I work at the BT labs in Sugar Tree, I can probably find a Chief Technology Officer (CTO) who would fall out, but I doubted I find any Chief Executive Officers (CEO). So at BT, first thing that we had to do is we had to think well, we got a team who understands the technology, but not customers and business, and secondly, we've got the engineering and the technical people, but we haven't got the business people. So we are going to have to bring in an outside management team and fuse it successfully into the internal team in order to do a spin-out. And the second feature was this feeling that we have to take the internal team and change their mindset from being technology-focused to being customer-focused. So almost immediately when we sat down and thought about what would be involved we recognized that there were two cultural issues.

By the way, just to set the context of this, because again it is a cultural problem, when I joined BT in 2000, as the CTO of Brightstar, BT's spin-out vehicle, the whole idea was to cre-

ate new business units inside BT, not so spin them out. And I arrived, I had been in BT, I had left BT gone for a start-up and come back again, and my reaction was, well we can't possibly make this work. We can't finance these companies, we haven't got enough money to do that and secondly, we haven't got the entrepreneurial managers to do it, and if we bring entrepreneurial managers in from the outside and put them into the business units in BT, frankly the BT culture will kill them. They will without doubt be leaving. So my argument was then we can make these things fly as new businesses in an entrepreneurial fashion was to take them outside the company. And it took exactly seven days for that view to be accepted by the senior management team at BT, so we actually started first of all with a cultural issue which was, it's hard to do it inside BT.

We then, spinning out, had this issue that I perceived and the Head of Brightstar, Harry Berry, perceived – and Harry is one of the people I mentioned earlier on, that if you can get to talk to him it would be very interesting because he is really people and culture focused in a way he thinks. He and I we both believed that we have to recruit managers and we have to change the mindset of people before we spun them out. So we created an incubator which itself was at the freedom to recruit outside staff and at the same time to hold the team in an environment that felt like they were outside while they were actually inside the company. We didn't believe that you can just take a team and say 'oh one day you are in BT and now we are putting you out of BT'. We believed that you have to transition out.

The interesting thing was the HR department didn't agree with us. The HR departments view was that oh, you ought to be able to train our internal managers to be CEOs. So we started with a clash. So what then happened with the very first spin-out we did – HR actually won the battle if you like. We did the spin-out and the BT guy actually ran to be CEO. And he was in many ways for the first two with the BT guy as CEO. Neither of them succeeded. In both cases the CEO stepped down to be CTO and in one case left the company altogether because you can't just tap somebody and make him CEO. They got to have a bunch of attitudes, a skill-set that they have time to do. And yes, you can learn in a start-up, but especially not learn by leaving out of BT into a start-up. One of my (…) was you know you don't wake up one day saying I want to be an entrepreneur. I know my great development step is to go work for BT. It doesn't make sense. So HR initially overruled the management team of Brightstar because you will be surprised how (powerful) HR was at BT at that time. But in the subsequent ones we brought in external management to try and manage the company. I would say a success rate of this was only about 50/50. It is extremely difficult when you are spinning out from a major corporation, and I come back to the 50% of the succeeded and the characteristics of them, actually is a really hard thing to do. You the engineer team, the spin-out team, you have got to be passionate about doing this, you got to be able to go through barriers, so here you are, this is your baby, that you are fighting to take it outside, you are granted permission to take it outside, and the first thing that happens is senior management takes it away from you by bringing in outside managers. And that's tricky. Do they share the same visions as the technology team? They might be more business astute, but can they take the technologies along with them? That proved to be more difficult than you might imagine.

The two that succeeded best when I was doing BT were actually companies called Azure and Vidus. Most of the spin-outs were like four men engineering teams, but Azure and Vidus were not. Azure had I believe 120 people, Vidus had 70 people, so these were guys – it wasn't their baby at the individual engineer level. They didn't own it with the same conviction that four engineers who would come up with a cool idea. These were systems built inside BT, run inside BT for a number of years but there was no way we could sell it externally from inside BT. So we took them out of BT so we could actually try a product line we could sell externally. They were almost fully formed companies from day one. They were used to having senior manager running them, senior managers talking change. So when we brought (…) management in over the top, it actually worked much better than it did in the sole engineering start-ups, which is interesting.

One of the other things I said earlier on is that people used to say to be, how long do you incubate a company in Brightstar, Chris? And my answer frequently given was, until the

mindset of the individuals is right. Until they have become customer and product focused and not technology focused. And the feature of most spin-outs in open innovation models is that they come out of R&D labs. These are not people used to run (…). So this halfway house is best illustrated by – in the end I think the company never spun out - but we have one company in the incubator, and the local press decided they were fascinated by this entire process. So they wrote a monthly or weekly column about this company and its development and I remember this growing tension building up each month in the column because basically the company was not hitting its commercial targets and individuals became more and more focused on cash from this and selling and selling and it actually did us a great deal of good in getting across through the local press, but the whole purpose of Brightstar was to change people from thinking from technology to product. The culture and HR issue, how do you manage, how do take people who are very good at technologies, how do you convince them to work with sales people much more closer than they have ever done in their lives. So these two issues of how you build a management team and how do you change the culture were very important.

There is another set of things from my Brightstar days and I am going to move forward to New Venture Partners (NVP) and Brightstar is quite helpful for looking at some of these, which was every time I suggested that we could do a spin-out, the middle management in BT would come forward and say well what do I get out of this. You are taking my best engineers, the most radical and entrepreneurial engineers, you are taking one of the projects I think that I can make succeed, you are spinning it out, what do I get? I just lose teams. So you had this issue where at the HR level you had to deal with how did you get the middle management to let go of a pet project or team because you can imagine the engineers who want to be going spin out were among the most enthusiastic, energetic and brightest. I spent a lot of time talking to the middle management, coming up with win-win scenarios and this reflected a very key HR issue which was the reward scheme.

I can tell you at Brightstar we never fixed this, but we spotted it early on. We actually said that in order to do a spin-out, there were bunch of contingencies involved. One was the team that was spinning out, how could they be rewarded, one was any numbers of that team who stayed behind, who had developed the technology, one was how we are going to reward the middle management who had overseen this project, one was how we are going to create a wider feeling or buying from a wider BT, preferably that the R&D engineering community, and then finally how to reward the Brightstar management team for the value added they were bringing? What happened with the very first spin-out was as usual what we typically do was set aside an option pool of between 15% and 30% of the stock as options for the new incoming management team when the guys were spinning out. And the four or five engineers would get between 1% and 5% of the company, depending on the role they had. And the first thing that happened at the very first spin-out was that the guy who ran to be CEO, he had 3% or 5% of the company, and I had BT engineers who come up to me, saying you just turned Mike into a millionaire. And I'd go: Sorry, if Mike grows this company to 100 million dollars, if he does it without any further cash (…), yes he would become a millionaire. (…) At the moment he has got 5% in options, which is worth less than toilet paper. So the perception was in the year 2000 when we first did this, that anybody spinning out was going to make the company a success and become a millionaire, and that somehow we had enriched these guys at the expense of everybody else. The strange thing was we found it harder to explain the risk and reward of the start-up to the people who were left behind than we did to the people who were spinning out.

If we speak about the risk and reward scheme to the guys who were spinning out, of course what they were also doing, they were giving up pension, because BT had a wonderful staff pension. So they gave up the pension scheme in return for options. One of the net effects of this was that it was strongly in favor of the younger guys spinning out. If you have been 25 or 30 years in BT, your pension was potentially so much more valuable to you in terms of the risk and reward balance, that almost always the people who would spin out would be younger than 35. Which might be right, but it was a strange consequence of the value of the company pension scheme in European companies.

I think I said earlier, when Wim wasn't on the phone, I said that we had a similar experience when I first with NVP did the Philips spin-out. We found that the Dutch and I found the same with the Fins, that the Dutch and the Fins don't really have a really good feel for the value of options and shares. They tend to seriously undervalue what we were putting on offer, very highly valuing their pension. And it makes it very hard to create a reward scheme for the guys spinning out in some of those cultures that match the risk and reward scheme of doing a start-up. I must admit I have struggled in some of the European spin-outs to get the balance right between company pension and option schemes. We developed a set of shadow option schemes and concepts in BT for wider people, the ones left behind, but in fact BT never exploited them. BTs big corporations in Europe are very socialist in their attitude to the distribution of wealth among staff. So if we tried through Brightstar to say well, the team who stayed behind will get options and also special bonus as those spun out, they tend to say oh no, all they are doing is their day job, they shouldn't be able to sharing the wealth created in the spin-out company. So this created a lot of tension and jealousy across who stays behind and who spins out.

Quite often you would have an engineer who is actually a brilliant (…) inventor, you wanted him to stay in BT, you wanted him to invent fruitful things that you could make spin-outs from, but of course he was sitting there going if I invent things, other people get rich in this mind, he wasn't looking at the loss-factor, therefore why would I stay in BT? Why don't I go out if one of the things that I have been a key part inventing? And trying to handle the HR issues around the reward scheme, or the perceived rewards, and everything else became challenging. You couldn't do it by having generic schemes, you had to take each individual and very carefully try and understand their motivations.

From this we came up with the entry and exit interviews. The entry interview was about interviewing people coming into the incubator to make an assessment as to their motivation, skill-sets and their ability to survive in the incubation environment where they would be working under squeeze and pressure like they would have never seen before. And then the (exit) interview which was do they really understand what they are going into in a start-up. And in BT we had two of us who were critical for the exit interviews because we had been in start-ups. So we could look the guy in the eye and say look, believe me, it is not like that. You will wake up in the night (…) wondering where the next dollar is going to come from. And I carried out these exit interviews into the start-up as I said with one of my favorite questions became this: Imagine this company successfully in five years' time; what do you think success looks like for you personally? And the ranges of answers to that question were really quite enormous.

When we moved into NVP, the Americans had also run a similar incubation system inside the corporation before spinning out, so we had a very similar model. What we called incubation they called market qualification. But it didn't really matter. When we started doing spin-outs therefore with other corporations we cannot (…) mechanisms for having an incubation phase. A lot of the times there were corporations going 'we decided to shut this project down'. We've decided then to give the managers just long enough to negotiate a deal to get out if that's what they wanted to do with the technology. So they weren't interested in prolonging the incubation periods. By the way, if in an incubation it turned out that your employee had made the wrong choice in thinking he wanted to spin out it was relatively easy to move him back into BT before the deal was done, it was part of the mindset change. So they just wanted the deal done. So (…) had no chance to learn the skills, change his mindset, it was a tech team torn out of his home and dropped into a company. And we had no time either to build the management team, get the management team to interact with the team spinning out, so there was a certain sense of we had to hope that the team leader would at least finish the act of CEO. In some cases that worked out and in some cases it didn't. A couple of years ago we reviewed the whole NVP spin-out portfolio. We discovered something quite interesting. In the companies that have broadly succeeded, apart from the two big BT spin-outs Vidus and Azura, if we hadn't had in the project team somebody who is capable of leading and running the company certainly through the first year or two, then it almost inevitably failed. In other words, crafting a management team into a young start-up was not associated with a history of success. To the extent that my partners concluded that they would no longer invest in a

deal unless the lead technologist or the lead member of the corporate spin-out team was capable of functioning through the first 18 months as the CEO. Had you have asked me in the year 2000 that would not have been high on my criteria list. We believed in the year 2000 that you could create and build an entrepreneurial management team around a corporate spin-out, we now believed that you got to have the nucleus of the team already in place.

W: That's interesting. Do you have an explanation for that Chris?

C: I think it has to do with this sense of passion and involvement. When you bring a CEO in to set a strategy and a direction, and normally to make it customer focused. And it's very hard in a small team, I think, where you got already four or five intensely committed insiders, it is very difficult to bring an outsider in, particularly if the reason to bringing him in is because you believe that the five are going the wrong way, they are going down the technology route rather than the customer route. Now that the CEO comes in and says let's focus on customers – if you haven't got time as a CEO to build up the respect and trust in the team, which in a start-up you don't really have much time to do, you almost immediately get (…). You can't have (…) in a small start-up. A small start-up, I describe it as all for one and one for all. It has to be a functional team. And if it was a dysfunction in it in terms of divide, it is not going to give you the energy and the drive you need. We didn't really come down to analyze deeply ourselves, but I do know that Harry is now firmly convinced of the view, no leader – no investment, effectively. I think the big corporate world has this belief that you can always have an interview process and recruitment process and can find the right individual and make teams. That might be true in the context of a large corporation; it doesn't appear to be anything like this easy in small corporations. And one of the comments that I have made along with one of the other Dutch partners (…), we got a bit of an argument about this, is if you look at the really big successful companies in America, Google, Facebook, Microsoft – these were actually founded by people who went the whole way with them. They are pretty extraordinary individuals, at some point they stand down as CEO, but I think venture capitalists should (…) a CEO and replace him (…) too easily at times. I don't think it is as simple as that in a small company, particularly a small company under stress.

W: Is it also because if you have these kind of CEOs, that he has his network in the mother company, in the big company, so that he can pull in his resources from them?

C: No, in fact the interesting thing is that once a company is spun out, one of the hardest things, something that I talked with Henry about occasionally and in my own talks about open innovation I focus on, is the connection between the spin-out and the parent company. In fact what happens is that almost immediately spun out everybody in the parent company forgets that they have got any association with this start-up whatsoever, or couldn't care less because it doesn't affect their bonus. To the quite surprisingly extents, Azure and Vidus had mission critical systems inside BT that they continue to maintain and support. But you have to get BT managers say well why should we give it to them? You own 40% of the company, and they have been there for the last ten years supporting your mission critical systems. And indeed the business champion in the corporation, the guy who actually is the link between the start-up and the main corporation is a terribly critical individual and this is why a Brightstar-like model works, because we had, Harry and myself, actually be more important in linking the start-up back at the main corporation than the start-ups own network was. When you just got an M&A department negotiating a spin-out, the moment it is spun out the M&A department sees it as a share portfolio to manage. The M&A departments don't broker a relationship back at the business unit and even CEOs who know the business units very well, so again the very first one we did was the Voice over IP quality, and I wanted to move the Video over IP quality into the same company two years later, which then led to the CEO talking to his old team. We thought this is the as close relationship as you could get. It turned totally (…). Because there were all sorts of jealousy features and you know, the CEO thinking he had some sort of divine right to the technology, the team left inside thinking he hadn't done the right thing with the Voice over IP stuff, they could make a separate spin-out with the video stuff, it just turned horrible. So I think it is the closeness of a team and the mutual respect. Some CEOs have managed the transitions and the ones who have done have been known as the ones welcomed and embraced into the team. So it is a classic, you know,

how do you build a team. You have to spend a lot of attention on it. And it is more difficult than normal because you are not only building a team, you are changing the way the team thinks and operates as well.

S: What do you think the role of training is? Can skills be trained?

C: Yes I have a view which goes, you know you shouldn't take an engineer and try to turn him into this business guy, but I think there are plenty of engineers who are bright enough, smart enough and competent enough to be trained to vastly improve their skills, in particular when you view the management of a start-up company. Some people seem to think they never recruit the perfect CEO. Every CEO ever seen in every company has some deep floor. You end up with a balance (…), not a perfect CEO. So the trick is before they spin out is to have giving them training. Harry and I were very keen on setting up training courses and in fact I still lecture at the Dutch business school here in Cambridge to corporate middle-managers who want to create start-up vehicles, effectively taking engineers and teaching them a set of business skills. If the engineer has got the attitude, he probably has the mentality, and if he got the desire to believe that these skills are important, and he has got the right sort of personality, you can't take anybody and turn him into a sales person for instance, then you can train him up on a lot of skills. And he can be trained up to (…) what he can do and what he can't do and therefore what he needs in a team to support him for the rest and to respect him. And I have become a strong believer myself that there are some sort of, let's call them not one year MBA, an MBA is a particular sort of qualification, but I believe you can construct courses aimed at people in R&D departments to give them the skill-sets that they need and the experiences they need so they can become CEO, and they can bring on as their right hand man a VP business development sales who is going to do the thing what engineers are terribly not good at, which is, engineers are actually quite good at selling, but they are not good at closing sales and focusing on the importance of customer propositions and closing sales. So you get the right ones, you can train one. But I came to hate the idea that you can train the whole spin-out. Actually if you are doing this as a strategy, what I have been trying saying to some of the corporations, actually at NVP, we are now investing in Europe, and I am only doing a few days a week for them, I spend the rest of the time running consultancy services on open innovation and spin-outs into a number of big corporations, and one or two of them I have been saying to them look what you want to do is identify the 30 or 40 of your 500 engineers who have got the right combination of skills, background, attitude and then send them on these courses now, so that they can start developing the skill-set and then give them projects were they can start practicing that more closer to the customer, more sales focused, and start to build up a pool of people who actually succeeded.

That brings me back to the point that I have forgotten earlier on. One of the things that happens of course is start-ups fail. And one of the policies that good companies have is 'no automatic right of return'. If you put a safety net, and I have had this, I worked with VTT in Finland and they are a public organization and they felt that when their staff was prepared to take a risk, well they make them a straight offer that if it all goes wrong in the first two years they will have their job back in VTT, which bizarrely has the effect of decreasing commitment in a start-up, not increasing it. My point at VTT is that my experience at BT is that start-ups that have failed have then released (…) engineers who are either more than happy to go find themselves another job because they never want to go back to the big corporation again ever 'thank you very much', or have actually let the engineers being happily re-absorbed by the old management because they have now a whole bunch of skills and experiences that will help lift a wider teams if they were commercially relevant. Failing beforehand and seeing if a company fails, this is a pool, not of failed people, but people who are being trained on somebody else's expense is very valuable. Actually the best example of this was I was forced to shut down one project in BT, while it was still in the incubation, (…) and BT decided to not take this project forward, so we shut it down and one of the two leading engineers decided that he would leave BT and he joined another start-up and I met him two or three years later and I said well, you know I guess you experience (…) was really bad, it failed, I guessed that he was not happy how it went in Brightstar, and he had this broad grin on his face and said 'no, no, Chris, on the contrary, I bought a bottle of Champagne, because

as a result of it, I go out, join this other start-up, and make a couple of million dollars'. The best thing ever happened to him was failing in this Brightstar company.

W: One small question I have is do you see enough willingness and commitment in big companies in Europe to train their people that are in the incubation period to skill CEOs for the new venture or is this rather exceptional?

C: A bit of both. European companies are actually not bad in providing their staff with training, I think actually better than American companies. I can't name an American company where I have seen people, you know - so I think European companies do. I have been intrigued, lecturing in Cambridge, how many companies have been sending their middle managers on innovation-oriented MBA-type courses (…). I think at the moment the cost of some of these courses, in my experience looks pretty high, so it means that only handfuls of people are sent and then part of the problem is when I talk to them they say well, it's fantastic, we have this great six months in Cambridge, we learn all this stuff, but actually, because there wasn't a spin-out immediately there or something to do, we ended up with a bunch of theoretic knowledge. So I don't think that someone actually comes in and says I need a career development step, can I go on one of these courses, and then the management says yes ok, (…) go on one of these courses, but there is no thought given to when they return back to home base, how they get the opportunity to practice the skills they got. So my observations and it may have changed over the last two years because I haven't been in this stage this much in the last two years, is that European companies have actually caught the open innovation strategy story and are more focused on training their staff than Americans. I am not sure if that is done systematically.

Can I come back to this word failure, because it is a critical HR issue? One of the things that I realized very early on and when I am lecturing on open innovation to big corporations it's a key think I talk about is you got a funnel model, everyone got a funnel model. That's fantastic because another way of looking at it is you take lots of ideas in and you got a few ones out. The two observations I make to the large corporations. The first is: who screens the 500 ideas in for the one out? In my experience when I go around the big corporations, because the one that comes out of the 500 is the successful one, you put all your best people on making sure that succeeds. And when I ask who is doing the screening of the 500, its junior engineers, its trainees, its people who volunteer to have a look at them. But do you know what the really difficult thing is? It's spotting the one jewel among the 500. Because believe me, it doesn't shine. This is a very, very skills and difficult job that requires experience, intuition, knowledge, and yet, that's not where you're putting your best people. And they all go oh, yes, I guess that's true. The second observation then is that in BT the R&D department, roughly speaking 75% of all the project bits that you put forward get funded by the corporation. And 25% were some sort of failures. But if you look at this funnel, in my experience 500 ideas come in, 5 out. 495 projects, probably 480 at the first screening you say no to. So now the most common thing that a corporate incubator or open innovation vehicle does is saying no. In a big corporation, no equals failure, equals incentive not to come back with another idea. So I used to say to my team in Brightstar the way we say no is infinitely more important than the way we say yes, because every project that we say no to has to be treated as a positive uplifting training exercise. We should appraise people for the number of ideas they put forward, not the number that succeeded, we should be able to give anybody who has given us an idea at least one good learning point to take away from that idea, that they can use to refine their next one. Otherwise in no time at all, what is supposed to be an entrepreneurial, enthusiastic, energetic business will end up looking like something that is constantly stony-faced saying no and turning people down. And almost always when I say this (…) people say 'oh god, you are right'. You see, that's the environment in a big corporation. Entrepreneurs are used to 'hey we are not yet done, I get back up, (…), I hit you again'. So failure management is a critical part of the HR process. In BT the way we work is which we split it into discovery business development and actually incubation. And so my job was to take the 500 down to about 20 to take it to business development. So I sat there (…) and the most critical part of my business process was how we said no. Of course the trouble is, what you want to do, is you want to get rid of ideas, so you get an immense overhead in judging ideas and passing feedback on them.

W: So is your point here that you want to make that the way you say no is a learning experience for the people involved or is it also a question of putting more experienced managers on that?

C: It is both. First of all to screen the ideas successfully, you got to have experienced managers, and frankly, in my experience, they probably got to have the experience themselves of having been in a start-up, because it is not an intellectual call, it is a gut call. You need the good guys who can say 'I don't know what it is, but there is something here'. Be prepared to commit some resources. So there are two HR issues. One is picking the right people, second is making sure that in your process the people who say the word no as being a training exercise and not a rejection. And that training is viewed validly and positively. And what is interesting in the appraisement loop therefore is that you want their managers being pleased with their staff putting ideas forward and learn something because in the appraisement process of course it is your manager who you got to convince that your time spent doing this was worthwhile. So that became part of the local appraisement scheme in the research department. I forgot now the mechanism; I had some way of feeding back, reports to people's managers directly, if they brought an idea to us. I can't remember what it was, unfortunately it has been 10 years ago now, so the exact details I can't remember, I can remember the star-reward-scheme, but I can't remember what it was.

S: What I was wondering what is the role of the HR department within this setting?

As a venture capitalist we ended up with this position where we just analyze the team and asked ourselves whether the team was going to pass or fail their criteria. We decided it was the company's job to fiddle with it before we got it. As the number two in Brightstar we actually brought a member of the HR department into the virtual management team, because we wanted HR buying into the way we did things and being prepared to change the big corporations HR processes to fit their means. So we wanted to set up our own training processes at Brightstar with Cambridge, the HR department decided to take that on board as their responsibility but then they wanted to design completely their own course. So I think in big corporations if you're the managers of the incubator, you are really trying to focus on making successful businesses and you can't refocus the technology, the product and the customers. It would have been great to have embedded HR that it really went well; HR was a bit of a variable experience. In BT the HR department was amazingly powerful when we were doing the Brightstar deal our Americans said they had never come across an HR department which has the right to say no. So it was a bit of a problem. To my experience inside of doing open innovation may be distorted by the BT experience. In general I think that if you are going to go to succeed, you need the corporate HR department in board, you need them buying into the reward schemes, you need them understanding the recruitment processes, you need them understanding how this affects appraisement processes. People would sometimes come into my incubator saying if I join Brightstar, will it affect my promotion prospects inside BT? Of course it will because we are helping you (…) leave BT. Occasionally records like mine I said look guys, remember, I was in BT, I left, I did start-ups, I came back, and you know what I got promoted three times in a year after I came back, without even trying. We had to create myths and legends, stories about Brightstar that circulated and sometimes we used HR to help manage the circulation stories and sometimes we didn't. So to be honest, I would prefer to acknowledge the HR department outside my corporate incubator and run it all inside the incubator but that wasn't possible. When I experienced NVP we used to believe that our collective experience meant that we could recruit and build teams, and (…) people in training courses. We have now settled into the classic venture capitalist mode in which we analyze the team, if the team is really a good team, then we might make the investment, if it is a bad team, we won't make the investment. So venture capitalists have a very different approach to a corporate incubator. A venture capitalist per se is not interested in open innovation, but in investments. So I think we are bad people in general to talk to about HR. I think NVP is an exception because almost every member of the team has been in a major corporation and does corporate spin-outs where the HR issues are very much different.

W: Is it fair to say that HR managers do not understand what you want because they are used to work for big businesses where you have different types of management and focusing on something quite different than what you need and want?

C: Yes, HR departments in big corporations treat people as largely replaceable, you know if one individual goes you can always find another individual to replace him, which is very different to a start-up where everybody matters and in most big corporations they are worried about fairness across the whole corporation. Start-ups are inherently unfair places. Some people are much more highly rewarded than others. The balance of risk and reward is completely different and you find that the skills in the HR departments in big corporations (don't) align with what medium-sized enterprises would do and certainly what venture capitalists might be looking for. One area where HR departments can be very good is in this area training because big corporations do commit money to training budgets and the biggest problem is that training somebody to leave the company that is a hard one to produce financial justification for the HR budget. So that's why they end up training people to have entrepreneurial skills used inside the corporation which is a very in my experience intrapreneurship and entrepreneurship are two quite different skill sets.

W: I see, so it is not because if they have courses in intrapreneurship, that they are already good in courses in entrepreneurship right?

C: Yes, but I think you can fund enough on the training side but we have to position it that we train managers to be better managers inside the company and by the way that just happens to make them better managers for outside the company with some of those skills. So yes, I think HR departments struggle in general, well certainly with the spin-out model.

W: If we would like to focus on the major problem for HR management, not HR department but HR management in spin-outs and maybe also the biggest leverage or the biggest lever you can use, what would it be according to you?

C: I think that there are three problems. One is getting the reward scheme, so that everybody's incentives are aligned for people who are left in the company, for people who manage the spin-out process and thinking about their relationship with the guys that are spun out. Second is how actually do you recruit the right management into the start-up to turn it into a success. And the third one is failure management. How do you handle failure, both at the ideas level and the company level if one of the spin-outs fails? Those three collectively set the culture and environment in which the spin-out model will either flourish or die.

S: Ok, I don't have any further questions either for now.

(End talk)

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 17th of April, 2013, 10.00 am – 11.00 am, Interview on site

Interviewer: Svenja Paul, Patrick Ronai

Interviewee: Lucienne van der Werff, VP HR & Communication at DSM Innovation Center

Topic: HR issues in a large organization

Transcript

(Introduction)

S: Maybe we can start that you tell us just about your position here and also how you see open innovation within DSM, so what the main activities are?

L: And what is for you open innovation?

S: (…)

L: Well I am responsible for the human resources of the innovation center of DSM and the innovation center in DSM started in 2006 and why we did this, because you have to a bit understand the DSM organization because we have several business groups, they are responsible for their own technology, for their own P&L, for their own business, the market, and it's quite diverse because we have strong fibers, Dyneema, but we also have vitamin C. So it's a very broad scope of products and markets also and technologies. And we said well if you really want to innovate than you have to focus on something, it's better so have it separate from the business, from the running business, so that's why the innovation center was established, and we have two main streams in the innovation center. The first part is the business creation, the other one is the enabling. Business creation is we are looking for opportunities outside with open innovation, we do this in the incubator, that's the department name, we are looking for all kind of opportunities, technology wise but also market, new business models etc. It's not only technology, it's one part, but it's also other kinds of business models, new markets, new applications, but really new for DSM, and sometimes new for the world. Not always, but sometimes. So that's for us the open innovation via the incubation, very early stage. Next to that we also have emerging business areas, then we have, it's a bit further in the process already, so we have idea generation, we have business cases etc., and we said yes we want to pay money, we want to have a budget for this specific project, and then we call it an EBA, emerging business area, for example we have biomedical, biomedical devices, it stared very small with two to three people and now it's more than 350 employees. And how we did that, we started very small, we looked for new opportunities outside, we had some acquisitions, this is also a way of open innovation, look for other small companies, start-ups, and say that's interesting, we can't develop it by ourselves, it will take too much time, so we will buy their company and we make use of that technology and their market and customers etc. and we will grow it further. It's also a way of open innovation. So biomedical is an example, it has grown already almost to a more mature business, we have already many customers and production facilities etc. So it's very far in the chain we say. But we also have a very young EBA, Advanced Surfaces that's called glass, and we started with that in 2011 and it's an evaluation so to say for the incubation. So we started with that concept in the incubator and we made a business case and then we said that's a new market, it's totally new for DSM and also the technology we have already in DSM, but we apply it totally different. So that's also a way of innovation, and then we said now we have to make it an EBA, emerging business area, so we can totally focus on that new idea and we focused in that case on solar, solar market, so it's called glass, so specifically that you get the energy from the sun, which is a normal concept, but we have find out a new technology for that to have a lot more renitences, more energy from it, and also the surface for example it's more smooth, you can clean it more easy, all kind of advantages, and it's very successful in the market. So we started with that and now we bought last month a very small company with a very specific technology, it's also open innovation, that's interesting, very early face, but we need that specific technology and then we will build on further within our R&D center. That's also an example of open innovation. But what we also do, so we have incubator, EBAs, we have some more EBAs, bioenergy for example is also very important and we have now a JV with a very big company in America, Poet, and they are very strong in developing plants, and we are very good in enzymes and yeast, in the technology part. And we can also build plants but we want to have asset (…), so we said no we don't want to have our own plant, so we have found another partner, Poet, and they said yes but we need you for the technology, you need us for the plants, so it's a JV now, it's a huge JV, it's millions. Next year we will start with the first plant and it will be about 30 plants, a lot of money, it's also a way of open innovation. Next to the incubator and the EBA we have the second stream in the innovation center, that's the enabling, and one very interesting that's venturing. We are looking for very small companies, it must have always a relation with our strategy, always, for example for us it's important to focus on climate, energy, so we are looking for companies who can help us with that, and then normally what we do, if we find a very nice opportunity we do due diligence, so we look into the books, and say that's an interesting company, we can learn from it but it's very early stage, we don't want to acquire it yet, it's too early, too risky, but we will take a stake in it, so we pay for example some millions to get a stake, 5 to 10% of

the company, and then you are also in the company, so you can also learn from that company. That's also an example of open innovation.

S: Yes, and do you also do it the other way? So not getting ideas in but having spin-offs or so?

L: Yes we do that also, we have what I mentioned the EBAs, two EBAs we had a spin-off, and we said that there were other companies very interested in the technology we developed and also in the market, and for us it was not interesting anymore and we said well we learned a lot, but now we are a bit further, and then a divestment takes place. So we did that also. And we also do licensing. Licensing in and out, that's also a separate department, so we are looking if we can license out our technology so that we get money but also licensing in, so that we have the technology, we have to pay for it, and that's also a way of open innovation, it's not necessarily that we develop it, but we can use it, we can apply it, so that's also what we do. You can imagine it's all different organizations and if you look at human resource part, venturing is totally different than licensing also, totally different people, different profiles, because in venturing you need a combination of investment management, you have to understand bit the technology, the relation to our technology at DSM, but also if you do due diligence you have to be very critical, judging, to make the best bit in the end, for licensing it's important that you really know in-depth the technology and that you are very good in contracting the licenses. So it's different. And in the EBAs it's different per EBA. For biomedical, the business developers need a biomedical background, they have to do about devices and you have to understand the market, but in the bioenergy it's totally different, then you have to know more about the genes and the enzymes, it's not comparable.

S: And for the spin-outs and spin-ins?

L: You cannot say it like that, it's always combined with what you are buying and it's not a general statement, you can't make it, because sometimes if we acquire we say it's not because of the people but it's because of the technology, but you have to take over also the people normally, in the Netherlands that's law, in Europe in general, in the US it's not always necessary for example, sometimes you need that expertise, that specific expertise, you are buying knowledge and that's per definition also people, so most of the times we are most interested in the R&D, business developers, marketing, but most of the times we are buying companies with not marketing and sales yet, but they are early face, but finance people that's not very interesting for us, because we have a lot of finance people here, so it's very specific related to the models.

S: OK, so where would you say is the main challenge or where does the human resource management kind of fits in?

L: Culture is most difficult. If you are working for a start-up and we acquire that company, DSM is a very big company and we are an innovation center and we are a bit different than the running business, but still we are part of a big company, of a corporation. And so it's very important to onboard them, make them part of the family so to say, so we pay a lot of attention to that, more the soft part, because the knowledge is ok, but what you want is that they share the knowledge with you, and that they are also happy in the new organization, that they are open for collaboration with DSM employees, so that their knowledge is utilized at the best so to say, and we acquired last year a big biomedical company in the US, a start-up, but it started in the early 90s and it was growing to 300 employees, very professional organization, but very independent organization, it was 300, that was the business. We acquired it and then it is part of the innovation center and the innovation center is part of DSM. So for them it was a big change in sense of who makes the decisions, decision-making, they were used to do it by themselves, and now they had to go to us, to the management of the innovation center, it sounds a bit soft but it's crucial, so you have to pay a lot of attention to the integration, the way of working, how do you want them to flourish, that they can utilize their knowledge, and also the way of working, that they also respect our way of working, it's vice versa. And the technical parts, because every company has its own remuneration sys-

tem and everything is different, that's a technical thing, that you can fix, that's not really an issue, it's more the soft part of it, that's most difficult.

S: Do you see that difficulty also from the inside, that you inside engineers face a clash or something?

L: It's the same, because they have to respect each other, it's not always that they have the best knowledge, they have very good knowledge, but you also, and you have to cooperate and share your knowledge to go to the next level so to say, also internally, it's not always easy because then somebody else also comes up with ideas, and oh, I have to share it now, and it's from both sides indeed, and that's not easy, it takes a lot of time.

S: Ok, so time is one issue, and do you have other communication or training measures that you do?

L: Yes, of course, we have for example if we acquire a company we always have an integration plan, depends on the company, what is the background of the company, what are the needs specific, but we are always addressing of course the technical part but also the way of working, how do we want to organize it for example, because you can imagine that if you buy a company, a very huge company, and we are a small company, then you have to think about your organization in terms of structure but also in terms of who will be the management, who will take decisions, do we want to have empowerment at the lowest level, or do we want to have a centralized organization, all that kind of topics you have to address, and it's per business area so to say it's different. In biomedical we organized it differently than for example in the bioenergy, because it's a totally different organization. So for each you have to develop your own plan, but the standard things are organization, how do you want to work together, talent management, how do we identify talents, how do we retain them ,do we need a retention plan for example or an appreciation plan or whatever, all that kind of things. It's all part of an integration plan.

S: And do you see training also as important for open innovation in general?

L: Training is one, yes, it's important, but that mainly also what you mentioned, it's more the soft part, behaviors, how can you learn from each other, that's another way of thinking and looking to the world. You have to open up; you have to listen, respect, all these kind of things. And you can train, and you can also coach people, so coaching programs we have in place, depends a bit on the situation, we have (…) training in place, that's the standards so to say.

S: Ok, because on research question that comes up frequently is that when people are new to open innovation they ask themselves, well can we train our employees to be open or do we have to get outside management in.

L: You can train people to be open, but it starts very fundamentally. It starts with people to be willing to be open and if they are not convinced it's very difficult to train them. But you need that conversation with them and we had also some people they think ah we can do that, but they were not open, so it was only kind of they checked if they are right so to say, and we said they don't have the right profile, so we did some training sessions with them and so on, but they were not fit for the job. So you can train it, but it starts really that they are willing also to work on that. And it's kind of in the R&D world, because in the innovation center we don't have R&D to say it a bit bold, we have R&D, but not fundamental R&D, yet we have organized in the shared research units, so it's not part of the innovation center, but we make use of them. So that's how you have to look at it. Also research people they have to look for open innovation of course and they are interested to go out to universities and we have to stimulate that also, and you can stimulate that by rewarding them , to give them budget to do that, so it's not only training, but you also have to facilitate them in a way. If they have to write a project, they have to write the time, because you are paid per project, so if it's very strict then they have no room for open innovation, so you have to facilitate it also as an organization, If you find it important, then you have to free time for them to do it,

yes so it's also the organization needs to do something, it's not only the employees themselves, and that's sometimes a struggle. So we said well, about 10% general people have time to look for opportunities outside DSM. You can call it open innovation; we call it always opportunities look, go out for example to conferences, go out to workshops, go to universities or other knowledge centers etc.

S: And do you see willingness to do that?

L: Oh yes sure, most of them they are willing to do that, but you also have to do that a bit in a coordinated way. It's not a go on itself, some R&D people are not really open for it because they are too busy with their own environment in their view, so them, you have to stimulate them, but in general they are open, but they also have to share what they have learned, of course it's not for free, that would be too easy, we are a company, we want to earn money.

S: And you also have a coordinated plan then how they can share that?

L: Yes it's in general per department so to say. They share with the colleagues, and sometimes you share it more broadly, it depends on the topic. We also have some communities; we have the innovation community, all employees who are working in innovation, business development, they are part of that community and that's global, we work global. And they meet sometimes via webcasts or seminars or whatever, we also have that for the science, for R&D, we have also a science community, there they are also organizing webcasts, communication, meetings to share.

S: Right. Ok maybe coming back to training, I have been asking you if it is possible to train to be open. Then on the other hand, would you say it's also possible to train people to have this entrepreneurial spirit?

L: That's difficult, entrepreneurial spirit, that's more difficult because entrepreneurial is also an active verb, you are actively looking for opportunities, grab them, make value out of it, that's innovation, make value out of that technology, a new business model or whatever. And entrepreneurial is, you can train it a bit, but to be honest, in an organization like this it is more intrapreneurial not entrepreneurial, because real entrepreneurs will not work in a big corporation, they will not fit in, because they want to do it by themselves, no rules, no requirement, we want to make money or make value, and sometimes we had some start-ups also with acquisitions, that were very good entrepreneurs. And we need them because they have a lot of knowledge, but you see them after a while that they left, because they want to set up their own thing, and that's ok, that's ok because you also have to fit into a corporation and you can learn from them, some specific elements you can learn, but really entrepreneurs in this kind of company, it's very difficult.

S: Would your point then be that you have to hire outside management when you have a start-up or spin-off coming out of DSM?

L: When we have a spin-off normally it's excluding the manager of that part because that person said I don't want to do that, I want to stay within this corporation. It's a more risky profile. If you are really an entrepreneur it's more risky. They also have for example other remuneration, they want to have a long-term stake or option or share or whatever and less fixed pay for example, that's another way of remuneration and we just hired somebody who had his own start-up and we hired him because now he's the manager of venturing, we need that skills in that organization to be more open, to be more entrepreneurial, it's very difficult for him, very tough, to work in this kind of organization because he was used to make his own decisions and to make his own remuneration plan, and now I say now you are part of this company and you can't decide, you can make a proposal, but… so it's not easy but we are trying to get the best out of it and that's working fine. And then after two or three years we have learned a lot and he also and then we can decide do we want to continue or not, so you can do it with some, but not with too many, that will not work, it's good or the change, it's good to bring new vision in the department and so on, that's good to have some entre-

preneurs in your organization, but the flipside is that you have to, guide is a bit negative, but to coach them, to make it work.

S: Do you also think that then reward schemes play a role in open innovation?

L: Yes we are currently developing different remuneration for the venturing department because we want to reward them but more at the long-term, normally it's between six and eight years when you can see the earning, it's a long period. But in these types of companies with a high technology it needs such a time, it's not in two or three years on the market, it's not possible. And especially more in the medical world you need approvals etc., it's so long, it takes a lot of time. And you want involvement from start, from day one, until that moment that you earn money. And that's why I am developing now a remuneration plan to keep them motivated to stay long but also to reward them, it's not like 10.000 or it's really a great part in the remuneration scheme, so that's what we are currently doing. And also to attract more the entrepreneurial persons, because they like another way of remuneration.

S: So you set up something specific for them?

L: Only for that part, yes. It's not easy because we have our own collective labor agreement, so I have to be a bit creative to see what kind of room I have to do it, and that's always difficult in a big corporation.

S: Yes I can imagine. And besides the rewards, is there something else that you use to attract entrepreneurs, intrapreneurs, top potentials?

L: They like to work here because they like the way we are doing things I think. It's not so difficult to attract them but you attract them also by giving them kind of empowerment in their role, they have a lot of freedom, to say it like that, to look for all kind of opportunities, to do a lot of work, very independent, so that's attractive, it's not so strictly organized, they have a lot of room to develop it by themselves if they like it. And of course we have training, we have advantages to be part of a big company, that's very good organized here.

S: Right, but would open innovation also be an attraction factor?

L: Yes, in general. We have, I think because of our way of communication, to the outside world, if you look at the website, I don't know if you have seen it, but if you work it out then you can also look at the website of DSM and if you go to innovation there is a lot of information so it's not so difficult to attract people because they really say ah, it's a company that likes to innovate and we have a lot of examples. But I always say to some interested candidates, be aware we are still part of a company, it's not all freedom, that's not possible, because we always have to ask money and you always need a good case for that.

S: You mentioned earlier on the talent management, is that something, maybe if you compare it to a closed innovation, is that something that's challenging or new in open innovation?

L: No, it's not new. It's difficult, to be honest, to apply really our talent management also for open innovation because it's only a small part of DSM and some people find it's very risky, open innovation, but I always say the real talents, they can do it. So we have a talent management in place and that's we have high potentials and top potentials and they get special attention so to say, special programs, they do some kind of programs like a business plan competition, where we stimulate open innovation for example, so we develop some tools to stimulate open innovation and also for people in finance or HR or in manufacturing, also to get that mindset, so that's also what we are doing and also offering to the talents, and for ours and broad, and sometimes you get also the right candidates for some positions in the innovation center, because they like it and say oh that's nice, we never did it in our department, so it's also stimulating, we make also make use of that.

(…)

S: Do you also try to build an external talent pool somehow?

L: No, not externally, because we are doing talent mapping, maybe you are mentioning that, because we are looking for example in the biomedical field, we know exactly the talents in the biomedical field, in the US, so that is what we know, but we are not developing them, we know them, where they are, in case we have some vacancies or when I think I need that person to give a boost to something, that's what we have in place, we call it also talent mapping, but that's more talented people working in other companies who could be good candidates for us if we have a vacancy or if we have some specific attention or something. We have that for biomedical, we have that for the bioenergy part, because it's totally different talents, you cannot share them it's totally different, in the glass companies, because coating on glass we are not glass experts, so you need talents from that part, so we know where they are, so at the moment we need somebody then we can, we never do it directly, always via some other companies and they will reach out to them and they will say well we have a nice opportunity for you there at DSM, that's what we are doing, but we are not developing it.

S: Ok, but there is somehow a network when you know you need something then you need where to look.

L: Yes, and of course our employees themselves have networks, we also stimulate that, go to conferences, to seminars, to meet others, it's also what we are doing, it's very, very important, also in our department, HR, we do that also. I always have the agreement with my HR business partners, you have to go out at least two times a year to seminars for your network, to learn, so that's also a tool.

S: If we wanted so focus on the major problem, let's say the major challenge for the human resource side in open innovation, what would you say that would be?

L: Oh, I don't like the word problem, because it's negative, opportunity. I like that more. It's for both sides that you have an inclusive and diverse team. And inclusive in terms of respect to each other, because you need a diverse team, and the challenge is to keep that also and that it's really effective. And then you need an open mind, and in general companies are looking for the same profiles, because it's easy, it's one of us, you can imagine things I think, and if you really want to make progress especially in open innovation, you need a diverse team with different mindsets, different thoughts, different opinions and different backgrounds. And it's not only in terms of gender or nationality, it's also the way of thinking, and that's a challenge to keep that working and to find that diversity, that's a challenge.

And also a challenge is if you develop a project in innovation, because innovation has different stages, if you start it's totally different than launching it to the market, you can imagine that you need different people for that, it's also a challenge to do it in a positive way, changing your team. Because some are saying I have a very good team, yes, for that stage, but you need another team now for your next stage of your project, and to do that in a positive way and also find other opportunities for that team at that moment, that's also not easy, that's also sometimes a struggle for me when you have very good people in project X and then we say we need some other people, but then I have three or four business developers, very professional good people, and I don't have a project at that moment. How can I keep them and how can I motivate them? It's also not easy.

Yes and in open innovation, what's also a challenge is that you learn a lot and you also then have to bring a lot otherwise you will not learn a lot, but you have to keep in mind the intellectual property, how far can you go with sharing, because knowledge is money. And that's also from the other part, what we have also noticed is that some other companies are very defensive in sharing, so we have to find a way to get the most out of it.

S: Would a challenge also be how you communicate this to your employees, how much can they say how much can they not say?

L: Yes, and you have to feel that a bit, and I am not saying that we have to be defensive because I don't believe in that, if you are not sharing then you also can't get any information from others then, you have to share, but you must be aware of what you can share, and in which stage, and especially if you cooperate with another company, we have a lot of partnerships here, it's a challenge to work with partners, because they also have their own way of working, policies etc. and the challenge is to discuss that from start and not to wait, and if you think oh that's a good part, I have to work, then you are normally in the mode of get it done, and sometimes you have to take time to make very good agreements together how to work together, make time for that. Think about it, what way, how do we do that, who will make the decisions if it's a 50/50 JV? Why are we doing this? What we often see if that you are positive, enthusiastic about cooperation, that you forget that step. That's entrepreneurs who think ah, I can get it done, but it's so important. That's sometimes a challenge to discuss that with them in an early face. And then I am saying no, first you have to be clear on this, who are taking the seats, who is the general manager, the business developer, how do you want to share your knowledge, do you want to have a patent or not or all kinds of stuff.

S: Ok, maybe my last question would be sometimes or probably often start-ups fail, open innovation projects fail…

L: We have that also, then we stop, then we stop sometimes, or spin-off what I said because that we have learned a lot but it's not for the future, but we always evaluate it, always. Why did we start it, what were our assumptions at that moment, what happened, and why is it not successfully so that we cannot proceed with it, maybe it was successfully for the early face, we learned a lot, and it's also a success. So you also have to accept sometimes that you have to stop projects, and that's also an success, not always negative, but then you have to take time to learn why we did it, what went wrong, what went positive, good, what did it bring us, and otherwise you will never start, so you must be open for that and that's also a challenge to stop it, they are working together and it's nice, but there are some difficulties, financial or whatever, and they always try to find solutions for that, sometimes it's better to stop it. And it's not easy because they are so involved and engaged in it, and then you have to make a step out of it and say what are we doing?

S: So do you also try to communicate to employees that when a project does stop, that they should see it as a success and a learning?

L: We do that, we have review meetings every month because we have many, many venture and partners, and then sometimes you say you did a great job, because you looked for all kinds of opportunities outside, learned a lot, only it brings not what we want, what we want, but we learned a lot also that we have to stop it now. That's not easy. It's not easy for the project lead to accept that, because they think oh it's a failure, we fail. It's a challenge also. And then what we try to do always is to find a nice other opportunity for that person, and that's not always easy, and then they think, I don't get another job, I fail, no. So that's a challenge to keep it positive.

P: Shortly to this point, is it then more a financial decision to stop a project or is it more the people side that also the project leader says well it's a good project but we are not getting where we want to get?

L: It's diverse, sometimes it is because we have to focus, if we have three projects and we have for example 10 million, and each project want to have 5, then we have to say ok in the first stage you all get some money, but in the second stage you have to show that you are worth that we invest 5 million in, sometimes it is because of the business case, it's not successful, or because the relationship with the partner is not good, could also be the case, because if they want for example not share the technology or whatever, and then we also say we stop, we don't want to invest anymore. It's never because of a person to be honest, if it's the person, then we replace him, but that's more a performance issue, or because somebody is not the right profile, it's a good person but does not have the right profile, then we appoint a new person, so it's business, also the timing, that it's for example for 3 years, and then with a lot of trials it's 5 years, and then we said no, then we need other partners for

example because it costs us too much money, so we need other partners, that could also be, and if we don't find them then we stop, so it's diverse, not only money, because open innovation, if you always say it costs money, stop it, sometimes it costs you money, it's not always easy to valuate it, so it's also a way of believing, a belief that you really think you can learn from others and in a big company we always have to translate it to money, and sometimes we say we don't do that, it's value and we believe in it because we learn other technologies, we learn other opportunities, and maybe later we can make money out of it, so it's also a mindset.

S: And you personally have this belief that open innovation…

L: Yes of course, and then you also have to stick. Of course we are a company and we want to earn money, we know that, but that's also long-term, you have to focus on the long-term. And that's not easy. Most entrepreneurs are focusing on this year, or companies even, this year, maybe next year. Long-term is not easy, because the world is changing rapidly, you can feel also the economic climate.

P: Is it then very difficult for a Dutch company in comparison with an American, because the Americans are more short-sided…

L: They are more flexible in America, here it's more difficult, in the US they have a bit a different mindset, that's true, more short-term, here the labor market is also more difficult, you have all kinds of laws, in the US it's more easy, I don't think it's always good to be honest, but in general it's also the global market situation.

(End talk)

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 29th of April, 2013, 18.00 am – 18.45 am, Interview on site

Interviewer: Svenja Paul, Sinja Cimiotti

Interviewee: Tom Coen, Founder of Induct

Topic: HR issues is SMEs

Transcript

(Introduction)

S: Ok, so first of all maybe we can start that you tell us about your company, maybe your position and what open innovation means for you and which activities you are involved in.

T: Yes, so we have two main activities. We design and build test and measurement solutions, so that means a quality measurement system, can be a measurement system used in R&D labs, so very diverse in application, but always the same basic technology, so measurement sensors, some actuators, so it's always a combination of mechanics, electronics and software. In that context we have also designed and developed our own suite of hardware and software products where we aim to facilitate the R&D campaigns, the R&D measurement campaigns of especially machine manufacturers, so that has been a product that has been designed over the last two years and is now more or less ready to be commercialized, so the commercialization will start after this summer. Then our second activity is mechatronic product developments, so that means the development of mechatronics, so the combination of once more mechanics, electronics and software, and we do that for large OEMs, so equipment manufacturers, especially in agriculture, so our main customers there are Case New Holland and Bombardier where we develop product features or new products which are always in that field of mechatronics.

S: Ok, so for you open innovation would be the collaboration with these big customers?

T: Yes the collaboration, that is in multiple areas, so in our product development trajectories, the design of the project and designing who does what is not only based on the competences we have, but also on the competences that the customer has, and also the availability that the customer has, and we try to make a puzzle of that, such that we come at the end to a complementary team. So it's not a real customer-supplier relationship, it's more like a partnership relationship typically. Normally there are also more long-term projects for multiple years where we have a long-term roadmap of what we want to do and where we collaborate towards the same goal. Another part of us for open innovation is also that means combined risk taking that we also take part in the commercial and technological risk of our customer which means that part of our fee becomes conditional on the technological but also on the commercial success of resulting product. It depends a bit on the customer, some customers, especially smaller companies; we work in that way where there is a combined effort for others we strictly work on fees for projects, so that depends, but for us risk-sharing is also an important part of open innovation.

S: Ok and I have been reading on your website that if you have a technology, do you commercialize it yourself or do you do that via external paths to markets?

T: It depends a bit. Our base philosophy is that we don't commercialize it ourselves, but of course we have to find a suitable partner to do it, and that means that for some situations like for the test measurement solutions we developed a new product, and that's something that we will commercialize ourselves because we think that we are the best party to do it. For other products we collaborate with other companies that design part of the product or even just have the idea or the commercial network to further develop it, so it really depends on the product basis but if we can chose then we don't commercialize it ourselves.

S: Ok and you were founding the company just in 2009 now right?

T: Yes.

S: Did you do this with the thought or with the thinking "I am going to do an open innovation company" or did that evolve later on?

T: Well it quickly became really basic idea of the company because well we want to do R&D, we want to develop products and we can considerably speed up that process by following the open innovation principles, so that's one part of the story. The other part is that we are convinced that we can develop better products for our customer by working from that open innovation context instead of the pure consultancy context ok, we are going to perform that many hours and we are going to send you an invoice. That's really in our DNA that we are not a consultancy company, so it's really quite seldom that we work on an hourly basis. So from that end we work in fixed price projects, we have the joint risk-taking so.

S: And how many employees do you have?

T: Now we are four people, so three employees next to myself.

S: Ok, talking about human resources, when you look for people, do you have this in mind that you do open innovation, and what would you say are you looking for?

T: It's really hard for me to say well really that part of the profile we are looking for is due to the fact that you want to do open innovation, but I think we are looking for a quite specific profile of people because on the one hand we want to have experts, we want to have people who are good in what they do but on the other hand we have to have people that can collaborate with others also in non-hierarchical contexts, so that means with their colleague but also with someone outside the company, a supplier or a large client, you are always involved with people with which you don't have a direct relationship, so and that's something that we try to take into account, we try to get a feeling of yeah, will the person be able to do that.

S: So would you say it's then based on feeling or is there something specific that you…

T: Yeah there are no specific tests; it's really based on our feeling, we involve multiple people, we try to get a lot of experience around the table to further quantify that feeling but it is a feeling.

(…)

S: Ok, one question that is frequently coming up is if this mindset can be trained, do you have a personal perspective on this, if you think that somebody can be trained to have an open mindset?

T: To some extent. I think it depends on what you are looking for, if your question is can somebody be trained to function in an open innovation context the answer is yes, but if the question is can someone be trained to create an open innovation context then the answer is no. So you can create followers but you can't create leaders. So if you have a company that functions in that open innovation mindset or even company that starts to function in that mindset and if there is someone who implements the procedures and says ok we are going to do it like this and like that and this is how we are going to stimulate it, then I think you can train people to work in that context. But it's very important then that you get everything right because in a lot of companies, especially in large companies, the structure is fundamentally against open innovation because open innovation also means that part of your job is to make somebody else shine, that's inherently a part of open innovation because well you have to share everything you know, so also other people can do something with that, and if you have a company where remuneration is still based on how many ideas you brought on the table, yeah then that won't work.

S: Do you have any specific rewarding or remuneration system in place regarding open innovation?

T: Well yes and no. We do but I don't think it's relevant, because ok we are a small company, we are a small team, I don't think you need that kind of system if you are working on a team basis and where the team leader, in this case myself, can decide over remuneration, then I don't think it's relevant. If you have a larger organization, then it becomes relevant because ok you work in a team and a team leader doesn't decide over remuneration and rewards, someone higher up in the hierarchy does. So you have to have all kinds of systems to quantify that and to try to bring that into the remuneration pattern, whereas here it is clear for everyone that I take it into account at the end of the evaluations, and ok the algorithm may be a secret, but it's clear for everyone that it is taken into account. So we do have a system, our largest customer actually has a system where inputs or ideas that lead to patent applications are rewarded with some kind of an amount, and that system is also in place for our own employees. So if we give ideas that lead to patents then we also get that same amount for the persons of our company that were involved. Ok it's nice, but I don't think it has a considerable impact relative to the working of the team where it's clear for everyone that open innovation is the focus.

S: Ok, so we have been talking about recruiting, training and rewarding as HR practices inside the company, maybe before we move on to like the interrelation, is there anything else specific that you would say you do as a HR practice regarding open innovation?

T: Yeah I can't think of something really.

S: Is it easy with that small amount of employees to create a culture?

T: I don't know it's easy, it's different, because the culture is inspired by a person, not by a structure, that's the main difference. So the things I do and say have to end up and have to lead to that mentality, to that culture. Whereas in larger companies it's not what the managers say that is relevant, but it's what the structure says what's relevant, what the structure implicitly means, that will count. So it's different.

S: Ok, but do you have to enforce this and communicate this to your employees?

T: Well yes that's a lot of small things. Before a meeting with the customer you give some pointers, before a meeting with a supplier, also negotiation with a supplier, you try to give a good, to lead by example, ok to say, this is what we will do, this is also the way we negotiate with the supplier, because it's also important for us, we have about half our turnover is in expenses we make, so material we buy, so purchasing is important, it's a couple of 100.000 Euros every year, but also there you can walk in and say the only thing that counts here in purchase is money, so if we buy something then we want the lowest price, always. Or you can say what's important is that we get a good price, of course, because if you don't get a good price then we can't give a good price to our customer. On the other hand we also want support. We want support from a supplier, we want a supplier that's also happy, that's willing to do something for us and is willing to help us if we need something urgently or if we need to fix something then he also has to be willing to help us, so that's a totally different mindset and it's like, from examples like that in specific cases where you do a briefing before there is a meeting with the supplier or customer that you give the example of how you want it to be, so you don't have to write it down in procedures, nobody will read it anyway, that's not relevant. It's the everyday case that counts because if there is a new person that comes into the company, then other people will also if he has a question and says well how should we do this or that, then the feedback he will get from his colleague will also be based on these cases that the other person has already experienced, so and that can be good or bad. Sometimes there is something that arrives where you say ok I didn't respond to that situation, I didn't like it very much but I didn't find it that relevant that I had to step in and then later on you notice that that same situation is being briefed to another colleague as ok that's how we do it, so and that's what counts, that every situation where you see there is something that doesn't add up to the mindset that you want to move the company then you have to intervene and the other persons will learn from that situation as well.

S: So would your point be that every time in a briefing you have to communicate how much people can tell for example? Is this also an issue that comes up when you as a small company collaborate with a big company, how do you communicate to your employees how much they can tell?

T: Yes absolutely. The guideline is nothing. That is the guideline because you want, and that may be very contradictory with open innovation, but in my opinion the biggest enemy of open innovation that is people that start blubbing everywhere about what they did and how they did it, because when you do that with a new customer he will say oh, you are telling me how you did it over there, but that will also mean that what you do over here you will also tell somewhere else, so I don't want to work with you. So you have to start from a situation where you say ok, what can you tell another customer, nothing, because every time you tell something to a customer you have to think about it first and say ok can I do this, can I tell that and then the next guideline is ok, you can tell stuff, but you can't speak about other names of customers, you can't speak about the context, you can't speak about how the project fits in the product map, you can't tell anything strategic, he can only talk about what's at the essence of the technology, that's all you can talk about. But you have to start from a situation where first of all everybody has to keep quite because there are a lot of (…) in place and they have to be respected and it's also very important if you want to keep doing business and from that point on you can say ok, let's think about it and see about how we can anonymize all the data to make it also interesting for other parties, because the interesting things are not who are the other parties or what is the application or what was the result and how many percent have you improved the result, that's not relevant for the customer. What he wants to benefit from open innovation are ideas: how do we solve this, oh but over there we did this and that and yeah, that's what is interesting, but that is often not protected by IP or know-how.

S: Ok, you were saying that the biggest enemy is if people maybe talk too much, what would be another problem or human resource issue that you see when collaborating with big companies?

T: Another problem I think is that, something that we experience quite often is that if we collaborate with large companies in an open innovation context that they always seem to end

up in some situation where they say that they want to internalize the knowledge, which is basically a good thing, but the implementation is not always such a good idea. That's then their implementation then is often something like we want that you work for us and we want that when you do the work for us you come over here one day, two days, three days a week, and as you can do it over here, cause we want to have you here to interact with your colleagues, which in the old thinking was very interesting, I also prefer that my employees are at their office and can interact with their colleagues, so it was a good thing. But in the open innovation context it's a bad thing, because if my employees are always at the customer site, then they are no longer my employees, I am just hiring my people, not only is that something that doesn't interest me, I don't want to hire people, that's of course one big problem, but on the other hand at that time in my opinion it's no longer open innovation, because open innovation means that you can create cross-fertilization, that you can have a person that functions in totally different contexts and can bring in all kinds of new ideas, but if you take that person and say ok now you are going to sit behind this desk for the next six months and you are going to think like all the other people around you, yeah then it's just a resource, so he can solve the resource problem, but the cross-fertilization effect is gone, even the expertise effect is for a large part gone because he is no longer supported by a company, it's just a person sitting there instead of, working for the company directly or as an external, that's just the same thing. So and that's often something that's very hard to explain to the customer, that on the one hand that you want to support their efforts to internalize that knowledge, there is nothing against that, and you want to facilitate and support and give them documentation and give them all the documents so that they can internalize the knowledge, but on the other hand that you don't want them to internalize their people. That wouldn't work, so and that's the thing it's very hard to explain.

S: And with internalizing people you mean your people going there and working on a project…

T: Yes, so of course we go to the customer, clearly, we have meetings over there, we have work meetings over there, and depending on the situation we can spend a lot of time with the customer. But it's always, we are at that point as an external with the customer, so it's not that we have a desk there and that week we work there, some days a week, so it's always with the purpose, that's a totally different context.

S: Right. Is there another challenge that you see?

T: I think that's the most important.

S: What about the culture? Because you are like here, I understand that you probably have this entrepreneurial spirit somehow having founded the company, and then you have this large organization with rules and restrictions?

T: Yes but part of the reason they hire us is because of that culture, so most of the time that's not really a problem.

S: Ok.

T: So there are some HR issues that I am thinking of right now, but it's not really 100% relevant, something that we have to train our people in as well that on the one side you want them to collaborate with the customer, but on the other side they have their own objectives. Their objectives in a project are set based on the objectives that we have in the project as a company; so you want them to collaborate, and to be open to the employees of the customer, but they have to protect themselves as well, so if the customer starts asking too many questions, something that is not relevant for our own objectives, then the answer is you have to learn to say no. And say yeah, that is difficult, especially for engineers, if someone calls them and says I have a problem over here, I need you to help me, and you have to train them to say no you can't, because I don't have the time to do that, we could help you, but if you want that yeah then you have to talk to him.

Sinja: I would have one question because we were not talking a lot about your employees and if they are willing to share knowledge etc. How is your experience with the large OEMs, if your employees need knowledge from them, do they get any training on how they get the knowledge from the OEs because their employees are probably told as well, well don't give away too much knowledge.

T: In general I think we are better in keeping our mouth shut than they are, because well here the distance between the enforcing organ and the executive organ is much shorter, if they tell something somewhere that they shouldn't, I know. Whereas in a large company, the people that really care about that, keeping the knowledge in, are often very far from practice. So in general that works quite efficient.

S: I would like to come back to your engineers. We were talking in the beginning about that you most of the times also take ideas outside, I could imagine it's frustrating maybe also as an engineer if you have a great idea, you want to build on it, you are passionate about it, but then you take it out, do you see this as a problem? Or how do you handle that?

T: Well, it's correct that it could be a problem in some situations, but in our case we do the entire trajectory from idea to design into implementation to production, so our employees have enough opportunities to really take an idea from the beginning right to the end, so I am thinking in that way it is not really necessary that they can do that with every idea. But I think you have to have a good balance. You are right that it wouldn't work if you were sitting over here and just giving ideas and selling that idea immediately to another company would be a consultancy role, I think that would be much harder for an engineer because it would start to itch to do something with it, but if you have a number of trajectories where they can do something with it, then it doesn't really hurt when we have other trajectories where we just collaborate and open up the idea to other people.

S: Ok, I think these were almost all of my questions. If we wanted to focus on (…) the main problems regarding the people side in open innovation, what would it be?

T: Yeah I think, like I said earlier, you can train people to be followers in open innovation, so if you have an organization of no matter what size and there is someone at the top who says ok this is how we are going to do it and it means that you have to start sharing your ideas and put in place all kinds of systems to stimulate that and support that, then I think there is not that many people that would say no, because there is just a mass that is moving in the right direction and they will follow. But I think it's very hard to take the leader of that SME and try to convince him and try to learn him how to work in open innovation because it's a bit like, you can compare it with snowboarding, skiing, in order to be very good in it you have to have faith and really go for it, because if you are going to slow then you will fall and I think that's much like, it's also the same with stopping with smoking or stopping with drinking, you have a habit, and you have like ok, when I don't do that, then something bad is going to happen to me. And you have to learn those people to step over that fear and say ok but let's try something completely different, you think that it won't work if you do this and that, well let's try, and that's very hard to do.

S: Ok, maybe it's a personal thing, but so you would say faith is one thing that you as a team leader need, what would be your advice for other team leaders, what else do they need? Because I understand that you point is that a team leader is important in open innovation.

T: I think so, yes. I think, well it's a bit like, there was an article some time ago about someone that worked; on one hand a good manager is important, he can add little value to the company, but on the other hand you see that companies who have really made it with someone who started up and became a big company, they have some entrepreneur that is leading them to a very mature face. That entrepreneur is often not very good at managing. The thing he has is that he has authenticity, he is driven, he has clear vision on where he wants to go, and everybody has to choose, either they follow, either they get off board. And I think that's much the same for open innovation. In don't think that systems are that important,

getting the people enthusiastic about what you are doing and how you are doing it and convincing them that that is the way to do it, that's what it's all about.

S: Ok, and so would your point be that an entrepreneur is not a good manager?

T: I think that is often the case, I know for myself, I am not a good manager. I have no problem with that.

S: But you are managing a company?

T: Yeah, but that's, managing means keeping, so writing out a protocol and that's how we do it and always enforcing that protocol, that's what managing is all about, enforcing the protocol. An entrepreneur is about thinking outside the box and when, I think both types of people can perfectly manage a company, but it has to be clear for everyone who is working there which type of person you are, if an entrepreneur starts to act like a manager then you have a problem because you are no longer authentic, it's not really a problem for people if you have some strange thoughts about something, you say ok this is the way that I want it. People accept that. And that is authentic. For me for instance I am quite maniac about getting everything perfect, it's important for me, if something goes out to the customer it has to be perfect, and that's not about money, it's not about efficiency, it's about it has to be perfect, it's part of what we do here. And if you act like a manager, then you say oh well, we now, we reached 80% of what we wanted to do, it's acceptable for the customer, if I want to reach more then perhaps, I will have to put too much pressure on the person now it will be bad for moral I shouldn't do it. An entrepreneur will say, the hell with that, it has to be perfect. And if someone doesn't agree with that, he says for me it's too much, then he has to go work somewhere else. And I think that's very important also in open innovation that the leader is someone who is really passionate about it and doesn't really care whether it's fair or enough, no, he has a vision and wants to translate that vision into practice.

S: So would you put team leader and entrepreneur on the same level?

T: I think there are lots of things that are very similar, I think there is one big complication with an entrepreneur, it is that you also have to lead people, whereas a team leader can just say I am focusing on a project here, so I have to make everybody enthusiastic about the project and make sure that they want to work for the project, but I don't have to take into account all the practical things of being their actual people manager. In lot of big companies that's no longer the case; the team leader is not the people manager. And that's something that you have as an entrepreneur especially in our business where you have a lot of technical stuff, that's an additional complexity, because they know if there is a technical decision they can always challenge that, I am not the pope, I can make mistakes, so if I say ok we are going to do it like that on a technical basis there are very welcome to say no it's not a good idea because of this or that. On the other hand, if I take a business decision, there is no discussion and it's very hard to put that in the same person, and that's often much easier for a team leader, because either he only has to have the profile of ok we have a technical decision so there is no boss there are only decisions that are really based on science, or there is the people manager that says ok I am just following procedure, I can't do anything about it, we agree that we have that many days of holiday, and you can take a (…) and that's how it works, but it's a completely different way of interacting with the people. And with an entrepreneur you have to combine both things in the same person and well maintain a good relation with the people that work for you.

S: Right. And we have talked about if it's possible to train people to be open, would you say it's possible to train people to be an entrepreneur?

T: I don't think so. You always see that well there are lot of aspects of being an entrepreneur of course. So I can imagine you can train people in some aspects of it like the core of being entrepreneurial and thinking up new ideas and going for it, I think there are some people you can train for that. But there is a combination of many things, there is also the uncertain-

ty that plays a big role. That's something, either you can deal with that or you can't. And I don't think that's something you can teach.

(End talk)

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 15th of April, 2013, 16.30 am – 17.30 am, Interview on site

Interviewer: Svenja Paul

Interviewee: Patrice Vandendaele, Founder of Devan Chemicals

Topic: HR issues is SMEs

Transcript

(Introduction, background information)

S: Maybe we can start by you telling me about your position, how you're involved in the company, and also how the company is involved in open innovation?

P: Right, so Devan is a family company, owned by two families, so we started in 1977, it's the second generation. To make it easy I'm the 'Van' of Devan and Mr. de Keyser is the 'De' of Devan, that's the name. So the company evolved quite a lot in the last 20 years. When my father started the company in 1977, it was really buying and re-selling chemicals for the textile industry. Then, once I took over the company in 1991, before I didn't work for Devan, so I was working for my own, and I decided to join the company when my father decided to retire. In 1991 we decided with my colleague Mr. de Keyser, so we were the second generation, we decided a few things. First of all, we wanted to grow, secondly we don't need to have our children work in the company, and that were two important decisions because if you want to grow with buying and re-selling chemicals like my father was doing, there was not much future because you are an agent of other companies, so you depend on the development of other companies and also our market was limited, it was limited to the Benelux – Belgium, Luxemburg and the Netherlands. So we also needed to change the strategy of the company, so we decided to start to develop our own products and we started with flame retardant quite successfully in the 90s, and in 2000 I found a very interesting molecule which is an antimicrobial not used yet in textiles and we decided to launch that in the textiles. And therefore we needed also much more research and development and from there, starting in the beginning, it was more like by need that we did open innovation, it was more collaboration with some institute to understand what was a good antimicrobial, why and how it was working, because we were chemists and no biochemists or biologists. So we needed some external assistance, but it was not really like a relationship consultant and us, so we didn't just pay for getting advise, it was more, we wanted to develop some new products, can we work together to develop something? And so from 2000 we progressively moved to now, what I can really say, an open innovation strategy where all the strategy of the company still in the chemicals for the textile industry, but always now because we do research which is about I would say, we do what we call long-term research which is we work now on a product that we will launch in 3 years from now which is quite long for a SME, most of the times you work for the product of next month or of six months. So we had two programs, we have a short-term development, this is really what I would call doing products for specific customers, so it is really based on what the customer needs, and then what we are working on long-term is what we believe is technology which will be useful within two to three years for the textile industry. That means also, you will see in the brochure that for example 10% of our turnover is really invested in research and development, we spend 10% of turnover which seems to be quite high. I believe it because it is an important investment for us, and also 30% or the people in the company are working in R&D. So we are really considered on the market as a real innovative company bringing new products, but to bring those new products, new technology, what we need really is also a good collaboration with universities,

with also other SMEs, so in the framework of FP7 for example, the European project, we have collaborative projects where we work together using the competence of the institute, other SMEs also. So we have also programs which are not related with Europe or I would say within the money that we could receive to do research, for example what you have to know, we do research in three companies, our group, it' s a small group with 50 people, but we have Belgium for flame retardant and antimicrobials, we have Portugal for the microcapsules and then UK for what we call functional polymer, so in the three places we do research, but I decided to keep those three places because they have all also good connections with universities, but also local institutions, so it's also important really to decentralize everything to have as much as possible contacts with different people, different ways to think, because Portugal is completely different from UK, and so we keep a company with several cultures, but also several roots, local roots, which makes it also easier to do open innovation. So we strongly believe that we cannot move on or keep moving or growing like we are doing now without an open mind, an open way to work, because you cannot invest in all the equipment available in some place, but also when we talk about microcapsules we know very well what are microcapsules, but if we need a new process which has to be combined with the microcapsules, we don't necessarily just develop it. If we know a company having this type of technology, we really want to share what we know about microcapsules, with them they share what's the next step of the process, and so we move quicker. We can really move quicker, cheaper, but it is a question of trust. That's all about also, I guess, open innovation. So this is an introduction I guess.

S: Ok, very well. So you would say that for you open innovation means in general collaborating with universities, with other SMEs…

P: Yes, but collaborating in the sense that we share knowledge. It's not just you sell for me and you get a commission, that's also collaboration. But collaboration here is really at the level of developing or innovating new products.

S: Ok. Then, maybe the main question, and then we can go from there into deeper issues, would you see HR as critical, or do you see problems looking at the human recourse side when opening up?

P: Well, human resource is as such a very difficult topic. Even without open innovation, so this is probably for me as the boss of the company the most important job is human resource. It's also the most difficult because you need to find the right people, you need to keep the people, it's quite challenging. Especially also that it's not easy to find people with high-tech profiles in our sector. There is a lack of engineers, there is a lack of PhDs, so we have in our company now five PhDs, but especially in Belgium for the moments it's quite difficult to find people. But that's common; it doesn't make a difference with open innovation. Then, if you look at the relationship of human resource and open innovation, the profile of the people is also very important. Not only the technical background, but also you need people who are open minded also, who can share ideas, who can accept that they are not the only ones who are intelligent and who can really recognize their limits. For some people it's difficult, because it's oh I am a PhD in chemistry, I know everything, and why should I share my knowledge with somebody else, especially if it is not in the company? So this is, when we look to the people,, it's an important criteria, but we look at that more like is a person curious, likes to ask questions, to look around, means that he is also open for others, secondly his communication skill is important, does he talk with people, does he not only to the team inside, but is his behavior outside of the company, he should not been locked down to his seat and not dear to speak in a meeting, so the communication skill is really important. I don't ask negotiation skill, that's not the purpose, but really to ask the right questions, to share things, but also to be curious all the time to look where we can find a new partner. Because open innovation is not just with one partner, for one product we have three partners there, so it is very important, yes.

S: And why would you say that negotiation skills are not important?

P: Well because that's even more difficult. So when we see ok we will work together with other people, of course we need contracts, of course we need some framework, and there the people can translate that in contracts, but then some people in the company are more specialized to just to put it on paper, what is the limits, what is the agreement on IP and so on. You cannot ask to a young clever engineer, even after five years, to know all the things about that, so when you hire somebody you know you can eventually train him to do that, but I doubt that you can really see this is a good negotiator, unless it's a lawyer but we don't need a lawyer.

S: And would you say that training plays a big role, because I understand that when you look for people to hire you look for curiosity and communication skills; do you think this open mindset can also be trained?

P: Frankly speaking no. When we have hired people, all are not curious, all are not the ideal profile I was giving you, but also some people you can – I would say yes you can train them by creating a culture in the company, but not a formal training. So my first reaction was I said no, because if you think that if you make training at a university or an evening school about that, yes, I think if it is not in the culture of the company, it will be not much difference afterwards. But I think that if we, yes we tell people look we dare to work with other people, we dare to be open, to share our knowledge with other people. In the beginning some people will be shocked but when they start to see the advantages, and also when they know that there is trust of the top management and also the support of the top management to go in that direction, they feel comfortable because it is not really in our culture to share things, in the business. Most of the times, too much and that's probably one of the weaknesses also of the business community in Europe is that everybody wants to work in his castle, well defended, well closed, and then you can progress, but not progress at the speed that you should progress. So I think that the people we hire, some like that we recently hired, we really feel that it is in their blood already to cooperate, to exchange, to work in group, but then some profiles are very good, communication is good, but still in their education it has been always said be careful not to say too much because people will steal you. Then you have to show them, first show the strategy and say look, there is a risk, we take the risk, sometime ok, there is a cost when somebody cheated or took something from us, but the total benefit is anyway much better than some disadvantages, but when they feel the support then it's easier for them to move, but is that a formal training? No, it's just showing them, give them examples, showing them the way to go.

S: Ok, but how do you show them or how do you communicate this trust?

P: We don't have a formal training package for that, but I think what we do, when new people are coming into our company they are always surprised that they don't receive a huge amount of work to do. We start very slowly, we give them just one project, just a part of a project in a team, and actually they could probably work 50% more, but we don't ask, we just want them to take their time, to integrate what we do, how we do, that they can take time to understand the project, to watch our people at working, and then progressively we increase the volume of work, also the difficulty of work. But it's really progressively so that people who are working with a new person are not expecting from day 1 or the next day, oh now he is there, now I have less work. No, he knows that it is somebody who will work step by step and so first you don't put to much presser to the person and you don't stress him or her, and then you can really feel more comfortable, they can also see examples of other people, so step by step, and after a year they are full, optimal, but optimal doesn't mean that it is necessary that they work 60 hours a week, it is just also the other people in the group are taking younger people with them and so slowly moving on.

What we do, I forgot but it's important in the selection of people, when we need a profile the first thing of course we look around if we have a profile available, what can be somebody in the university and we know that he is looking to get in the industry, and if we find this is a good profile we approach them. If we don't, we make an advertisement not in the newspaper but with our network, ok we are looking for people and then you put that in the universities or research centers and there you get people who are applying for the job. What happens

then? We have a first, when I say we it's really we, we have a first discussion with the person, and it's different people of the company who will work with him, so we start with the idea that if you are an engineer in chemistry, you should know chemistry, so it doesn't make sense to make an interview on the technical background. It's more an interview about what the person wants to do, what is his motivation, what is his interest, and then one of the key questions is also, will this person fit in the group. Not technically because if we need a chemical engineer, technically it will fit, but how he will communicate, is there an empathy between us and the person and reverse, well the person will most of the times say yes I would like because he is looking for a job (…) but what we really look is if that person will fit in the group. Because each time you add somebody to the group, the group has kind of a delicate balance, if you put one more and if it's for example very brilliant, but no communication skill, he can just disrupt our group. I prefer somebody a little less profile or less intelligent but who fits better in the equilibrium of the company. And last but not least, because I work a lot with my gut, just I have a feeling yes or no, I hire people sometimes just because of one thing say said, why? Ok, I hired one person one day because he was a rugby player, and for me a rugby player is somebody with team spirit, a lot of quality because you create a lot of synergy between people. But we have an external person that I call our coach who knows quite well our company, I know him for a long time, he knows almost everybody here, and then I let him interview, do you think would he fit our company. That's the only question. And then he says yes but he needs training, or no because yes, of course a background of oncologists, but it's not a full psychological profile, this place of this person in our group.

S: Would your point be that if that person fits to your group, your company, that he will also be good in communicating with external players for example?

P: Yes, if he communicates well in the group, I believe that he will communicate also well with the other people, because the group will be the culture. That's why I also said he needs some time, to get to know the culture, but once if he has a good communication skill and a good relationship with the people in the company, he will quite easily move by himself also in the same thing.

S: Ok, another HR topic would be the rewarding scheme. Do you see this as something that changes with open innovation?

P: It changes… yes, I have to think, because through the years I see a big difference between the way we reward people now and 10 years ago, and I am not sure it's because of open innovation or if it's just the trend of the moment. So I cannot today make the difference, maybe you can, but I can't. What I see is that people are less demanding on the amount that they receive, but they want more, I would almost say more private time. Private life becomes much more important, you cannot ask people today what you could ask 10 years or 20 years ago, people were working at home very late and you have to pay a lot of money and they work a lot. Now you can say that the people are not necessarily expecting a lot of money, if you can give them a way of life where the private parties can be kept. Small examples are in the past everybody started at 8 o'clock, now 8, 9, 9.30 and even if we would say ok everybody has to start between 8.30 or 9, I think it is also trust of the people, and that's maybe why we can do that, if you trust people to open innovation, you should also trust them in the way they work for the company. You can start at 9 o' clock or 8.30, and for me until 17.00 or later, as long as the job is done and it's the same risk like open innovation, if somebody wants to cheat, he can cheat yes, and this is the negative part of the positive. Now I think that you need to give a lot of flexibility to the people because the new generation is asking more flexibility but also probably if you want to do open innovation it is also like I said people are curious, if somebody takes his computer in the evening, is google about some technology and he finds something, this is, what we do also for example, sometimes we just say you can stay home, work from home because you need really to look for new things; here we have open office everywhere, so I can understand also that it's not always easy if you want to think about a new strategy, so why not to work from home. But again I don't know if it's because open innovation or if it's because new generation, but I understand also that open innovation makes people as to say ok, and that's also kind of reward, if you

give people some freedom that means that they are also free to go to some training, to some conference, then they can also make publish some paper, which is not necessarily, we are not winning money with papers, but sometimes for the people it is also a reward, so you have to think more and more also now in an intellectual reward, and not only a financial reward. Ok, you have a financial reward, you have part of the freedom reward, a reward by freedom, and then last but not least it is also a reward that people can evolve, can intellectually progress, because that's also a nice reward if we have for example, we have some patents, people is also, their name is on the patent, that's also an important reward, although they don't get any fee on the patent, but the fact that they together with the university in Gent, their name is listed on the patent, it's for them also a reward. So, yes and no.

S: I think this is interesting that you see those parallels between for example open innovation where there is a risk involved and then you translate this into work life, where maybe people get more flexibility, it's an interesting point. Maybe to move on, do you see failure management as important in open innovation? The way you deal with failures?

P: Well for us, we don't talk about failure. When somebody failed, it's an experience, it's never a failure. It's a failure if he keeps to fail and he doesn't learn from that, but we don't have any way to - if we are blocked in a project, actually we want that person to be very open about it and tell ok I am blocked, or the partner is blocked and I cannot help, and then we can talk again together and then try to find a solution, so a failure for us would be really somebody who makes a mistake or also in our company, if you do nothing, you cannot fail, ok, but that's not a good politic, so we say you can do it, try it, and if you fail, no problem, we are there to help you, maybe to go through, and if we fail we can say ok we made a mistake, but we learn from that and we start again or something else, but there is in our company not really a failure. Failure would really be fail to communicate and tell ok, I have a problem, because that would be a sign that the person is under stress that he could be punished, and I don't know anybody who has been punished here for failure.

S: Just one thing about innovation – if you have an idea and you are in an innovation process, does it happen that you cannot use it and you give it away? For example en engineer is working on something, has a great idea, but you say oh that's a great idea but we cannot use it at Devan?

P: Yes that happened, there are two cases. There are side products of side things that we say ok it's not in our core business, and then what we will do is try to find a company who could use it and then license it. The other things we do, recently we did it also, we had a nice product, a side product also, but ok not in our core business because it was too close to the consumers market, and then we give it to the incubation center and they are looking out who can use the idea, and we are really not looking even to us to make money out of it, because that idea or that product, they use one of our products, so when the idea is turning well, they will buy our product, that's then an example of things were we – the difficulty in a company like us is to keep focus. We have so many opportunities that if you don't, one of the difficulty is to say ok this we drop, this we don't do, or we keep it and we see later, but it is the whole system generates more innovative ideas than what we really can process. Sometimes it's frustrating also, but at the same time that means that you have to be more selective, that you have to be more picky on what you will do: Is that really in our strategy, yes, ok, what are the answer?

S: Ok, because I think this is also an important part of open innovation that you give this expertise that you can't use away – and this is also then my next question, for those two cases, when you gave it away because it was not in your core business, do you see problems there with people?

P: People inside or outside?

S: Both, maybe first inside.

P: Well I think inside if somebody is coming with a good idea so I can thought and then or part is ok we try to spin-off or give it at least there is a reward that you don't, I think it would be a frustration if you put in in a cabinet and say ok good work, we see in a few years, because we know that you're worried for but ok you know it so if you can't give it a second life, a life to something I think that can be a frustration. That's for the inside. Outside, sometimes people are astonished but if we explain again that ah we don't want to do it ourselves, there is a risk, no – why are you not- because we have to many things to do and again, to be selective, to keep your focus, is more important.

S: And do you see a risk of people moving away, if a researcher has a good idea but you say that you can't focus on it, that you may lose that researcher? Because in times of open innovation it's easy to have a start-up go out…

P: I think that for the moment I see still a big gap between researchers and entrepreneurship. The two profiles are quite different, and also I see that frequently when you work with universities and a group is working on a brilliant idea, I say why this guy who has worked for four years on that is thinking to put it himself in a company to do that because it's another profile, they don't have the same version for risk, what is a risk for them, risk is failure, ok, an entrepreneur does not think in terms of failure, he thinks in terms of a success, and most of the times it's a success because you put enough of energy to avoid failure. While a researcher has another way to approach, he knows that when he does experiments, then consider it as a failure, but it's a safe failure, but becoming an entrepreneur, I think there what's next, so that's why I don't see many people leaving with an idea in an open innovation structure to do it themselves, because either if you do it – don't forget also, once you do that open innovation, where you have several people working that and you are not the only owning all the knowledge, so you know that you need all the others, if you decide to leave the group to do it by your own, the risk is that you lose also all the other things because those people will not just follow somebody, if I work with the university of Gent, if one researcher is leaving to take the idea, he cannot just go to Devan because we want to keep, it's always a long-term relationship also with the universities, so if you do things short-term by cheating, stealing, something like that, you are cut out for many years and you are cut out of a whole group of people. So re-create to people, ok maybe you will succeed, but it's not just like you can leave on the side and all the people oh we keep working with you. Because he has . There is a lot, I see a lot of new people in the company here, sometimes are really astonished of the quality of the relationship between the partners in an open innovation, I mean the trust, ok there are some papers, because we have to do some papers, contracts and so, while we in some cases, the trust becomes so strong that if I give my word, or if we say don't worry, we develop that but if we find something you have the priority, I know that it is true. The risk is well that it will change position, but the prof most of the times remains in his position. This is true also, that I should say also, that is very important, in open innovation we have good or excellent experiences with research centers and other SMEs. We don't have good experiences with multinationals. So now the last years we almost refused or avoided to work with multinationals in an open innovation because there the risk is what you mentioned in there, that can happen, because in a multinational they change positions quite frequently, so the guy who makes an agreement with you today, next year he can be in another position and the next one says that was his past, now I am the top, I want to show that I can be , and he thinks much more in short-terms because they think just what is my next position in the big group, to make go quick, it means a lot of commitment, but to serve himself, not necessarily the company and to serve the partner. While in small companies we are thinking much more long-term, why? Because next year we want to be there, the same position, I mean I want to have my company still running, so I have to think long-term and also the people inside our company, it is no run to overpass somebody, but that's only possible in an SME, but we have bad experiences with multinationals, just because this big difference between long term and short term view from them and also people changing all the time.

S: Ok, you said you had bad experiences or no experience? Bad experiences right?

P: Yes.

S: Was there something other involved except that people would change positions?

P: Well the multinational is like a big black hole where you put information and then you don'n know where it goes, this information could go from me in Belgium to somewhere in the US, there they say it's a brilliant idea, we don't need that one, we will try by ourselves, and there the power to try to do it yourself, and then you don't get feedback and you have the feeling that they are abusing of us because you don't have the control and if you have some continents with some people you see also that after one year, two years, suddenly they change and it's never a very long-term relationship. All the people who I am working nicely with I know them now for several years and it's almost friends because we don't need, but it's all SMEs, it's all people who think the same philosophy knowing that alone we can do a part of the path, but if we are together we can grow much further.

S: Ok, and maybe we talked about ideas going out of the company, and maybe we can look on the other side. I've been reading for example that you've been acquiring one spin-off from a university in Portugal I believe, and then, when you do this, do you see problems? Because a spin-off would probably be highly entrepreneurial for example, if you acquire it, in your experience, were there any human resource issues or problems because of that?

P: No, because for several reasons. First of all I don't think that a teacher, a university professor or so, he can be a good company manager, ok, I see many times unfortunately spin-off run by professors and be going to the failure because it's much more beyond just the technology, there is much more on running a company. So in that specific case in Portugal they were after four to five years still struggling to develop the market. Not develop the technology, that's the problem. Most of the university they say well we can do that, we can do that, we can improve, improve, improve… But at a certain moment you have to decide to stop improving, start to sell. When you start to sell, then you generate money and then you can keep improving. With the philosophy with some professors, we would still be on Windows 1.0 because nobody, I mean it is each time you can say oh I can do something, yeah ok, but first let's use that and we will announce a new version and ask even more money for the next version and so on. This is one thing. The other thing what we brought there also it was not just buying a technology, it was buying a technology and bringing out know-how and also our network to make this what they had commercial. And then come from a turnover of zero to a nice turnover today. The second thing is that we kept everything in place over there, so we didn't say we buy the technology and now thank you, we put it here in Belgium, if one wants to follow to Belgium you are welcome, to the rest thank you, bye bye. No, again because we think that their network is also important, we keep it there. And last but not least the people who were there we really trust them to continue the company there, well with some advise with for example all the research stays there, the manager of research also, but since they didn't have any sales, and not a sales manager as such, of course we use also our sales network to do it, but it was again they were anxious about what happens with us in the future, but in the beginning I said ok, it's not the company who has the know-how, you have the know-how, so we want to respect you and we want to keep you. And very quickly they understood that it was the case and it was not just a one shot thing.

S: Ok, and from the innovation side, the R&D people from the university, who do research there, you would say could work well also with your people or engineers?

P: Well we have also then by the frequent contacts we have shown them, first of all they are no longer located in the university, they are in other buildings, but they talk frequently to the university because the university supports equipment and so on. But we have not really trained them, but again giving this culture of you have to look to that you have to keep co-operating with the university, but keep in mind that we need to finalize products and that we need to go on the market.

S: OK, I think these were most of my questions. Is there anything else that you have in mind?
P: No, you asked the right questions.

S: Maybe, to sum up, like my goal in the end is to also give guidelines, give managers who are doing open innovation, who are acquiring, who are involved in spin-offs, start-ups, big companies, what's missing, why am I doing this? There are no guidelines; there are not even problems that managers need to tackle. So very interesting for me were especially those problems that you mentioned when working with multinational, this is something that I am trying to go deeper into, to establish first of all problems, to work on them. So, based on that, is there any other problem, because you gave nice solutions and said why it's working?

P: It's difficult for me because to be honest with you, we went to open innovation in a natural way. I didn't read five books about open innovation, and say that's it and now we will implement is. So I think it's a self-made open innovation. So of course there is a lot to improve, a lot to do to take advise, but it's something which has been created spontaneously because one step and then you see that it is successful, there is a lot of advantages, then you move on, and we see that finally, with a lot of things like that, if you ask people what they think about open innovation and they are not doing an open innovation, they will give you all the risk, yes there are risks, but those risks do not show up so much, and I don't know exactly in English, but what I mean ok, there is a risk that somebody is running away with your know-how, that's a big risk, but the potential of that happening is very low, because you heard all the advantages, so you can have a high risk, but the risk that it happens is very low. So you counterbalance the impact, we can talk like that, the impact of somebody running away is very high, but the risk, that may be better, the risk of somebody running away is very low, because the culture , because the whole system, and people are not realizing that if you do that like that, you don't need to make people signing a lot of papers, they feel also the advantage and they like it and they will not do a kind of treason, I think they are part of the group, of the family, and doing that will exclude them from a bigger group than just a company, ok you can always have somebody who leaves, but he will not leave to take the technology away, perhaps because his wife is working somewhere else and maybe for private reasons, but not for sure the risk of running away with something. Only for me, I've said the biggest risk is with multinationals, that's why we are very careful with that. But again, also interesting for me when I was interviews by Wim, ok out view was that we had no structure in our open innovation, but then when I read what he wrote about us and other people, then he puts a structure, so for me it was also discovering, well we do not so bad, we can still improve, but it's quite interesting what he sees in this or what we are doing.

(End talk)

Project: Master thesis: HR issues in open innovation, Hasselt University, Svenja Paul

Date and location: 4th of April, 2013, 09.00 am – 10.15 am, Interview on site

Interviewer: Svenja Paul, Patrick Ronai

Interviewee: Marc Hufkens, Deputy CEO & HRM, Ridley Bikes

Topic: HR issues in SMEs

Transcript:

(Introduction talk)

S: To the study I already told you, it's about HR issues in open innovation, and maybe we could start by you telling us just about your position within the company and then later we can go deeper into open innovation and HR issues involved in it.

M: Ok, so I joined the company in September 2010. At that time I was asked to research for an extension of the program range for e-bikes, the electric bikes, but at the time I knew Ridley for more than 20 years and I knew it was a very fast-growing company, specialized in race bikes and mountain bikes, always bikes for competition or recreation, no classical bikes like Dutch bikes. So that was a complete new step for the company, but when I came in I

just studied, I made a SWOT analysis and I saw after six weeks, that would be not a good idea to do because the company was growing so fast that the structure and organization was not following the growth of the company. The owner and founder, Mr. Jochen Aerts, was still owner and CEO. He was taking care of four to five management positions by himself. His wife had another important role, CFO, she still is, but then you are limited in your growth due to the time you have, and even if your turnover is growing or your project range is growing, time you have is not growing. You still have seven days and 24 hours, so it was necessary to install a structure, a management team, that means that from the CEO their must go authorization to people where he has enough trust in the people to give the authorization and to let it go. First of all you have to find, if you have in the company the people with the skills you need, or you have to go outside. And most of the members of the management time I found outside, so that was in fact the first step I took in HR. At the time I started, HR was just only a payroll administration. There was no soft skill HR at all. And I thought, ok, I have no department, there are no people involved with job descriptions, evaluation systems and things like that what a normal modern HR management requires, and I made a proposition, ok, let me work with an external consultancy HR office and let's ask ESF, European Social Fund, to receive some subventions in order to pay our high invoices; when you want to do and install for a company with at that time more than 56 employees, when you want to install all these HR soft skills, so we managed to do that, we started in the first of July 2011 and it will run until end of June this year. But in the meantime we were building this complete HR department, we took also care for a good communication inside towards attitudes, core values, just more than only a mission statement, strategy, you find that in every company; but attitudes, what you may expect from your colleagues, what you may expect from all the employees, horizontal or vertical, or even what clients and suppliers can expect from us, we can write it down in our core values. And before you want to change important things in a company, it is important to communicate very well about these core values and to make that as an important item regarding or related to management by example. You cannot say you have to behave like this and this and this and as a manager yourself you do the opposite, that makes no sense, it will not work. And I call it, many years ago I found out from another management in a complete other company and industry, he called that the, in Dutch it is BIO, in English it stands for engagement, integrity and then entrepreneurship. And therefore we pointed out ten points for each from these three items and made that clear to use and to let it use by every employee, whatever its position is in the company makes no difference, top manager or people who take care of the cleaning of the offices, for everybody just the same. And that gives us a good protection to go into this quick change because we want to catch up and structure and organization what we were missing for more than 15 years in the company. We want to do that in two years, there is a certain risk. But anyway, it went very well, and together with the implementation of these job descriptions and for sure regarding competence management, talent management and also evaluation we started with training and education to all the managers and also the team leaders because it makes no sense to say ok now, you are responsible for a bunch of employees, so here are the papers and you have to make an evaluation every year. You need to educate them and to train them. Only 25% of the management members had some experience in other companies from the past, so it was also a big challenge to keep that in line. But we had a good training company and that went very well. When we were starting, and when we received subventions from ESF, we were also obliged to have a survey from Flanders Synergy which was working very closely together with ESF, and that survey was about 200-300 questions, digital, but it went very deep and then we had some input from different angles, not only from the position as HR manager but also from other stakeholders into the company, so it gives us more 3D situation and grounding from where we were and what we want to be. What target we want to reach and what kind of company we want to create. After six months, it was the beginning of February 2012, there was a famous Dutch professor, Henk Volberda, from Erasmus University Rotterdam, who had a lot of experience in social innovation in Holland, he studied that for more than six or seven years and he made some research. At that time he wanted to do that for the first time in the same way in Flanders. So again we received a survey from 200 questions, and this questionnaire together with our answers and also our balance sheets, yearly reports, he made a combination from that, and he made a complete list of companies and related to the points that he was giving to this survey, we were at the best three in Flanders. For us it was

a big surprise, it was very nice to hear. Those are the three companies which are on the highest level related to social innovation. And social innovation, what the hell is social innovation? For us innovation, when we thought before that time about innovation, we related innovation to products. Only to products, new products and things like that. But he gave us some important insight and said ok, when we study the results from a company related to new innovations then only 25% in Holland and 20% in Flanders is coming from only product innovation. All the rest is coming from social innovation. But what do you mean with social innovation; that means smarter ways of working, dynamic way of management, that is also a flexible organization and that has to do with co-creation and open innovation. Ok, some examples of that, and then we found out that we were not aware that we were very active in social innovation because we had indeed a flexible organization, we had a dynamic management, our structure was very easy, only three layers, that's it. And we saw the role from the managers more as a kind of a steward, a steward for people, and also the company which was always and continued in transition, because I am very convinced that the success of a company or success of employees who are growing into a company is related to the ability to change. (…) And that is also the reason why the company was growing so fast, because when a company is growing very fast from zero to where it is, then you are obliged to change very quickly to new situations, not only situations in the company, but in the outside. The world outside is not standing still. It's not because when you have now the best products in the world that it will be next week or next month, so you have to think and to re-invent always and to make re-evaluation, ok this is now the best, what can we do better. And that is something what is very important related to social innovation. So, on these points we were very active, we were not aware, and then ok, so we can steer more and more to these points and when we go into HR recruitment and selection we will take much more about these skills when we make an evaluation about the candidates. Then the last point it was co-creation and open innovation. Co-creation is making products or developing products together with your clients, with professional users, and we do that also for many years. We never mentioned it as co-creation, but as a matter of fact we were in sponsorship since the year 1998, we were sponsoring teams, and since 2002 professional teams as well on the road race bikes as on cycle cross. And that for us, a professional rider, he has a lot more experience and he has a lot more feeling, not all of them but certain riders do have a lot more technical experience and feeling about what is better or not better on the bike when we make an innovation. That's one point. One the other hand we work together also with universities, and high-schools and make some research and investments what can we do better, new materials, new projects; we were one of the first to go for a race bike from steel to aluminium, but also from aluminium to garment fibre. So that makes that for us it was very easy to change from one material to another one because we always had enough interest for it and were open minded to see ok, what can we do better. So that was one thing we already did. And then there was one point where we had no experience in at all and it was open innovation. And I said ok, when we are good in all these other points, then it can't be so difficult for us to do something in open innovation. And then I started to study what do they mean by open innovation and how can we set something up because we are here in this area with a few other SME companies, but also in the bicycle competition business and bicycle recreational business. We are Ridley, we have a few kilometers from here Bio-Razer, who is a manufacturer of cycling wear, we have Lazer who is a manufacturer of helmets, also for cyclists and also for winter sports, we have Energy Lab, and that is a consulting company specialized in what is the best position on your bike, what is the best consulting on how you can do your training schedules, also on food and sleep, just to consult on a very professional scale all the professional riders and also amateurs of course, and looking therefore for better and better solutions. And I thought, ok, we have also, altogether of us, we have one big point when we look to product innovation, what is for all of us a big challenge; and that is aerodynamics. Because when you are riding your bike, aerodynamics, the wind, is you biggest opponent. As well for the bike as for the clothes of the rider as for the helmet as also the position you take on your bike, so we make use of wind tunnel studies for more than seven years and we knew that also Bio-Razer was using wind tunnels for three years and also the people from the helmet manufacturer, only Energy Lab didn't do that because there is not a free wind tunnel in this area, when you want to be sure and when you want to make use of some knowledge for bicycle related wind tunnel experience you have to go to San Diego (…) and then you may

pay 800 Dollars for each hour that you make use of the wind tunnel, so when it could be here in this area it would be good. And I thought we need one common item to start to build this group of open innovation because when we share our experience, our R&D departments, put them together and let them share all their experience in the wind tunnel, then we can make a start and do some more things together than only that. And it was for me, I studied what was working in the world and what was the best example for some industries or some competences, I would not see it completely as one industry because we are normally divided into metal, there is not so much metal anymore on the bike but anyway, bicycle clothes that's textiles, helmets that are plastics and things like that, and then Energy Labs that's study, it's engineering. So it was much more than only just one division in an industry and when I saw a list of all examples, there was one example which was very successful, and I found out that was Silicon Valley in the USA in the Bay area. It's ICT, but it is much more than ICT alone. The way they are working I think it was a very good example, they work in a triple helix where government is one side of the helix, another side are universities and high-schools, these are the second leg, and the third leg are the companies. When they are working together with the government as a facilitator, with universities and high-schools of course as an input from knowledge and basic research and then the companies themselves, they have to create companies in spin-offs, in joint ventures, in working together, they can move much faster and they can have much faster innovation and they can make the innovation time from a product from basic research to launch into the market they make it much shorter. And when you do that, when you can do that, and improve and improve, that is the best way to protect your inventions. Everybody knows ok, we can make patents and things like that, but ok then it is legally protected, but it won't keep people in the Far East away from copying your inventions and keep in on their own market. Then you are still losing. But when you are so fast to invent and to make everything better and better, they don't have the time to copy you, because they are always behind you, they copy old products, when they are ready with their copy, then you have already made an innovation into something new. So make it shorter, that's the best protection you can get and you will always be on top of the list of worldwide leadership in technology. And we are that, Bio-Razer is that, so we have a unique situation. Flanders is also the area where road race and cycle cross was born. Everybody sees it in Japan, Australia, the USA, and now at this time when we have all these classic races like Tour de Flanders, (…), that's all Flanders, so we have here all the heroes, we have here all the knowledge, so it is easy to make it here and to keep it here. It is the same with the Silicon Valley, all the ICT, when you see where is Facebook, where is Google, where is Apple, they are all in this same area, they give input to each other and they attract, and that is maybe the most important, they attract high potentials from all over the world and people who have brand-new ideas, who have new ideas around software or hardware, it doesn't matter, the highest chance that they can get for their projects is going over there. There are specialized private equity companies and things like that which say hey you may come over here like Davy Kestens from our neighborhood with TwitSpark, which is a good example; here in Belgium he can't do anything with that. But he is going over there and they say you may come over here, very nice idea, here is one million dollars, keep on going and develop and make use of our knowledge, make use of our suppliers, make use of our clients, it doesn't matter. And now he is growing much faster than he could ever do here in Belgium. And we have the same position for everything what is related to road race cycle and also to cycle cross. So it would be a pity to let it go and to have that situation in China or in Holland or Germany or whatever. We are here right in the middle of the area where road race bike was invented. So I think that was a very great and big opportunity to make use of it and for each company we don't have the intention to make one big company, it is important that we keep our independence, and all the other five members keep their independence, but we work together not only on R&D, but we have also the chance to work together on HR, also on Logistics, also on Marketing. And in HR for example, when we want to attract the best people in the world related to development for bicycles, related to basic research for example, the new material, the best people in the world are not the cheapest ones, they cost a lot of money. But they have also the ambition to work on something and to develop their idea in the company or with a spin-off, then it is necessary that we are big enough to effort ourselves and them to let them work with us and then we had after let them work not only with us, but also with the other members. When they are young, and when they are coming just right

away from the university, then maybe it's better that they start with the smallest company from our five and then make a step and grow and go from one to another company or starting with two or three from five, so that they can build up a career not only in one company, but in several companies at the same time. That's also an innovation on HR because social law does not allow that. So we have to find out what are possibilities inside the law, are their exceptions because social law is complicated in Belgium, not only in Belgium but also in other countries, but especially in Belgium it is very complicated and it is changing every day, every hour. So we make our preparation and go to the federal government and say hey that's what we want to do, please study this and give us some answers, what's possible and what's not, and how should we do it; that's a big opportunity, we may not lose that. We studied very carefully and then they had to change something to the social law to allow it that there are exceptions for us and they did it because they saw the importance, they saw also what Silicon Valley, how important it was for keeping ICT into America, otherwise it would go to the Far East, they would lose it. And the strategy for a country like the USA it is very important to keep it there. For us, economically, in Belgium we don't have very big multinationals based and located in Belgium, we don't have it, Belgium and for sure Flanders is an area where a lot of SMEs are active. So make use of that and bunch them together so that they have enough power, that they have enough credibility, that they have a much better image than anyone individual can ever reach for sure when we go into intercontinental markets. That's the very big advantage that we can have and also a multinational when they have a world map they have five, six, seven, ten or even more places in the world where they can produce their products. And when the subventions are better in another part of the world they pick it up and they move it over there, just as easy as that. For us with SMEs with only production here in Belgium and sometimes outsourcing to third parties and that happens in the Far East, we cannot move that in the same speed and direction, we don't want that, when we go to mass production and products with a low added value, ok, then there is China and you don't have to try that here in our countries. But with new products and with products in a high-tech, also in bicycles, the added value is much higher, and there we can keep the manufacturing and the production as well here as our R&D because I think that's a mistake that a lot of governments are making, they say ok, it's important for Europe to keep R&D here in Europe; no that cannot be only the point, it is necessary to keep also the manufacturing of these invented products with a high-added value in high-tech, that you also keep it here, because also in the manufacturing it's necessary that you put in innovation in the process engineering. And that is very closely related to R&D. When you split it up, then you give away this certain know-how to another company or to an external company into another part of the world. And it is very easy that you can put the R&D also away from Europe and put it near to the company that is taking care of the manufacturing. On a strategic way, and when you have enough attention to give strength to the economy and to the economic structure here in Europe it is absolutely necessary that it is not only R&D you are investing in, but also in manufacturing of this high-tech products with high added value. It is absolute necessary. And I find more and more ears to understand what I am saying as well in Flanders as well on EU scale, therefore I give a lot of presentations to point to the importance of that especially for SMEs and I am very happy that there is much more attention for the SMEs also in Europe and for sure in Flanders because they don't like what is happening now with Ford, these big multinationals who go away and leave here thousands and thousands of employees without work, so we have to do something about that.

So that's the story and also the start from what's your position at the company, how is it growing, and for now when I see to my activities right now, the biggest part of my time is going to this open innovation because together with one guy from Innovation Center of Limburg, we are let's say the activators of this bike valley, this open innovation company, and in the next month it will be founded when we have the definite green light on the subventions we can use to build the wind tunnel project, so then we start officially, but anyway we are working and what's also important we are spreading the word about this open innovation project. A lot of organizations and also from government we receive the demand that they may use bike valley as a model for other industries, for other SME companies, how you can create different companies and then let them work together in order to get all these advantages that I pointed to. So I think it is important to do that. The government is prepared

to invest a lot of money into this open innovation structure because they see all the advantages and from our side we find it normal and also when we can do that for the economy and we can do that for the people I think we are obliged to do so, to support; the better and the stronger our economy, the better feeling people have in our area, the more products we can sell. When there are too many people without a job, they don't spend the money as we are used to and we are getting lower and lower in economic strength, that's not good. It is also a little bit to defend ourselves by doing that. But it also gives a good feeling that you can do something for the community. So it's not only for shareholders of our company, but the reactions you receive, it is very motivating and it is even important as money you are receiving from the job you are doing. It is also a little bit the respect and you can see that, we are growing in a positive way, we are developing in a positive way, and that gives more and more support to do something and to have a good answer and to bring back jobs here to Europe. A little bit the same as what the US is trying to do right now, not only investing in R&D, but also in the process engineering, the innovation that is necessary there to keep the manufacturing very close and near as one line into R&D, I think that's a very important thing to do.

S: Yes Ii think it's very interesting. I would actually like to go further into innovation. It's very good for us that you have this HR experience but then now also this open innovation insight. So if you now do this open innovation project, if you build the wind tunnel and have different people working together, do you see HR issues that arise out of this?

M: Yes. HR will be as well in the companies as well for sure in this bike valley system; these companies are too small to attract the best people in the world, the high potentials. They will grow, they will grow bigger, but it is not the same as the big multinationals. But it is necessary that these high potentials, in many cases that are people with a high level of ambition, so it must be possible and it must be necessary that they can grow, that they can grow together with companies but not with one at the same time, with a few. And also the exchange in experience and the exchange in knowledge when they work for three or four or five companies together, it will be much better and R&D and development of new products will be much faster than everyone is doing his thing on his own. So it gives a lot of advantages on that way and therefore HR is playing a strategic important role to take care that you are in line with the law, but that you also have enough input with all the CEOs and with all the shareholders to point on the importance of people. Because you may have the best products in the world, in the hands of the wrong people, nothing will happen. People can make the difference between success and failure, not your product. Of course you cannot have bad products, good people placing bad products on the market, that won't last, that's normal, that's logical. But good products will not make the change; it will be the people who can make the change into success. And in the past HR was more and more, ok it's an obligation, it's costing money, we need them for payroll administration – when you see it like that, completely wrong. You better replace all your employees by machines and then, what are you going to do then. Machines can't invent, they can't think, or they don't think quick enough. Last week I heard a presentation of the CEO from Nike, the European distribution center here, which is very big in this neighborhood, they have more than 200.000 items in the stock range. They make the distribution for all Nike products in Europe. And he said finally, we were searching for many, many years to the best software programs, to the best automatization programs, to have the easiest way to make the distribution. Containers were coming in, and all the trucks were going out and we came to the solution, that the best thing to invest in is not in these computers, it is not in the software, but in people who can think and who are acting more proactive than a machine can do. It is too complicated for me, it doesn't work. There is always something, when there is nothing wrong, ok, but everyday 20% of the things are going wrong. And then people, when we make the same investment, instead of these computers into people, we can have a solution for all our problems. So for me he said it's easy, I will invest in people, people who are thinking and working proactive, it's much better; he was not saying ok, I am going to throw out all the computers and all the software, but the solution for making the highest added value and the lowest possible mistakes and then receiving complaints from clients, is investing in people. That's very well said.

S: And investing in people, when you think about your engineering people who are in the innovation department, do you see training as a huge role in this open innovation process, do you have the feeling that you need to train those people on being open for open innovation?

M: Yes, they got to have an open mind. And they got to have the skills to notice, to see from the beginning the changes that are external to our company. The change in mindset from clients, from end-users; our clients are independent bicycle dealers, the end-users, that are the riders. So people should be a lot more proactive than average. In order to make quick changes and your organization and your structure must give the people the freedom to do it. That means you have to trust people so that they can make mistakes. We don't like people who are coming in, I do the recruitment and selection all by myself, and a lot of people they say oh, I am Mr. Perfect or I am Mrs. Perfect, oh my god. I don't want that. When people only want to be perfect - we have for sure a status quo, and the status quo is holding all development because it is a risk - Mr. Perfect or Mrs. Perfect don't want to take a risk. You have to take a risk and you have to make mistakes in order to learn something. When you don't make mistakes you don't learn. You don't ask when you are riding your bicycle and everything is going perfect you don't ask yourself, oh it is strange, I didn't fall, but when you are going too fast in a curve and fall with your bicycle you ask, hey, what did I do wrong? Ok, now I understand and now I will learn and I will watch more carefully and ok, I can avoid it the next time. I don't say you have to make always the same mistake, that's not ok; then you are learning nothing. But making no mistakes, you and me neither we didn't have the skills to walk; you know that a baby before it can walk it has to fall or to lose its balance for 2000 times, that's an average. Some people are counting that and study that, but anyway. It makes sense. By trying to find your balance that you can learn to walk, that you can learn to ride a bike; that you can learn everything you want.

P: How do you communicate this to your employees that they can make mistakes, because you don't want to say 'make mistakes' but on the other hand encourage them?

M: It's necessary that you speak out your trust in them and ask questions. Don't make the mistake and say ok, go at the side, I will do it myself, then it will be much quicker and much better – that's not good. Also, another point, try to hire people who are smarter and much more intelligent and much better than yourself. Try to let them work together. Don't try to be the smartest or the best of your employees, because everyone you are going to hire will be, you see, different to people. You don't go for the best one, and don't act them. When there are too much, and I am more than 50 years old so I saw a lot of managers and I think there are 75% to 80% who protect their job so much that they say ok, I don't want that anyone is involved with things I don't understand. It is necessary that you understand the risk, but it is not necessary that I am as smart as our best aerodynamic engineer. I only have to calculate with is that risk acceptable or not for the company. Is he bringing us in danger or not? But to go for innovation, you need to take some steps into the dark. You need to take some steps where nobody ever was. Otherwise you will never have a new product. So you have to let them go and let to try. And by asking things and acting more like a coach or a mentor, then people can grow. It is necessary that you give them the space to grow, that's one of the best ways to keep the best people in your company, but not with a big obligation. When people are developing much faster than the company, you have to let them go. You may not say I want to and I pay you more, that doesn't work. That doesn't work. And when you do that, the best people in the world are moving much faster to you because they know we have the freedom to develop as fast as we want. It is not the first time that some people are developing so fast that the company itself cannot follow them. Why do you want to keep them in your company? The other thing can happen as well, that the company is developing much faster than people who were here from the first hour. Some managers in HR they say hey, for me, retention is a very important KPI, the number of employees who go away from themselves; my job is only good when there is nobody who wants to go away. I say that's not correct, that's really not correct. People who cannot follow the development from the company, then it is time, maybe you are coming to a size, to another face of the company where they don't like it anymore. When you start the company from zero with two or three employees, the corporation and the atmosphere is different than when you are working on a

much more international scale, you are now exporting to 61 countries. In the beginning we were only serving independent bicycle dealers here in the neighborhood. It is completely different. Now more than 80% of our products are export. That means a lot of communication is in foreign languages, and some people say I don't like it, I don't want it; why do you want to keep them in your company when they want to go let them go. And that does not say anything to the quality of the HR managers. And that's something very strange that I find, the best thing to do is to use and to put people to take care of what are their talents and let them work enough in their talents in order to let them develop themselves and in order to avoid a burn-out. People who are not working in a positive way and people who say oh I made a mistake, I hired them but they don't fit in the company, they are not positive enough, or there is this or that, these are not people who are in line for a burn-out. People who want to cooperate very well and who want to do their job very well, but when you put people in a job or give them tasks for which they need a lot of energy to do it because it is not really their talents to do, that are the people that are going to have a burn-out. So I don't say everybody can do what he likes and what he wants the whole day, that doesn't exist; I have also tasks that I don't like and tasks that I like very much, it must be a good balance. When I have too many tasks that cost me a lot of energy and I say oh, again Monday, again that, that's not good. But when I can do things I like for 50% or 60% in my job, it gives me enough energy to do also the other tasks and to not have the syndrome of the Mondays. So trust and giving attention to the talents of people is the best thing you can do to let them develop and to put them into innovation, even R&D or even other departments. Normally I receive many times the reaction, how is it possible, Specialized and Giant is a much bigger company and they have more than 60 people only in R&D, you have only four engineers in R&D and you are worldwide technological market leader. I said your analysis is not correct. It is correct that Specialized and Giant they do have 60 people in their R&D department, but here for me, for us, all our employees together we are asking to think about their job, to think about our processes, to give some proposals to make things better. So in fact all the company itself we are worldwide with 88, so we have more people in our R&D than these guys. Of course this is not completely true and not everyone is, like people who take care about the maintenance or the cleaning they don't give as much input on improvement items as people who are involved with manufacturing. But anyway, you know what I mean, it is not only the product, it is also processes, it is also administration, because at the end of the day there is only one party who must be satisfied and that are our clients. Everything what is happening here is possible because our clients have enough trust in our brand and in our company to work with us. And to grant us the possibility to deliver one of the best bicycles in the world, and with a part from the money we accept from the clients, we can pay all the people here and we can make investments. So the clients, when he is not accepting our prices or our quality, or both of them, then we are out of business. Then we can make innovation as much as we want, it doesn't matter.

S: Yes, I have two other big topics that I would like to touch on, one is recruiting, if you see a change in your recruiting process and in what skills you are looking for, really focused on this open innovation approach.

M: That's one; also I already told you I try to check the skills to change. How can I find it? When I see for example somebody was doing law study and he is going to work into something very technical and be very successful there. In the opposite, that means these are people who do have a higher level of skills to make a very big change. Doing your whole life or doing 20 or 30 years exactly the same job and growing there ok, from executer to a manager. What does it say about change capacities? Not so much. But having a lot of experiences in a lot of industries from law to technical to whatever it takes, to commercial, these are people who can change very easily. Of course they must be successful, not trying that and don't succeed, trying that don't succeed, that is a disaster.

Also there is something relatively new. About one year (ago) I had the opportunity to meet Professor Jodi Gittell Hoffer, and she is very well aware of relational coordination. And that is one very important thing what is missing in a lot of companies because in a company we have departments and even in departments you have different stations, the process, where you have the flow from a product or a service and you can have person A who says ok my

job is to do that as good as possible, ok that's my job, I give it to person B who can add something and so on. But when this is not completely good related to each other, it can happen that a part of quality or a part of speed or a part of something else is missing and that at the end of the day your client is not happy with it. And then you are going to have some troubles. And relational coordination is not organizational coordination but it is to make one part of the process as much as possible proactive to another one, that everybody is trying to do the job not only what's their responsibility, but they already think ok, when I change this in that color or when I am not laying it here but there, it makes it easier for the next station, so that there is a very smooth flow from the start of an order to deliverance of a product. And that is something what is missing in a lot of companies. And ok, everybody is doing a good job but at the end of the day the client is not happy. And the results of that, when you study the companies in the USA who are in, how do I call it, companies like United Airlines, Southwest Airlines, the aviation industry but not building the carriers, there is only one company in the USA which was able to make every year after year after year positive returns, possible results, without firing people. All the other ones they had to let go 1000, 2000, 3000 people and stayed into the red zone, into losses. And only one company was able in the USA during the last 20 years to avoid that, and it was Southwest Airlines, and it was because of the relational coordination that Prof. Jody Gittell Hoffer was bringing into this company and that was the connection, all these different - people had to clean the airplane, people had to take care of all the service when the airplane is one the ground; it was so much let's say in a good proactive way link it to each other that there was a very smooth flow and that they could do the job what other companies took double of the time, they could do it in half of the time with the same number of people and without any extra energy, because they were much more related to each other. So that gives a result that the planes could take much more flights every day than the other ones because they needed much more time for cleaning and when the cleaning was done, ah ok, we didn't know that you were already ready with cleaning, then we can do the next thing, and it is, when you here it you say that must be easy to do, but in a big company with thousands of (people) and a lot of small teams it does give some big problems to a lot of companies. So that are two points, so relational coordination and then the skill to change and to show it that you can change, that you are very flexible in open mind, that are very important two things. And of course team work.

S: So you would say then based on team work, the relational coordination and change this openness to collaborate also comes?

M: Yes, yes.

S: Ok and then what I also find very interesting are the reward schemes. Do you see that you have to change those when you start collaborating with others, that people are no longer rewarded based on for example individual performance, but taking it across companies? Do you see in the past a change or that you have to change this for when you build up this wind tunnel and collaborate with others?

M: Yes I think that is indeed important. Team work, only by speaking out team work isn't team work. You cannot say, in this plant here we have 66 people, calling that a team, you can do it, but in reality it is not a team. The best number (of people) for a team is between 8 and 12, because the best results from a team are coming from this number because they can have the time and they can have the possibility to know each other as a person much more, not just as one of a number or somebody that you know is working here, but what is he doing exactly? And it is also important that in a team everybody is equal. Is there a manager in? You can have a manager in a team or a team leader or an executor or whatever, but the weight for the input from solutions, answers and demands must be the same. And the rewards for people individual I don't think it is good. When people are working very individually and there we have some examples, for example the sales representatives, they work very individually, they don't go with two or three people together; 90% - 95% of their work is individual. There you can reward them individually to the number of sales they bring in, number of sales related to the minimum margin that you want. There you can do it. But that's all in our company. All the rest must be done by teams. That means that when you reward a team for the results of a team, that means that people who have a problem with

something, they are going to get some help from other team members. When you are going to reward them individually, they don't care. They are only thinking about what they can do by themselves. This is a little bit the same as in some sporting disciplines where you are with four or five people and you need to go from point A to B and who can do that in the fastest time is the winner. But it is always the winner from the last member of the team who is counting. So even if they have to carry one to the finish line it is better than to leave him alone. And for the result to win it is better that everybody is in the best possible time at the finish. And that is a little bit the same with the performance that you want. You want that everybody is giving his best possible (…) and his best possible result to the company. And that is much better when you do that with teamwork than with individual rewarding. And that is the reason why individual rewarding with the exception of sales representatives is not good.

S: Yes, and do you see this team rewarding also across companies?

M: Why not. When people are working together on one item, when you can give a definition on what is your aim, what do they have to reach, of course you must calculate, here you have to take care about social law, but the rewarding I don't think it is only money, what is a reward. It can be something different. A reward can also be, when they reach their goal, you can give them and their families a nice city trip or a sailing experience, that is also team work and together you have some team building, together you can relate also the family, maybe they saw their partner not so much during a few days or weeks when they were working on the team work and to reach their goals, so you can reward not only your employee but also his family. But it is not only money that is counting.

S: Patrick, do you have any further questions?

P: No, I think we covered most things.

(End talk)

Appendix

C. Case study protocol illustrating detailed operational procedures

Note: Grey lines to be complemented for each individual case	
A: Overview of the case study project	
Summary	This case study research is conducted within the scope of my master thesis at the Faculty of Business Economics at Hasselt University, Belgium, supported by the professors N. Roijakkers and W. Vanhaverbeke. So far, there is little theoretical guidance for organizations that seek to implement open innovation. More specifically, HR issues arise when opening up the innovation process, but no profound evidence exists about what constitutes these problems and how the role of HR management practices looks like. Thus, the goal of this research is to collect evidence and data based on which testable theory can be built. The main source of evidence is interviews with managers from carefully selected companies.
Objective of the study	- Giving an overview of problems that need to be tackled when implementing open innovation - Guideline for HR and open innovation managers
Case study issues	- The influence and role of the HR department for open innovation success - HR issues that arise when opening up the innovation process - HR practices (selection, training, rewarding) that support open innovation or/and need to change respectively
Relevant readings	- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), S. 532-550. - Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. Academy of Management Journal, 50(1), S. 25-32. - Yin, R. K. (2009). Case Study Research Design and Methods (4 ed). Los Angeles et al.: Sage Publications - Chesbrough, H.W. (2003). *Open innovation: the new imperative for creating and profiting from technology.* Boston, MA: Harvard Business School Press.
B: Field procedures	
Interviewer(s)	Svenja Paul
Name and address of the company	
Contact person	
Date	
Duration	

Data collection plan	- Collection of data within the real-life context, from people in their everyday situations - Access to key persons in organizations is gained through the personal network of the supporting professors and by own research. Invitation of participants by email (see Appendix E), reminder is sent by email, after which contact is made by phone when necessary - In the field, resources to take along include the personal computer, a recording device, paper, pen and envelopes to collect evidence. If guidance is needed, one of the professors can be called - The visit at the site is projected to be 1 1/2 hours: 5 minutes for explaining the purpose and procedures of the study and to receive consent to record the interview, 50 minutes for the interview itself and 5 minutes for the collection of further evidence from the interviewee. A further 1/2 hour might be used to collect additional evidence (e.g. job descriptions regarding open innovation, outline of open innovation trainings/workshops) from further persons in the organization (e.g. employees within the HR department), to copy papers, return them, etc. - When possible, multiple sources of evidence and multiple investigators are used - The procedures are flexible and can be adapted during the field work depending on the subject being studied - In case of changes in the availability of the interviewee, the interview will be rescheduled - On site, the interview is recorded, field notes are taken, and it has to be listened carefully. Interviewees are guided as little as possible and are only interrupted when necessary to explore as much as possible.
Preparation prior to visiting the site	- Thorough review of the company and interviewees being studied - Complementation and printing of the case study protocol to be used for guidance - Identification and integration of second researcher to increase the quality of the study
Data analysis plan	- Interviews are transcribed and together with the field notes analyzed in-depth for every individual case - The results are described for every individual case using quotes from the interviewees - The individual cases are sent to interview partners + second investigator for revision - Consequently, findings are compared across cases - Literature from relating fields is enfolded
C: Case study questions	
Introduction	- Thank interviewee for participation - Ask for consent to record the conversation for analytical purposes - Explain purpose (and procedure) - Start interview
Level 1 (questions asked of interviewee)	- What is the position within the company? - How did position evolve (if it has something to do with open innovation?) - What is the personal attitude towards open innovation? Towards HR in open innovation?

Level 2 (questions asked of case)	- When did company engage in open innovation? How? - Are HR practices critical for open innovation success? How? - What problems/challenges arise regarding HR in open innovation? - Where new roles created within HR because of open innovation? --> *Documentation* - How do you find the right people for open innovation? How do you attract them/promote? --> *Documentation* - Can open innovation skills be trained? - How does an open innovation training look like? --> *Documentation* - Is open innovation included in reward structures? --> *Documentation* - What is the role of talent management and how is it changing?
At the end	- Ask for further evidences / documentation that help explain the phenomenon - Ask, if necessary, if interviewee can refer to further persons of interest
D: Outline of case study report	
Target reader	Master thesis committee, fellow students, companies
Table of contents	1 Introduction 2 Literature review 3 Methodology 4 Research findings 5 Conclusion
E: Appendix	
Template letter to invite participants	Dear [Name], My name is Svenja Paul, I am from Germany and currently investigating the HR side in open innovation in the scope of my master thesis at Hasselt University. These are the main facts about the study: Topic: HR issues in open innovation Kind of investigation: Exploratory study based on case studies Timing for interviews: April Timing for thesis: June I am looking for interview partners who are willing to share their experiences with us. Interviews will take around one hour. I would very much like to include [company name] in my research study as your company is [reason why: usually because it is advanced in open innovation]. It would be very interesting to hear about

	HR issues when for example [activities of company in terms of open innovation]. I am writing to you as [reason why: usually because somebody referred that person or because of previous participation in research projects] and believe that you would be the right person to talk to. I would highly appreciate your time and support and am looking forward to hearing back from you! Thank you in advance, Best regards, Svenja Paul
F: Field notes	

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The role of human resource management in open innovation: exploring the relation between HR practices and OI

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Voor akkoord,

Paul, Svenja

Datum: **8/06/2013**