

2013•2014
FACULTY OF BUSINESS ECONOMICS
Master of Management: International Marketing Strategy

Masterproof
Open innovation with an effective open innovation team.

Promotor :
Prof. dr. Anna ROIJAKKERS

Supervisor :
Prof. dr. Wim VANHAVERBEKE

Jonas Vanvoorden
*Master Thesis nominated to obtain the degree of Master of Management, specialization
International Marketing Strategy*

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Summary

This master's dissertation explored how open innovation teams can successfully support open innovation inside an organisation. Open innovation or OI is a paradigm introduced by Henry Chesbrough (2003) a decade ago. It started as a notion of the need to open up the innovation process outside the traditional boundaries of a firm and can be seen as an organisational innovation (Christensen, 2006). OI is about expanding the innovation potential of organisations by opening them up to new ways of working with external partners (Golightly et al., 2012).

To implement OI many companies rely on a small group of managers tasked to direct the implementation of OI (Mortara, 2011). These dedicated groups utilising OI are named 'open innovation teams' or OI teams (Mortara et al., 2009; Du Chatenier, Versteegen, Biesmans, Mulder, & Omta, 2009). OI teams can potentially be vital for implementing OI in an organisation, but so far in recent literature it is not fully explained how OI teams can effectively support OI within an organisation.

Only a handful of sources directly discuss these OI teams. Therefore, the objective of this thesis was to investigate with the means of case study research (Eisenhardt, 1989; Yin, 2009), how these teams are best organised and structured to best support OI and the implementation process. In this Master's thesis is focussed on the structure of the team, task-design, composition of the team, problems in the team, key success factors in the team, performance measurements, and the future development of the team. To address these topics, first, the existing OI literature was addressed to give an overview of the scattered literature on OI teams. Subsequently, six interviews were completed with companies using an OI team to lead their OI activities. These companies are Tate & Lyle, Chemelot Campus, AkzoNobel, Shell, Unilever, and Natura. Apart from Chemelot Campus, these companies are all large companies with global activities.

In the analysis was realised that a possible distinction should be made between several types of OI teams. In this thesis the distinction is made between OI implementation teams and OI adoption teams. They are very similar but differ in their purpose and in the way they are structured into the organisation. OI implementation teams are well integrated into the organisation and have the purpose of OI embedding into the rest of the company, and especially the R&D units. OI teams, whether they are OI implementation teams or rather OI adoption teams, should be organised and structured to best support the OI goals of their organisation, therefore, a clear purpose must therefore be identified. To achieve the objectives the OI team needs power to act. This can be accomplished through semi-autonomy and having a dedicated budget. In order to

best support OI in an organisation, a certain profile of the OI team members is required. The team needs to be a diverse group of experienced people with both, technical and business knowledge as well as with an open mind-set. Their skill-sets and personality make it possible to take on the roles of link with the external world, cultural change agent, and internal gatekeeper; each role has its specific tasks. Apart from hard skills for managing the partnerships, OI team members should master soft skills such as relationship building and communication skills to really add value to the team. The internal and external network of the team is a valuable asset for doing and implementing OI. Thus, an OI team can effectively support OI if they have the right structure, task design, and team composition. In addition, the team must have support from senior management and understand that OI is an evolving concept and that the team needs to evolve with it.

Table of content

Acknowledgements	i
Summary	iii
Table of content.....	v
Register of Figures	vi
Register of Tables.....	vi
List of Abbreviations.....	vii
Chapter 1: Introduction and Problem statement	1
Chapter 2: Methodology.....	5
Chapter 3: Literature Review.....	9
3.1 From Closed to Open Innovation	9
3.2 Open innovation teams.....	14
3.2.1 Explanation of OI team	14
3.2.2 An effective OI team.....	16
3.2.3 Roles and tasks.....	17
3.2.4 OI Team composition.....	20
3.2.5 Conclusion and gaps in the literature	24
Chapter 4: Case study research	27
4.1 Introduction to the case study research	27
4.2 Individual case study reports.....	29
4.2.1 Tate & Lyle.....	29
4.2.2 Chemelot Campus	33
4.2.3. AkzoNobel	37
4.2.4. Shell GameChanger.....	42
4.2.5. Unilever	47
4.2.6. Natura	52
4.3 Overview individual case study reports	57
4.4 Cross case analysis	60
Chapter 5: Conclusions	63
5.1 Definition of OI team	63
5.2 Answering the sub-questions.....	64
5.3 Answering the central research question	73
5.4 Final conclusions.....	73

Chapter 6: Managerial implications, limitations and future research	75
6.1 Managerial implications.....	75
6.2 Limitations and future research	75
References	77
Appendices	82
Appendix A: Research design	82
Appendix B: Case study protocol	84
Appendix C: Transcription interviews	86
Interview Case study subject 1: Tate & Lyle	86
Interview Case study subject 2: Chemelot Campus.....	93
Interview Case study subject 3: AkzoNobel.....	101
Interview Case study subject 4: Shell GameChanger	113
Interview Case study subject 5: Unilever.....	122
Interview Case study subject 6: Natura.....	133

Register of Figures

Figure 2.1: Replication approach to multiple-case studies	5
Figure 3.1: The closed innovation model	11
Figure 3.2: The open innovation model	11
Figure 3.3: Mars' global open innovation structure	15
Figure 3.4: Input-Mediator-Output (IMO) team effectiveness framework	17
Figure 3.5: Company groups most important for implementing OI	20

Register of Tables

Table 2.1: Case study tactics for three relevant design tests	7
Table 3.1: Characteristics to follow an open or closed innovation Approach	12
Table 3.2: Motivations for OI	12
Table 3.3: List of roles of OI teams and their encompassing tasks	19
Table 3.4: OI skill/competences	21
Table 3.5: Personal attributes for OI	22

Table 3.6: List of personal competences for OI success	22
Table 4.1: Case study subjects overview	28
Table 4.2: Overview individual case study reports	59
Table 5.1: List of roles of OI teams and their encompassing tasks adapted after own research	67
Table 5.2: Personal attributes for OI adapted after own research	70

List of Abbreviations

ANNI	AkzoNobel Networked Innovation
BU	Business Unit
BD	Business Development
B2B	Business to business
B2C	Business to consumer
CoP	Communities of Practice
FMCG	Fast moving consumer goods
IP	Intellectual property
KPI	Key performance indicator
NIH	Not-invented-here
NPD	New product development
OI	Open Innovation
RFP	Request for proposal
R&D	Research and development

Chapter 1: Introduction and Problem statement

This master's dissertation seeks to explore how open innovation teams can successfully support open innovation inside an organisation. Open innovation or OI is a paradigm introduced by Henry Chesbrough (2003) a decade ago. It started as a notion of the need to open up the innovation process outside the traditional boundaries of a firm. The mobility of knowledge makes it impossible to keep all the best talents and relevant knowledge within the companies. Thus, companies started to look outside the organisation for new paths of innovation (Chesbrough, 2003). OI can be considered as an organisational innovation (Christensen, 2006) and therefore should be managed accordingly if it is to be implemented successfully (Mortara, Napp, Slacik, & Minshall, 2009). Only, OI is often defined differently within organisations (Lindegård, 2010) and thus should be implemented depending on the organisation's structure, size, culture (Sloane, 2011), and impulse to become more open in the first place (Mortara et al., 2009). OI has proven to be a valuable concept for many firms and in various contexts (Huizingh, 2011). However, until this day, numerous companies find themselves with difficulties regarding OI implementation (Giannopoulou, 2011; Brunswicker and Hutschek, 2010).

There are several ways towards a more open approach to innovation. Since the book of Henry Chesbrough was published in 2003, firms think more homogeneously about OI. This affected the way OI has been adopted. Many companies now started to adopt a top down/centralised approach. These companies, also called conscious OI adopters (Mortara, 2009), will be the focus of this thesis. They often rely on a small group of managers tasked to direct the implementation of OI (Mortara, 2011). These dedicated groups utilising OI are named 'open innovation teams' or OI teams (Mortara et al., 2009; Du Chatenier, Verstegen, Biesmans, Mulder, & Omta, 2009). A survey by the consulting group Frost & Sullivan in 2012 states that 56% of all questioned firms¹ use a dedicated OI team. Likewise, in the OI best practices report by APQC in 2013, three out of the four best practices² use an OI team. Thus, research on these teams can be highly relevant for companies adopting OI in today's world. The OI team has many tasks and objectives such as leading the OI practices, actively implementing the open paradigm into the company, and being the link between the company and the outside world. Large

¹ Survey respondents were 353 manager-level and above R&D/innovation and product development executives from companies globally.

² Best practices used are: Amway, British Telecommunications plc., Cisco Systems Inc., Corning Inc., and General Mills Inc.

multinational companies such as Unilever, P&G, Tate & Lyle, Natura, Shell, AkzoNobel and many others use an OI team to lead their OI practices.

As mentioned above, putting OI into practice is not an easy task. OI teams can potentially be vital for implementing OI in an organisation, but so far in recent literature it is not fully explained what makes the OI team a successful OI supporter. The purpose of this thesis is to describe what OI teams look like as well as to discover several key factors determining the effectiveness of an OI team in practice. Hence, the central research question is formulated as:

- *How can an OI team effectively support OI within an organisation?*

Several sub-questions are added to support the central research question. These have been developed after scanning the OI and team literature.

- *How is an OI team structured?*
- *What are the roles and tasks of an OI team?*
- *How should the composition of an OI team be?*
- *What are critical success factors for a successful OI team?*
- *What are problems related to OI teams hindering OI implementation?*
- *How is the success of the team measured?*
- *How will OI teams develop in the future?*

From answering these questions we should come to a better conclusion pertaining to the central research question and discover how these teams make the whole organisation jump on the OI bandwagon. As own research has shown; only a handful of sources directly discuss these OI teams. Therefore, the objective of this thesis is to investigate with the means of case study research (Eisenhardt, 1989; Yin, 2009), how these teams are organised to best support OI and the implementation process. A focus is laid on the structure of the team, as well as on their roles and tasks. The human side of the team is also regarded by zooming in on the OI team members' profile, skills, and personality. In the end, the research and investigation lead to a better understanding of several key drivers determining the success of an OI team and possibly uncover some puzzle pieces determining successful OI implementation. Apart from team composition, team structure, and the task-design of the teams, other key factors will be considered. Valuable is also the identification of problems or roadblocks, and how the success of these teams gets considered. Additionally, insights from key people working in OI teams about the

development of OI teams can be valuable for discovering how OI teams develop and evolve. The results coming forth from this research can be useful for companies looking for an optimal use of these teams but also for scholars wanting to take a closer look at OI in practice.

This thesis consists of six chapters. In chapter one the problem statement and research questions are described. Chapter two elaborates on the research methodology used in this master's dissertation. The following chapter three includes an overview of the existing literature on OI teams, while also considering the general team literature. The actual case study research and practical part of the thesis is described in chapter four including the individual case study reports, as well as the cross case analysis. In chapter five the final conclusions are drawn linking the case study results back to the literature. Moreover, answers to the research questions are formulated. Chapter six is the final chapter and addresses the managerial implication of this master thesis, points out the limitations of this research, and contributes some remarks on the future of research on OI teams.

Chapter 2: Methodology

Case study research is used for investigating how an OI team is organised to be successful in supporting OI implementation. To be more precise multiple case study research has been used. A case study is a research strategy which focuses on understanding the dynamics present within single settings (Eisenhardt, 1989). Case studies are the preferred method when 'how' or 'why' questions are being raised (Yin, 2009). My opinion is that case study research is the best existing method for understanding OI teams due to the lack of existing literature on the topic and for the exploratory purpose of this thesis. The method can be used to accomplish various aims (Eisenhardt, 1989): to provide description (Kidder, 1982), to test theory (Pinfield, 1986; Anderson, 1983), or to generate theory (e.g., Gersick, 1988; Harris & Sutton, 1986). This thesis aims at all three purposes. A description of OI teams is given while looking what the existing literature states about them. In the end, some new theory about OI teams will be developed based on new insights which have been discovered throughout the case studies. Several authors describe the process for doing case study research (Eisenhardt, 1989; Stake, 1995; Yin, 2009). I mainly combine ideas of doing case study research from Eisenhardt (1989) and Yin (2009). The process of conducting the multiple case study research is visualised in Figure 2.1. and is based on the approach of Yin (2009).

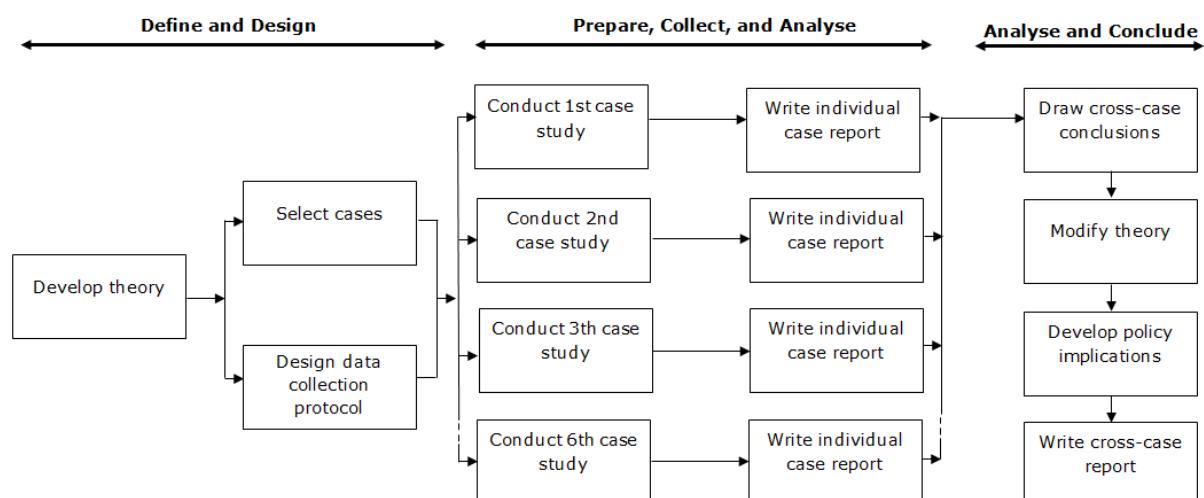


Figure 2.1. Replication approach to multiple-case studies (Yin, 2009 p. 57)

At the start of the study, a research design was developed according to the book of Yin (2009), which fits into the 'Getting started' step of Eisenhardt (1989). A research design links the data to be collected and the conclusions to be drawn to the initial questions of

study. The whole research design can be found in Appendix A. First, the research questions were developed while keeping in mind that the research questions could shift during the actual research (Eisenhardt, 1989). My central research question and sub-questions were developed after scanning the OI literature. These preserve and ensure a certain focus during the research. The review of existing literature provides a theoretical framework as well (Yin, 2009). Eisenhardt's (1989) goal of case study research is to develop theory, and not until the last-but-one stage in her case study process does she consult the existing literature (Brereton et al., 2008). I turned towards the literature at the beginning of the case study research, following the approach of Yin (2009). It had the purpose of finding more insightful questions about OI teams, but also to elaborate on what is already known about the topic (Yin, 2009). Mainly the EBSCO database and Google Scholar were used to find academic articles and books discussing OI teams both directly and indirectly. During the case study design one should consider if they favour a single- or multiple-case design. Multiple case study subjects were chosen due to the analytical benefits from having two or more cases. Analytic conclusions independently arising from two cases are more powerful than those coming from only a single case (Yin, 2009). Hence, more robust conclusions can be made. Also, a holistic instead of an embedded design is used because there is only one unit of analysis (Yin, 2009), namely the OI teams. Another important factor is the choice of the number of cases. Due to time limitations (Yin, 2009) not more than six case studies were conducted. This amount of case study subjects is in my opinion enough to discover some basic insights into OI teams to develop some potential generalisations and conclusions across cases. For the selection of case study subjects theoretical sampling has been used. The interviewed teams were chosen for theoretical, not statistical, reasons. In case study research random selection is not a necessity, nor is it preferable. The goal of theoretical sampling is to choose cases which are likely to replicate or extend the emergent theory (Eisenhardt, 1989). In existing literature (see Lindegaard, 2013) and on OI websites a list of companies using an OI team was identified. Subsequently, these companies were contacted for cooperation.

To conduct multiple case study research the replication logic, not sampling logic, must be considered. Each case is selected so that it predicts similar results (Yin, 2009). At the same time it is also necessary to realise that OI teams vary according to the culture and perspective of the company group they are dealing with (Mortara et al., 2009). To ensure maximum quality during the case study research, four tests have been considered: construct validity, internal validity, external validity, and reliability (Yin, 2009). Table 2.2

lists the three relevant tests³ for case study research together with the recommended case study tactics, as well as a cross-reference to the phase of research when the tactic is to be used (Yin, 2009). Throughout the whole study a focus on these three tests and their tactics will be ensured. A very important step for ensuring the reliability of the case study research is the development of a case study protocol. Its purpose is to guide the investigator through carrying out the data collection from a single case (Yin, 2009). A template partially based on the report of Brereton et al. (2008) is used to construct the protocol. It can be found in Appendix B.

Tests	Case study Tactic	Phase of research
Construct validity	<ul style="list-style-type: none"> • Use multiple sources of evidence • Establish chain of evidence 	Data collection Data collection
External validity	<ul style="list-style-type: none"> • Use replication logic in multiple-case studies 	Research design
Reliability	<ul style="list-style-type: none"> • Use case study protocol • Develop case study database 	Data collection Data collection

Table 2.1 Case study tactics for three relevant design tests (Yin, 2009 p.41)

In the collection of the data from the case studies a focus was kept on the three principles of data collection described by Yin (2009): (1) using multiple sources of evidence; (2) creating a case study database; and (3) maintaining a chain of evidence. Theory-building researchers typically combine multiple data collection methods (Eisenhardt 1989). In this case study most information is gathered from personal in-depth interviews which were semi-structured. All interviews were tape-recorded and transcribed (See appendix C). Multiple respondents for every case study subject reduce the risk of personal and post hoc interpretation biases (Yin, 2003). Only in the case of Shell and Natura this was possible and two persons were jointly interviewed. An attempt was made in every case to gather secondary data on their respective OI websites to improve construct validity (Yin, 2003), but this was also not achievable in every case. The second principle is creating a case study database which increases the reliability of the case study. The database should contain all the raw data that was collected during the study. This case study database consists of the recorded and transcribed interviews, and the notes made during the interviews. The third principle increases reliability as well. A chain of evidence should be maintained. The principle is to allow a reader of the case

³ Internal validity is not relevant for exploratory studies (Yin, 2009).

study to follow the derivation of any evidence from the initial research question to the ultimate case study conclusions (Yin, 2009). Readers should be able to trace back the conclusions to the evidence in the data. Every statement made in the case study reports can be found in the individual interviews or on the corporate websites.

To analyse the case study subjects, each single case was the subject of a within-case analysis. After that, a cross case analysis was conducted to reach several general insights and conclusions. In the final conclusions an attempt is made to answer the research questions developed in chapter one. At the end some limitations existing in this research are mentioned together with some remarks for future study on OI teams.

Chapter 3: Literature Review

Before proceeding to the case studies, a review of the existing literature about OI in general and OI teams has been completed. This provided a basic understanding of OI and a first grasp of what an OI team is and does. The research questions were developed on the basis of this review. First the process from closed to OI is described followed by an insight in the OI team literature. Because OI teams are, as the term already states, a team, the team literature was also taken into consideration, in order to understand what makes a team generally successful.

3.1 From Closed to Open Innovation

"In today's world, where the only constant is change, the task of managing innovation is vital for companies of every size in every industry." (Chesbrough, 2003, p.xvii). It is a common understanding that companies that do not innovate do not survive (Chesbrough, 2003). This is why it is in every company's best interests to be innovative. "For most of the twentieth century, internal R&D was viewed as a strategic asset and even a barrier to competitive entry in many industries." (Chesbrough, 2003, p.xix). Only large organisations with sufficient resources and long term research programmes could compete. In those days the opinion predominated that successful innovation required control. People perceived that companies had to generate their own ideas and bring them to market themselves (Chesbrough, 2003). This is the closed innovation view following the mantra: "If you want something done right, you have got to do it yourself." (Chesbrough, 2003, p.xx). Therefore, most large companies were mainly using an internal focus. Closed innovation can also be considered a vertical integrated model (Chesbrough, Vanhaverbeke, & West, 2006).

However, in the last years of the twentieth century, the closed innovation paradigm started to become less relevant with the emerging of erosion factors (Chesbrough, 2003): A first factor is the increasing availability and mobility of skilled workers. The radical increase of college graduates and the development of an auction market for highly qualified talent are considered reasons for this (Chesbrough, 2003). Professionals also prefer portfolio careers to a job-for-life with a single employer (Dahlander & Gann, 2010). A second factor is the development of the venture capital market. Attractive risk/reward compensation packages could persuade individual personnel away from big internal R&D labs to join new start-up firms. Thirdly, differences between the incentives of the research group and the development group gave rise to a buffer inventory of ideas sitting on the shelf. External options emerged to market these ideas. Chesbrough (2003)

mentions as well the increasing capability of external suppliers. These factors started to change the way companies innovate. Also, other "external environmental pressures resulting from increasing globalisation and rapid technological advancements, increasing competitive pressure, shrinking product life cycles, and fluctuating marketplace and customer demands were and also are forcing firms to continually rethink their innovation models." (Fredericks et al., 2010, p.130). Another development is the growing division of innovation labour. This means that a party develops a novel idea but does not bring this idea to market themselves (Chesbrough, 2006 p.2). With the advanced information technology of today we have access to a wealth of knowledge. The internet and increased quality of scientific knowledge has led to a higher diffusion of knowledge. This put an end to the knowledge monopolies built by their centralised R&D organisations of the twentieth century (Chesbrough, 2003). Companies started structuring themselves to exploit this diffusion of knowledge, rather than ignoring it (Chesbrough, 2003). All these developments were driving a new organisational model of innovation.

Chesbrough (2003) came to the conclusion that due to these erosion factors and other developments, solely using closed innovation no longer was sustainable, and named the new emerging approach 'Open Innovation' (OI). OI is a paradigm which assumes that firms should use valuable ideas from inside and outside the company, and also should use internal and external paths to market (Chesbrough, 2003). In another source, Chesbrough (2006, p.1) describes OI as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation." The OI paradigm treats R&D as an open system. And it offers the prospect of lower costs for innovation, faster times to market, and the chance to share risks with others (Chesbrough, 2006).

There are three kinds of OI: Outside-in, inside-out (Chesbrough, 2012) and a coupled approach (Gassmann & Enkel, 2004). The first two concepts, also called inbound and outbound OI, are two distinct although entangled dimensions⁴ (Buganza, 2011). The outside-in part of OI involves opening up a company's innovation processes to many kinds of external inputs and contributions. For inside-out OI organisations allow unused and underutilised ideas to go outside the organisation for others to use in their business and business models (Chesbrough, 2012). They can generate profits by licensing IP and/or multiplying technology by transferring ideas to other companies (Gassmann & Enkel, 2004). There is also a third approach coupling the outside-in and inside-out

⁴ Not all companies choose the same core open innovation process, or have integrated all processes to the same degree. Each company chooses one primary process, but also integrates some elements of the others.

processes by working in alliances with complementary partners whereby give and take is crucial for the success (Gassmann & Enkel, 2004).

Figure 3.1 and 3.2 visualise the difference between the closed and OI model. Under the closed model of innovation, research projects are launched from the science and technology base of the firm and go through the development process. Some projects do not get chosen while others are selected for further development. At the end a few successful projects are chosen to go through to the market. This traditional innovation process is closed because projects can only enter and exit it in one way. In the OI model projects can enter or exit at various points and in various ways. Here, projects can be launched from either internal or external technology sources, and new technology can enter into the process at various stages. This is the outside-in part of OI. Projects can also make their way to market in many different ways as well. Examples include out-licensing or via a spin-off venture company. This is the inside-out part of the model (Chesbrough, 2012 p.22-23).

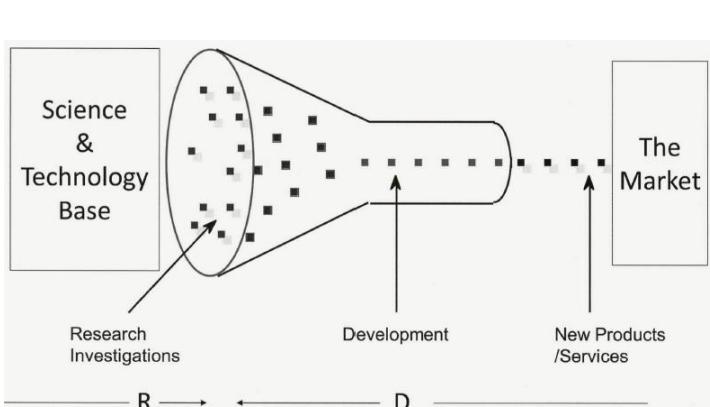


Fig 3.1 The closed innovation model (Chesbrough, 2012)

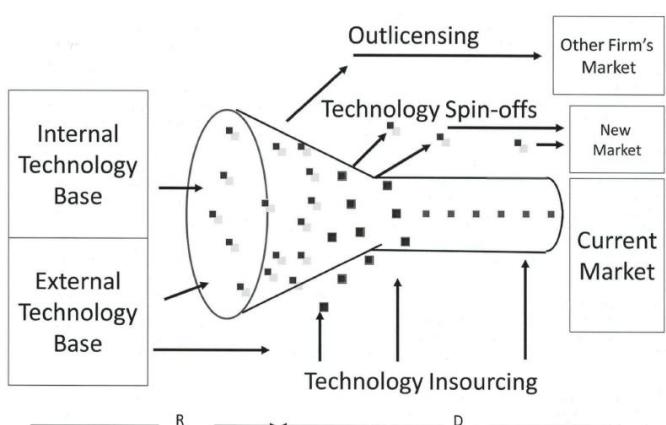


Fig. 3.2 The open innovation model (Chesbrough, 2012)

It is important to realise that OI is not an 'all or nothing' approach. "A continuum exists between Open and closed Innovation, and a firm has several alternatives regarding how to put the new management paradigm into practice." (Buganza, 2011, p.428). Golightly et al. (2012) state the need for a balance between OI and closed innovation: "The optimum 'balance' of open and closed innovation for a large corporation will be found through fostering a culture and attitude where OI is always actively considered as an option for new knowledge, and the onus is on those who wish to remain closed to make their case (p.9)." OI adoption also differences between industries (Christensen et al., 2005). Gassmann and Enkel (2004) have described some determinants of OI (see table 3.1). It summarises the characteristics identified as being key factors in gaining an advantage from an OI approach.

Open Innovation approach:	Closed Innovation approach:
<ul style="list-style-type: none"> • High product modularity • High industry speed • Much explicit and tacit knowledge required • Highly complex interfaces • Creating positive externalities 	<ul style="list-style-type: none"> • Low product modularity • Low industry speed • Less tacit knowledge Required • Low complex interfaces • No positive external effects through licensing

Table 3.1: Characteristics to follow an open or closed innovation approach (Gassmann & Enkel, 2004 p. 14)

In addition, the motivations for adopting OI can differ. Golightly et al. (2012) give an overview of the different drivers for OI coming forth from their case study research (table 3.2). They stated that many firms are not aiming directly at financial returns, but see them as being achieved through other important motivations.

Theme	Drivers
Financial	<ul style="list-style-type: none"> • Competitive Advantage • Growth – “Grow or die” • Shrinking budgets • “Reducing costs in the supply chain by encouraging flexibility”
Innovative capacity	<ul style="list-style-type: none"> • “If you sell more interesting, new stuff, there is higher value in it...more than just a commodity” • Access to small, fleet-footed innovators: “high speed of conversions of new ideas” • “Tap into a wider intellectual pool of talent” • “Understand the customer” • Access to emerging markets
Public relation	<ul style="list-style-type: none"> • Prestige • Altruism
External forces/ policy	<ul style="list-style-type: none"> • “The world is changing, the ‘not invented here’ mentality simply won’t work” • Government favours SMEs in public procurement. They enhance our position” • The impact of disruptive technological innovation on traditional industry business models
Internal staff motivation and processes	<ul style="list-style-type: none"> • “Keeps people connected and interested” • “Smart minds, similar issues, different perspectives” • “To be challenged” • “Everyone in the business to take ownership for innovation” • “Reduce inefficiencies of reinventing the wheel” • “Make use of talent internal intellectual capital”

Table 3.2.: Motivations for OI (Golightly et al., 2012 p.4)

There is some criticism towards the OI paradigm. "Scholars have used different definitions of openness in their studies of OI. This has led to conceptual ambiguity with empirical papers focusing on different aspects, inhibiting our ability to build a coherent body of knowledge." (Dhalander & Gann, 2010, p.706). Also, few studies have explored OI using large-scale datasets covering many different industries. Moreover, almost all the published papers on this subject matter focus on the potential benefits of openness, without going deeper into the disadvantages. It is therefore important to give attention to the barriers and limits of OI in order to bring useful insights to practitioners (Dhalander & Gann, 2010). These barriers and risks hinder companies from profiting from their OI initiatives (Gassmann, Enkel & Chesbrough, 2010). Also Chesbrough (2012) notes that we still have much to learn about the problems, boundary conditions, and critical success factors of OI. Trott and Hartman (2009) state that OI is nothing more than 'old wine in new bottles'. They debate that Chesbrough creates a false dichotomy by arguing that OI is the only alternative to a closed innovation model. However, as stated by Huizingh (2011), it is clear that the roots of OI go far back in history. Dahlander and Gann (2010) found many references to concepts such as absorptive capacity, complementary assets, and the exploration versus exploitation discussion (as stated in Huizingh, 2011).

In conclusion, a wide range of external developments have led to the emerging of a new OI approach. Today, the OI concept has developed from a small group of innovation practitioners to a widely discussed and implemented innovation practice (Gassmann, Enkel & Chesbrough, 2010). OI is about expanding the innovation potential of organisations by opening them up to new ways of working with external partners (Golightly et al., 2012). It is important to realise that OI should be considered as a tool for better innovation, not a goal (Lindegaard, 2010). It can bring many advantages but also failure when not implemented or used accordingly.

3.2 Open innovation teams

Many articles state the need for the establishment of dedicated OI teams devoted to the implementation of OI. But only a handful of articles and books directly discuss this topic thoroughly. The first purpose of this section is to give an explanation of what an OI team is and what it entails. The second purpose is to give an overview of what has already been discussed in the literature on the subject and to identify some important factors related to OI teams. At the end, some conclusions are drawn and gaps that are still existent in the OI team literature are pointed out.

3.2.1 Explanation of OI team

Since the book of Henry Chesbrough (2003) was published, numerous firms are thinking more homogeneously about OI and this has affected the way OI has been adopted. Many companies now adopted a top down/centralised approach. These companies are called conscious OI adopters (Mortara et al., 2009). Many of them depend on a small team of managers with the task of leading the implementation of OI (Mortara & Minshall, 2011). Such a group can be called an open innovation implementation team or in short OI team. The need for such a team is stated by many authors (Chesbrough, 2003; Goers, 2008; Mortara et al., 2009; Chiaroni, Chiesa & Frattini, 2010; Buganza, Chiaroni, Colombo, & Frattini, 2011; Sloane, 2011; Bingham & Spradlin, 2011; Lindegaard, 2011; Golightly, Ford, Sureka, & Reid, 2012; Malouf, 2012). In today's literature there is no uniform definition of an OI team. One good explanation of what an OI team is and does comes from Mortara et al. (2011):

"A dedicated OI implementation team is usually formed from R&D managers with a strong technical background and business mind set, coupled with a deep understanding of the company. They provide support for the company's interactions with the outside world. They also provide links between company groups and facilitate access to tools, skills and resources. They help the R&D units to become more open and generally design the OI implementation rollout." (p.30)

That paragraph makes it already quite clear what the general tasks and roles of the OI team are. They should be the ultimate link in the open system connecting all the players involved and ought to be the key party in the implementation process. Garcia (2011) describes an OI team as a dedicated cross-functional team needed in order to kick start the OI journey and to make OI systematic in the company. It is very important to realise that the roles of OI teams vary according to the culture and perspective of the company group they are dealing with (Mortara et al., 2009). Thus, no OI team is identical with

another one, but in the literature some general roles and tasks, skills and competences needed within most OI teams come forth. This will be discussed in the next sections.

A couple of sources discussing OI teams focus on the knowledge creation with external partners and less on them leading the OI implementation (Du Chatenier et al., 2009, 2010; Ritter& Gemuenden, 2002). Du Chatenier et al. (2009, 2010) state that "...in open innovation teams, people from different organisations work together to develop new products, services, or markets. This organisational diversity can positively influence collaborative knowledge creation but can frustrate and obstruct the process as well. (p.350)" In many organisations the knowledge creation with external partners is one of the most important tasks. Only they fail to mention that a typical OI team has more responsibilities than solely innovating with the outside world.

It is valuable to give an example of an OI team. Garcia (2011) discussed an OI team within the food industry, namely the OI team within Mars Inc. They started their OI journey back in 2007. Mars established a dedicated cross-functional team of three members in 2008 within the chocolate business. They work fulltime on OI activities and are internal consultants supporting the entire R&D, procurement and engineering communities in changing their ways of working. In addition to these fulltime members they have OI ambassadors at each of Mars' five business segments (chocolate, food, drinks, gum, and sugar). These provide support to the OI team ensuring that the OI principles trickle down the global R&D movement. OI ambassadors are 20% OI champions and combine their time with the execution of the innovation pipeline (Garcia, 2011). The structure of the team is represented in figure 3.3

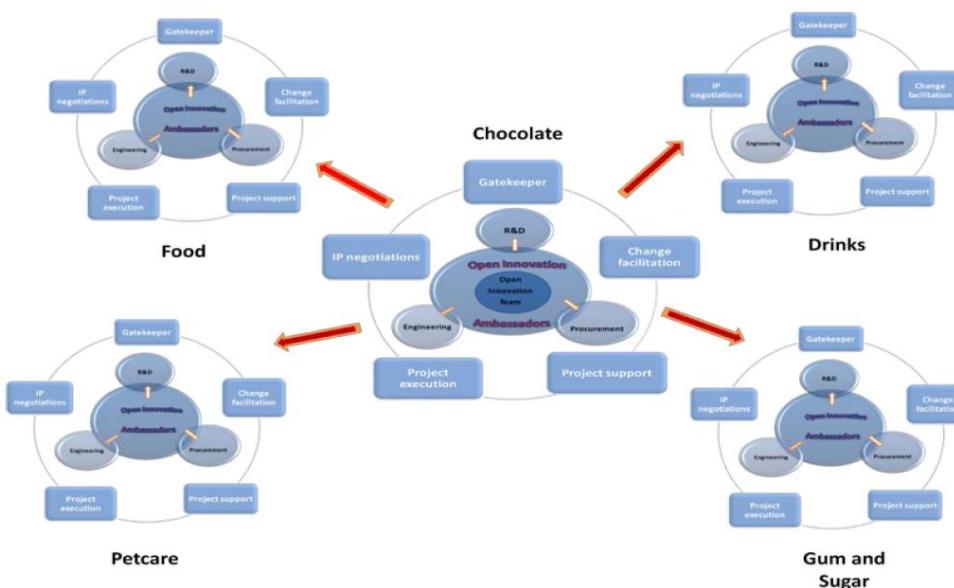


Figure 3.3: Mars' global open innovation structure (Garcia, 2011 p.7)

3.2.2 An effective OI team

An OI team can successfully support OI if it is effective. Team effectiveness has been a widely discussed topic in the last decades. There is a focus on all sorts of team contexts vaguely related to OI teams such as top management teams (Edmondson, Roberto, & Watkins, 2003), implementation teams (Higgins, Weiner, Young, 2012), virtual teams (Gibson & Cohen, 2003), cross functional teams (Graff, Koria & Karjalainen, 2009) and many others. However, in this dissertation to identify some focal points for researching OI teams, I will focus on a more general approach towards team effectiveness. Hackman (2002, as stated in Higgins, Weiner & Young, 2012) discusses five factors that should increase team effectiveness irrespective of the context of the team. They include that first the team is a "real team". It needs clear boundaries for the members of the team, requires tasks that need interdependency among team members, and a membership that is relatively stable over time. A second factor is that a clear direction and purpose is needed which is challenging. A third factor is the structure of the team. The team needs well-designed tasks and a good team composition in terms of team size and variety of skills. The forth factor is the need for a supportive organisational context. And the last factor is the need for valuable coaching from both the team leader and team members. In this thesis the main focus will be kept on the third factor listed by Hackman (2002), namely on the structure of the team. The reason for this is to not make the scope too broad. Particular attention will be drawn to the design of the team, the task-design and the roles the team have to obtain, both the roles of the team as a whole and the individual roles of the members, together with the composition of the team. The OI team literature already partially addresses these topics is reviewed in the next section. This is in line with the Input-Mediators-Outcomes framework (see fig.3.4) developed by Ilgen et al., 2005 based on the Input-Process-Output framework coined by McGrath in 1964 (Mathieu et al., 2008). The factors chosen as a focus in this thesis can also be named team inputs (McGrath, 1964; Ilgen et al., 2005). As stated in Mathieu et al. (2008), team inputs are factors enabling and constraining member's interactions. They include individual team member characteristics (e.g., competencies, personalities), team-level factors (e.g., task structure, external leader influences), and organisational and contextual factors (e.g., organisational design features, environmental complicity). These factors drive team processes (see fig.3.4). Additionally, Mickan & Roger (2000) investigated effective teams based on three levels: the organisational structure, the individual contributions to the team, and the team processes. They also highlight the need for specified tasks, distinctive roles, relevant members and adequate resources. Thus, to investigate how an OI team can be successful, the scope is limited to team

inputs especially on team-level factors such as task structure and team roles while also focussing on individual team member characteristics such as competences and personalities. Next, an overview of the OI team literature is given to discover what has already been written about OI teams.

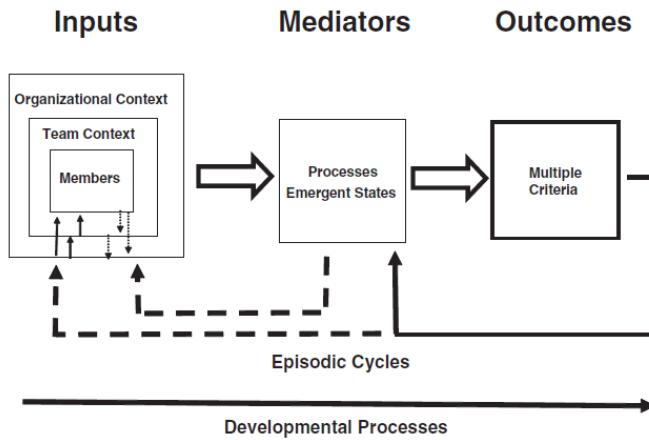


Fig 3.4: Input-Mediator-Output (IMO) team effectiveness framework (Mathieu et al., 2008, p.413)

3.2.3 Roles and tasks

"Team task design can be characterised as a series of structures and roles within a team context that determine the allocation of tasks, responsibilities, and authority." (Stewart & Barrick, 2000 as stated in Hollenbeck, De Reu & Guzzo, 2004, p.360). However, there is 'no one best way' to design teams and the team task design is actually dependent on the type of task and the level of internal and external fit (Hollenbeck, De Rue, & Guzzo, 2004). In the OI literature the functions and tasks of OI teams are a widely discussed topic. From own research three roles of the OI team became visible when scanning the OI literature: one as cultural change agent, another as internal gatekeeper, and the third one as being the link with the outside world. An overview of those roles is given in table 3.3. The table contains a listing of the tasks mentioned in the literature linked to the three roles. Some tasks support more than one role.

The first visible role is that the OI team must be the link between the organisation and the outside world (Bingham & Spradlin, 2011). A part of this is being the friendly face of the company in order to provide potential partners an easy route towards the company (Mortara et al., 2009; Golightly et al., 2012). This also entails finding and attracting partners to cooperate with (Bingham & Spradlin, 2011). The members of the team should be on the look out for interesting ideas and technologies as technology scouts (Golightly et al., 2012). To make a clear link with the external environment they have the task to

set up external knowledge sharing platforms (Mortara et al., 2009) to increase collaborative knowledge creation with other companies (Du Chatenier et al., 2009).

A second role of OI teams is that of a cultural change agent (Garcia, 2011; Bingham & Spradlin, 2011). In chapter 3.1 it has already been mentioned that the culture of the organisation has to change. The OI team plays a major part in this process of change. They are instrumental in removing internal resistance to collaborative innovation. This also entails resolving the NIH⁵ problem (Chesbrough, 2003). This is done by providing support and engaging the entire organisation in changing their ways of working (Garcia, 2011). Change management needs champions who can create enthusiasm around the needed change (Tushman and O'Reilly III, 2002). It is the task of the OI team to be these OI champions⁶ (Mortara et al., 2009) and live the values of OI (Bingham & Spradlin, 2011). The OI team should create a common language (Mortara et al., 2011; Lindegaard, 2010) by providing a framework and training for OI (Mortara et al., 2009; Garcia, 2010). Communication also plays a significant part. It should be used to create anticipation and excitement (Sloane, 2011; Bingham & Spradlin, 2011). The organisation should realise that OI is not a threat but an opportunity (Garcia, 2010) and that it is there to stay (Euchner, 2012). The OI team has to communicate best practices, success stories, tips and advices (Bingham & Spradlin, 2011) to make as many people as possible jump on the bandwagon. Golightly et al. (2012) mention that a multi-disciplinary approach is required. This is needed because OI is a holistic approach which involves many organisational departments from the start into OI activities (Bingham & Spradlin; Lindegaard, 2011). Interaction with R&D, the legal department, procurement/supply chain, business development, and with marketing are required (Golightly, 2012). The company groups most important for implementing OI can be viewed in figure 3.5. Each functional department has their own language, metrics, and goals (Sloane, 2011), which can bring forth conflicts (Fredericks, 2010) and do not always conform to the OI thinking. It is the task of the OI team to break through these functional silos as change agents (Golightly et al., 2012).

The third role identified is that of internal gatekeeper. With this I mean supporting the internal organisation with the (open) innovation activities and knowledge sharing. The OI team is responsible for the OI rollout in the organisation and the OI strategy gives direction to this rollout (Lindegaard, 2011). Therefore the OI team should manage the OI

⁵ The NIH (not-invented-here syndrome) has been defined as overemphasis on internal technologies, ideas or knowledge' (Clagett, 1967; Katz and Allen, 1982). That is, people do not value ideas or technologies that are not generated from within their own company (Mortara et al., 2009).

strategy. Frequent updates of the OI rollout strategy are needed also to adapt it to the changing needs of different groups (Mortara et al., 2009). Another task is to provide tools and processes (Golightly et al., 2012). "The central team should act as internal gatekeepers, who listen to problems, connect the right people, facilitate and lubricate the internal cogs of innovation." (Mortara et al., 2009 p.31). They should connect the right people inside and outside the company (Mortara et al., 2009) to get the most out of the partnerships. In addition, they are also tasked with enhancing the diffusion of knowledge inside the organisation (Golightly et al., 2012) by for example creating internal knowledge sharing platforms or develop flexible career paths⁷ (Mortara et al., 2009). For this role it is also important to adopt a holistic approach integrating many departments. Another task is to provide the right pool of skills needed for OI. This can be done by providing training and mentoring (Mortara et al. 2009).

Roles	Tasks
Link with the outside world	<ul style="list-style-type: none"> • Create knowledge sharing platforms • Attract and find partnerships • Be a technology scout • Be the 'friendly face' of the company
Cultural change agent	<ul style="list-style-type: none"> • Be an OI champion • Use clear communication strategy • Create a common language • Break through functional silos • Provide training and support • Show success
Internal gatekeeper	<ul style="list-style-type: none"> • Manage the OI strategy • Facilitate OI innovation internally • Increase knowledge sharing inside • Connect the right people • Work with many departments • Provide training and support • Develop tools and processes

Table 3.3: List of roles of OI teams and their encompassing tasks

⁷ Flexible career paths including business unit hopping to enhance knowledge sharing.



Figure 3.5 Company groups most important for implementing OI (from Mortara et al., 2009)

3.2.4 OI Team composition

"Few contextual characteristics of teams have received more attention in both scientific study and the popular press than team composition." (Hollenbeck, De Rue & Guzzo, 2004, p.354). Team composition is believed to have a strong impact on team performance (Bell, 2007). Two critical points have to be addressed when composing a team. The required skills have to be available in the team and the members need to really gel (Hollenbeck, De Rue, & Guzzo, 2004). Crucial to the performance of teams are the abilities and behaviours of their members (Senior, 1997). Working in a team requires unique demands, knowledge, skills, and abilities which differ from those needed by individuals working alone (Morgeson, Reider, & Campion, 2005 as stated in Mathieu et al., 2008, p.434). Thus, an effective team member needs a certain set of competences. However, not every individual team member needs to obtain all competencies (Du Chatenier et al., 2010). The needed skills can be combined by forming cross-functional teams where each member brings in different attributes (Mortara et al., 2009). To enable OI in an organisation there is no perfect blend of skills but several authors describe important skills and personal competences for the OI professional. These competences are specific but not necessarily unique to OI, although their combination might be (Du Chatenier, 2010). Competences and skills are two concepts often used interchangeably in many contexts (Hoskins & Fredriksson, 2008). This is also the case in OI literature. But in reality there is disparity in the meaning of both concepts⁸ (See Rychen, 2004 p.21-22). In this thesis the two concepts are both used without making a real distinction between them. An overview of the literature discussing OI skills will be given.

⁸ "Let us emphasise that the terms competence and skill were not used as synonyms. Skill was used to designate an ability to perform complex motor and/or cognitive acts with ease and precision and an adaptability to changing conditions, while the term competence signified a complex action system encompassing cognitive skills, attitudes and other non-cognitive components. In this sense, the term competence represented a holistic concept." (Rychen, 2004 p. 21 – 22).

Mortara et al. (2009) divided the OI skills into four categories. In table 3.4 these categories are listed together with the needed skills. The first group of skills are 'introspective skills' which are needed to understand the needs and opportunities of your own organisation. A second group of necessary skills are 'extrospective skills'. Their function is the understanding of the viewpoints of other organisations and the potential fit for your own company. The next category of skills is 'interactive skills' which are communication skills to optimise the relationship with the external world. In order to support the previous categories of skills, the last category namely 'technical skills' is needed. They include all the technological, marketing, financial, commercial, management and business skills and tools needed to support the other categories. The OI team is responsible for bringing these different skills together but also to provide training to fill gaps or improve skills (Mortara et al., 2009).

Introspective – Understand ourselves	Extrospective – Understand our partners
Strategic insights: e.g. understand fit with internal strategies Legal/IP skills: e.g. understand IP implications, ability to draw up contracts	Behaviour analysis: e.g. analytical, personal. Strategic insight: e.g. understand fit with partners' strategies
Interactive – Skills to address the relationships internally and externally	
Communication/collaboration: e.g. communicate needs internally and to partners, resolve conflicts, language skills, network building Negotiation: e.g. understand buying and selling tactics	
Technical – Skills and tools needed to support the three categories above	
Technological: e.g. understand principles of technology being exploited Portfolio management: e.g. manage innovation as a portfolio of opportunities Financial: e.g. understand and set budgets Analytical: e.g. evaluation of risk, financial analysis, problem solving	

Table 3.4: OI skill/competences set based on Mortara et al. (2009) p.42

To be a successful OI manager or OI team member, specific personal attributes or traits are desired. Lindegaard (2011) and Sloane (2011) mention personal competencies for OI success, listed in table 3.6. They mention in their books practically the same competencies. Only Sloane (2011) adds one more competency namely communication skills. The needed skills are listed together with traits needed for these skills. Also Mortara et al., (2009) identified a set of desirable personal attributes including:

Personal attributes for OI		
• Motivation	• Systems thinking	• Lateral thinking ⁹
• Ability to learn	• Leadership	• Vision
• Sociability	• Balance between ego and empathy	• Adaptability and flexibility
• Techno-business mind set		• Entrepreneurial mind set

Table 3.5: Personal attributes for OI according to Mortara et al. (2009) p.42

Skills	Traits
Intrapreneurial skills	<ul style="list-style-type: none"> • Aware of and enables new ideas (from anywhere) • At ease outside their “comfort zone” • Boundary pusher • Self-driven • Not afraid to fail
Talent for relationship building (inside and outside organisation)	<ul style="list-style-type: none"> • Is genuine (builds trust) • Represents the partner well to the organisation • Listener
Strategic influencing	<ul style="list-style-type: none"> • Politically astute (high organisational awareness) • Knows when, how and with whom to gain support
Ability to be a quick study	<ul style="list-style-type: none"> • Ability to develop expertise (also outside area of specialisation) • Curious • Resourceful
Tolerance for uncertainty	<ul style="list-style-type: none"> • Manages risk through milestones and keeps moving forward • Doesn't plan failure, plans to avoid it
Balanced Optimism	<ul style="list-style-type: none"> • Knowledgeable about risks but also rewards • Overcomes moods and emotional states to keep moving forward • Evaluates criticism but moves on
Passion	
Communication skills	

Table 3.6: List of personal competences for OI success (based on Lindegaard, 2011; Sloan, 2011)

OI skills are also the topic in several interviews. Chris Thoen, in that time director innovation and knowledge management at P&G, talks in an interview from 2010 about a preferable profile of people dealing with OI. He states three important points: The first

⁹ Lateral thinking is approaching at a problem from a different, perhaps non-standard, direction.

one is having a T-profile¹⁰. They need breadth (generalisation) and depth (specialisation) at the same time. They need the breadth to understand a wide range of subjects but they also need sufficient depth to understand the topic and ask the difficult and dangerous questions and the intuition to know when to dig deeper. As a second point he names the three legged stool: the technical mastery, the organisational mastery, and the business mastery. The technical mastery is having a technical background, the organisational mastery is understanding how decisions are made in your and other companies, and the business mastery is to put opportunities into the context of a market, with words that make sense to an audience through an elevator pitch. The last point Chris Thoen states is the need for a balance between soft skills and hard skills. Sloane (2011) also addresses these skills in his book. His focus is on soft skills¹¹. In his opinion they underlie OI success. When applying OI there is a need for both soft and hard skills¹², but soft skills may be more essential because the OI job is ultimately about people, relationships and trust (Sloan, 2011).

Du Chatenier et al. (2010) identified competences needed in OI teams with seventeen interviews and two focus groups. They focused on the skills needed for the knowledge creation with the external environment as their definition of OI teams makes clear¹³. Their discovered competencies make again clear that soft skills are important for OI. The most frequently mentioned competences were being able to:

- Combine: 'create win-win situations';
- Show social astuteness: 'understand social situations';
- Socialise: 'develop, maintain, use effective networks', and interpret 'listen actively'.

Other frequently mentioned competencies were:

- Commitment: 'have the motivation to learn';
- Have inter-personal influence: 'Appropriately adapt to situations, use influencing skills';
- Govern oneself: 'have perseverance, think positively'.

¹⁰ This concept is not linked only to OI. It first came forward in a study about hybrid managers (Guest, 1991)

¹¹ Soft skills are subjective skills that are much harder to quantify, also known as people skills or interpersonal skills.

¹² Hard skills are teachable abilities or skill sets that are easy to quantify.

¹³ "Open innovation teams are formed in which professionals from different organisations create new knowledge collaboratively." (Du Chatenier, 2010 p. 271).

An interesting note made by Du Chatenier et al. (2010) is that some competences mentioned from the interview and focus group discussions seem to contradict each other. For example it was mentioned that one needs to share his or her knowledge even if one is not sure, but it was also mentioned that one must share within boundaries. Apparently many challenges in OI teams are dilemmas, requiring professionals to show opposing behaviours at different times.

Next to skills and competences, additionally relevant for the composition of the team are the individual roles of the team members. These roles can be interpreted as functional which relate to a person's job role and function in the organisation. "People are often chosen to be members of teams on the basis of their functional roles, these being considered most appropriate to the tasks." (Senior, 1997, p. 242). However, peoples' functional roles do not necessarily help when it comes to the process through which a team makes decisions and implements them. As well not in matters such as the way different team members approach a problem or task, the way team members interact with one another, and their style of behaviour in general (Senior, 1997).

3.2.5 Conclusion and gaps in the literature

The existing literature makes it relatively clear what constitutes an OI team. Yet, there is no uniform definition. With the case study research will be seen if the explanation of Mortara et al. (2009) is visible in all the teams. In the literature we can already see a pattern on the way a team can support OI. Most discussed in the existing literature are the roles and tasks together with the composition of the team. Three roles were visible in the literature together with linked tasks. First, the team has to be the link with the outside world, they must be the key link bringing in new partners and supporting these partnerships. Secondly, they must change the mind-set of the organisation by taking on the role as change agent. And thirdly, they must support the organisation internally and facilitate the internal working of OI. Are all these roles and tasks visible in every OI team? And are the roles of the team interdependent? It will be interesting to see how these tasks and roles are translated into the structure of the team and the individual tasks and roles. Furthermore, it is clear from the OI literature that the composition of the OI team is very important. People with the right competencies and skills and the right personality should take part in the team in order to affect implementation success. These skills, as well as the member's personality, must align with OI. Coming forth from the literature is that people practicing OI must have a strong technical knowledge together with a business mind-set. In addition to this, they must have good people skills related to

communication and relationship building. With the case study research, it will be investigated which types of people sit in the OI teams.

There is an overview missing how different organisations organise their OI team accordingly to their organisational structure. Furthermore, still lacking in literature are general problems or roadblocks coming forth in OI teams. These can be helpful in structuring the teams for success. Another interesting point which is missing in today's literature is the knowledge on how the success of the team is measured. It is known that today metrics in OI is still an obstacle (Enkel & Ienz, 2009). Thus, it will be interesting to see how companies measure the effectiveness of the team in practice. The view about the future of these teams is also absent. For future organisations is an insight on how the teams will develop in the next decade is valuable. Hence, in the next chapter we take a look at six different OI teams from different industries to have a look at OI teams in practice and come with additional information and theory about OI teams.

Chapter 4: Case study research

4.1 Introduction to the case study research

In order to investigate OI teams, companies were identified using a dedicated OI team, or a team actively using OI. Six companies stating they use an OI team were willing to do an interview about their OI team. These companies are active in very different industries. In table 4.1 a short comparison of the companies is given. The data is collected from the corporate websites or annual reports of the organisations. The companies investigated are Tate & Lyle, Chemelot Campus, AkzoNobel, Shell, Unilever, and Natura. Apart from Chemelot Campus, these companies are all large companies with global activities.

A semi-structured interview was completed for every case with people inside the OI team. They were all recorded and transcribed (see appendix C). The questions asked in the interviews can be found in the case study protocol (see appendix B). To analyse the results each case study subject is initially treated separately in an individual case study report. Here the individual companies are introduced followed by a description of their OI team. Next, an overview of the success factors coming forth from the case is given followed by a short conclusion of the individual case study reports. The individual case study reports are mainly descriptive and contain information from the interview as well in several cases information from the corporate websites. Subsequent to the individual case study reports, a cross case analysis is completed to draw some overall conclusions and develop some generalisations across cases.

	Tate & Lyle	Chemelot	AkzoNobel	Shell	Unilever	Natura
Industry	Food & Beverages	Chemical industry	Decorative paints, performance coatings and specialty chemicals	Energy and petrochemicals	Food, refreshment, personal care, and home care	Cosmetics, fragrances, Personal hygiene
Employees	4.300	1.350 ¹⁴	57.000	87.000	173.000	6.200
Revenue	€ 3,9 billion (2013)	/	€ 15,7 billion (2011)	€ 345,23 billion (2012)	€ 51,3 billion (2012)	€ 2,36 billion (2012)
Team	Dedicated OI team	Business and development team	CoP leaders and ANNI team	Shell GameChanger	Dedicated OI team	Dedicated OI team
Interviewee(s)	John Stewart (<i>Chief Open Innovation</i>)	Hugo Delissen (<i>Business Development Manager</i>)	Dick Van Beelen (<i>Director Innovation Alliances</i>)	Hans Haringa, Chaco van der Sijp (<i>GameChangers</i>)	John Hague (<i>VP Open Innovation</i>)	Adriano Jorge (<i>OI and networks manager</i>) Leonardo Garnica (<i>Scientific manager – Innovation systems</i>)

Table 4.1: Case study subjects overview

¹⁴ Employees on the whole industrial park

4.2 Individual case study reports

4.2.1 Tate & Lyle

- *Introduction*

Tate & Lyle is a global provider of distinctive, high quality ingredients and solutions to food, beverage and other industries. They are situated throughout America, Europe and South East Asia with over 30 production facilities and a network of research centres. In 2013 they realised a revenue of 3,9 billion euro. The food and beverage market represents over 75% of their total sales. Tate & Lyle also has many customers in the industrial, animal feed, pharmaceutical and personal care markets. They operate through two global business units: speciality food and ingredients, and bulk ingredients. These two business units are supported by globalised support services and an innovation and commercial development group. Innovation and commercial development brings product development, marketing and product management together into one group, enabling a fully integrated approach to developing and commercialising innovation.

I interviewed John Stewart, he is the director of open innovation, who works within the innovation and commercial development team which is responsible for new product development and innovation around specialty food ingredients. Within that team they have a dedicated OI platform, an OI team. They are responsible for extending the innovation reach. The team has to assure there is a continuous source of new opportunities for their ICD process, their innovation pipeline. Tate & Lyle want to be open for opportunities no matter where they come from, ensuring a very efficient innovation system. Tate & Lyle mainly uses internal innovation teams but they also work with external partners such as start-ups, universities, SME's and other companies of all sizes to develop and commercialise innovations.

- *Description of the team*

The OI team within Tate & Lyle is a small team of three fulltime members. The group consists of the senior vice president for business development, John Stewart as director of open innovation and a third position which is currently unfilled¹⁵. The OI team was set up in 2010 as part of a wider restructuring of Tate & Lyle when the whole approach to innovation was redefined, improved and reinvested in. Part of that was establishing a dedicated OI team. John Stewart as director of OI is situated at the head office in London

¹⁵ They are currently looking to hire an extra person into the team.

while the vice president for business development is based at the North American head quarters in Chicago. They spend a lot of time together both in London or Chicago building the internal network across the company, as well as the external networks. According to John Stewart three members is the right amount for Tate & Lyle given the company structure and OI objectives. Tate & Lyle wants to keep the team together for a longer period of time. This is advantageous because it ensures continuity. A big part of their tasks is network building which takes time and experience to build, and can be easily lost when members leave the organisation. Therefore, continuity in the team is valuable according to John Stewart.

The main objectives of the OI team are to bring new opportunities into the innovation pipeline from outside the company, managing the due diligence, leading the commercial agreements and negotiations, and finally getting the deal signed. The VP business development takes the lead in closing the deal, the new member will mainly be responsible for sourcing and building networks, while the director of OI works across the whole spectrum. Thus, the team has a broad range of tasks ranging from technology scouting, network building, finding new opportunities externally, all the way to project managing both the technical and commercial due diligence. Also part of their tasks are negotiating, structuring and closing the commercial agreement with an external partner; this involves a lot of legal input. Other tasks are transitioning the external technologies into Tate & Lyle and managing these relationships. To complete all the tasks the OI team works together with many different functions within Tate & Lyle. In order to determine whether to invest in a specific external opportunity, experts within Tate & Lyle relevant to the project are involved. They are not fulltime members of the OI team. The team has to know the right people within Tate & Lyle and connect them to the right task at the right time. They as well take on the role of cultural change agent. This is done by promoting and communicating the benefits and the value of the OI process internally. And to make people understand that it is not a competitive situation between external and internal opportunities.

For Tate & Lyle the members of the OI team have both technical and commercial skills. When looking for new members they consider people from the venture capital community, while also people with business development experience can add value to the OI team. Generally people are needed who can communicate well with a wide variety of audiences such as investors, university professors and CEO's. Moreover, they need to be good at building networks internally and externally.

The performance of the team is measured in various ways, some more tangible than others. Primarily outputs are measured, which is the amount of launched products that

have come from OI. Or products that have been launched using technology the OI team brought into the company. Also the contribution to the overall innovation pipeline by value is assessed. In addition, input metrics are put into place. They for example track the number of different opportunities screened. The team evaluates themselves as well on how well they are attracting external partners, how many of the partners came to Tate & Lyle, and how many give positive feedback on the participation. These evaluations exist to indicate if a reputation as a business partner of choice is being built.

- *Success of the OI team*

According to John Stewart the success of the OI team lies in its purpose. The company should have a clear reason as to why to adopt OI. Generally an organisation does it to solve a particular problem. For example to reduce the time to market, a broader access to innovation is needed, or faster growth is desired, etc. John Stewart states that, when there is no clear goal, people and also the OI team will become distracted by the term OI. The organisation initially has to decide what is expected of the OI practices. The OI team must then have the expertise to know which practice they have to focus on for delivering the expected results. Top management should not set the boundaries of the OI team. They have to define the problem and the OI team should understand this problem and demonstrate how OI can be used to solve it.

There should be an emphasis on a very well integrated team. It will not work if it operates in a silo. The team should interact frequently with the rest of the organisation and should have support from the senior level of the organisation, because input from them is needed. This means a large OI team is not required when the team is well integrated into the whole organisation.

In addition, having a very established global network of contacts is important. It should be carefully managed to maintain the reputation of the firm. According to John Stewart, very often smaller companies can find it rather difficult to work with a larger company because they are autocratic and slow. The OI process can be used to challenge this. More importantly if it is done correctly, it is a way to differentiate oneself from other organisations. An OI team is needed because a dedicated resource is required to really see the purpose of OI and to make the organisation easier to work with. A customer service mentality must be retained to bring in innovation and to attract it.

The organisation needs to have the right pieces in place in order for the OI team to be successful. Tate & Lyle have a well structured innovation process including the OI team,

they have a dedicated venture capital fund, and they have good support from senior level. These factors are all vital for the OI team to be able to move forward.

- *Conclusions*

John Stewart states that OI is nothing new; it is old wine in new bottles. For example licence agreements and joint ventures are nothing new. But until recently there was not a dedicated team in place with experience in the start-up environment, namely an OI team that competitively differentiates itself by doing OI in a very purposeful and strategic way. This will assure that the OI team will not be distracted by the term OI. It is connected to the organisation and recognises that large organisations are difficult to deal with. OI success depends on what you want to achieve as an organisation, which sector and business you are in (B2B or B2C), the ultimate goal of your innovation process, and how you are structured.

Crucial for the OI team is the statement of a clear purpose of the OI practices giving the team direction. This will assure that the OI team will not be distracted by the term OI. It is the task of the top management to identify the needs and the problems to be solved, while the OI team should have the capabilities to find answers to these problems with the use of OI. Thus, here OI is considered a means to an end. To make an OI team effective and be able to move forward, the organisation must be structured accordingly. A well structured innovation process, senior level support and dedicated budget have to be allocated to the team. However, this is not enough to make the team a success, integration of the team into the rest of the organisation is essential, this to provide support for the team while also achieving cultural change. John Stewart states that a small OI team is possible when the OI team is well integrated and works well together with many different functions within Tate & Lyle.

The most important role of the OI team within Tate & Lyle is being the external link to the outside world. But also the other two roles identified in the literature are visible, namely those of internal gatekeeper and cultural change agent. The OI team should act as an internal gatekeeper by connecting the right people inside the organisation and transitioning external technologies into Tate & Lyle. The roll of change agent is translated into communicating success and integrating people into the OI process. However, not all the tasks found in the literature linked to these roles are taken by the OI team of Tate & Lyle. This is due to the purpose of the team.

Fitting the literature John Stewart acknowledges that both commercial and technical skills are needed. According to him a lot of emphasis should go to the ability of building and

maintaining internal and external networks. Especially to make external partners see you as the business partner of choice. Therefore, a customer service mind-set towards external partners is required.

4.2.2 Chemelot Campus

- *Introduction*

Chemelot Campus is an organisation operating on the Chemelot site in Sittard-Geleen, The Netherlands. Chemelot consists of two parts, an industrial park of 800 hectares with many chemical factories and a R&D part called Chemelot Campus. Originally the entire site was owned by the Dutch company DSM. They opted for a new course at the end of 2000 and sold their petrochemical units to the Saudi-Arabian company SABIC in 2002. In 2004 it was decided together with the Dutch province Limburg and the unions to further develop the former DSM site into an open industrial site for chemical production, research, and development. The year 2005 can be considered the real starting point for Chemelot as the R&D part named DSM research disappeared, and the site obtained the name Chemelot. This strategy had consequences for DSM research, the research activities were now decentralised to the individual business units inside DSM. The former research location became Chemelot Campus, a separate entity that has the purpose of developing the industrial site. The province of Limburg, DSM Netherlands and the University of Maastricht invested in this organisation. It was decided to develop the site for two reasons, the first one being OI which is advantageous for DSM but also to develop small start-ups. Another reason is to attract more companies to the site. This is beneficial for the region because it creates new jobs, but also lowers the costs to maintain the facilities on the site. The Chemelot Campus focusses on 4 pillars: performance materials, bio-based, biomedical, and enabling technologies.

Hugo Delissen was interviewed. He is a member of the new business development team which can also be considered an OI team. The team actively implements and supports OI practices on the Chemelot site. The purpose of the team is to attract new companies to the site and to support existing firms with growing. OI practices are used to reach that goal. For example, they help start up new companies based on the ideas coming from everywhere on and off the campus. Another great example of their OI practices is their service boulevard. This is a physical point on Chemelot Campus where people from anywhere can come with questions and ideas related to the four pillars mentioned earlier; these can be technical, innovation and business development questions. Business developers from six companies on the campus take part in this boulevard. If the service

can not answer a question it will move on into a network of Dutch chemical companies outside Chemelot. The purpose of the boulevard is to connect questions and ideas to partners on the Chemelot site and to increase business opportunities. The team also actively reaches out to the outside world, such as SME's, to let them know they can possibly help them. Additionally, Chemelot Campus tries to develop an open community on the site as well.

- *Description of the team*

The OI team within Chemelot Campus is called a business development team. Eight people are working fulltime trying to make the companies on the Chemelot site flourish. The team has been set up in the summer of 2013; hence, it is only still taking its first steps. The team is partially based on a matrix organisation structure. On one side you have the four pillars (bio based, biomedical, performance materials and enabling technologies) and for every pillar there are four tasks. One task is acquisition; attracting existing companies or parts of it to Chemelot. The second task is customer growth; supporting existing companies with growing. The third task is valorisation; this means developing existing ideas into a real business. And the forth task is cluster development; this is supporting and developing a network so all the entities on the site can find each other when needed. Depending on the importance of the pillar, more people are assigned to them. In practice there are a lot of overlapping activities with other pillars, so the team often works together to complete the tasks. The structure is put into place to give direction to the team. The team also works together with many people inside Chemelot Campus. They call in knowledge when their expertise or skills are needed. For example, when a new idea gets developed they search for the relevant people to best support the new idea and eventually the start-up company.

The people within the team all have a commercial and technical background. Deliberately high profile people were chosen to be part of the team. They need to be able to talk with many different parties and understand business. For example Hugo Delissen started several start-ups and has a lot of experience on that matter. While another member comes from the innovation centre DSM and has a good knowledge of what goes on inside the plant; that person does customer growth. Another member has a marketing and sales background, while yet another member has a lot of technical knowledge. Thus, the technical level should be high enough to understand the technical part, but often business development experience or relevant business experience is required. Most members, but not all, are more business focussed instead of having a technical focus.

Additionally works the OI team together with another team named the Connect team. This is a team that organises events and meetings with the purpose of idea exchange and creating an OI community. The Connect team tries to involve the whole campus in the community while the OI team or business development team tries to involve the individual companies. Chemelot Campus does not actively have the purpose of making companies accept external ideas better. The Connect team is thus a group separately developing the OI community on the Campus. They make sure that there are as many intentional meetings of different parties as possible by organising events. Plus, they try to increase the possibilities for unintended encounters. This is done by organising for example joint sport activities for the whole Campus. In the future these classes will be based in a central building together with the restaurant and a bar but also the BD team and DSM innovation centre, a group working with OI within DSM, will be situated there.

A budget for the OI team has been developed for the next 10 years, ensuring continuity. Hence, enough resources are made available for the team. In the coming years it is planned to expand the team by two or three members. And after 10 years the team should be self-sufficient. This will be done by for example shares in the new start-ups, which increase in value when the small companies grow.

As a side note, DSM has also several advantages from Chemelot Campus. They gladly invest not only to make the industrial site grow but also to increase their inside-out part of OI. Chemelot Campus can for example develop unused ideas from DSM as new start-ups. DSM can also keep an overview of potentially interesting ideas coming from outside being developed on the campus.

- *Success of the OI team*

According to Hugo Delissen the success of the team comes from the ability to fully understand the partners. In collaboration with the partners, their needs are identified so they can effectively be connected to other parties. When this is done well, and there is a real effect on the growth of the companies, the company can become the place to be for developing new ideas in the industry. The partners for example become ambassadors for the Chemelot Campus when they truly gain value out of the partnerships. A friendly face towards the outside world is important but more essential is the ability to really help the partner to move forward with their ideas. The availability of resources is vital as well. For example at Chemelot Campus they are building 16 pilot plants in order to support the pilot phase; which needs a lot of resources.

- *Conclusions*

The business development team at Chemelot campus is not the conventional OI team. They are responsible for supporting OI on the whole Chemelot site and not only in one company. They are a business development team that uses various OI activities and is therefore relevant to study as an OI team. They attract new ideas to the site and develop them as new businesses. The team scans for ideas on the Chemelot site as well as outside the campus, for example using the service boulevard. Their main role is being the link between the many companies on the site and moreover between industrial park and the external environment. Chemelot Campus links parties with potential synergy and develops relationships and networks. Ideas from everywhere become new businesses enhancing both inbound and outbound OI on the Chemelot site. They do not take up the role of change agent directly, but with their activities OI is surely spread further across the site, especially if their activities prove to be successful. The team is only starting up and the real success is still to be proven. Nonetheless, Hugo Delissen already identified several factors needed for the team to be successful. They must recognise what the different parties want to make it possible for them to achieve success. The success of the team lays in the ability of identifying needs and to deliver them. Therefore, a customer service mind-set is important. Chemelot Campus wants to become the place to be for developing new ideas in their domains. Additionally, the team can have a significant effect if considerable resources are awarded to the team. The members of the team should also be able to communicate with many different parties and certainly know what business entails.

4.2.3. AkzoNobel

- *Introduction and OI within AkzoNobel*

AkzoNobel is the world's largest paint company and a leading supplier of specialty chemicals. They operate in more than 80 countries with more than 57.000 employees worldwide. In 2011 they achieved a revenue of 15,7 billion euro and their headquarter is situated in Amsterdam, the Netherlands. AkzoNobel is active in decorative paints, performance coatings and specialty chemicals. They are divided into nine business units. From around 1995 until 2009 AkzoNobel developed a strong business unit structure. The business units became very segmented and the individual business units grew into independent organisations. This had several disadvantages including silo thinking. Every business unit only focussed on themselves and it became unclear what happened outside the silo. After the acquisition of Imperial Chemical Industries (ICI) in 2008, a process of change was decided upon to make better use of the collective knowledge inside the organisation. This was done with the means of OI and was led by Dick van Beelen, director of open innovation at that time. He is the interviewee in this case for discussing the OI teams within AkzoNobel. He has a long and successful track record at AkzoNobel and several months ago he took up the position of director innovation alliances. According to Dick van Beelen and AkzoNobel, OI involves everything you do with an external party in order to come to a development or to solve a problem. Two practices called the communities of practice (CoP) and an innovation network named AkzoNobel Networked Innovation (ANNI) were put in place. Both practices are linked to OI and use a dedicated team to lead the implementation and support. These practices will be introduced briefly.

Communities of practice, or CoP¹⁶, have been implemented by many organisations and are not directly linked to OI. AkzoNobel used this concept to break down the walls of the silos developed between the business units. You can even say that in this case the different business units could be considered the external parties because of the major independence between them. The CoP are based around domains that become the common ground for the communities. These domains are defined top-down and are subjects of interest for several business units. Six of these domains were identified resulting in six CoP. Each CoP is led by a fulltime dedicated CoP leader. These CoP leaders form a mini community and a team determining the direction of the communities. Two other kinds of people are identified in the CoP. The first type is the core team whose

¹⁶ They are groups of people informally bound together by shared expertise and passion for a joint enterprise (Wenger & Snyder, 2000)

members are the representatives of the business units. The second group are the associate members, these are volunteers who have to take the initiative themselves to join a CoP. The primary goal of the CoP is to bring knowledge in the organisation together rather than developing new knowledge. In total there are 500 to 1.500 members per CoP.

A second OI practice is the set up of AkzoNobel Networked Innovation (ANNI). This relates more directly to the OI paradigm as it is a structured approach for finding (external) solutions. It has been developed with the help of Ninesigma¹⁷. They supported AkzoNobel on three levels: the first one was training in OI. Ninesigma trained collectively for three to four months around 300 to 400 people. Not only from the R&D discipline but also other departments to make them understand and be alert for OI. The second level was helping AkzoNobel to organise for OI, to ensure OI implementation in the most effective way. AkzoNobel decided to use a dedicated OI team named the ANNI-team. And the third level was and is being an OI intermediary. The goal of ANNI is to find faster and better solutions to problems within AkzoNobel. The solutions can be found on three levels. The first one being AkzoNobel internally; the second level is called the external AkzoNobel network, the parties they know and where they have already established contacts; and the last level is the rest of the world, parties unknown for AkzoNobel but which have knowledge and experience relevant for AkzoNobel. The problem that needs to be solved is translated into a 'request for proposal' (RFP) to describe the problem in a comprehensive way. First, these get sent to key players in the internal organisation such as the other OI champions, the CoP leaders, and the directors of the business units. Only when no solution is identified internally, they reach out to the real external parties outside the organisation. Internally the requests for proposal work really well and within a week responses with possible solutions are received. 40% of these responses solve the problem or are a major help for the development of a solution. But externally this process works to a lesser extend. It works slower and even not every RFP gets send outside the firm.

- *Description of the OI teams*

AkzoNobel has two teams in place dedicated to OI practices. Although, the CoP leaders are technically not considered an OI team in the way it is described in the literature (See Mortara, 2009, p.30), their goal and tasks definitely touch the topic of OI. Dick van Beelen considers the CoP as a component of OI, especially because of the strong

¹⁷ NineSigma is an open innovation services provider that connects organisations with external innovation resources to accelerate innovation in private, public and social sectors.

segmentation of the business units. AkzoNobel could be considered as one firm consisting of many independent organisations. Therefore, this team is also considered in this thesis. As mentioned before the team exists of six fulltime CoP leaders, steering the CoP and defining the agenda. They are people who have knowledge in their domain but are not the all knowing experts. Their tasks entail organising events and platforms to increase the diffusion of knowledge together with the rest of the CoP. Examples are setting up an internal website, a discussion forum, and webinars. This works as a way to diffuse tacit knowledge existing in the organisation but also to present problems to your colleagues. For example through 'challenge webinars' people across business units discuss problems online, increasing the cross-pollination between business units. Each CoP leader realises this with the support of their core team consisting of representatives inside the business units. They get support from a core team which includes 10 to 15 people per CoP and which devote 10 to 20% of their time to the CoP. They have specific goals and tasks. It is not actively the job of the CoP leaders to make all the people of AkzoNobel more open and convert them into joining the CoP as associate members. The communities of practice grow via the associate members' engagement. The CoP leaders need to be people with a long term role in the organisation, longer than 10 years in the case of AkzoNobel. They need to have a developed network and a good knowledge of the organisation. All the leaders have a R&D background. The different CoP leaders work together in a way that they discuss positive and negative experiences with each other. To measure the effectiveness of the CoP, qualitative criteria are reviewed such as the diversity of the members and the different themes they work with.

The other OI practice is AkzoNobel Networked Innovation (ANNI) led by the so called ANNI-team. This team is more directly related to the type of OI team discussed in the literature review. Dick van Beelen states that OI is actually nothing new. Only since Henry Chesbrough developed the OI paradigm 10 years ago these activities received more attention under the terminology OI. AkzoNobel wanted to strengthen their OI activities, especially with parties outside the organisation. Not only with known external parties such as suppliers or strategic partners, but also with unknown parties. To implement OI more effectively Ninesigma was contacted. As mentioned earlier a dedicated OI team was established named the ANNI-team. The purpose of this team is to enforce OI within AkzoNobel in a structured way in every business unit. Every business unit has one or two OI champions which take part in the ANNI-team. Thus, the amount of members ranges from 10 to 15 people. There is more diversity between the types of people compared to the CoP leaders. Seated in the ANNI-team are mostly R&D people, but also business people are OI champions. Again these people have a long track record inside AkzoNobel, and the establishment of an extensive personal network is a key factor

together with good people skills. OI champions need less technical knowledge but need to have a wide understanding of business. The task of OI champions is to be the spider in the web as Dick van Beelen states. This means finding the right people for the right tasks across business units and across departments when searching for solutions. When the OI champions are setting up a project, technical R&D people, legal people, and marketing people need to be involved. Therefore, their network is again vastly important. The ANNI team meets two times a month virtually, and two times a year they get together physically in order to exchange experiences and inspiration. In addition, people from outside AkzoNobel are involved to contribute to the topic of OI. On those meetings they discuss what works and what needs revision. The OI champions decide themselves how much time they spend on their tasks. It becomes the responsibility of every business unit. In the beginning the time spent on ANNI ranged from less than 5% to over 50%. Today ANNI has shown success and therefore almost every business unit uses ANNI more regularly.

A challenge for the team is that they do not use the external network enough. Dick van Beelen does not see the exact reason for this. One reason can be that it takes longer to assess the ideas externally but financially it is also more expensive to use an OI intermediary such as Ninesigma for reaching out to the outside world.

- *Success of the OI team*

Dick van Beelen states that considering the ANNI team the most important factor is the way the team interacts. Once every two months a conference call is organised and two times a year they meet physically. It is essential that they interact and communicate with each other what works and what does not work. The OI team members have to be open for other approaches. Therefore, ANNI champions should not suffer from the NIH syndrome. Part of this is that the OI champions need to realise that they do not know everything. Also, it is important to show success as this brings the open process forward. Since ANNI has proven to be successful most of the business units spend more time using the ANNI network. As well it has to be realised that OI should be part of your culture, which takes a longer time to change. Hence, patience is needed to leave certain mechanisms in place for a longer time. The organisation needs the motivation and the time to spend on a process such as ANNI. The ANNI team, but also the management should spend enough attention on the programme to ensure its continuity. The positions of the ANNI champions do not change annually. The turnover in the team is low because when people leave, their network of people is also lost.

- *Conclusions*

AkzoNobel shows that the ideas of OI can also be used to open up an organisation internally when the departments are segmented. Even though this is not considered in the OI literature, Dick van Beelen acknowledges that it does relate to OI. It uses several of the dynamics existing in OI. The business units should realise that not all the smartest people exist in their own business units. Hence, to distribute developed knowledge internally, AkzoNobel uses on the CoP and full time CoP leaders. When looking for solutions to important and larger problems they utilise a dedicated ANNI team with OI champions. These champions dedicate a part of their time to solving problems externally. However, so far the OI practices have worked to demolish some of the walls between business units, AkzoNobel does not partner with the outside environment as frequent as desired. Time, quality and financial constraints limit the outward reach to these partners. A possible explanation for this can be that a large amount of knowledge can still be found internally. Possibly, when the OI initiative becomes more mature and when the organisation opens up internally, more effort will be done to explore the outside world.

The CoP takes on more the role of internal gatekeeper by supporting knowledge sharing between the departments. Because of the more indirect link with OI they will be acknowledged but considered less in the further analysis in this thesis. It is valuable to note that different types of teams can use the OI thinking to reach their goals.

The ANNI team was set up with the help of Ninesigma. Here the OI champions do not take on fulltime roles. Since the OI champions started realising the value of OI, they devote more of their time to OI. The OI team members must be a spider in the web as Dick van Beelen phrases. They should be the link in a network finding people for the right tasks across business units. A strong personal network is therefore important together with good people skills. Key factors for the ANNI team are good interaction, an open mind-set of the OI champions, and showing OI success, as well as a motivated organisation towards OI and top management support. Continuity must be ensured by keeping the OI process in place for a longer term.

4.2.4. Shell GameChanger

- *Introduction*

The Shell GameChanger programme is a concept within Shell. Shell is a global group of energy and petrochemicals companies with about 87,000 employees in more than 70 countries. In 1996 the GameChanger initiative was set up to identify and nurture unproven ideas that have the potential to drastically impact the future of energy. It has the purpose of bringing a Silicon Valley culture into Shell where people can discuss wild ideas in an informal way. GameChanger consists of a team including 12 dedicated technical and scientific experts. They combine the benefits of support from Shell with the freedom to make their own decisions. GameChanger is supported from the top of Shell and a significant budget has been allocated to the initiative. The annual budget reaches between 20 and 22 million dollar.

Two GameChangers were willing to share their view on the GameChanger programme, namely Hans Haringa and Chaco Van der Sijp. Hans Haringa joined Shell in 1982. He has a background in chemistry and information technology. For three and a half years he can call himself a GameChanger. Chaco Van der Sijp has been with Shell for 25 years. He is a metallurgist and joined Shell after first working with a daughter company named Billiton. Together with Hans he works in the same team.

Shell has been cooperating with external parties to solve problems since the beginning of this century. According to Hans Haringa some people state that Shell was using OI before the concept became popular. Three phases are recognised within Shell and GameChanger. In the beginning GameChanger supported primarily internal ideas from people within Shell. At the end of the previous century it was realised that numerous good ideas existed outside of Shell. Senior technical people picked up external ideas and these were mostly developed internally. Today GameChanger primarily focuses on the external world, for the source of the idea as well as for the development of the idea.

GameChanger focusses on four criteria: firstly they have to look at ideas with a potential major impact on Shell (Value). Secondly the ideas have to be drastic instead of incremental. GameChanger looks for unproven ideas (Novelty); otherwise they could run through the normal research funnel. The third criterion is that they need to prove the concept quickly and affordable (Doable). They test as many ideas as possible with the consequence that many ideas fail. And the forth criterion is that the idea must be relevant for the future of energy (Relevant). The GameChanger team is structured in a way to best realise these four criteria. After proof-of-concept is reached, GameChanger

may also be able to help take the invention to a further stage. There are three potential forward paths: the idea can be graduated into Shell's internal R&D funnel or another Shell business for direct use by Shell, the idea can also be licensed out to an existing technology provider other than Shell, or a new company might be set up to commercialise the idea.

- *Description of the OI team*

As mentioned previously GameChanger consists of 12 fulltime members including 11 Gamechangers and one manager. Half of the team is based in Houston, the United States while the other half is situated in the Netherlands, divided over Amsterdam and Rijswijk. Some GameChangers such as Hans Haringa work very virtual and do not see themselves bound to these Shell locations.

Typical within Shell, and also GameChanger, is that people often do not keep a position longer than 4 years. This is considered to be healthy for the team since diversity is essential. The team is recruited to hold maximum diversity on several levels. Functional diversity is accomplished by recruiting people with different technical backgrounds. Each member holds one or more academic titles. Furthermore, there is a focus on diverse personalities and even to some extend on diversity in age. In addition every member brings a diverse network to the team. According to Chaco Van der Sijp this can be considered more important than functional know-how. All the members are people with a significant amount of experience within Shell. There is no external recruitment outside of Shell.

The individuals in the team need good technical knowledge in their subject area. Additionally, good knowledge about one's company and industry is valuable. As well the ability to build networks and great social skills are required. Furthermore, GameChangers need the ability to recognise good ideas. They need to act as a radar in the outside environment and scout for potential ideas. People skills are required to recognise if the people behind an idea have the competencies to realise the concept. Individually every GameChanger is considered equal, but the team realised that every member has a set of personal skills. For example one member can be good at brainstorming while another is good at getting deals signed. Hence, in the whole lifecycle of an idea, every GameChanger has its specialities and they complement each other.

A first task of GameChanger is to identify and process ideas. These ideas are to be found in two ways, the first one being rather passive and reactive. People from outside Shell submit their ideas via the web portal. The other approach is more proactive,

GameChanger looks for ideas actively and also for people who might have the right ideas. GameChanger focusses on broad subareas or domains where Shell needs solutions. A proposed idea gets assessed on three different levels: first there is a pre-screening. After the initial assessment of the idea, a Shell technical counterpart becomes a 'co-proponent' of the idea and helps you through the screening process. Secondly, there is a screening panel consisting of two GameChangers who will assess the idea in 48 hours. If a positive assessment is reached the idea moves on to an extended panel consisting of three GameChangers and at least three experts who are not members of the GameChanger team. Another assessment is made as to whether to fund the project or not.

GameChanger takes on the task to be a supporter or sponsor of external ideas. Once ideas are identified they do not execute the actual development of the idea, this is done by the people behind the idea. Thus, GameChanger takes on a passive role. However, this can turn into an active role. In some occasions the team helps to improve the concept without taking the credits afterwards. GameChanger is situated at the beginning of the innovation funnel. With what they call 'proof of concept' they try to reduce the risks linked to the idea in order to make it manageable and acceptable by other parties inside Shell that will take over once the concept has been proven. Even though, the acceptance of external ideas is not always easy, Hans Haringa sees a positive development in the acceptance. The traditional Shell business is very risk averse and is thus naturally resistant towards the practices of GameChanger. GameChanger acts as an umbrella safeguarding the new ideas from risk averse antibodies. Two reasons bring forth these antibodies. The first one is psychological, namely the NIH syndrome. The second one is a financial constraint, as the ideas still need financial resources to be further developed into a pilot prior to the real implementation. Better acceptance by the rest of Shell comes forth from a successful track record. Besides, GameChanger as a brand has a good reputation inside as well as outside of Shell which also raises acceptance of the ideas. A fundamental aspect of the GameChanger brand is the mantra: "failure is an option".

GameChanger also uses portfolio management. It is important to realise that there is a distribution curve in the ideas. Ideas can be drastic which are most favoured by GameChanger but naturally Shell also wants ideas at the other end of the spectrum which are drastic on a smaller scale and need less change management. Thus, GameChanger will regularly implement ideas with smaller risk but also with less of an impact in order to boost their reputation and acceptance within the rest of Shell.

To measure the success of the team several metrics are put into place. To measure individual ideas they use the four criteria mentioned in the introduction of this case: novelty, value, doable, and relevant. To evaluate the whole portfolio it is important to have a certain flux of ideas. For example the amount of ideas per time unit is measured. Also, the spectrum of the ideas is considered; ideas must come from several branches such as wind energy, geothermal energy, or traditional oil. Hence, flux, breath and, quality are the three major points for the evaluation of the portfolio.

The future of GameChanger is not indefinitely positive according to Hans Haringa. GameChanger is partially protected because they already exist for 15 years, but many people within Shell would like terminate the programme. All because they do not fully understand the way the programme works. They want to institutionalize the unit into the rest of the organisation. Others do not understand the process but see the outcomes and the value coming forth from it. As long as GameChanger can stay semi-autonomous Hans Haringa sees a bright future. When they lose the decision making of the portfolio and more constraints are put into place, the initiative is destined to not survive. Certain new trends need to be considered. In today's world everyone is more connected and ideas move faster and increase almost exponentially. Thus, GameChanger must adapt to this efficiency and scalability. Another trend is that GameChanger should become more service minded. They should focus less on improving technical products and more on business models. In addition, the team focuses more on people. When looking for ideas they look for scenes of people with the relevant knowledge. To conclude, the three visible trends in GameChanger are scalability, a larger focus on business models and services, and a focus on people instead of ideas. Chaco Van der Sijp states that if GameChanger can not adapt to these developments in the future, the future will not be very bright.

- *Success of the OI team*

According to Chaco Van der Sijp two factors are important for an OI team. The first one is diversity, which is already discussed earlier. Adding to this diversity, every GameChanger must know what they are talking about. Having an established network is vital. A GameChanger should know the right people since innovation can not be done alone. Knowing where in the world people with the right knowledge are situated helps. Experience is essential to achieve these factors. As mentioned previously it is a trend to look more for people instead of ideas. Thus, the network the members bring into the team increases in importance.

Hans Haringa states that the members need passion to bring new and exiting ideas forward. This characteristic is necessary to clear roadblocks as Gamechangers have to

strive against the stream every day. Due to this passion, GameChangers have the will to make ideas better instead of rejecting them with a killer face. This is linked to a positive attitude. Change management also plays a vital role. Hans Haringa sees GameChanger as a sport of change management. Innovation at GameChanger is substantial change, and therefore a GameChanger must understand how to influence large systems. Change management comes into play from the beginning because acceptance of the GameChanger colleagues is needed to invest in these kinds of ideas, as they do not always agree unanimous with every idea. This change also comes forth in changing and improving ideas together with the inventors. To deal with failure the GameChangers require a teflon-like skin. If an idea does not work, they must accept this and move on. Failure should not be perceived as a knockout. Apart from key factors related to the people inside the team the semi-autonomous character of the team is fundamental. The team must retain this character in order to have a positive future.

- *Conclusions*

GameChanger is an OI team different from the OI implementation team explained in the literature. It can be considered an OI team that specialises in bringing in drastic innovation at Shell in cooperation with the outside environment. Therefore, the acceptance of the rest of the organisation is challenging. They also do not focus on implementing the open ideas into the rest of the organisation. They have been extensively using the ideas of OI before the paradigm became popular. GameChanger acts as a semi-autonomous entity rather separate from the usual business within Shell. It seems that culturally it acts more in a silo. Different parties in Shell are trying to institutionalise the team, even though this autonomy is considered a key factor of the team. Interesting to note is the evolution in the process. First, ideas came more from the inside while later this shifted to an outward focus. After the team became more mature, increasingly they started looking at the external environment.

Vital for the team is its composition. A strong focus is on the people side of the team. GameChangers are experienced people with a strong technical knowledge coupled with know-how about the company and industry. They all have had role inside Shell for a long time. Diversity is one of the key points for the composition of the team. Networking skills, social skills, and people skills are essential. Having passion to bring new and exiting ideas forward is even more important. The innovation at GameChanger is drastic and substantial, therefore the member must master change management to drive these ideas forward in the team and as well in the organisation.

4.2.5. Unilever

- *Introduction*

Unilever is a global FMCG company that sells their products in more than 190 countries, generating sales of €51,3 billion in 2012. The organisation operates in four major categories namely personal care, home care, foods, and refreshment. 57% of its business is in developing and emerging markets and more than 173,000 people are employed at Unilever globally. Unilever has been working with partners for a significant amount of time but the crystallisation of OI was a strategic imperative that happened around 2008. Unilever acknowledged the changing science, technology, and innovation environment. They also planned to not significantly increase their R&D spending. Therefore, a central OI team was established in order to bring in the much needed innovation by partnering with the outside world. Unilever defines OI as the integration of any new business proposition of technology that is proprietary, that you can not access in a normal way of business and that is created through partnerships from the external world. This includes for example academic collaborations, strategic supplier collaborations, venturing, and working with start ups and small to medium size enterprises. Since the embedding of OI, the number of projects inside the category programme of Unilever that were using partnerships as the primary route to delivering the targets went from 38% to 78% this year. The resistance towards OI is low because there is a wide recognition that Unilever does not have all the resources to bring in all the required innovation. However, disbelievers in the open concept still exist.

To get an insight into the OI team of Unilever John Hague was interviewed. He is the vice president OI in Unilever. He has been in Unilever for 23 years leading the OI team for just over 5 years. He has a background in material science and has taken on roles across the whole range of different R&D functions inside Unilever.

- *Description of the OI team*

The OI team in Unilever is a centralised team led by John Hague. It is a group of people owning the thinking, the best practices, the processes, to some extend the creation of the OI programme, and the integration of this programme into the organisation. The whole team consists of around 40 members. Several groups in the team take on different roles but they get together, meet, and talk as a team. One group is a strategic science group charged with the integrating of longer term break through science into all parts of the business. Secondly, a new business unit exists which looks to find and generate new

growth operations for Unilever through incubation. This is closely related to the strategic science group because some of the more radical and disruptive technology breakthroughs are introduced through new business. In order to embed OI into the four category groups (home care, personal care, foods, and refreshment) four OI directors were appointed. In collaboration with the category organisation their role is to define, drive, and enable the creation of partnerships that build the category innovation pipelines. The OI directors are evaluated on the value of the pipeline that is depended upon OI and the number of big projects with OI dependence. These hard metrics ensure they engage very deeply with the category organisation. The OI directors are the most important part of the organisation for embedding OI in the organisation. Unilever also recognised that they have to be outward facing in order to be good at OI. For this reason they reached out to three parts in the world, namely China, North America, and India. Places where there is not a strong outward presence yet. Unilever has appointed directors in those regions who build relationships with companies and academic institutes. There are major R&D labs as well so they are not completely out on a limb. Additionally, to reach out to regions where Unilever does not have a strong R&D presence yet, they started implementing innovation ports. These ports act as a presence on the ground and their purpose is to draw innovation, ideas, and entrepreneurs from those markets. The first one was launched this year in Israel and is subcontracted to an innovation company. In the OI team there is also a block of specialists. These are people holding very specific capabilities. One specialist has the task to build strategic supplier alliances and does that on behalf of the whole company. He does that for the strategic supplier alliances that transcend all the categories. There is second specialist who is a deal architect. His job is to think through the types of deal constructs they need with the external world and across different types of partnerships. He focuses mainly on small to medium size enterprises where Unilever find the idea, IP, and commercial negotiations to be very tough. One other specialist task is categorised as scouting. This is done by the regional people. The whole OI team is about 40 people strong and acts and meets as one team. The communication within the team is very important because the regional people can only be successful in attracting useful innovation for Unilever if they are extremely close to the category people. They must understand what the business is looking for. Thus, it has to be a very dynamic and networked community to be successful.

John Hague runs a leadership team which mostly acts as a virtual team. They only meet face to face twice a year. And once a year the whole OI team, all 40 people, get together and set the direction and look at the major points they need to work on as a team. As mentioned before, the OI directors are in charge of embedding OI in the different categories. These OI directors run a major forum for this, called the category OI forum.

There are 48 of these during the year. They are about embedding OI into the category organisation and they are joined by anybody who is needed to contribute to the OI plans. This is a wide ranging group.

Unilever went for a very senior, experienced and impactful group relative to the rest of the R&D organisation. Many of the directors do not have direct reports, or only have one or two. It keeps a tight, simple structure but also brings forth challenges with career progression in such a small and senior team. The people who joined the OI team were people dissatisfied with the way Unilever was doing innovation. They were in one way misfits in the existing organisation. These people also realised the power of partnerships. They are also seen as dynamic, engaging, and enterprising. A lot of it comes down to the peoples' mind-set toward OI. Instead of control they need to use trust and they have to mutually set expectations. It requires a more emergent leadership style which requires listening to partners. As a consequence, it takes longer to come to agreements. Patience is needed to spend time building relationships and understanding what partners want when they engage with Unilever. John Hague realised that the OI team was fully on the map when high performers in the mainstream organisation started to come into his organisation. People recognised they have to change their skill profile and capabilities and competence profile to be able to work more effectively, they realise OI is the future.

Unilever loosely applies the want, find, get, manage process of Gene Slowinski. They defined several OI skills needed in those stages. OI definition¹⁸ in the want stage, scouting in the find stage, deal architecture in the get stage, and alliance management in the manage stage. Beneath it all are the softer skills which are having empathy, having a win-win mind-set, and having humility. This is again related to the mind-set of the people. John Hague acknowledges that the best way to do OI is to go and do some OI, although a basic appreciation¹⁹ of the OI skills is provided through training modules. Everybody involved in OI should have a basic appreciation of OI skills while the OI directors for example need a working knowledge of several skills and the specialists need to be leading edge.

There still are some problems coming forth in the team. However, Unilever has made much progress, one challenge is changing the 'we need to own everything mind-set' in partnerships, so the IP mind-set. People and the attorneys need to understand the role of IP in OI, which acknowledges that not all the IP needs to be owned. In many cases

¹⁸ This is a skill to define the needed innovation which engages partners or is compelling to partners.

¹⁹ Unilever has a dictionary of skill definition. There are four levels: basic appreciation, working knowledge, fully operational, and leading edge.

Unilever uses a use it or lose it clause²⁰. Another challenge is that of asymmetry in the partnerships, if one partner has much more to gain. A third challenge is that of resourcing. In Unilever they have opted for a static R&D budget which makes spending more resources outside more difficult. John Hague mentions that if you get your arrangements right, people will want to spend their own money on innovation. As long as they are confident you are going to go to market with them.

According to John Hague it is important to understand that the OI team is not a static organisation. It is going to evolve. The role of the OI team should change when the organisation adapts to OI. Unilever is starting to move into a new space which they call ecosystem innovation. This is the next wave of OI where Unilever looks at ecosystems to innovate. An example is a consortium with British Aerospace, BAE Systems, and Sheffield University to try and use 3D printed components in high speed factory lines. When OI evolves, the team will have to adjust and skills will move on to stay at the leading edge of OI.

- *Success of the OI team*

John Hague mentions several points determining the success of the OI team. It is important to not keep too much control. Freedom is necessary in choosing which ways to go and with whom to partner, although some direction should be given. Also, there should be no mismatch to what the OI team is doing and what the company wants. The direct engagement of the CEO in the team was a catalytic event. This helped to jumpstart the OI rollout and pushed the organisation over an activation barrier. Now the CEO is not as engaged anymore and does not need to be. Another crucial point is that the team must be modest and not overpromise to make partners want to work with you. Therefore, a good reputation is needed as well. Unilever's brand and name is a very powerful attractor for people to come and talk to them. This is also a success factor for the OI team. Related to the structure of the OI team is the crystallisation into a single global organisation as opposed to being scattered all over the company. Unilever has come from a very fragmented past and it has been difficult to make things happen globally in the company. Hence, forming a global structure and giving them power to act has been helpful for Unilever.

²⁰ If Unilever does not go to market with the IP, there is an almost automatic right for the partner to exploit it themselves.

- *Conclusions*

Unilever has a very large OI team of around 40 people acting as one team. The group may be even considered an OI department. It is an integrated team into a single global organisation. These members are practicing and embedding OI in the company. The team is a catalyst, an enabler, and is a place where thought leadership happens. They own the OI processes and best practice. The OI team is a group divided into several groups focussing on their tasks related to OI. One of the most important tasks is the embedding of OI in the category organisation by integrating these categories into the OI programme. Apart from internal embedding, an outward focus is kept.

John Hague finds the forming of a global OI structure and giving them enough power to act crucial for the success. To kick-start OI successfully, engagement of the CEO in the team pushes the organisation over an activation barrier. When engaging in partnerships a win-win mentality must be kept. This can be done by being modest and at the same time not overpromise. Enforcing your brand as a good partner can be a powerful attractor for potential partners. The OI team must take charge in building this reputation of being a good partner.

The OI team is not a static entity and must evolve when the organisation adapts to OI. Thus, OI teams must keep on maintaining the leading edge in OI and keep on looking for new ways of finding innovation outside Unilever. John Hague states that the team at Unilever is moving towards ecosystem innovation and that the team must change their skills and ways of working to adapt to these new developments.

4.2.6. Natura

- *Introduction*

Natura is the biggest Brazilian cosmetic company. They are a leading player in sales of cosmetics, fragrances, and personal hygiene products in Brazil (Ferro, 2009). They employ around 6.200 people and achieved a revenue of €2,36 billion in 2012. Natura has operations in Brazil, Argentina, Chile, Columbia, Peru, Mexico, France, and Venezuela. The company has a central research and development centre with around 200 researchers with additionally a small research laboratory in Paris since 2006, focussing on skin studies (Ferro, 2009). At the end of 2005, advised by a consulting firm, Natura adopted an OI approach in the research and technology department to extend the sources of innovation in order to gain agility in the innovation process (Ferro, 2009). Currently they consider OI more broadly than the traditional definition. They regard OI as innovation in networks. A big ecosystem of different actors such as universities, suppliers, and service providers exists. But also the customers and their sales channel. Thus, Natura faces OI as a large ecosystem and tries to create conditions to bring different people to work together. Since 2005 they have appointed a dedicated team to lead the OI implementation. Today, it is not only the OI team using OI, the whole R&D team is now dedicated to OI and all researchers are searching for new partners.

Adriano Jorge and Leonardo Garnica were contacted via Skype to get a closer look at Natura's OI team. Adriano Jorge has been the leader of the team for the last three years. He has a background in pharmacy and has been working for Natura for the last 13 years. His last years were related to R&D and innovation. Leonardo Garnica is a scientific manager and has been working for Natura for the last three and a half years. He is an industrial engineer and he has a role at the Natura Campus programme to foster collaborations with universities, enterprises, and entrepreneurs. He is also working on funding, to raise money from the government for their innovation process.

- *Description of the OI team*

The dedicated OI team at Natura consists of nine fulltime positions. In addition, several trainees are part of the team totalising 13 people devoted to the team. There are basically five different cells in the team related to OI. The first one is OI management; here the team provides all the policies and partnership models while also evaluating the partnerships. It is a group that meets every Wednesday with the researchers engaging in a partnership. Two or three people from the OI team form a counsel and advise people

on how to establish their partnerships. They have all the relationship rules, conditions, and models for establishing these partnerships. OI management exists to have an overview of the ecosystem of partnerships and to give support where needed. A manager, an analyst, and a trainee take on this role. Thus, the team acts as an enabler and supporter by providing the best conditions for partnering. They evaluate the partnerships on two dimensions, on the technical results and moreover on the institutional aspects of the partnerships. The team wants to create certain development plans to further develop the partnerships. With the most strategic partnerships Natura desires to share their strategy to have better inputs related to innovation. A second cell is named the Natura Campus programme. It was designed to deal with universities, but has developed more broadly. Now they are dealing as well with suppliers, specialists, entrepreneurs, and others. There are basically two flows, namely open calls for proposals and challenges. Open calls for proposals are incoming ideas from the network. Natura tries to provoke the external parties to build future innovation together with Natura. Last year more than 300 proposals were submitted, 13 projects were funded and developed at Natura together with the submitters. As a second flow, Natura Campus posts challenges online to find solutions to problems they struggle with. Additionally, Natura Campus supports a relationship programme. Scientific content is shared on their website and they are active on social networks. This is done to keep the doors open and make Natura the partner of choice. Two people of the OI team are partially working with Natura Campus. The third cell is co-creation. Natura invites the most engaged people and during these meetings they cooperate and in times develop new prototypes together. Natura appointed two members of the team to work with this co-creation. The fourth cell works with network intelligence. Natura is developing their OI model and is seeing a great opportunity in studying networks. They realise that potential partners are part of a big network and developing network intelligence can give the team an understanding how others connect with different people. With network intelligence they can have access to new competences or identify the most influential people in the network. Three team members are dedicated to work with networking intelligence. The last cell is a new OI port in the Brazilian state Amazonas. In that region Natura has set up an office together with one OI team member and several researchers who report to Adriano Jorge. Their task is to establish innovation networks there and set up partnerships this region.

The OI team at Natura brings in new tools and ways of innovating into the mainstream R&D organisation. Therefore, they have to promote change in the existing innovation culture. Hence, the OI team acts as a change agent. This is challenging because all the activities of the team are provoking and questioning the status quo. Adriano Jorge states that they are innovating the way Natura innovates. The team engages people to do OI by

integrating them in the OI process. As mentioned before this has lead to the integration of OI and now not only the OI team focusses on OI, the whole R&D team is dedicated to OI. Since this year the OI team provides training to people as well, but only for network intelligence. They are contemplating other training modules additionally. Leonardo Garnica mentions the integration with other departments. He points out the link with the law department. They have weekly meetings with them to learn from the head of IP and other IP experts. New models of interaction and new models of contract for establishing partnerships are discussed. Adriano Jorge agrees with the importance of internal alliances because the OI team does not have all the competences available inside the team. The most important link exists with the law team but they also have links with the other departments in order to move forward.

People in the team have very diverse backgrounds. Most of them have a technical background, although this is not a rule. For example engineers, chemists, and biologists sit in the team. Natura looks more at the profile of the people because entrepreneurial people are required with a background related to partnerships and OI. Normally in Natura people move often from department to another. But specifically for OI they do not see a lot of people moving internally and the turnover inside the OI team is low. Nevertheless, Leonardo Garnica and Adriano Jorge both state the importance of having a balance between senior people and junior people such as trainees. The trainees bring in fresh ideas and new perspectives which is positive for the team in general.

OI team members need a wide range of skills. According to Adriano Jorge the most important skill is the ability to build and manage relationships, together with a strategic view. People in the team must understand what happens inside Natura and where Natura is going. This view is also needed to identify how Natura should focus their OI efforts. Communication skills are also mentioned additionally. These are required to motivate and engage people. Furthermore, the team members should have technical skills such as understanding IP and different partnership models. People working with network intelligence must obviously have network intelligence skills as well. Leonardo remarks that OI team members should have a basic know-how about digital platforms. He realises that IT could help them to better access the innovation networks. They should know which platforms perform better to achieve their goals. Additionally, alliance management skills are needed. Certain personal traits are also important. They require people to be collaborative and they must like to meet new people and establish relationships. As mentioned before, they have to be entrepreneurial as well.

The success in the team is measured in objectives, which are established every year. These objectives are linked to the corporate and the innovation strategy. However, the team is flexible when they identify certain opportunities. Adriano Jorge states that Natura is also working on KPI's about OI.

There are several challenges coming forth in the team. The team occasionally does not have the power to make things move forward as fast as they would like. This is due to the strong dependence and integration with the R&D team. The OI team has to move forward on their speed. The OI team regularly sees an opportunity on which they can not act fast enough. The team is studying ways to have more independence although realising they will always have to work in a collaborative way with the rest of the organisation.

Three years ago the team consisted of only three team members and it has already grown significantly. Now Adriano Jorge does not see the team grow a lot in the future. This is due to the supporting role. They do not want to take on too many tasks. The team mainly wants to provide tools and processes for people doing OI. They also see the team become and act more independent to cope with the challenge mentioned earlier. The team would like to give them more space and time to do OI while giving them support, because they recognise the potential of the people in the organisation for doing OI.

- *Success of the OI team*

According to Adriano Jorge the mind-set of the people is the most important factor for the success of the team. They need to believe in the OI model and that it brings forth positive results for Natura and the whole network. Furthermore, passion is essential, passion for the work and for the topic. Leonardo Garnica adds the need for a strong and motivating leader in the team. According to him Adriano Jorge truly promotes motivation and collaboration amongst the people inside the team, while maintaining a focus on the long term objectives of the OI team.

- *Conclusions*

Natura has a dedicated OI team designed to increase the agility in the innovation process. They take on all three described roles in the literature. They are the link with the external environment, especially with their Natura Campus programme and Co-creation initiatives. They also want to reach out to new territories by establishing an OI port in Amazonas. They take on the role as internal gatekeeper by providing tools and processes for the internal organisation, while also integrating them in the OI programme. The role of change agent certainly is also visible. The OI team innovates the way Natura

innovates and constantly questions the status quo. It takes time and change management to implement these ideas into the organisation.

Most of the mentioned skills and personal traits are also linked to what is already known about OI teams. New are the network intelligence skills as this is seen as the future of OI inside Natura, a way to grasp new competences or identify the ideal partners. For Natura the success of the team also lies in the people of the team and moreover, in the mind-set and personal believe in the OI programme and passion for the topic. In addition, an inspiring and motivating team leader takes the team further.

The team at Natura is based on the following concepts. Firstly, on the integration of the R&D organisation and other departments into the OI programme together with creating the best conditions for enabling partnerships. Secondly, a focus is kept on having people in the team with the right personal belief and passion for the task. Thirdly, there is a focus on network innovation as they see it as the future of OI.

4.3 Overview individual case study reports

	Tate & Lyle	Chemelot Campus	AkzoNobel		Shell	Unilever	Natura
Structure	OI implementation team	Business development team	ANNI-team (OI implementation team)	CoP-leaders	GameChanger	OI implementation OI team	OI implementation team
Objective	3 full time members integrated into the organisation. Each member takes a lead in certain tasks. They involve experts within Tate& Lyle relevant for the project	8 full time members working based on a matrix structure. Work together with	10-15 members. Not fulltime roles. One or two members per business unit	6 fulltime leaders supported by 10-15 representatives per CoP devoting 10-20% of their time	Semi-autonomous team of 12 fulltime members. Every member is considered equal but has specialty skills. They act more separate from the rest of Shell.	Global structure of 40 members consisting of several groups with different roles	13 people: 9 fulltime members plus trainees divided up in 5 cells. Integrated into the organisation.
Roles	Bringing in new opportunities into the innovation pipeline from outside the company, make the innovation system as efficient as possible	Growth of the Chemelot site	Find faster and better solutions to problems, enforce OI in every BU	Diffusing knowledge internally, solving problems across BU's	Identify and develop unproven and drastic ideas together with external partners	Bringing in innovation through partnering with the external world, embedding OI into the category organisation	Gain agility in the innovation process
Tasks	Link outside world, change agent, internal gatekeeper	Link outside world, change agent, internal gatekeeper	Link outside world, change agent, internal gatekeeper	Internal gatekeeper	Link outside world, change agent	Link outside world, change agent, internal gatekeeper	Link outside world, change agent, internal gatekeeper
	Building networks, technology scouting, connecting the right people, communicate success, integrate external technologies into company, managing due diligence, work with different departments	Building networks, Attracting existing companies to Chemelot, supporting existing companies with growing, developing existing ideas into real business	Spider in the web ²¹ , set up RFP, assess responses, involve people from different departments	Organising events and platforms for knowledge sharing (setting up an internal website, a discussion forum, and webinars)	Identify and process ideas, support ideas (passive or active), portfolio management	Integration of LT innovation, growing operations through incubation, support the category innovation pipeline through partnerships, reach outside to new regions, specialty tasks such as building strategic supplier alliances, deal architecture, and scouting	Provide policy and partnership models, evaluate partnerships, relationship building, co-creation, building network intelligence, involve people from different departments

²¹ Finding the right people for the right tasks across business units.

Composition	<p>People from venture capital community or with business development experience, global network</p> <p><i>Skills:</i> Technical and commercial skills, network skills, communication skills (with many different parties)</p>	<p>High profile people, experienced people, commercial and technical background (more business minded)</p> <p><i>Skills:</i> communication skills (with many different parties)</p>	<p>Mostly R&D people but also business people, divers people, LT roles, developed network, good knowledge of the company and the business</p> <p><i>Skills:</i> communication skills, people skills, understanding of business, networking skills</p>	<p>Not the experts, LT roles in AkzoNobel, R&D background, experienced, developed network, good knowledge of the company</p>	<p>Divers people (background, personalities, age, network)</p> <p><i>Skills:</i> Good technical knowledge, knowledge about company and industry, networking skills, social skills, people skills, scouting skills</p> <p><i>Personal traits:</i> Passion, optimism</p>	<p>Senior, experienced people, OI mind-set,</p> <p><i>Skills:</i> OI definition skills, scouting skills, deal architecture skills, alliance management skills, soft skills</p> <p><i>Personal traits:</i> patience, thrusting</p>	<p>Entrepreneurial people with background in partnerships and OI, balance between senior and junior people (trainees). Diverse people</p> <p><i>Skills:</i> relationship skills, strategic view, communication skills, technical skills, network intelligence skills, IT skills</p> <p><i>Personal traits:</i> entrepreneurial, collaborative, social</p>
Success factors	<p>Specific purpose of the team, established global network, integration of the team into the organisation, support senior management, well structured innovation process, dedicated budget</p>	<p>Understanding of the partners' needs, availability of resources</p>	<p>Way of interaction (share success), OI mind-set, patience, managerial attention, continuity</p>	n/a	<p>Diversity, experience, established network, passion and positive attitude (Mind-set), Good change management skills, semi-autonomous character</p>	<p>Power to act and partner, no mismatch between what company wants and what OI is doing, engagement of the CEO at the start, modest and not overpromising team, integrate team into a single global organisation, Unilever brand</p>	<p>Mind-set of the members, passion, good leadership</p>
Challenges	<p>Distraction about the ultimate purpose</p>	<p>Cultural change, The team is new and acts as a start-up and thus some problems will rise</p>	<p>Works mostly internally, not enough RFP get send outside the organisation</p>	n/a	<p><i>Antibodies:</i> NIH syndrome and financial constraints</p>	<p>'we need to own everything mind-set' (IP mind-set), asymmetry in the partnerships, financing, career progression</p>	<p>Balance between dependence and interdependence of the OI team and rest of the R&D</p>

Performance measurements	<p><i>Output measures:</i> Launched products with technology from outside, Contribution to the overall innovation pipeline by value</p> <p><i>Input measures:</i> Number of screened opportunities</p> <p><i>Other:</i> How well is the team attracting partners, how many of partners come to Tate & Lyle, Quality of the network.</p>	n/a	n/a	<p><i>Qualitative criteria</i> reviewed such as the diversity of the members and different the themes they work with</p>	<p>Evaluate <i>individual ideas</i> on: novelty, value, doable, and relevance</p> <p>Evaluate <i>portfolio</i> on flux of ideas (amount of ideas per time unit) and the spectrum of ideas (breadth of the ideas)</p>	<p><i>OI directors:</i> metrics on the value of the pipeline that is depended on OI, number of big projects with OI dependence</p> <p><i>Others:</i> n/a</p>	<p>Measured in qualitative objectives linked to the corporate and innovation strategy</p> <p>They are working on OI KPIs</p>
Future developments	n/a	<p>The tasks of the team will not change much. Only when more companies join the Campus, more roles in the team will exist. After 10 years the team should be self sufficient.</p>	<p>Important is to keep OI team in place for a longer term to change the innovation culture.</p>	n/a	<p>Future is not indefinitely positive. As long as it stays semiautonomous there is a future.</p> <p>Team must change to the efficiency and scalability of innovation</p> <p>More a focus on people instead of ideas (network)</p>	<p>The OI team is a dynamic team which evolves. It will evolve into ecosystem innovation.</p>	<p>No big growth of the team in the future due to the only supportive role they want to take.</p> <p>The team wants to give the people in the organisation more time and space to do OI.</p>

Table 4.2: Overview individual case study reports

4.4 Cross case analysis

After the individual case study reports a cross case analysis is completed to consider similarities and patterns in the data. From the start it is visible that no team is identical. Several types of OI teams were visible in the literature. In one group of organisations the OI team is integrated into the organisation. OI teams at Tate & Lyle, AkzoNobel (ANNI team), Unilever, and Natura have this common factor of integration. They are mainly integrated into the R&D units but also have connections to many other departments. These teams also want to make the business units more aware of OI. Therefore, they need to actively take part in changing the culture in their organisations. GameChanger at Shell is a different type of OI team as it uses OI searching for drastic innovation. Therefore, integration is more difficult and the team acts more in a cultural silo. They de-risk the ideas coming into the organisation before other parts of the organisation take on the further development of the project. The team at Chemelot Campus is a business development team using OI as a tool to be more effective at developing the Chemelot site. The CoP leader team at AkzoNobel is only indirectly an OI team. It uses ideas from OI to open up the segmented BU's.

It is clear that the objectives of the different teams are as not uniform. They all focus on other main objectives. These are stimulating growth; solving problems; increasing innovation possibilities with partnerships, whether it is innovation in the normal innovation pipeline or more drastic innovation; or stimulating OI inside the BU's. Thus, each OI team has a specific purpose and is structured accordingly.

It is important that the teams act and communicate like a real team and not only act as a dispersed team. These teams mostly work in global entities and often communicate virtually. Most teams ensure to have annual meetings where they meet physically. When teams are small they have more possibilities to meet more regularly all together.

The size of the OI teams range from three members at Tate & Lyle to 40 members at Unilever. Generally a small team suffices to support OI inside a firm, even though they act in global organisations. Unilever is the exception with 40 members. This is because they take on many tasks related to OI and bring all OI functions together in an integrated global organisation. In all but one case the members have full time roles. Only at AkzoNobel in the ANNI team the business units and the OI champions can decide for themselves how much of their time is spent on OI.

In nearly all cases the three general roles of an OI team discovered in the literature can be identified. Every OI team is the link between the company and the outside world as an

enabler and practitioner of OI. Most teams actively scout for ideas and people externally. They build external networks and relationships with outside partners and connect the right people. OI teams actively manage the deals as well. Because OI requires a vast amount of change, most teams take on the role of change agent actively. The team at Chemelot Campus does not take on this role actively as this lies beyond their purpose of growing the industrial site. Cultural change is achieved in several cases by showing and communicating the success of OI and integrating the BU in the OI process. The integrated OI teams take on the role as internal gatekeeper more actively than the others. Shell GameChanger takes on this role to a lesser extend. Unilever and Tate & Lyle integrate external technologies and new innovation into the organisation, and most OI teams connect people internally. To support the internal R&D organisation with partnering the OI teams provide all the policies, partnerships models, and best practices.

If we look at the composition of the teams, we see that the teams consist of mainly senior people with a lot of experience. The high profile character is a common factor in every team. Only Tate & Lyle and Natura also consider less senior roles in their team. Most people are hired from inside the organisation. This is because good knowledge of the firm and industry is required. Many OI team members stay in the teams longer than is usual in the rest of the organisation. The teams find continuity inside the team important. Furthermore, both a technical and business background is required to be an OI team member. Diversity also returns in many cases. Especially the GameChanger team at Shell is structured to ensure maximum diversity. The people have to have an open mind-set and believe in the OI concept from the start. Several personal traits such as passion, optimism, patience, being entrepreneurial, trust, and being social are mentioned in the cases. Patterns are also observable in the needed skills: technical skills, communication skills, people skills, and networking skills are brought forward as key skills for OI teams.

In the case study interviews several success factors for the team were identified. Every interviewee names different success factors for OI teams. But these mentioned factors may be applicable for all OI teams. The right mind-set and personality of the members, managerial engagement, a well developed network, and power to act were mentioned several times. In addition, having a specific purpose, integration into the organisation, a well structured innovation process, and the ability to understand what partners want and need. Diversity in the team, experienced members, good change management skills, and great leadership were also identified as vital characteristics inside the team. An OI team needs to have freedom to act. Top management engagement is also important, but they do not have to set the boundaries. They only have to define the problem while the OI

team should understand this problem and demonstrate how OI can be used to solve it. The overall strategy has to be designed to meet that purpose.

To measure the success of the team mostly qualitative criteria are used to evaluate the performance. In addition, Tate & Lyle, Unilever, and Shell use as well more quantitative metrics. Natura is in the process of developing OI KPI's. Thus, the OI teams get evaluated on OI success and organisations are improving their evaluation methods for OI teams.

Challenges or problems in the team depend very much on the team and the organisation. They all have specific problems related to their team and organisation. However, several are linked to culture. Shell and Chemelot Campus identify antibodies as a challenge and Unilever recognises cultural challenges in the IP mind-set.

The future of an OI team is very dynamic. Teams will have to evolve to stay at the leading edge of OI. As Unilever and also GameChanger realise, OI evolves and the teams have to change together with the OI paradigm. This is especially recognised by Unilever, Natura, and Shell. OI evolves towards a networked or ecosystem approach where the OI teams have to scout for people or groups of people instead of looking for ideas. OI teams must adapt and change their skills-sets accordingly.

To conclude, several patterns became visible when combining the data from the different cases, even though the structure and organisation of the OI teams depend on numerous factors. In the next chapter the discovered insights will be linked to the existing literature. Some general conclusions will be made related to the research question. An attempt will be made to answer the most important, and central question, how an OI team can successfully support OI inside their organisation.

Chapter 5: Conclusions

To conclude, a more thorough analysis is done of the case study results. First, the definition of OI teams is addressed. Second, answers will be formulated related to the sub-questions developed in chapter one. Moreover, the outcomes in this thesis are linked back to the literature. Last, the central research question is addressed and an overall conclusion of this master's thesis is drawn to see how OI teams can be most effective in supporting OI in their organisations.

5.1 Definition of OI team

Concerning the definition of OI team, in the literature a major or almost only focus is on OI implementation teams. Most authors realise the need for a team dedicated to the rollout of OI. However, as seen in the case study research, there is not only one type of OI team. Although many similarities between every OI team are clearly visible and many implications hold for every OI team, a distinction should be made between several types of OI teams. This is not emphasised in today's OI literature. Some characteristics should be recognised to identify different types of OI teams. Thus, the first and major type of OI team is the OI implementation team. In my research a key characteristic that came forward to identify OI implementation teams is integration into the organisation. The teams at Tate & Lyle, AkzoNobel, Unilever, and Natura clearly indicate this characteristic. Another vital characteristic is that they are responsible for embedding OI into the R&D department. As mentioned by Mortara et al. (2009) they try to enforce OI in the R&D units, while also owning the OI processes and best practices. The other type of OI team does not strongly focus on OI implementation or OI embedding compared to the OI implementation team, but they concentrate on using OI practices or OI thinking to complete their specific goals. Possibly they are as well less integrated into the rest of the organisation. However, it does not mean that these teams are not integrated at all. These teams can in some way be considered OI adoption teams. For example the OI team at Chemelot Campus is a business development team focussing on using OI to attract business to the industrial site. GameChanger does not emphasise OI embedding into the rest of the organisation either. They use OI to find and develop drastic and challenging innovation into Shell. In the literature Du Chatenier et al. (2009, 2010) mention a type of OI team that can be considered a third archetype. They defined OI teams as groups of people from different organisations working together to develop new products, services, or markets. This type of team was not identified in the cases and

should possibly be considered as OI project teams. Thus, the general term OI team should possibly be broadened to a definition in the direction of:

An open innovation team is a team actively and predominantly using the ideas and practices coming forth from the open innovation paradigm to reach their specific goals.

This definition fits better to all the teams identifying themselves as OI teams. The term OI implementation team thus stands for a specific type of OI team with the goal of embedding OI into the rest of the organisation. These teams are defined correctly by Mortara et al. (2009, p.30) and most other authors. Only the integration into the organisation is not clearly highlighted. In the literature when OI teams are mentioned, mainly OI implementation teams are meant. More research should be done to see if there clearly is a distinction between the OI implementation teams and the OI adoption teams.

To further analyse OI teams, only OI implementation teams and OI adoption teams will be discussed. Also, these two types of OI teams seem to be very similar apart from the OI embedding and integration of the internal organisation. When the term OI team is used, the statements hold for both types of teams, otherwise a distinction will be made. OI project teams will not be considered in the further conclusions.

5.2 Answering the sub-questions

- ***How is an OI team structured?***

From the case study research we see that no OI team is identical. Every team is structured differently according to the culture and perspective of the company (Mortara et al., 2009). The purpose of the team and the objectives of the OI strategy play a role in how the team is organised. In the previous paragraph the difference between several teams is pointed out. This difference between OI implementation teams and OI adoption teams is best visible in the way the teams are structured. OI implementation teams are integrated into the organisation and working together with many functions inside the company. Most OI implementation teams depend on a dedicated and small team of managers (Mortara & Minshall, 2011). This holds for every OI team. Hence, no large team is required to implement or work with OI. This could possibly mean: the smaller the OI team, the greater the need for strong integration into the rest of the organisation. However, considering the objectives of the team and the extent of the OI programme, the team can be larger. A large team can exist when many OI practices are implemented and integrated into a single global organisation (see Unilever). Dedication towards OI

works best if the team members take on fulltime roles, although it is also possible when the members of the team only have part-time roles. This is achievable as long as these part-time teams understand and believe in the OI programme and are dedicated to put in a lot of energy. An OI team should have enough freedom to act and make decisions. Therefore, semi-autonomy is valuable; this will be further addressed later. Otherwise potential opportunities can be lost if they can not react on them in a timely manner.

Thus, to conclude, organisations should organise their OI teams according to the OI objectives and the culture and perspective of the company. Teams should have enough power to act, and therefore, a semi-autonomous character is valuable. A smaller and dedicated team of full-time roles is the dominant structure of an OI team.

- ***What are the roles and tasks of an OI team?***

(OI) teams need specified tasks and distinctive roles (Mickan & Roger, 2000). An OI implementation team takes on three roles, as mentioned before in this research. They are the link with the outside world, are cultural change agents, and are internal gatekeepers. OI adoption teams take on mostly the same roles but focus less on being an internal gatekeeper. Several tasks are linked to these identified roles. Many of these tasks were already recognised in the literature. Table 5.2 is an adapted table listing the roles and tasks once more. I would like to note that some of these tasks also belong to other roles. For example, integrating the large parts of the organisation into the OI process helps to achieve cultural change, but is also a task that fits into the role of internal gatekeeper. The blue highlighted tasks were both visible in the literature and the case study research, the tasks coloured green were not clearly visible in the literature while they did get mentioned in the cases and the other tasks were only cited in the literature. Possibly the most essential role of an OI implementation teams is being the link between the outside world and their organisation. They provide support for the company's interactions with the outside world (Mortara et al., 2009). One of the most highlighted tasks is network building, both internally and externally. This can also be considered as intra- and interorganisational networks. Part III of the book by Chesbrough, Vanhaverbeke, & West (2006) goes deeper into the relation of OI and inter-organisational networks. The role of intra-organisational networks is considered less in the OI literature, although being extensively researched in general. The OI team thus plays an important role in establishing them. Establishing networks is required to identify where possible useful innovation can be found and to know which people can be involved to support those partnerships. Additionally, OI teams have to attract, find, manage, and evaluate partnerships. By being the friendly face of the company (Mortara et al., 2009;

Golightly et al., 2012) potential partners are more likely to bring their innovation to their organisation. External partners must feel invited to come and work with them. An image of the organisation as being fair and easy to work with, is advantageous. Finding partnerships entails actively searching for them. Many OI teams send out requests where they state which problems need to be solved in a comprehensive way. Also, innovation possibilities can be found by reaching out to parts of the world where the organisation does not have a good innovation presence. Finding partnerships is related to technology scouting. Managing partnerships involves supporting the relationships but can also mean managing the deals and the required due diligence. Evaluating partnerships is also important. This involves evaluating the technical results and the institutional aspects of the relationship. Another task is creating knowledge sharing platforms. This can for example include an online portal. Natura set up the Natura Campus initiative where knowledge is shared with the outside environment. Technology scouting is another major task (Golightly et al., 2012). This topic is nicely addressed in a report by the consulting firm Sagentia (2010). Technology scouting intelligence can possibly support this task (Veugels, Bury, & Viaene, 2010). From the case study research, it was learned that technology scouting is closely related to finding the right people because the recent trend is to look increasingly for people than for ideas.

Roles	Tasks
Link with the outside world	<ul style="list-style-type: none"> • Create knowledge sharing platforms • Attract, find, manage, and evaluate partnerships • Be a technology scout • Be the 'friendly face' of the company • Build networks • Reach out to new regions
Cultural change agent	<ul style="list-style-type: none"> • Be an OI champion • Use clear communication strategy • Create a common language • Break through functional silos • Provide training and support • Show success • Integrate the rest of the organisation into the OI process

Internal gatekeeper	<ul style="list-style-type: none"> • Manage the OI strategy • Facilitate OI innovation internally • Increase knowledge sharing inside • Connect the right people (internal network) • Provide training and support • Develop tools and processes • Work with many departments • Integrate technologies inside the organisation
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Table 5.1: List of roles of OI teams and their encompassing tasks adapted after own research

The second role OI teams should take on is that of a cultural change agent. There should be a steady pressure on the culture to continue to shift mind-sets away from resistance to 'not invested here' (Huston & Sakkab, 2006). This cultural change also helps to break through functional silos. This task was identified in both literature and case study research. To achieve this cultural change, the OI members should be OI champions. Change management needs champions who can create enthusiasm around the needed change (Tushman and O'Reilly III, 2002). OI needs to become top of mind within organisations and not only within innovation teams (Lindgaard, 2011). In practice, most OI teams achieve this cultural change by showing success. The rest of the organisation then realises that the innovation process in the firm can benefit from looking at external opportunities. The OI team must provide and share success stories (Bingham & Spradlin, 2011) to show there is no competitive situation between external and internal opportunities. OI implementation teams also make people buy into the OI paradigm by integrating them into the OI process. A holistic approach should be adopted by integrating many different business units and different departments into OI projects. Therefore, they can see at first hand the advantages an open approach entails. OI training can as well increase OI awareness. For example at AkzoNobel, 300 to 400 people were trained to create a common language for OI. In the case studies it was not identified if an OI team should use a clear communication strategy. However, the importance of communication was addressed in all cases.

The third important role of OI teams is being an internal gatekeeper. This is organising and managing OI internally. One of the most important tasks is being a spider in the web. The OI team must identify the right people at the right time for specific tasks. Their expert knowledge and skills can be used to support the OI process. These people can come from everywhere in the organisation. Having an established internal network is thus important (see intra-organisational network above). The integration of other functions into the OI process to achieve cultural change was already mentioned and it is

thus as well required to bring skills together. The OI implementation team additionally supports the internal organisation by providing tools and processes for establishing and managing partnerships (Golightly et al., 2012). They create the best conditions for internal innovation teams to perform OI activities. This also includes training, especially training in OI skills. For example, Natura trains people in network intelligence. Furthermore, OI teams support the implementation of innovation brought into the company with OI. However, OI adoption teams often identify and attract external innovation, but do not actively implement this in the organisation. Chemelot Campus and GameChanger indicated this. OI teams should not only open up the company for ideas coming from the outside world. Possibly before achieving this, the OI team must open up the business units inside the organisation and increase internal knowledge sharing. GameChanger did this in its early years and AkzoNobel still focusses on executing this task. Further, in the case studies it did not come forward that the OI teams must manage the OI strategy, although it seems to be advantageous to keep the right focus on the right OI practices.

Apart from the roles of the team, individual roles also exist inside the team. There is no clear and general approach visible on how these roles are distributed individually, also because the focus during the research was brought more on the team roles and task-design. However, several insights on the individual roles were visible. Most team members have their specialty tasks in the OI process. At Natura and Unilever the teams are subdivided into categories, taking on parts of the tasks involved in OI. In other teams, the subdivision is rather done according to the business units. Each member has their tasks inside their business units (e.g. AkzoNobel, Chemelot Campus).

To conclude, the team roles of OI teams are already widely discussed in the literature and are also identified in practice. Individual roles are organised according to the organisational structure of the company and the purpose of the OI practices.

- ***How should the composition of an OI team be?***

The composition of the OI team is a very important factor. Specific types of people are desired inside the teams. OI teams consist of high profile and senior people with a considerable amount of experience. Experience inside the organisation, since a strong knowledge of the organisation and its industry is required and experience in establishing networks, both internally and externally. Thus, OI team members should favourably have longer term positions in the firm. But when team members are hired from outside, people from the venture capital community or people with business development

experience can be considered. They possibly are more likely to already have an open mind-set. Having an OI mind-set is vital for members of the team. They have to understand the benefits of OI and realise that a new way of innovating is required to stay innovative. Although most teams have a very senior OI team, a balance between senior and junior people can as well be advantageous in order to have different perspectives on the OI processes. Natura achieves this by involving trainees into the OI team. This is linked to diversity, which is also important inside the team. Most teams show diversity in backgrounds, but according to GameChanger at Shell, OI teams should be organised to maximise team diversity in terms of background, personalities and to some extend diversity in age. Additionally, having very diverse networks inside of the team is advantageous to find and bring in better innovation. People with both, a technical background while also being business minded sit in an OI team. This is already widely identified in the OI literature (Mortara et al., 2009; Thoen, 2010). Crucial to the performance of teams are the abilities and behaviours of their members (Senior, 1997). The team needs a variety of skills (Hackman, 2002). OI team members need to develop a substantial network. Therefore, networking skills are vital. Networking skills involve an ability to identify and understand other people's work in relation to ones own and to assess the value of the connection with these others for potential future work (Rajagopal, Joosten-ten Brinke, Van Bruggen & Sloep, 2011), in this case future innovation. To build networks, great communication skills are required. OI teams need to be able to communicate with many different parties. "Good communication skills drive OI and collaboration by bridging the gap between external and internal parties." (Sloan, 2011, p.92). It is recognised that other, less soft skills are also needed to support the collaborative tasks in the team. Technology scouting skills, deal architecture skills, alliance management skills, network intelligence skills, and IT skills came forward in the research. Table 3.4 in chapter 3 offers a good representation of the needed skills in OI teams. Mortara et al. (2009) divided up the skills into introspective, extrospective, interactive, and technical skills.

Mathieu et al. (2008) state the importance of individual team member characteristics such as competencies and personalities. Reilly, Lynn, & Aronson (2002) showed that the success of NPD teams working with radical innovation gets influenced by the personality of its members. Thus, probably this is also the case for OI teams. In the OI literature it is identified that certain personal traits are beneficial inside an OI team. Members of an OI team should be entrepreneurial and passionate people who believe in the OI paradigm. In addition, optimism, patience and trust are required to work with external partners. In the book of Sloan (2011) Martino and Bartolone mention the importance of optimism and passion as well. In Addition, OI team members need to be social and should have the

desire to communicate with others. In table 5.1 the personal attributes according to Mortara et al. (2009) are listed. Again, the blue terms are characteristics identified in both the literature and case study research, the green words came only forward in the cases and the remaining characteristics were only visible in the literature.

Personal attributes for OI		
<ul style="list-style-type: none"> • Motivation • Ability to learn • Sociability • Techno-business mind set • Passion 	<ul style="list-style-type: none"> • Systems thinking • Leadership • Balance between ego and empathy • Optimism 	<ul style="list-style-type: none"> • Lateral thinking • Vision • Adaptability and flexibility • Entrepreneurial mind set • Trust

Table 5.2: Personal attributes for OI according to Mortara et al. (2009) p.42 adapted after own research

To summarise, an OI team should be a mostly senior and highly experienced team with an OI mind-set. These people should have both technical and business knowledge. Networking skills are identified as critical together with good knowledge of the company and the industry. Skills for managing the partnerships and relationships are as well significantly important. Underlying these skills certain soft skills are required, with communication skills and relationship building probably being the most important ones. Certain personal characteristics can help to bring the OI team further. Conceivably, when these skills and personal characteristics are obtained by the OI team members, there can be a positive influence on the success of the team.

- ***What are critical success factors for a successful OI team?***

To be a successful OI team, there are several factors that are recognised as critical. These are identified by key persons involved in OI teams. The recognised factors suggest several points that definitely should be addressed when setting up an OI team. The OI team members need to have the right OI mind-set. The members should inherently be open and truly believe in the underlying values of OI and that OI can ensure positive results for the firm. OI teams must have the power to act. Autonomy is indicated as an important point. The team literature supports this finding. Hoegl and Parboteeah (2006) investigated autonomy and teamwork in innovative projects. "The findings demonstrate that team-external managers of innovative projects should generally refrain from interfering in team-internal operational decisions (p.67)." Moreover, the OI team must have the time and resources to implement OI successfully (Malouf, 2012). Also a dedicated budget must be allocated to the team to give them autonomy and power to act. To establish an effective team, there is a need for managerial engagement. Top management gives the fundamental push to establish an open innovation implementation

team (Mortara et al., 2009). Innovation leaders must feel full support from executives (Lindegard, 2010), especially at the start of the implementation. For example at Unilever, the direct engagement of the CEO in the team was a catalytic event. This helped to jumpstart the OI and pushed the organisation over an activation barrier. Now the CEO is not as engaged anymore, neither does he need to be. The senior management must define a clear purpose for the OI activities and the OI team. The OI team will otherwise become distracted by the large scope OI has. A well defined OI strategy can possibly provide a good framework for the OI team. Mentioned previously in the conclusions and identified as key success factors are the facts that the OI team must have a well developed network and that there needs to be diversity inside the team. Also integration inside the organisation was pointed out as being a key factor.

- ***What are problems related to OI teams hindering OI implementation?***

The most identified problems coming forth from the case study research are linked to culture. Apparently changing the culture of an organisation towards OI can be challenging. The IP mind-set can additionally cause problems. The 'we need to own everything' mind-set is not advantageous for the team, as partners also have to gain value from the partnerships. Moreover, the team has to ensure there is no asymmetry in the partnerships. Thus, the deals must be properly constructed to create win-win situations. Because OI teams are very senior teams, problems can arise in the career progression. Another challenge brought forward is the balance between dependence and independence between the OI implementation team and the rest of the organisation. Integration of the team into the organisation can have the consequence that the team becomes too dependent on the speed of working of the internal R&D units. Therefore, the team cannot always react fast enough to identified opportunities. When many ideas come from the internal organisation, it can be difficult to reach out to ideas from outside. AkzoNobel has experienced this at first hand. A challenge is to be aware of ideas inside the organisation while not missing the external opportunities. This can possibly be dealt with by enforcing the technology scouting activities and not only depending on OI intermediates to bring in external solutions.

- ***How is the success of the team measured?***

Measuring the success for OI teams seems to be closely related to general OI evaluation measurements. For example Tate & Lyle looks at output measures such as the launched products with technology from outside and the overall innovation pipeline by value. In addition, they assess OI input by looking at the number of screened opportunities. Qualitative criteria considered are how well they are attracting partners, and how many partners take the step to come to Tate & Lyle. GameChanger evaluates the OI portfolio

on the flux of ideas and the spectrum of the ideas. While Unilever looks at the performance of the team by look at the value of the pipeline that is dependent on OI or the number of big projects with OI dependence. Natura is working on developing OI KPIs and has qualitative objectives linked to the corporate and innovation strategy.

There is no general way of measuring the success of an OI team. In the literature is realised that while the OI paradigm is growing, metrics systems are not yet adapted to monitor and measure the value of activities (Gassmann & Enkel, 2010). And not much scientific literature is available on the topic. Although, in an article on the reputed innovation website 'www.innovationmanagement.se' is stated that "appropriate tools and metrics are needed that empower innovation teams to properly measure open innovation in order to be able to promote the best innovation ideas and solutions and in fact to turn new knowledge into successful commercialised products or services." (Erkens, Wosch, Luttgens, & Piller, 2003). Moreover, they state that measuring OI highly depends on your desired innovation goals and specific OI activities. "Method-specific metrics or KPIs are needed in order to be able to properly assess and measure the progress and success of each of these activities." (Erkens et al., 2003).

Thus, there is not yet a general approach for measuring the success of OI teams. However, seen in the case study research is that organisations are creative at developing evaluation methods assessing their OI process and their OI team. Of course, OI implementation team success is linked to OI implementation success, but additional measurements should be put in place to measure the performance of OI teams at team-level and individual level.

- ***How will OI teams develop in the future?***

OI teams are not static teams, just like OI is not a static paradigm. Organisations must realise this from the start. Gassmann & Enkel (2010) state that organisations are starting to professionalise the internal processes to manage open innovation more effectively and efficiently. Nevertheless, in many firms it is currently still more trial and error than a professionally managed process. Thus, as the OI paradigm becomes more mature, and organisations are learning more on the subject, OI teams will be organised more effectively to support OI. An interesting note made by John Hague from Unilever is that OI teams are going to evolve. The role of the OI team should change when the organisation adapts to OI. When OI evolves, the team will have to adjust and skills will move on to stay at the leading edge of OI.

5.3 Answering the central research question

Answering the sub-questions in the previous section makes it possible to formulate a more conclusive answer on the central research question:

- ***How can an OI team effectively support OI within an organisation?***

OI teams, whether they are OI implementation teams or rather OI adoption teams, should be organised and structured to best support the OI goals of their organisation, therefore, a clear purpose must therefore be identified. To achieve the objectives the OI team needs power to act. This can be accomplished through semi-autonomy and having a dedicated budget. In order to best support OI in an organisation, a certain profile of the OI team members is required. The team needs to be a diverse group of experienced people with both, technical and business knowledge as well as with an open mind-set. Their skill-sets and personality make it possible to take on the roles of link with the external world, cultural change agent, and internal gatekeeper; each role has its specific tasks. Apart from hard skills for managing the partnerships, OI team members should master soft skills such as relationship building and communication skills to really add value to the team. The internal and external network of the team is a valuable asset for doing and implementing OI. Thus, an OI team can effectively support OI if they have the right structure, task design, and team composition. In addition, the team must have support from senior management and understand that OI is an evolving concept and that the team needs to evolve with it.

5.4 Final conclusions

There is not much direct research on OI teams or OI implementation teams. This master's thesis investigated how an OI team effectively supports OI within an organisation. It adds value to the OI literature by giving an overview of the scattered OI team literature and additionally comparing six different OI teams in practice to get a better insight into how organisations set up their dedicated OI team. There is a focus on the structure of the team, team-task design, team composition, critical success factors, performance measurements, and future developments. The case study research mostly confirms the findings in the OI literature. However, several new implications came forward:

- The term OI team should be readdressed as there are different types of OI teams. Possibly a distinction between OI implementation teams, OI adoption teams, and OI project teams should be made.

- Three roles were clearly visible in OI implementation teams. They are the link between the organisation and the outside world, are cultural change agents, and are internal gatekeepers for OI. These functions each entail specific tasks.
- The people side of OI teams is important. A lot of attention is given to the right type of members: experience, diversity, mind-set and personality are important focal points.
- OI teams are dynamic and should evolve with the OI paradigm.
- Several key factors for OI teams such as having a clear purpose and the power to act as well as their integration²² into the organisation were identified.
- The success of OI teams is probably linked to OI success. No general approach to measuring an OI team's success is identified.

²² Possibly more important for OI implementation teams

Chapter 6: Managerial implications, limitations and future research

6.1 Managerial implications

The research in this master's dissertation has also several managerial implications. There is not one identified way for setting up an OI team. Much depends on the company's culture, structure, and OI goals. It is identified that the human side of OI teams is important. Therefore, it is vital to find the right people to increase the chances of OI implementation success. It is probably valuable to involve the HR department when setting up this team. However, the HR function in the organisation must then acknowledge and understand OI and its requirements. In addition, when a team has been set up successfully, the reward structures, performance measures, the hiring of other OI team members, and further career progress of the OI members should be considered.

When OI embedding is desired, top management and favourably the CEO has the task of showing engagement into the OI concept and has the potential to bring the organisation past an activation barrier. It should be considered in which ways this can be achieved and the decision need to be made when OI embed enough and managerial attention is required less.

6.2 Limitations and future research

During this research, interesting conclusions and implications came forward. However, several limitations are visible in the research. A first limitation is that the research is only based on qualitative research using a small amount of case studies. Six OI teams were described to test the exiting literature and identify some new implications concerning OI teams. To come to more robust statements concerning OI teams and to see whether the found implications are valid, quantitative research is required using a larger sample of OI teams.

Moreover, in this research no distinction between the different types of organisations was made. All interviewed organisations operate in different industries. Possibly similar patterns exist inside industries when considering OI teams. Conceivably, a distinction can also be made between OI teams of B2B and B2C organisations. Future research can be valuable to have a stronger focus on these organisational differences.

Further, in this thesis the focus was kept on team inputs such as team structure, task-design, and the composition of OI teams. Other focal points could as well be considered. For example, further research can also consider team processes and team outcomes (see Input-Mediator-Output model Ilgen et al., (2005)). In this master's thesis a more practical approach was used to study OI teams. A more theoretical method using quantitative data can as well be valuable to add more value to the general team literature.

In addition, OI maturity can possibly influence the structure and design of an OI implementation team and therefore impact the team's success as well. In this thesis it was pointed out that OI implementation teams are dynamic and have to change and develop with the OI concept itself. Thus, it can be interesting to investigate how an OI implementation team develops throughout the process of OI adoption, from starting the OI initiative until full OI embedding into the organisation. This would enhance the knowledge on the dynamic character of the team.

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Appendices

Appendix A: Research design

Prior to the case study research a research design has been developed. It can be seen as a blueprint for the research, dealing with at least four problems: what questions to study, what data is relevant, what data to collect, and how to analyse the results (Philliper, Schwab, & Samsloss, 1980 as stated in Yin, 2009). Unlike other research methods, a comprehensive catalogue of research designs for case studies have yet to be developed (Yin, 2009). The design is a logical plan for getting from here (set of questions to be answered) to there (set of conclusions about the questions).

Five components of a research design are important (Yin, 2009):

- (1) a Study's questions;
- (2) its propositions, if any;
- (3) its unit(s) of analysis;
- (4) the logic linking the data to the propositions; and
- (5) the criteria for interpreting the findings

First the study questions need to be developed. This has been done in chapter one where the central research question and sub-questions have been developed. These questions came forth after going through existing literature:

The central research question is formulated as:

- *How can an OI team effectively support Open Innovation within an organisation?*

Several sub-questions are developed to support the central research question. These are developed after scanning the OI and team literature.

- *What is the structure of an OI team?*
- *How should the composition of an OI team be?*
- *What are the roles and tasks of an Open Innovation team?*
- *What are critical success factors for a successful OI team?*
- *What are problems related to OI teams hindering OI implementation?*
- *How is the success of the team measured?*
- *How will OI teams develop in the future?*

The second component is the development of study propositions. Each proposition directs attention to something that should be examined within the scope of study (Yin, 2009). But because our task is very explorative a strong focus on these propositions doesn't have to hold, although a focus is kept on the structure, composition, roles and tasks, problems, measures of success, and future developments of the team.

The third component is the unit of analysis. This is very clear in our case. We investigate the dynamics within and from OI teams inside organisations implementing the OI paradigm.

The forth component is linking data to propositions and criteria for interpreting the findings. Together with the fifth component it foreshadows the data analysis steps in case study research. It contains the choice of analysing technique for studying the data coming forth from the cases. The main concern during the design phase is to be aware of the main choices and how they might suit your case study to create a more solid foundation for the later analysis (Yin, 2009). A choice from the analytic techniques has to be made (Pattern matching, explanation building, time-series analysis, logic models, and cross-case synthesis). For analysing the interviews conducted in my case study research cross-case synthesis will be used.

The last component is the criteria for interpreting a study's findings. Because we conduct no statistical analyses, no 'statistically significant' result can be found. Therefore attention must be kept on other ways of thinking about such criteria (Yin, 2009). A major and important strategy is to identify and address rival explanations for your findings. At the design phase it is important to anticipate important rivals, so the task is to include information about them as part of your data collection (Yin, 2009). In my opinion rival explanations are less relevant in this research because the thesis is very descriptive. However, when looking at successful OI implementation other important factors come to mind. These can for example be influence from top management or an already very open culture inside the organisation from the start. An open mind will be kept for other explanations regarding successful OI implementation. But the task of this thesis is not to discover what drives successful OI implementation but how an OI team can help pushing the OI thinking forward in the organisation and how the team best supports OI practices.

A complete research design requires the development of a theoretical framework for the case study that is to be conducted (Yin, 2009). This theoretical framework will be constructed with the use of a literature review. This is conducted in chapter 3 of this thesis.

Appendix B: Case study protocol

1. Change Record

- First version completed 4/10/2013
- First Modified version 11/11/2013
- Second Modified version 4/12/2013

2. Background

Not much academic research is done directly addressing open innovation teams neither on how they influence OI implementation success nor on which factors make an OI team successful. Mortara et al. (2009) and Du Chatenier (2009) add the most to the OI team literature. Next to those articles mainly fragmented knowledge about OI teams is found (Lindegård 2010, 2011; Golightly, 2011; Mortara et al., 2010; Bingham & Spradlin, 2011; Spradlin, 2011; ...)

3. Design

Can be found in in the case study design (see Appendix A)

4. Data Collection

In this case study most information is gathered from personal in-depth interviews. All interviews are tape-recorded and transcribed. If possible an email follow-up was done to gather some important missing data. Multiple respondents per organisation reduce the risk of personal and post hoc interpretation biases (Yin, 2003). Only in the cases of Shell and Natura multiple interviewees joined the conversation. The data to be collected consists of information to answer the central research question and the sub-questions mentioned above.

5. Data Analysis

After the data collection out of the interviews and extra information from the websites single case study reports are constructed. These include an introduction to the company with an overview of the OI practices, a description of the team, and the most important factors for the success of the team. At the end of every report individual conclusions are drawn based on insights coming forth from the single case study reports. Afterwards, a cross case analysis is done to look for patterns or interesting conclusions visible. General conclusions are drawn at the end of the case study research linking the results back to the literature and formulating an answer to the research questions.

6. General structure of the questions asked during the case study interviews

Phase 1: Introduction & general questions

- Introduction (explain purpose of thesis)
- Ask permission to record the phone call and to use all the information in the thesis
- Can you maybe give a short introduction of who you are and your role within your firm?
- Can you shortly tell me a bit about your Open Innovation practices within your firm?
- How well is OI embedded in your organisation at this moment?

Phase 2: OI team (general)

- How do you define an open innovation team?
- Can you tell me a bit more about the OI team in your company and your role within this team?
- Can you tell me a bit about the structure of your OI team? (team design)
 - How many people?
 - Fulltime?
- Since when did your company decide to use an OI team to lead the OI practices?

Phase 3: OI team (specific)

- Can you elaborate a bit more on the composition of the team?
 - Which people?
 - Which skills and competencies are needed in your team?
 - Are there any personal characteristics or traits needed within all the members of the team?
 - Is there much diversity within the team?
 - Is there a large inflow of new people in the team or does the team stay the same for a long period?
- What are the roles and tasks the OI team?
- What are the most important roles of the individuals within the team?
- What makes an OI team successful for implementing OI in your firm? What are important factors?
- How do you measure the success and performance of your OI team?
- Can you also identify some problems or roadblocks related to OI teams hindering the effect of the implementation and OI in general?
- How do you see the future of OI teams, will there be large developments or changes?
- Any other comments about your OI team?

Phase 4: Closing

- Do you maybe have some other information about your OI team? (Report, PowerPoint?)
- Do you maybe have some other contacts with other OI teams of other firms?
- Thank words and closing

Appendix C: Transcription interviews

Interview Case study subject 1: Tate & Lyle

Date: 5/11/2013 11:00-12:00

Organisation: Tate & Lyle

Interviewer: Jonas Vanvoorden

Interviewee: John Stewart (Director of Open Innovation)

Medium: Phone call to London head office

JV: Is it possible to give a short introduction of yourself and your role in your company and in the innovation team?

JS: Sure, I work with Tate & Lyle as director of open innovation. Tate & Lyle is a global food ingredients group with about 3 billion pounds sterling revenue and operations all over the world. We serve the food and beverage industry. All the worlds' largest food and beverage companies are our customers and we supply them with ingredients ranging from bulk ingredients to commodity ingredients all the way to specialty, high functional ingredients backed by IP and generated through innovation. I work with the innovation commercial development team (ICD- team) responsible for new product development and innovation around specialty food ingredients. Within that team we have a dedicated open innovation platform, an open innovation team. We are responsible for extending our innovation reach. We have internal innovation teams and this is really the majority what we do but as well we work with external partners like start-ups, universities, SME's and other companies of all sizes to develop and commercialise innovations that are created outside Tate & Lyle.

JV: So you see your OI team more as an extension of the R&D department and not as a team to implement OI in the whole R&D department?

JS: Yes, the OI team full time role is to make sure that we bring in a continuous source of new opportunities to the ICD process, our pipeline. We use the same development pipeline as our internal processes. We are open to opportunities wherever they come from, whether they come from people within Tate & Lyle, if they send us leads. The focus and purpose of our innovation is to create new products, whether we create them using internal resources or whether we partner with external companies and organisations to create those new products. We have teams in place who do either but it's about having the most efficient innovation system you can possibly have.

JV: How many people are in the team and what are their functions?

JS: At the moment it's a small team with three fulltime members within the OI team. Senior vice president for business development, myself as director of open innovation and then one other role which is currently unfilled so we are looking to hire an extra person into the team. Our skills cover a broad range of things, everything from technology scouting, building networks and finding new opportunities all over the world wherever they come from all the way through project managing the due diligence, so

very much both technical and commercial due diligence. We are not technical people were not commercial people, we are both. Also actually negotiating and structuring and closing the commercial agreement with an external partner, so obviously a lot of legal input. Also transitioning those technologies into Tate & Lyle and managing these relationships. That's the core team. We also interact with different functions within Tate & Lyle, everything from technical people to help with the due diligence to commercial people to put together business case, to legal people, regulatory people, nutrition people, applications people. So everybody that needs to be required to look at opportunities and access it, to decide if we want to invest or partner.

JV: So when you work with other people, they work partially on the OI projects, or how does that work?

JS: If there is a specific opportunity or company that we're looking at to partner and invest in, we reach that decision by doing a short period of due diligence and obviously we'll involve experts within Tate & Lyle who are relevant to that project whether it are technical or commercial issues, and usually both and we would manage that process. But they are not full time members of the OI team. They do work on OI projects as well as internal projects.

JV: Do you look for them directly or do they also volunteer a bit to work with you (as the OI team)?

JS: It's a little bit of both. Usually it's pretty obvious who the right individuals would be. Some are very keen to work on these kinds of projects and others are more focussed on internal projects. There is no real formal list of people. It's just about knowing who the right people are in the organisation and choosing the right person for the right task, for the right time.

JV: So it's only 2 people working fulltime, but do you specialise on certain aspects?

JS: So our role is to bring in opportunities, managing the due diligence process and lead the commercial agreement and negotiations and getting the deal signed. We divide the tasks that way. There is a third member of the team, someone we're in the process of hiring. So the activities are divided across 3 people. The hired person will concentrate on the opportunity sourcing and the early vesting of opportunities, building networks, identifying where they are, where opportunities come from, not only universities but any source externally, all the way to project management making sure opportunities are vested correctly and all the way to sitting down and closing the deal. So everybody gets involved in each project but senior VP business development takes more the lead in closing the deal and the new member of the team will take more the lead in sourcing and building networks, and as director of OI I will work across the whole spectrum.

JV: Since when do you actually use an OI team?

JS: We set up this team in 2010 as part of a wider restructuring of Tate & Lyle. The whole innovation approach, not only OI. The whole approach to innovation was refined, improved and reinvested in. We changed how we structured our innovation process and the types of people and skillsets that we had in our innovation organisation. Part of that was creating this dedicated OI team within that.

JV: Where are you actually situated within the organisation as a team?

JS: I am situated in the head office in London and the other current member of the team is based in North American head quarters in Chicago. I spend a lot of time in Chicago and he spends a lot of time here in London. And we spend a lot of time building the internal network across the company as well as external.

JV: So a big part of it is also is being a virtual team?

JS: Yes, in any global organisation this is probably true in most roles nowadays.

JV: A bit more an open question: what do you think makes an OI team successful? What does the team need in order to be successful?

JS: That's a good question. First of all I think you need to have a clear idea why you have chosen to adopt OI. What is the reason you have chosen to do this? Generally you'll see organisation do it if there is a problem they are trying to solve. Is it that you have to reduce time to market, or do you have to access innovation more broadly than your internal teams create themselves. Is it that you need faster growth or more value to your innovation pipe line or is it that you believe some activities can be outsourced or can be better done externally, whatever it may be. But what is the problem that you are trying to solve? We have seen examples of adoption of OI without a clear goal and then your people will become distracted by this term (OI). The tools in OI are nothing new. We do licence agreements, we do collaborative development, we do joint ventures, we do acquisitions, nothing of that is new. We have been doing that since the eighteen hundreds. But why have we chosen to do it this way? Because we recognise that it does require specialist skills sets and specialist teams that really know how to interact better with the outside world. That's why we do this. But the first thing is to have a clear goal what is expected. What is your OI team expected to deliver and then have some expertise within that team who then know which practice they have to focus on in order to deliver that. If it's faster growth or is it innovation, what sort of partnership should they seek and what sort of network should they build. For instance when it's reducing time to market and your OI team go off and spend all their time on researching consortia, then it's going to fail. Whereas when expected to stress the boundaries of your innovation capability and conduct a lot of blue sky research, but if they then work with joint ventures and licence agreements with later stage opportunities well, then your platform is going to fail. It has to deliver why and which tools to use. So the first decide why are you using OI and which tools do you need for that.

JV: So you think that the top management have to set boundaries to the team so they can focus on what the purpose is of the team?

JS: Well I'm not sure whether the top management has to set the boundaries or whether they should be clear on why they are doing this. There clearly is a problem that needs to be solved. The top management identifies they have a problem and OI is one of the ways to solve it, they really need to define that problem and then the OI team should be able to ideally understand that problem and demonstrate how OI can be used to solve it. But there is really no point in adopting it for the sake of it. It needs to be for a very clear purpose. The overall strategy has to be designed to meet that purpose.

JV: Are there any other inputs that are important for success?

JS: Yes, a very well integrated team. It won't work if it operates in a silo. If it's small team that doesn't really have a lot of interaction with the rest of the organisation or doesn't have support from the senior level of the organisation and works in isolation. That obviously is not a good approach because you will require input from the rest of the organisation otherwise you will just operate in a silo. When you do require certain commitments from the organisation to external partners they have to come from the broader organisation, they can't just come from a small team or a single team. So a well integrated approach is needed. It doesn't mean you need lots of people or a large OI team. It just means that however you do it, it needs to be recognised as valuable and has to be well integrated.

JV: And now a bit more on the composition of the team: Do you see three people as the maximum or would you want more people in the team?

JS: I think that's very specific to your organisation, I think the number of people in your team is a very subjective question. I think it depends entirely on your organisation and how you're structured. For us three is the right number and given the objective of the OI process and how we're structured and our objectives and what we're here to do. I think that works pretty well. If you have more people you could probably do other things but that's not essential for us to perform our task. Other companies will define OI differently and have their own definition of OI and does its own practice depending on what they call OI and maybe need more people for that. For us a small team is enough that is well integrated and connected within the organisation.

JV: Which kinds of skills are required in the team?

JS: It really does depend on what your organisation means with OI, it's hard to be general. For Tate & Lyle, in our team the skills we require you have to be both technical and commercial. That's why we tend to look for people from the venture capital community, because that's exactly what they are. And certainly people with business development experience cause that's basically what you need. But again that is very specific to us. I can think of organisations where people tend to come more from the product development world, have a very deep technical insight into the new product development process so they can really understand that and when they see external technology they can understand how that fits in. I can see how that can be valuable as well. So again it depends on the organisation. But generally it's important to have people that can communicate to a very wide variety of audiences, everything from inventors and university professors to CEOs, and understanding what they are looking for and how to communicate with them.

JV: Do you think the team has to be stable for a longer period?

JS: Yes I think generally it would help to have some continuity. I think if you have people who just constantly come into to team and see it as a way to spend only a short time it doesn't work. A lot of it is building networks so people haven't had a chance to establish their own global network. Then it's difficult for them to add value. And likewise if they do build up a very established global network and then leave, then that obviously causes some issues in continuity. It's important to have people who bring in those networks and experience with them. It takes some time to do that.

JV: So the main thing for people to bring in the team is bringing in a lot of experience?

JS: I don't think you would necessarily need to be highly experienced to add value to the team. It depends at the level where you want to go in at. Obviously if you want to lead the team you need to have quite a lot of experience but to come in at a more junior level, to be able to look at opportunities with a commercial and technical mind, being able to build networks globally would be the starting point.

JV: Now a bit more on the roles and tasks of the team: You mentioned that you in your firm look more at the outside link, finding new ideas. But do you also take on the role as change agent by making the internal research teams realise that these ideas coming from the outside are okay. Is that also part of your tasks?

JS: Yes it is. Communicating and promoting the benefits of the process and managing that. I guess a cultural shift is certainly a part of what we do. Letting people understand it's not a competitive situation between external and internal opportunities. I think that's important too, because there are a lot of misconceptions about external innovation. As long as you dispel the myths, then people accept this more.

JV: And how do you really communicate that with them in practice?

JS: I guess it's a case of explaining what value and benefits the process can bring to them. What are the bottlenecks and what are the things they are actually trying to achieve. That it's ultimately going to save them resources internally. For example if you have an internal team working three years on a technical problem but somebody already solved it externally while they didn't know about it. If they had known about that external technology then they would have saved them three years. That's how you reassure it's not a waste of their time.

JV: So basically showing them success?

JS: Absolutely

JV: Does it also work by involving them?

JS: Yes absolutely, they are totally integrated, it's not a separate process. You work side by side by them.

JV: Do you think the tasks and the roles of the team will stay the same? Or that they will shift in the future?

JS: I think generally, it depends on the company. Tate & Lyle is B2B and the role we have is to accelerate our innovation process and build our innovation process but there are also ways OI is used by other organisation much more in a go to market process. We don't currently do that, but it is very commonly used that way. It is not something that we do but it could potentially be used that way. For the B2C world that's extremely common and it could be possible that the B2B sort off catches up on that regard but it's relatively early days in the B2B world. I think there is some catching up to do.

JV: Do you recognise some other important factors apart from the strategic purpose and the composition and structure of the team?

JS: Generally, I think having that well established global network of contacts and very carefully managing that. I think that one of the things we're very careful with is to maintain our reputation, so having a culture on how to work with external partners in a way that they see their interaction working with you very well. Very often smaller companies can find it pretty difficult to work with a larger company and find that being a large company, we are autocratic and slow. I think we use the OI process to kind of challenge that and say it shouldn't be that way, so a customer doesn't see you as slow and bureaucratic and inefficient. We use that in a way to differentiate and if that's done correctly, I think it's an important way open innovation can be used.

JV: Any other factors?

JS: Basically being focussed on the problem and not being distracted. We use the term open innovation but we use it to distinguish between things we used to do previously. But essentially it's business development. It really is old wine in new bottles. None of the practices we do is new. Licence agreements aren't new, joint ventures aren't new. But what is new is that previous we didn't have a dedicated team in place that had experience in the start up environment. My own background is venture capital so I understand that process: The investment process and their challenges, their needs and frustrations. You need to have a dedicated resource to really see the purpose of OI and to make your organisation easier to work with. You need that technical and commercial depth, but having a culture of customer service mentality. You're here to bring innovation to your company but also here to attract it. You need to have a customer service mind-set to your partners. If you can get that right rather than just having a team whose title is open innovation. That probably goes a long way in making it more long lasting.

JV: So basically everything already existed before but the OI team put more of an emphasis on those practices?

JS: Yes, these practices happen everywhere, every company does licence agreements, every company does business development but having a dedicated team to use that as a way to competitively differentiate by doing it in a very purposeful, strategic way that is connected to the organisation. And recognises that large organisations are hard to deal with and whose full time job it is to do that is a way to differentiate. The right skills set and people you need depend on your organisation, some want more technical people, others more commercial people. We tend to chose people who are both. But I think it's difficult to say what makes a team successful. I guess it's like saying what makes a legal team successful, what makes an HR team successful or what makes a financial team successful. It depends on what there is to do and the factor they're in.

JV: Can you maybe identify some problems and roadblocks that really come forth in them?

JS: The major one is distraction about the ultimate purpose. The whole hype around the term OI is becoming a bit of a distraction. It really is: we have a problem, how do we solve it. There are external solutions, how do we work with them better is really all it is. If companies become confused or distracted about the purpose of using OI that would

lead them to use the wrong practices, this would lead them to build the wrong networks, and the wrong skills sets. It really is making sure you're focussed on what you're doing and why you're doing it.

JV: How do you actually measure the performance of the team?

JS: There are various ways to measure that, some more tangible and some less. We measure primarily on output which is the products that our company launches that have come from OI. Or the products that have been launched, that have been enables by technology that we brought to the company. These are the main output metrics. Also the contribution that we make to the overall innovation pipeline by value at any times is another measure. These are the most tangible ones. There are also other input metrics that we track such number of different opportunities that we screen or see at any given time or per year for instance, the deal flows as we call it, the network that we have and high productive as being. But I think less tangibly we measure ourselves is, how good are we attracting external partners, how many of our relationships come to us and have given us good feedback that they would like to work with the company, it's a sign that our reputation is building as business partner of choice, that is ultimately one the goals of what we do.

JV: Do you maybe have some other comments about OI teams that you would like to share?

JS: It comes back to this point where it has to be clear what you want to achieve as an organisation and which sector and business you're in (B2B or B2C), the ultimate goal of your innovation process, and how you're structured. All these things will have a huge impact on the success of OI. We are very lucky that we have a lot of the right pieces in place which really is quite fortunate. We have a very well structured innovation process that we as a OI team are part off. We have a dedicated venture capital fund that we work carefully with. We have spent years building up external networks. We have good support from senior level. We have good integration with the rest of the innovation team and the rest of the company. All these things are absolutely key for us to be able to move forward. I think if teams also need commercial mind-set with-in the OI system. I see some organisations where they organise OI very separate from business development. To us it's the same thing and there is no distinction. I think that's an important point. If all OI is there to do is to scout opportunities and pass them over to another team, that wouldn't work for us. Because that would mean there isn't enough continuity between the team that started the relationship with the external partner and the decision makers. So you do need a certain amount of continuity. Acting as that certain internal advocate for that partner, you will manage that relationship with them. And if you don't do that, you just have a lot of different touch points along the way. Then your company is very hard to deal with and there is no real reason why people would want to work with you.

JV: So one main purpose is making companies want to work with you?

JS: Yes that's our focus, why should someone want to work with us? They have a lot of choices where they can take their innovation and if it's something that's genuinely breakthrough then it could be a serious risk to us if we don't know about it. And if we have a bad reputation as company to work with then that also creates a serious treat.

JV: So it's basically also being the friendly face to the outside world?

JS: Yes and that's not only on promises but also on how you deliver on what you say you do. This is certainly our practice, this is not necessarily how others approaches OI but this is culturally where we've been over the years and that's what we see is very important.

Interview Case study subject 2: Chemelot Campus

Date: 6/11/2013 10:00-11:00

Organisation: Chemelot Campus

Interviewer: Jonas Vanvoorden

Interviewee: Hugo Delissen (Business Development Manager)

Location: Personal interview at Chemelot Campus (Sittard-Geleen)

JV: Kunt u misschien eerste even een korte introductie geven van uzelf en uw rol binnen Chemelot?

HD: Mijn naam is Hugo Delissen. Ik heb in het verleden 15 jaar bij Phillips gewerkt. Daarna heb ik 9 jaar start-ups geleid en sinds 1 augustus ben ik bij Chemelot campus gekomen, bij de business development groep. Chemelot campus is een b.v. die het doel heeft om deze site (Chemelot Campus) verder te ontwikkelen. In het kort, Chemelot Campus is een onderdeel van Chemelot. Chemelot bestaat uit twee delen, een industriegebied van 800 hectaren waar heel veel chemische fabrieken liggen. Vooral kunststof fabrieken maar ook basis chemicaliën. De Chemelot campus is daar het research en development gedeelte van. Vroeger was de hele site DSM maar sinds 2002 is er eerst Sabic bijgekomen nadat DSM zijn polyolefine business heeft verkocht. Toen was het niet meer DSM R&D maar heeft men het terrein Chemelot genoemd. Dit omdat er meer spelers waren nu. En het R&D gedeelte is toen Chemelot Campus gaan heten. Ik werk voor Chemelot Campus. Het is ongeveer 20 hectaren en bestaat vooral uit R&D en eerste fasen start ups. Daarna als men naar productie gaat dan kan men naar het industrial park. De Chemelot Campus heeft 4 speerpunten: performance materials (coatings, kunststofmaterialen vanaf eenvoudige kunststoffen zoals polyethyleen maar ook de doorontwikkeling naar engineering plastics en biomedische kunststoffen en materialen. Dus materialen is een groot gedeelte van de unieke kennis op deze site. Tweede en derde speerpunt zijn twee nieuwe blokken die nog niet zo lang hier zijn. Dat zijn bio based. Alle materialen die niet vanuit olie als bron maar vanuit biomaterialen kan maken. De derde is ook een nieuwe, dat is dan biomedical. Das zijn allemaal materialen die je nodig hebt om biomedische applicaties te maken. Dat zijn 3 belangrijke speerpunten. Daar hebben we een 4e bij, dat zijn alle technologieën die het mogelijk maken om R&O te doen op de gebieden van de materialen. Dan hebben we het vooral analytische technologie wat een sterke op deze site maar ook proces technologie die nodig is om de materialen te maken. Daar hebben we sinds kort nog een nieuwe aan toegevoegd en dat is business development kennis. Dus een team van 8 mensen binnen de Chemelot Campus die zich bezig houd om de partijen op de campus te helpen met groeien. In dat business development team dat is onderverdeeld over de 4 gebieden. Binnen dat business development team ben ik verantwoordelijk voor het stuk enabling technologies and services and andere collega's hebben daar een eigen stuk in.

JV: Dus vanuit dat team werken jullie met het idee van open innovatie. Dat ideeën over heel de campus en ook buiten de campus te vinden en nieuwe ideeën verder te ontwikkelen?

HD: Ja, waar het dus om gaat is dat in 2002 hier nog maar 1 bedrijf was en dat er toen Sabic was bijgekomen. Toen heeft DSM gezegd dat ze een andere richting uit gaan. Op dat moment werkte hier 900 man. Toen heeft mijn besloten om de campus verder te ontwikkelen. Om twee redenen. De eerste is open innovatie, wat voordelen heeft voor DSM maar ook voor de kleine start-ups en de regio. Hoe meer bedrijven er komen hoe beter voor de regio. Maar ook heel simpel, als je met 900 man bent, en je hebt een hele site die je moet onderhouden en die 900 zou terug gaan, op een bepaald moment kun je de faciliteiten niet meer betalen. Dus dat was ook een belangrijk punt voor DSM om te zeggen we moeten meer kritische massa hebben, we moeten meer mensen naar deze campus halen. Op dit moment zitten we met meer dan 40 bedrijven en meer dan 1350 mensen die hier al werken. Dus dat gaat goed. En daarom heeft met de Chemelot Campus organisatie, die was al gedeeltelijk ontwikkeld onder DSM vlag, maar nu is daar een nieuwe b.v., een nieuw bedrijf ontstaan met aandeelhouders provincie Limburg, universiteit Maastricht en DSM. Maar we zijn een apart bedrijf, onafhankelijk van DSM. Dus we hebben zowel het onderwijs als, als de overheid (provincie Limburg), als het bedrijf DSM gecombineerd in één samenwerking. Als Chemelot Campus organisatie hebben wij drie producten. Wij willen de campus laten groeien, dit kun je op twee manieren doen: kan nieuwe bedrijven naar hier halen en je kunt zorgen dat bedrijven die hier zitten groeien. Daar hebben we drie producten voor. Het eerste zijn de gebouwen en alle faciliteiten die je nodigen om chemie, life sciences, materialen te ontwikkelen. Dit is productsoort één. Voorbeeld van utilities zijn een waterstofleiding, maar ook een chef van dienst die 24 uur per dag zorgt voor veiligheid maar die ook kan helpen om 2 uur 's nachts om één of andere knop, een proef moet worden omgezet, dat soort zaken. Een brandweer voor de veiligheid, een overkoepelende milieuvergunning waar je heel gemakkelijk kan onder vallen waardoor je direct kan beginnen. Dit zijn een aantal voordelen van die faciliteiten. Wat vrij nieuw zijn blok twee en drie. Blok drie is financiering: we zijn bezig met een incubator financiering op te zetten en we hebben al een development fund, dat heet Chemelot ventures en daar zit 50 miljoen in. Dan worden gebruikt om bedrijven die na een bepaalde fase proef principle willen doorgroeien om deze verder te financieren. Tweede blok dat noemen wij het vormen van een OI community. Wat daar inzit, is ons business development team maar ook een gedeelte dat Connect heet, een organisatie die zorgt voor de communicatie maar ook voor het organiseren van events, eigenlijk het bij elkaar brengen van partijen. Dit kan op twee manieren, dit kun je regelen dat partijen bij elkaar komen maar een tweede is ook dat je kunt zorgen dat de automatische ontmoetingen die partijen hebben onder elkaar dat die zo hoog mogelijk zijn. Dan zorg je dat je de omgeving zo creëert dat je elkaar gemakkelijk ontmoet. Een belangrijk punt hierin is ook dat we onderwijs naar hier hebben gehaald. We hebben de science opleiding van universiteit Maastricht. Die is nieuw en die wordt hier op de locatie vorm gegeven. We hebben ook HBO en MBO , middelbaar en hogere opleidingen, ook die zitten hier. Die zitten hier samen in een groep die noemt CHILL (Chemelot Innovation and Learning Lap). Wat we creëren is dat mensen elkaar ontmoeten. We hebben een kantine waar alles bij elkaar komt, mensen van de 40 bedrijven en het onderwijs. Dus hoe gemakkelijker je bij elkaar komt, hoe meer ontmoetingen er zijn en hoe prettiger de werkomgeving is. Er zijn bijvoorbeeld sporten georganiseerd en niet een eenvoudig fitness centrum. Dan ontmoet je iedere keer

dezelfde. We organiseren sporten in groepen, bijvoorbeeld in twee maanden een sport beoefenen in een groep en daarna kun je weer naar een andere groep. Ook om mensen elkaar te laten ontmoeten, dit zijn niet geplande ontmoetingen. Daar werkt het Connect cluster helemaal voor. Daar werken we af en toe mee samen.

JV: Daarom dat jullie ook een nieuw gebouw aan het plannen zijn?

HD: Precies, er komt een nieuw gebouw, dat wordt zo opgezet dat het de kans op niet geplande ontmoetingen heel hoog wordt. Wij komen daar als business development op een bepaalde strategische plaats te zitten zodat we zien wat er onder ons gebeurd. Maar er is ook een koffie bar, een grand café, een restaurant, de sport komt daar in, de universiteit, CHILL komt daar in. Dat wordt het broednest, daar komen ook de conferentie ruimtes in waar iedereen kan vergaderen. Daar komt een grote zaal in voor events te organiseren. Er komt een wall of fame in als iemand een prijs wint. Dus het gebouw is om de community bij elkaar te krijgen. Het wordt het centrum van de community. En open innovatie is mensen bij elkaar brengen en mensen met elkaar laten praten. Als je mensen van verschillende bedrijven en dezelfde tak van sport bij elkaar zet, binnen 10 minuten vliegen die ideeën meestal over tafel.

JV: Merken jullie daar al iets van?

HD: Nee en ja, natuurlijk merk je dat, we zijn al dingen aan het doen. Dit stuk gedeelte is pas begonnen vanaf begin van de zomer dit jaar. Het BD team is nieuw. Ik ben zelf per 1 augustus begonnen. En we zijn vooral bezig om ons voor te bereiden, maar volgend jaar gaan we daar zeker dingen van merken. De netwerken die er al lagen die worden natuurlijk al gebruikt. Zo zijn er al bedrijven opgestart op basis van ideeën die bij DSM in een lade zijn terecht gekomen en die Chemelot Campus eruit heeft geplukt en waar een ondernemer is bij gezocht en waar een bedrijf gestart is. Dus dat gebeurt sowieso al. Dus de activiteiten van BD zijn om bedrijven hier naar toe te halen of om bedrijven op te starten op basis van ideeën die we hier zien ontstaan en die door open innovatie komen. En het vormen van een netwerk dat als een klant hier naartoe komt en zich hier wil vestigen dat die zich direct in het netwerk ploft, dat die sneller kan groeien. Dat zijn zoal de zaken. Wat wij ook opzetten in de open innovation community, wij zijn bezig met een service boulevard op te zetten. Dit is een loket met verschillende bedrijven samen die hier zitten. Op dit moment zes bedrijven. En daar kan iedereen met een kennisvraag bij ons terecht. En iedereen is echt iedereen. Dit zijn bedrijven, instituten die willen samenwerken. Die kunnen op de campus zitten maar ook vooral ernaast en we gaan met die service boulevard om die vragen binnen te krijgen gaan we naar buiten naar klanten toe. Naar MKB (midden klein bedrijf) toe om te zorgen dat ze weten dat we er zijn en dat we hen kunnen helpen. En dit gaan we regionaal aanpakken.

JV: Dus dat is echt een fysiek punt.

HD: Dit punt zijn we nu aan het ontwikkelen. De mensen die binnen de service boulevard werken zijn allemaal business developers van verschillende bedrijven. Dus die weten hoe ze een vraag kunnen analyseren. en hebben we een systeem van bedrijven ergens op de Chemelot campus om die vraag neer te leggen. Lukt dat niet, is die kennis er niet op de campus, dan hebben netwerkpartijen en dat zijn op dit moment Nederlandse netwerkpartijen die vanuit de top chemie delta, dit is zeg maar de chemische industrie van Nederland en wordt gestimuleerd door de overheid. Dit zijn netwerkpartijen die we netwerken in heel Nederland in de chemische industrie. Maar er zullen ook vragen bij zijn

bijvoorbeeld het psychologisch gedrag van een mier of dergelijke, dit gaan wij niet behandelen. Maar in principe gaan we daarmee creëren dat ieder bedrijf een hele lage barrière krijgt van toegang tot partijen met kennis. Hier zitten ongeveer 14 wereldspelers die op hun gebied wereldtop zijn. Dus we gaan dat efficiënt doen. Dat maken en het bij elkaar brengen van partijen gaan we gewoon doen met de partijen. Dus het wordt gewoon efficiënt samenwerken de wereldtop. Dat is het idee achter service boulevard.

JV: Wat doen jullie dan met de uitkomsten van die vragen? Want naar mijn idee is het nogal nieuw dat mensen met vragen, meestal komen mensen met ideeën. Wat doen jullie dan een antwoord hebben en jullie brengen dat naar de mensen die de vraag gesteld hebben, wat wordt daar mee gedaan?

HD: Iemand kan een idee of een vraag hebben. Het kan natuurlijk allebei. Het moet gaan over techniek, over innovatie of over business development. Dat zijn vragen die wij aankunnen. En op het gebied van de speerpunten en op gebied van de bedrijven die hier zitten. Als het daar niet past dan gaat het via het netwerk verder. Wat wij doen is de vragen bekijken en koppelen met partijen die wij kennen. Dan gaan we er tussen uit. We volgen wel of er voortgang is en hoe het verder loopt maar een partij die een vraag heeft en die wil gaan samen werken met een andere partij moeten zelf die samenwerking opzetten. We zorgen dat iedereen weet wat hier voor unieke kennis zit en we zorgen ook dat mensen bij elkaar komen. We gaan actief de regio in om die partijen hier ook naartoe te halen. En zo creëer je open innovatie kansen.

JV: Willen jullie vooral partijen uit Nederland naar hier halen of kijken jullie ook verder?

HD: Wij kijken in eerste instantie naar Euregio: Luik, Leuven, Aken, en Zuid-Limburg plus Nederland. Dat is het eerste doel. Het jaar erna willen we uitbreiden naar de ELAt-regio: Eindhoven, Leuven, Aken, namelijk een wat groter gebied. En uiteindelijk komt het neer op Frankrijk, België, Duitsland, Engeland omdat dat de landen zijn waar Nederland 80% van zijn export heeft.

JV: En nu een beetje meer over het business development team. Wat zijn de verschillende rollen binnen het team? Hoe werken jullie samen?

HD: We hebben eigenlijk een beetje een matrix organisatie. Aan de ene kant heb je die speerpunten (bio-based, biomedical, performance materials and enabling technologies) en voor ieder thema do je aan acquisitie dat is bestaande bedrijven of gedeeltes hier naartoe halen. Je hebt customer growth, dat is de huidige bedrijven die hier al zitten laten groeien. Dus stel een nieuwe research afdeling van DSM op een bepaald gebied proberen we hier naartoe te halen en niet ergens in China of dergelijk. Dat is customer growth. Dan heb je ook nog valorisatie, dat betekent ideeën die er zijn ontwikkelen tot bedrijvigheid, en cluster development, het actief onderhouden van een netwerk waardoor je partijen gemakkelijk, als ze wat nodig hebben, op de juiste plek kan brengen. Die 4 activiteiten doen we voor ieder speerpunt.

JV: Dus elke persoon binnen jullie team heeft dus een speerpunt?

HD: Voor enabling technologies ben ik alleen, ik doe dat speerpunt maar bijvoorbeeld voor biomedical hebben we 2 personen en eentje doet acquisitie en de andere doet valorisatie.

JV: Dus dat hangt een beetje af van speerpunt?

HD: Ja, we hebben performance materials dat is het grootste speerpunt, dat is historisch gezien de meeste activiteiten op gebied van kuststoffen en coatings. Daar zitten op dit moment 3 personen op. Eentje doet dan customer growth, dat is vooral de grote bedrijven (SABIC, Lanxess, DSM) die hier zitten om die wat ik als zei om afdelingen en eventueel instituten te starten met die partijen. En de andere doet dan acquisitie en de andere doet cluster development. Dus afhankelijk van wat zijn de speerpunten en wat in die speerpunten heeft de hoogste noodzaak om te gaan doen, hebben we de meeste kans om onze doelen te bereiken en hebben we op die plekken gezet. Maar in praktijk is het natuurlijk altijd zo dat je heel veel overlapping hebt met ander speerpunten maar ook binnen één speerpunt heb je ook weer flinke overlapping. Dus in principe is het één team dat gezamenlijk alles doet maar we hebben wel een onderverdeling gemaakt waardoor we weten waarop we ons moeten richten. Het oprichten van de service boulevard is bij enabling technologies gekomen omdat enabling technologies alle diensten zitten. En in de service boulevard gaan partijen deel nemen die hun diensten aan willen bieden, die hun kennis aan willen bieden. Het kunnen ook partijen zijn of stukken van DSM zijn die dat niet willen, die enkel alleen voor DSM willen werken. Die doen dan niet mee in de service boulevard. Die doen niet aan open innovatie. Trouwen in het nieuwe gebouw komt ook DSM innovation center. Dus het specifieke DSM groep die met open innovatie bezig is.

JV: Wat zijn de soort mensen die in jullie team zitten? Hebben jullie allemaal een technische achtergrond?

HD: Ja het zijn allemaal combi's, er is bewust gekozen om high profile mensen aan te nemen. Je moet met heel veel partijen kunnen praten en je moet weten wat business is. Ik heb het meeste ervaring met start ups, maar het ook voor een multinational gewerkt. Daarna heb ik enkele start-up opgericht. Ik heb het zelf gedaan. Ik ben zelf klant geweest van mijn huidige organisatie. We hebben iemand die van innovation center DSM komt en dus heel goed weet wat op de plant allemaal speelt en die doe dan de customer growth (sabic, dsm) stuk. We hebben iemand die sales en marketing heeft gedaan bij een biomedisch bedrijf Europees georiënteerd en die hier nu naartoe is gekomen. En iemand die innovatie heeft gedaan die doet het validatie werk en heeft dat ook gedaan voor T&O. dus ideeën binnen T&O daar bedrijven van gemaakt. Iemand die uit de DSM koker vooral technisch op het technische klantenstuk is bezig geweest. Iemand die met start-ups bezig is geweest om in een organisatie te werken die bootcamps organiseerde en dergelijk werk, die doet nu bio based. Het niveau moet hoog genoeg zijn om het technische stuk te begrijpen en het gaat vooral om business development ervaring of relevante business ervaring.

JV: Dus vooral echt heel ervaren mensen?

HD: Ja, heel ervaren mensen, maar heel relevante ervaring. Het zijn meer commercieel gerichte mensen dan technisch gerichte mensen in algemeen, dit geld niet voor iedereen. Iedereen heeft in een commercieel gerichte functie gewerkt sowieso.

JV: Buiten de voltijdse mensen binnen jullie team, gaan jullie ook werken met mensen die voor even met jullie meewerken. Die dan even hun interne job laten liggen als jullie hem nodig hebben. En gaan jullie naar bedrijven om mensen aan te spreken als jullie hun skills nodig zijn voor een project?

HD: Dat is een van onze jobs denk ik. Als we bijvoorbeeld een nieuw bedrijf opstarten dan moet er een ondernemer komen en daar moet nog een bepaald stuk kennis bijkomen dan wordt hoe kunnen we deze kennis binnen krijgen. Dit kun je op verschillende manieren doen. Je kunt een deal maken met een van de bedrijven hier die dat kan leveren of je kan proberen mensen aan te trekken. Dan breng je gewoon alle kennis bij elkaar die je nodig hebt, dat doen wij. We hebben natuurlijk ook een eigen organisatie, we hebben een cluster real estate die zorgt voor de gebouwen. We hebben een cluster Connect, dit heb ik net uitgelegd, events en communicatie. We hebben een staf daar zit kwaliteit in inkoop, gewoon als een echte organisatie, die kunnen we natuurlijk allemaal gebruiken. Maar waar om het om gaat is dat hier vaak kennis nodig is die vaak niet in je organisatie zit en dan ga je hem vanbuiten halen als open innovatie.

JV: Dus jullie willen open innovatie belangrijker maken hier, maar de cultuur verandering om mensen meer open voor ideeën van buitenaf te maken dit doet dus meer het Connect team door de communicatie? En jullie houden zich dus meer bezig met ideeën naar hier brengen. Dus dat is een beetje gesplitst?

HD: Eigenlijk doen we dat wel samen want het business development zit meestal wel in een lead. Connect team doet het voor het geheel. En Business development doet het voor specifieke klanten. En daar maken we wel weer gebruik van het Connect cluster als iets georganiseerd moet worden. Het Connect team zorg voor het algemene, voor de ruimtes en de promotie en dat soort zaken en wij kijken naar echt naar een klant of een naar een start-up waarmee we bezig zijn en kijken van, als een klant interesse heeft om zich hier te vestigen. Het eerste wat we doen is afvragen waar heeft deze klant synergie mee. Als die dan op bezoek komt zorgen wij dat er al afspraken zijn geregeld met de bedrijven die er zitten waar wij van verwachten dat die synergie mee heeft. Dat doen wij specifiek op klanten niveau dat doet niet Connect, dat doet BD.

JV: En accepteren die bedrijven dat meteen als jullie afkomen met een idee van een start-up waar zij mogelijk synergie mee hebben? Zijn zij meteen mee in het verhaal?

HD: Soms wel, meestal wel. Wat je wel ziet is dat er bepaalde afdelingen zijn binnen DSM, maar dat weten wij dan ook, zij gaan niet met derden werken. Ze zeggen "wij willen niet met derde werken, wij moeten van DSM alleen werken want wij hebben strategische kennis en die willen wij niet buiten DSM laten gaan". Maar binnen DSM zijn ook bedrijven bijvoorbeeld DSM resolve is een analytisch bedrijf, een heel hoog niveau analyse technologie en die werkt al voor meer dan 50 % voor derden. Dus daar weten we van dat ze er al voor open staan, want dat kunnen klanten worden. Dus de meesten staan er gewoon voor open.

JV: Is het ook jullie doel om meer van die partijen die niet willen meewerken, toch mee te krijgen?

HD: Dat is wel een doel, maar niet echt het hoogste doel. Het hoogste doel is om hier meer bedrijven, meer FTA's hier naartoe te halen. Als je meer mensen hier naartoe haalt dan heb je ook meer vierkante meters die je betaald krijgt. Maar in eerste instantie gaat het om de werkgelegenheid, van de regio, om de unieke kennis die wij hier hebben om die ook hier te houden en niet naar Azië te laten gaan of naar andere plekken. We willen dat hier houden en verder ontwikkelen. Willen het aantal mensen dat hier werken zeg maar verdubbelen.

JV: Komt dat ook vooral doordat de provincie ook investeert in jullie dat jullie echt naar jullie toe werken?

HD: Ja, dat komt ook omdat de provincie daar aan meedoet, maar ook door ons gevoel dat wij iets voor de regio moeten doen. Ik heb één zoon, ik zou het fanatisch vinden dat hij hier over een aantal jaar hier een job kan vinden en de regio Limburg heeft dat ook keihard nodig. Dus het hoogste doel is om hier zoveel mogelijk bedrijvigheid naartoe te halen. We zijn ervan overtuigd dat de bedrijvigheid die hier is en de unieke kennis ook zorgt voor economische bloei want de bedrijven die hier zitten zijn gewoon top bedrijven. Die kunnen ook geld in het laadje brengen waardoor de hele regio zich ook verder kan ontwikkelen.

JV: En nog een beetje meer over het team. Denken jullie dat het team vooral stabiel moet blijven in de toekomst?

HD: Voor ons team is op dit moment voor 10 jaar een budget opgesteld. En na 10 jaar moeten we zorgen door bepaalde verdienmodellen in te voeren zodat er na 10 jaar voldoende geld binnen komt om het team in stand te houden. En het plan is om het team nog uit te breiden met 2 of 3 man in de komende jaren. Dus er is echt duidelijk geld opzij gezet om dit te kunnen invoeren.

JV: Zien jullie ook een evolutie van jullie team in de taken die er mogelijk nog bijkomen?

HD: Wat we zien is dat de speerpunten niet veel zullen veranderen. We hebben op dit moment een directeur marketing en business development. Die heeft 7 mensen verdeeld over de verschillende speerpunten en activiteiten. En naar mate we meer klanten binnen halen komt er meer werk en zullen er meer specifieke plekken worden ingevuld.

JV: Welke factoren binnen het business development team zorgen voor het succes?

HD: Het feit dat wij in staat zijn om echt in de huid van de klant te kruipen. Samen met de klant eruit halen wat hij nodig heeft en dan te verbinden met andere partijen. Dus wij zijn in staat als team om klanten sneller te laten starten en groeien. Op het moment dat bedrijven zien dat wij dat kunnen dan denk ik dat het zich enkel gaat versnellen. Dit wordt gewoon de place to be in deze tak van sport. Als je wat wilt doen op materials and life sciences op ons vlak dan moet je gewoon op Chemelot komen zitten. Dan heb je de grootste kans dat je slaagt. Ik kan je een voorbeeld noemen. Ik heb zelf het bedrijf Chemtrix gestart 5 jaar geleden en toen werd ik direct gekoppeld aan DSM, een groep van DSM, namelijk procestechnologie groep die al veel kennis had van het vakgebied waar Chemtrix zich op richtte, dat was microreactoren. Direct hadden we als Chemtrix een sparringpartner en die heeft ons direct een bepaalde richting ingestuurd. Die richting gaat het op, als je je daarop ontwikkeld dan heb je kans op slagen. Als wij op dat moment die connectie niet hadden gehad en we waren zelf begonnen was de kans groot geweest dat je een verkeerde keuze maakt en in een verkeerde richting ontwikkeld. Want dan ben je na 2/3 jaar weg, is het geld op, is er geen toekomst meer, stoppen de investeerders, klaar. Dat zijn de dingen die je hier gewoon hebt. Als je op Chemelot komt krijgt iedere klant een business developer. In onze groep hebben we 42 bedrijven en meer dan 60 klanten omdat in DSM zitten verschillende groepen die doen allemaal wat anders. Iedere klant heeft een business developer die voor hem zorgt. Dus daardoor

worden er connecties gelegd. En als die vragen heeft wordt die geholpen dus. Dus hier kun je gewoon sneller groeien dan ergens anders.

JV: Dus een grote taak van jullie is bezig houden met die individuele bedrijven en die relatie met hen.

HD: Absoluut, customer intimacy is heel belangrijk, dat je weet wat speelt bij die klant, dat je weet wat hen drijft. Dat je weet waar je hen kan helpen dat je naar hem toe gaat en zegt: "waar kan ik je mee helpen?". Dat is onze taak. En vanaf het moment dat het goed loop wordt de klant ambassadeur voor Chemelot Campus, dat is de volgende stap. Als die klanten ergens komen en zeggen dat Chemelot Campus wordt de place to be. Als dat goed gaat dat verspreid zich zo.

JV: Dus vooral ook een vriendelijk gezicht zijn en willen dat de bedrijven echt wille werken met jullie.

HD: Vriendelijk maar ook inhoudelijk. Het begint met vriendelijk en een goede relatie maar een klant als je hem wil helpen met je echt in hun huid kunnen kruipen.

JV: Ziet u ook problemen binnen jullie team die voorkomen?

HD: We zitten in een transitie van een DSM afdeling naar Chemelot Campus b.v. Dus eigenlijk van een vastgoed organisatie naar een klantgerichte service organisatie. Alleen als je 30 jaar binnen DSM vastgoed hebt gedaan dan doe je dat op een bepaalde manier, dan is service gericht en klantvriendelijk dat wordt anders ingericht in een interne organisatie dan als je echt de markt op moet. Vroeger had men één interne klant, nu heeft met 60 externe klanten en die transitie, als je het over cultuur verandering hebt, dit is wel een cultuurverandering. Vooral voor de rest van de organisatie, want de mensen die hier nu zijn bijgekomen hebben daar allemaal geen last van. Die weten hoe de hazen lopen in het commerciële landschap. Dus is een van de belangrijkste problemen om dat voor elkaar te krijgen. Eigenlijk zijn we een beetje een start-up, Een jaar geleden is de directeur er gekomen en heeft zijn directie team bij elkaar gezocht en die hebben hun team gaan vormen. Een stuk lag er natuurlijk al met de vastgoed organisatie. maar de business development organisatie wordt nu pas gebouwd. Dus we zijn eigenlijk een start-up van een jaar oud.

JV: Jullie zien toch al een positieve weg?

HD: Ja, het voordeel is ook dat we de middelen krijgen. Er is voldoende geld. We zien nu dat het stuk na het lab, de eerste fase , de pilot fase is nog niet voldoende ingevuld. And ene kant van het terrein komt een hele batterij flexibele pilot plants. We zijn bezig met 16 pilot plants waarvan we al voor 8 concrete projecten hebben. Er is dus duidelijk een behoefte, maar daar heb je geld voor nodig. En dat geld wordt door onze aandeelhouders hebben dat gewaarborgd. Dus je kunt dat ook doen wat je nodig hebt.

JV: Welke rol heeft DSM nu? Ze zijn investeerders, maar wat halen zij daar nu meer uit buiten meer mensen op de campus?

HD: Het eerste voordeel is bijvoorbeeld dat ideeën die eerst in een lade belang dat daar bedrijven van worden gestart waar zijn nog aandelen in hebben. Dat onderzoek is dan niet weg, daar komt nog revenue uit. Het tweede is ze zitten dicht bij bedrijven die synergie hebben met hun. En op het moment dat er een interessant bedrijf is voor DSM

dan zitten ze er boven op. Dat is ook open innovatie. Dat je dan de bedrijven koopt en naar binnen haalt. Dat open innovatie aspect dat speelt heel erg bij deze.

JV: Dus vooral ideeën kort bij u houden, zodat je er makkelijk naartoe kunt?

HD: Als je aandeelhouder bent en je zit er al in dan weet je hout en rand. Dan moeten ze het niet helemaal zelf ontwikkelen. Op het moment dat het groot genoeg is en interessant genoeg is pikken ze het in. Als het niet interessant wordt dan niet. Dat is het groot voordeel van DSM.

JV: Is het de bedoeling dat jullie na die 10 jaar dat jullie helemaal zelfvoorzienend te zijn?

HD: Als wij bedrijven gaan starten gaan wij daar misschien aandelen in nemen. Bijvoorbeeld bij het starten, het startactief, het feit dat wij dat doen willen wij ons laten in betalen in aandelen. Als die bedrijven dan gaan bloeien komt daar geld uit waarmee je de plant verder kan ontwikkelen. En dat soort ideeën en dat kun je op vele manieren. Maar we gaan niet alles doen voor niets.

Interview Case study subject 3: AkzoNobel

Date: 18/11/2013 11:00-12:00

Organisation: AkzoNobel

Interviewer: Jonas Vanvoorden

Interviewee: Dick Van Beelen (Director Innovation Alliances and ex-Director Open Innovation)

Medium: Phone interview to Sassenheim (The Netherlands)

JV: Kunt u misschien eerst een korte voorstelling geven van uzelf en uw rol binnen AkzoNobel?

DVB: Ik werk sinds 1981 bij dit bedrijf dus ik heb er al een aantal jaren op zitten. Ik ben chemicus van origine. Ik heb mijn PhD behaald in eind 1980. En daarna bij Akzo begonnen in één van de verf onderdelen van het bedrijf. En de eerste bijna 30 jaar heb ik mijn loopbaan binnen de verf R&D gedaan en daar toenemende verantwoordelijkheid opgebouwd. Na een beperkt aantal jaren heb ik me met het R&D management bezig gehouden. Een aantal van onze business activiteiten ondersteunt, zowel voor het stuk dat wij grote R noemen, de R voor research. Dus zeg maar meer langere termijn onderzoek, nieuwe technologieën. Alsook wat wij binnen onze organisatie D&S noemen, development en support. Waarbij support is bestaande producten bij bestaande klanten er voor zorgen dat het allemaal goed functioneert en dat de klanten uiteindelijk krijgen wat ze van hun leverancier als de onze verwachten. De laatste 15 jaar voor ik naar een andere rol verhuisde, waren dat met name internationale functies. In het gedeelte wat wij tegenwoordig binnen AkzoNobel performance coatings noemen. Dus industriële producten voor industriële klanten. We hebben ook een business area 'decorative paints'

dat zich met andere soorten verf bezig houd. Voornamelijk professionele en doe het zelf huisschilders. Een goede vier en half jaar geleden heb ik de stap gemaakt uit de coating organisatie naar een corporate functie en daar heb ik me de afgelopen jaren bezig gehouden met een aantal verschillende activiteiten die tot voor kort zich centreerden rond het thema wat je Open innovatie kunt noemen. Al noemen we het iets anders binnen Akzonobel. Hoewel er ook een open innovatie component bij zit. Ik houd me sinds september bezig met het versterken van de mogelijkheden die we in ons bedrijf hebben om externe subsidies binnen te halen. Internationale, nationale en regionale programma's. Dus dat is in een notendop wat ik de afgelopen 43 jaar gedaan heb binnen Akzo.

Een jaar of zes geleden hebben wij ICI geactiveerd. Dat is voor Akzonobel een punt geweest waar koerswijzigingen zijn besloten. De midden jaren 90 tot 2008-2009 ontwikkeld in AkzoNobel een zeer sterke business unit structuur, zeer sterk gesegmenteerd in business units waarbij de business units zich steeds meer ontwikkeld tot een zelfstandige organisatie. Met een aantal nadelen daarvan. Nadelen in de zin van silo's. Binnen de business unit weten waar we mee bezig zijn, wie onze collega's zijn en wat we doen en waarom we iets doen. Wat er buiten de silo van de business unit gebeurde werd steeds onduidelijker of er werd minder gebruik van gemaakt. Met die acquisitie van ICI is vanuit het management gezegd: we moeten als AkzoNobel niet enkel als individuele business units maar ook als AkzoNobel bepaalde zaken beter kunnen analyseren. En één van die dingen was dat mijn toenmalige baas, die de rol had wat bij de meeste andere bedrijf CTO heet, is een veranderingsproces begonnen. En een van die aspecten van het veranderingsproces was: hoe kunnen wij beter gebruik maken van het collectieve weten en kunnen van onze organisatie. En dit is voor mij een heel belangrijk aspect van open innovatie. Men heeft mij in het midden van 2009 gevraagd een aantal dingen daar voor op te gaan zetten. Daar heb ik mij de afgelopen jaren mee bezig gehouden. De belangrijkste aspecten naast dat gene waar ik recent mee begonnen ben, het externe funding gebeuren, waar je ook te maken hebt met samenwerking met derden. De twee belangrijkste aspecten van de afgelopen vier jaar die sterk raken aan OI, zijn in eerste plaats een aantal communities of practice en in de tweede plaats een formeel netwerk opbouwen met een formeel team daarbij die zich actief met OI bezig hield en houdt. Die twee aspecten, communities of practice en het bredere open innovatie netwerk zijn relevante zaken om iets meer over te vertellen.

JV: Dus gebruiken jullie een team om dat op te zetten?

DVB: Misschien is het verstandig als ik over beide onderwerpen iets vertel. Met name hoe we het gedaan hebben en de zaak teamspecten daarbij. Misschien is het ook aardig om te horen wat we daarmee bereikt hebben. Dan zullen die twee wel aanleiding geven tot verdere vragen.

JV: Oké, dat klinkt heel goed. Ga uw gang.

DVB: Laat ik beginnen met communities of practice. Dat is iets wat bij meerdere gepraktiseerd of ingevuld is. Als je in de literatuur kijkt of kijk hoe bedrijven dat doen, dan zijn daar verschillende modellen voor. Wij hebben vijf jaar geleden met het R&D management voor een specifieke aanpak gekozen. Die heb ik verder uitgewerkt en opgebouwd en aan het rollen gemaakt. Er is een specifieke aanpak waarbij bewust de domeinen zoals dat bij communities of practice (CoP). Het domein van een CoP is de

gemeenschappelijke basis waar zo een community zich mee bezig houdt. Er zijn een aantal domeinen top down gedefinieerd. Gebieden die voor Akzonobel belangrijk zijn. Dat zijn domeinen waar meerdere business units een interesse in hebben of waar meerdere business units capabiliteiten, kennis of praktijken hebben. Je moet denken aan een CoP 'corosion protection'. Er zijn verven die corrosie beschermend zijn. We doen ook in speciale chemie en in chemische installaties kan het optreden van corrosie een probleem zijn. Dus je kunt je voorstellen dat zowel voor verven als voor chemie 'corosion protection' een belangrijk thema is. Een ander voorbeeld is 'renewable raw materials' voor de chemische industrie is dat iets wat sterk op de agenda staat. Een zestal domeinen zijn dus topdown gedefinieerd. Dat is het eerste. Een tweede is dat we gezegd hebben: als we willen dat dit voldoende verankering of voldoende momentum gaat krijgen moeten we ervoor zorgen dat zo een CoP geleid wordt door iemand die daar volledig is voor vrijgesteld. Dus een fulltime CoP leider. Dat is met de gedachte dat we CoP's al vaker geprobeerd hebben. Toen kreeg iemand naast zijn gewone job de vraag van: roep maar een aantal mensen bij elkaar die zich op een bepaald gebied met ongeveer hetzelfde bezig houden en probeer er iets van te maken. Wat je dan ziet, dat gebeurd één of twee keer, er komt een meeting en mensen komen bij elkaar maar gaan dan naar huis en vergeet men het weer. Dus hebben we bewust gezegd dat er top down een fulltime CoP leider moet zijn. Akzonobel heeft geen grote centrale R&D organisatie. Deze is een jaar 10 geleden opgeheven. Dus binnen zo een R&D functie een aantal mensen centraal aanstellen dat kost uiteraard wat discussie. Maar dat was wel een belangrijk aspect om dat te laten slagen. Dus voor iedere CoP een full time CoP leider. Als je dan gaat kijken naar de taken van zo iemand is dat eigenlijk een verzameling van verschillende dingen. Het moet uiteraard iemand zijn die in het desbetreffende domein van de CoP redelijk zijn weg weet. Het moet niet de expert zijn. Zou die al bestaan dan is het niet de bedoeling dat de CoP leider de alleswetende expert is. Want het kenmerk van een CoP is het delen en het samen benutten van kennis. Hij moet wel weten waar het over gaat uiteraard. Maar hij heeft daarnaast een hele pakket taken zoals het organiseren van dingen, mensen bij elkaar halen, er voor zorgen dat er een interne website is, dat er activiteiten gebeuren in de breedste zin van het woord. Dus dat is een tweede belangrijke randvoorwaarde die wij binnen onze CoP's ingesteld hebben, een op corporate benoemde en betaalde CoP leider. Hoe we verder met CoP's zijn omgegaan. Vanuit die CoP leider zijn we het CoP gaan bouwen. Daar hebben we een tweetal soorten mensen onderscheiden. We hebben een core team gemaakt per CoP. Een core team waar vertegenwoordigers van business units aanwezig zijn die een belang hebben in het desbetreffende domein van het CoP. Vertegenwoordigers van de business unit in die zin dat ze formeel door de business unit als zodanig zijn aangewezen en voor hun taak een aantal percentage van hun tijd geacht worden te gebruiken. Dan moet je denken aan zo'n 10 tot 20 % van hun tijd. En in die taakstelling hun specifieke doelen hebben. En daarin herkend worden in de business unit en ook hun verplichting daar in hebben. Als je gaat kijken naar de verschillende CoP's dan bestaat zo een core team uit tussen de 10 tot 15 personen. Een derde groep mensen waar je dan over hebt binnen een CoP zijn de 'associate members'. Dit kan iedereen zijn die een interesse heeft om deel te nemen binnen het CoP. En op een bepaalde manier zijn bijdrage wil regelen. Iedereen kan dat zijn, het initiatief ligt bij de desbetreffende persoon. Er is 1 randvoorwaarde naast de bereidheid om deel te nemen en dat is je moet een interne trade secret module, een online module gedaan hebben om de do en don't van intellectual property en trade secrets te kennen en te weten. Je gaat natuurlijk kennis delen, kennis die één van je essence is van je bedrijf dan moet je wel weten hoe daar mee om gaat. Maar voor de

rest afgezien van die formele beperkte drempel geen moeilijke voorwaarden waarop mensen tot het CoP kunnen toetreden. Als je dan nu gaat kijken naar de vier jaar voor die zes CoP's die wij hebben, dan zijn die CoP's gegroeid tot communities van ergens tot tussen de 500 en 1500 personen per CoP. Ik moet er wel twee dingen bij opmerken. Meerdere personen zijn lid van meer dan één CoP. Misschien nog één zijopmerking eerst, onze wereldwijde R&D organisatie omvat ergens tussen 3500-4000 mensen. Als je de mathematica doet van die CoP's dan kom je op een groter totaal aantal uit dan die 4000 mensen. Dus daarom de twee opmerkingen die ik maak. In de eerste plaats mensen die lid zijn van meer dan één CoP. In de tweede plaats zijn er CoP's die niet enkel members hebben van de R&D organisatie. Als je bijvoorbeeld 'color en effects' bekijkt dan zijn er een behoorlijk aantal mensen vanuit de marketing organisatie die hier in deelnemen. Op zich is dat ook wel logisch want het gaat om kennis die ook in die discipline gebruikt wordt. Belangrijk is het dat mensen uit marketing soms afkomstig zijn van R&D of vanuit hun opleiding kennis en ervaring hebben die voor een CoP van interesse zou kunnen zijn. De membership is breder dan alleen maar R&D en dus zoals ik al zei tussen de 500-1500 leden per CoP. En daar creëer je voldoende kritische massa om ook dingen te kunnen. Wat doen we nu binnen zou een CoP? Het gaat primair om bestaande kennis. Het gaat dus niet om het opbouwen van nieuwe kennis. Het hoofdaccent ligt ook heel nadrukkelijk bij kennis die wij intern hebben. Dat klinkt niet heel erg open, althans niet heel open innovatie achtig. Maar de achtergrond die ik eerder schetste van Akzo had zich ontwikkeld in een bedrijf met gesegmenteerde business units met vrij stevige muren om iedere business unit dan is dat toch wel iets waar ik de discussie graag aanga van is een CoP dan een aspect van OI, ja of nee? En ik ben van mening dat het wel zo is. Een illustratie van die gesegmenteerde business unit organisatie: we hebben een periode gehad dat een persoon uit business unit één bepaalde informatie wilde krijgen uit business unit twee, er een confidentiality agreement moet opgesteld moet worden. Waarbij als je dat uit juridisch oogpunt gaat bekijken al heel snel tot de conclusie komt dat dat grote onzin is. Maar het geeft wel aan hoe gesloten we waren over de grenzen van onze eigen business units heen. Dus het gaat om bestaande kennis voornamelijk op intern AkzoNobel maar ook heel nadrukkelijk voor de domeinen waarover we het hebben kijken naar wat er in de buiten wereld gebeurd. Dat doen we dan en dat core team samen met de CoP leider hebben een belangrijke taak hierin. Die definiëren in feite de agenda van de CoP. Als het ware waar de CoP zich mee wil bezig houden. En om dat wat concreter te maken. Neem bijvoorbeeld een CoP 'corrosion protection'. Het core team heeft een aantal werkgroepen benoemd, 'interest groups' hebben ze het genoemd. Binnen het domein van corrosie bescherming kun je bijvoorbeeld denken aan inhibitoren. Wat weten we daarvan en wat kunnen we daarmee? Dus dat is typisch zo een werkgroep thema. Een ander thema binnen zo een zelfde CoP is bijvoorbeeld hoe meet je nu corrosie op een effectieve manier in de omstandigheden waar wij er wat van willen weten. En hoe voorspellend zijn die methoden om gedrag te voorspellen. Per domein kunnen we aantal deel onderwerpen voorstellen om de kennis zo goed mogelijk boven tafel te krijgen. Eén van de primaire doelstellingen van een CoP gaat om bestaande kennis en kennis boven tafel te krijgen die je als tacit knowledge kunt omschrijven, kennis die dus in de hoofden zit van collega's en kennis die niet als explicit knowledge in rapporten of in data bases is weggeschreven maar kennis die heel essentieel is om stappen voorwaarts te maken. Die werkgroepen verzamelen die kennis. Iedere CoP heeft een intranet site waar een aantal dingen opstaan onder andere die kennis, zoals wiki's onder andere. We houden ook online webinars. We vragen aan collega's of soms ook mensen buiten Akzo om over bepaalde onderwerp dat past binnen het domein van een

CoP een presentatie te geven om op die manier je eigen kennis rond een project of rond een product in dat desbetreffende domein aan je collega's te vertellen waaraan collega's op vrijwillige basis kunnen deelnemen. Dat is iets wat we online doen. Dus het opent de mogelijkheid om dat wereldwijd te doen en dat doen we ook. Vanuit Europa gezien op twee momenten in de ochtend om het ook voor Azie toegankelijk te hebben en in de middag om het voor America toegankelijk te hebben. We nemen deze webinars ook op zodat ze later ook gezien kunnen worden. Die dingen zijn een groot succes tot op heden. Het gemiddelde aantal deelnamen per webinar is ergens tussen de 60-70 mensen wereldwijd. Dat werkt gewoon als bron van kennis maar ook als methode om een probleem te presenteren aan collega's werkt dat uitstekend. Dus webinars zowel om kennis te delen als om problemen neer te leggen. Met dat laatste kom je op gebieden waar je zegt: ik weet iets niet, maar misschien dat andere collega's dat wel weten. Wij doen dat met wat we noemen 'challenge webinars' waar mensen ook online kunnen discussiëren over vragen die gesteld worden en op die manier hun collega's kunnen laten zien hoe ze denken zodat de kruisbestuiving op een zo goed mogelijke manier kan plaats vinden. Heb je specifieke vragen over opmerkingen over deze CoPs?

JV: Ja, of deze CoP leider, zijn dat ook 6 leiders?

DVB: Ja

JV: Werken deze ook samen?

DVB: Ja dat is een goede vraag. Wat we in het begin gezegd hebben. Je moet ervoor zorgen dat als je dit als nieuw initiatief begint, dat deze CoP leiders niet allemaal een verschillende richting uit gaan rennen. We hebben eigenlijk een mini community van CoP leiders gemaakt. Diegene die verantwoordelijk was voor CoP's was ik, en samen met alle alle CoP leiders kwamen we met een regelmaat van ongeveer 1 of 2 maanden bij elkaar. Een van de dingen die we bijvoorbeeld gedaan hebben in de fase dat we de CoP aan het bouwen waren is het volgende. Ik noemde net ergens tussen de 500-1500 mensen per CoP op dit moment, dit he je natuurlijk niet op dag één. In de periode dat je aan het bouwen bent moet je ervaringen delen met elkaar, wat werkt goed, wat werkt minder. Wat ook uitstekend werkt is de intranet site en online discussion fora waar je dus naast zo een webinar problemen kwijt kunt maar ook online je uitdagingen kwijt kunt. Dus delen van positieve ervaringen en negatieve ervaringen om zo een CoP te bouwen. Wat we ook gedaan hebben is hoe kun je nu de effectiviteit van zo een CoP meten? Dat is dus typisch een managerial vraag van ik lever mensen en faciliteiten en wat komt daar nou ook uit terug. En dat is op zich heel moeilijk. Ik denk ook niet dat je dat te kwantitatief moet willen meten. We hebben wel kwalitatief geprobeerd om met name de groefase van een CoP te visualiseren. Je kunt kwalitatieve criteria voorstellen waarop je een CoP kunt beoordeelen. Bijvoorbeeld de diversiteit van de leden, de thema's waarmee je mee bezig bent. Als iets heel erg goed is geef ik er een vijf voor en als er iets heel slecht is geef ik er nul voor en als je dan die criteria hebt, je kunt er een stuk of 8 of 10 verzinnen, en daar kun je een spiderdiagram uit optekenen kun je visueel maken hoe een CoP het op een gegeven moment doet. Dat is ook iets wat er met die mini community van CoP leiders gedaan hebben en dat heeft goed gewerkt. Ook als je het over intranet website hebt, dat je een vergelijkbare look en feel hebt zodat mensen weten als ze van de ene CoP gaan naar de andere wat ze kunnen verwachten en wat ze niet kunnen verwachten en waar ze informatie kunnen vinden. Da zijn allemaal dingen waar we ons mee bezig gehouden hebben.

JV: En de CoP leiders gaan die ook actief naar andere delen van het bedrijf zoals het marketing deel van het bedrijf om hen te betrekken of richten ze zich toch vooral op de R&D afdeling?

We hebben dus niet de CoP leiders de taak gegeven, ga de organisatie lopen bekeren, gaan zieljes lopen winnen. We hebben gezegd we kiezen voor associated membership, dat is het initiatief van de persoon zelf. Uiteraard als je met CoP's begint is het belangrijk om met presentaties bijvoorbeeld aan de organisatie te vertellen dat je er mee bezig bent en mensen te interesseren om aan zo een webinar mee te doen, of een discussie en werkgroep mee te doen. Maar uiteindelijke maken de personen zelf de beslissing of ze een associated member worden of niet. Dat betekent dat ook naar de andere disciplines, marketing, supply chain en noem maar op, daar geen actieve zending bedreven is. Maar ook die mensen zijn er op een gegeven moment spontaan erbij gekomen. Uiteraard hebben de CoP leiders in voorkomende gevallen, zo kun je bijvoorbeeld denken aan die werkgroepen, ook contact met mensen buiten R&D, maar niet op een andere manier dan met de mensen binnen de R&D discipline.

JV: Dus het groeit eigenlijk meer vanuit de leden van de CoP zodat anderen mee doen met de CoP?

DVB: Correct.

JV: Welke soort mensen willen jullie in de CoP?

DVB: De CoP leiders moeten niet de experts zijn maar op het moment dat je core members hebt of associate members hebt, dan heb je ook wel degelijk de experts erbij. Maar het domein is in de regel zodanig groot en complex dat je in het volledige domein niet kunt spreken over de expert die we binnen AkzoNobel hebben. Ik geloof dat zelf namelijk niet, er zijn deelgebieden waar je experts heb en in een ander deel gebied zijn die veel minder experten en hebben we andere experts. Dus die CoP leiders dat zijn geen expert, althans niet in de zin dat ze alles weten over alles. Wel nogmaals voldoende kennis binnen de desbetreffende gebieden. Er zijn een paar andere aspecten die voor die CoP leiders van belang zijn. Het zijn allemaal mensen die al langere tijd binnen Akzo Nobel rondlopen. Een langere tijd is langer dan 10 jaar. Ik denk dat het minder verstandig is voor zo een rol, zeker op de manier dat wij hem ingevuld hebben om met mensen te beginnen die net van de universiteit af komen. Die missen het netwerk, die missen de kennis van de organisatie. Die missen ook voldoende aanknopingspunten om te kunnen zeggen: als ik hier iets hoor dan weet ik dat het in die context geplaatst moet worden en dat we die persoon daarvoor zou kunnen benaderen of dat ik die weg zou moeten bewandelen. Dus ervaren mensen is een belangrijk aspect.

JV: Dus ervaren mensen met een goed netwerk?

DVB: Inderdaad, een goed werk en een goede kennis van de R&D organisatie. Ervaren R&D-ers.

JV: Ik denk dit het ongeveer is over het aspect CoP's.

DVB: Oké, dan het andere aspect, open innovatie. Ook daar ben ik een jaar of vier geleden mee begonnen. Een initiatief dat we vanaf het begin ANNI genoemd hebben. Dat is de afkorting van AkzoNobel Networked Innovation. Als we even een zijstapje maken.

Als je over OI praat, heet het zo omdat Henry Chesbrough dat een jaar of 10 geleden heeft bedacht. Maar in alle eerlijkheid, OI is natuurlijk iets wat al veel langer gepraktiseerd wordt binnen ondernemingen. Voor mij is alles wat je met een externe partij doet, om te komen tot een ontwikkeling of het oplossen van een probleem of tot een innovatie, dat zou je open innovatie kunnen noemen. Het heet alleen pas zo sinds Henry Chesbrough zijn mooie boek daarover schreef. Dus op een gegeven moment dat wij met ons OI initiatief begonnen, werd dat ook in AkzoNobel gepraktiseerd. Zij dat de ene business unit daar actiever mee was dan de andere. Wat we vier jaar geleden gezegd hebben is we willen OI meer versterken. Ook vanuit de benadering wat OI zou moeten betekenen conform de nieuwe definitie, namelijk behalve het samenwerken met externe partijen die je kent, ook proberen samen te werken met externe partijen die je niet kent. En dat laatste aspect was een van de belangrijke onderdelen van ANNI initiatief. Wat we 4 jaar geleden gedaan hebben is we hebben op Akzo niveau een contract gemaakt met Ninesigma. Een van de bedrijven die OI services heeft voor de industrie bijvoorbeeld. Het contract dat we op AkzoNobel niveau gemaakt hebben waarbij we een drietal deelactiviteiten met Ninesigma hebben afgesproken. In de eerste plaats hebben we gezegd: jullie moeten ons trainen, wat is nu de juiste manier om OI te doen. Tweede wat we van ze gevraagd hebben is als wij dat verder willen versterken, hoe zouden wij dat organisatorisch op een goede manier kunnen doen, willen jullie (Ninesigma) ons daarbij begeleiden. En het derde, en dat loopt nog steeds, is dat ze een intermediair voor OI zijn. Zij hebben hun processes en services en zij zijn onze preferred partij voor OI. hoewel wij niet alleen gebruik maken van Ninesigma. Ninesigma heeft een aantal groepen mensen in de organisatie getraind over de grenzen van de business units heen. We hebben een aantal sessies gehad waarbij we mensen uitgenodigd hebben, niet alleen uit de R&D discipline, maar ook vanuit marketing, vanuit supply chain, vanuit HR, vanuit legal omdat als je het over OI hebt zijn er meerdere stakeholders dan alleen maar R&D. Deze trainingen hebben we de eerste 3-4 maanden gedaan. Collectief hebben we een 300-400 man getraind en op die manier in feite een groep mensen gecreëerd die er van weten en die er alert voor zijn. Het tweede, het opzetten van hoe ga je dit nu op een effectieve manier organiseren. Wat we gezegd hebben is, we willen een open innovatie team hebben. Wat we het ANNI team genoemd hebben. Iedere business unit heeft een OI champion benoemd. Een aantal business units hebben er meer dan één benoemd. In het collectief zijn die OI champions het ANNI team. Ik had op een bepaald moment de leiding ervan en de doelstelling van het team was, een beetje vergelijkbaar met die CoP leiders die met elkaar spraken van, hoe kunnen we ervoor zorgen dat als we OI gaan versterken voor AkzoNobel dat we dit op een soort gelijke manier doen en hoe kunnen we ervoor zorgen dat we dingen zo goed mogelijk met elkaar delen. Daar heeft Ninesigma ons gedurende een klein jaar mee begeleid. Dat heeft geresulteerd in een paar praktijken die we afgesproken hebben binnen dat ANNI team. Wat we ook opgezet hebben, want op het moment dat je over OI praat is het ultieme je probleem de wereld in sturen en hopen dat er wat zinvol terug komt. Voor dat we dat doen of als je dat zou willen doen moet je je ook realiseren dat er twee andere groepen of platforms zijn waar je je probleem of uitdagingen kunt exposeren. Dit is in de eerste plaats intern AkzoNobel en dat tegen die achtergrond van silo's en muren omheen de business units heen. In de tweede plaats het externe AkzoNobel netwerk, in Ninesigma termen wordt het wel het trusted network genoemd. Dus partijen buiten je eigen organisatie die je kent, waar je ervaring mee hebt en waar je mee hebt samen gewerkt en contacten mee hebt. Waarvan je weet waarin ze goed zijn, en minder goed in zijn. Dat is je bekende netwerk. Wij hebben dat het externe AkzoNobel netwerk genoemd. En als derde de rest van de

wereld. De partijen die je niet kent en die mogelijk ook kennis en ervaring hebben die jij zou kunnen gebruiken.

Wat we in het ANNI team heel nadrukkelijk afgesproken hebben is dat op het moment dat wij met een vraag naar buiten gaan, of als een business unit een vraag heeft waarmee die via het mechanisme wat we aan het opzetten waren naar buiten gaat, dan is de eerste verplichte stap om te nemen om dat binnen AkzoNobel bekend te maken. Dit heeft heel pragmatisch een tweetal belangrijke redenen. In de eerste plaats, iets wat je al zelf hebt kost je niks. En je hoeft dus niet gebruik te maken van services zoals Ninesigma bijvoorbeeld die voor zo een actie geld zou vragen. Een tweede belangrijke voordeel is, als je met een andere partij in zee gaat en je gaat iets ontwikkelen afgezien van de extra kosten levert dat ook mogelijkwijs conflicten op IP gebied op. Dus de eerste stap, verplicht binnen AkzoNobel en de tweede stap daarna, en dat is aan de business units om dat te beslissen. Je kunt gebruik maken van het externe AkzoNobel netwerk of je kunt gebruik maken van de Ninesigma's van deze wereld. Na intern AkzoNobel moet je niet eerst extern AkzoNobel en dan pas daarna Ninesigma gebruiken. De tweede stap is aan de business units om die invulling te geven. Wat we verder binnen het ANNI team hebben afgesproken is dat we ook voor de interne vragen, dat op de Ninesigma manier willen doen. De Ninesigma manier is in dit geval het maken van een formele brief waarin je op een voor een buitenstaander begrijpelijke wijze beschrijft wat je wilt. De probleemstelling, waar je naar op zoek bent, ook waar je niet naar op zoek bent en voor een buitenstaander begrijpelijk. Dat betekent dat bijvoorbeeld als business unit één een request for proposal gaat maken, zo noemen we zo een brief, Dat is conform Ninesigma terminologie, da laten we die altijd bekijken door en ANNI champion van een andere business unit. Zodat het duidelijk genoeg is voor iemand die niet in mijn eigen business unit aanwezig is. Zodat je geen rommel uitstuurt en dus rommel kunt verwachten als input. Als je intern zo een vraag uitstuurt kun je meer informatie daarin kwijt dan wanneer je buiten je organisatie dat gaat versturen. De grenzen van IP die staan om Akzo heen en niet omheen een individuele business units heen. En dat mechanisme hebben we voor wat betreft het interne AkzoNobel stuk, behalve die formele brief is het mechanisme wat we verder gebruiken bewust relatief simpel gehouden. We sturen een email uit die gaan naar een beperkt aantal geadresseerden en dat beperkt aan geadresseerden omvat een drietal een viertal groepen, dat iedereen maar 10-15 groot kan zijn. In de eerste plaats gaat dat naar de collega OI champions, want die zijn een soort spin in het web voor hun business unit en weten bij wie ze terecht moeten voor wat. In de tweede plaats gaat zo een request for proposal altijd naar de CoP leiders. Die CoP leiders hebben natuurlijk overzicht over hun domein en kunnen ook vragen die raken aan hun domein plaatsen. De derde groep mensen waar het naar toe gaat zijn de R&D directors van de individuele business units die we hebben en dan is er nog een kleine categorie van mensen. Dan praat je collectief over een man of 35-40 die dus zo een email krijgen. Heel nadrukkelijk met het verzoek zo een ding door te sturen. Bijvoorbeeld op het moment dat Jan of Piet zou me misschien hier iets over kunnen zeggen stuur je dat door naar hen, en Jan en Piet worden dan ook aangemoedigd om dat verder door te sturen. En het tweede is op een moment dat je denkt dat je feedback kunt geven aan de probleem eigenaar hebben geen moeilijk formulier dat je moet gaan invullen. Je kunt de telefoon pakken, je kunt een email terugsturen, je kunt het net zo breed of net zo smal houden als je zelf wel. Primair belangrijk is intern dat je de verbinding tot stand brengt en dat mensen met elkaar daar over gaan praten. Wat we gezien hebben is dat het mechanismen van uitsturen en antwoorden best snel gaat. We hadden zelf gezegd, dat

moeten binnen 4 weken bekeken zijn. Dat gaat eigenlijk veel sneller. Binnen een week heb je responses. De eerste paar jaren hebben we dat ook kwantitatief gemeten, gemiddeld per RFP krijgen we zo een 8-10 responses. We hebben die ook kwalitatief laten beoordelen door de probleemeigenaar. Kwalitatief in de zin van een drietal categorieën, rood, oranje, groen. Ongeveer 10 procent van de responses vallen in de rode categorie. Dit zijn responses waar helemaal niets mee gedaan kan worden. 50% valt in de oranje categorie. Daar zitten onderdelen bij waar ik wat mee kan. En 40% zit in de groene categorie. Dit lost mijn probleem volledig op tot ik heb hier heel belangrijke bouwstenen om tot de oplossing van mijn uitdaging te komen. Dus eigenlijk een ontzettend positieve score, veel positiever dan wij verwachtten. Binnen een week hebben we meestal een response gekregen. Ik herinner me een vraag die een jaar of twee geleden op het eind van de dag uitgestuurd werd omdat de ANNI champion in Europa zat. Die had een probleem van iemand in Singapore. De Europeaan stuurde het op het einde van de dag uit. De volgende morgen toen de man in Singapore zijn email box opende had hij op dat moment al 20 responses in zijn inbox zitten. Dus het gaat echt heel snel. Wij denken zelf dat de belangrijkste reden daarvan is dat we het bewust voor diegene die input kan leveren heel simpel houden. Geen formulieren invullen, een simpel emailtje volstaat. Daarmee maak je het contact en in een email kun je net zoveel informatie kwijt als je wilt. Een derde voordeel dat we gezien van het interne stuk en dat is natuurlijk anders dan dat met externe partijen kan doen. Op het moment dat je op een interne vraag feedback krijgt vanuit je eigen AkzoNobel organisatie dan belet jou niet om met al die mensen collectief en tegelijkertijd een conference call of een meeting op te zetten waarbij je zegt: ik had dit probleem, jan zijn de oplossing zit in dit hoekje en piet zegt ik heb deze bouwsteen bij te dragen en iemand zegt weer wat anders. Als we daar nu met zijn allen over praten als AkzoNobel collega's, misschien zijn we dan wel in staat om tot nog betere oplossing te komen. Een soort piggy bagging wat je kunt doen. En dat werkt ook in de praktijk heel erg goed en dat wordt natuurlijk mogelijk gemaakt uit het feit dat je allemaal binnen dezelfde onderneming zit. Het initiatief heeft tot heden heel uitstekend gewerkt. Na vier jaar dat we er mee bezig zijn zitten we collectief op zo'n 150 requests die we gedaan hebben met de appreciatie vanuit de organisatie zoals ik juist vernoemde. Het externe stuk loopt wat moeizamer moet ik zeggen. Het externe AkzoNobel netwerk benutten we jammer genoeg niet op de manier zoals dat zou kunnen, namelijk veel actiever. En ik weet niet de reden ervan. We hebben wel via Ninesigma een aantal tests laten lopen, wat je ziet is dat daar het gemiddelde aantal responses hoger ligt. Dat zit zo rond de 25. Maar daar is de diversiteit in kwaliteit ook veel groter. Van hele goede tot absolute rubbish wat je krijgt. Want ik net noemde 150 requests die we intern gedaan hebben, die zijn uiteraard niet allemaal opgelost. Er is wel een redelijk percentage intern opgelost maar ook een groot percentage niet. Het is niet zo geweest dat het voldoende aanleiding geweest voor de business units om te zeggen, we hebben de oplossing niet gevonden en nu gaan we daarmee naar buiten toe. Wat je voor een deel wel zou verwachten. We hebben het externe netwerk wel gebruikt maar niet op de manier zodat we alles we intern niet konden oplossen, buiten de deur neergelegd hebben. Verder wat we zien is dat die externe input heeft behoorlijk wat tijd nodig heeft om dat goed te kunnen verwerken. Je moet zorgen dat je binnen 3-4 maanden van input en assessment tot concrete afspreken met potential solution provider komt. Die evaluatie van de input dat neem in ons geval aanmerkelijk langer tijd in beslag.

JV: Misschien gaan jullie ook minder snel naar buiten omdat het te lang duurt?

DVB: Dat speelt wel mee, maar dat is niet de enige reden is. Een andere belangrijke reden is zeker ook het financiële aspect. Met name in tijden dat het economisch wat moeilijker gaat, en dat is natuurlijk ook gewoon zo. Dan is de bereidwilligheid om een aantal tien duizenden euro's uit te geven voor een probleem veel lager. Daar moet je een goede business case voor hebben. En die kostendrempeel heb je natuurlijk niet als je iets intern doet.

JV: Kan ik nu misschien wat directere vragen stellen over jullie ANNI team?

DVB: Ja natuurlijk.

JV: Hoeveel mensen waren het weer die er in zaten?

DVB: Het schommelt tussen de 10 en de 15. We hebben een totaal van negen business units, eigenlijk is er één business area maar dat telt in dit geval als business unit. Negen business units plus de eindverantwoordelijke van het ANNI gebeuren maakt al 10 personen. Maar sommige BU hebben meer dan één ANNI champion. En het maximum is twee overigens. Dus dat betekent dat het tussen de 10 en de 15 personen schommelt.

JV: Wat soort personen zijn dit dan?

DVB: De diversiteit is wat breder dan wat je in de CoP's tegen komt. Daar waren het vooral R&D mensen. In dit geval zijn het voor een deel R&D mensen maar ook voor een deel business mensen tussen. We hebben één persoon die als een business developer manager werkt. Er zitten een paar mensen uit de business bij maar het aantal R&D mensen domineert. Maar ook hier zijn het mensen die een langere track record in de onderneming hebben en hun netwerk met name hebben. In dit geval is dit minder technisch inhoudelijk, in dit geval speelt ook het begrijpen van de business in de bredere zin van het woord een rol. Dus mensen met dat soort kwaliteiten.

JV: Welke soort persoonlijkheden zijn deze personen?

DVB: Goede people skills zijn nodig. Maar ook mensen die niet al te sterk lijden aan het NIH syndroom. People skills zijn inderdaad belangrijk, je moet mensen met elkaar kunnen verbinden. Zo een ANNI champion is niet diegene die alles doet. Hoewel er wel een belangrijke taak voor hem ligt. Maar hij is met name diegene die er voor moet voor zorgen dat zaken de juist volle web krijgen. Juist de volle web betekend ook door de juiste mensen. Want er zijn op het moment dat je met het opzetten van iets bezig bent heb je te maken met technische aspecten waar je R&D mensen voor nodig hebt, je hebt te maken met het business aspect waar je misschien marketing mensen voor nodig hebt. Je hebt wellicht met supply chain zaken te maken. Je hebt op het moment dat je met een derde partij afspraken gaat maken zeker ook met legal te maken. Dus je hebt mensen nodig die op dat soort gebieden hun weg kennen. Zo moeten een stukje ervaring hebben en op die manier de juiste dingen kunnen doen.

JV: Wat ziet u eigenlijk als belangrijke factoren die het succes van het ANNI team bepalen? Dus factoren waardoor ze echt hun stempel kunnen drukken op het ANNI netwerk?

DVB: Wat we gezien hebben is dat het ANNI team, de manier waarop we met elkaar interacteren een belangrijk hulpmiddel daarmee is. Het ANNI team heeft eens in de twee maanden een telefonische vergadering, en twee maal per jaar komt het fysiek bij elkaar

een dag of twee. En daar worden met name de ervaringen gedeeld. En nieuwe inspiratie opgedaan door er mensen van buiten bij te halen die op het OI gebied iets interessant zouden kunnen bijdragen. Er wordt gekeken of de dingen waar we mee bezig, werkt dat nog goed of moeten we dingen gaan aanpassen. Dus je moet mensen hebben die daar wel voor open staan. Dus geen mensen met NIH of met ik weet het alleen en niemand anders weet het zo goed als ik. Dat is denk ik het belangrijkste. Ook het communicatieve uiteraard. Ook kennis van de organisatie, kennis van de business. Dat zijn belangrijke dingen.

JV: Dus u zei al dat die ANNI champions regelmatig contact hebben met de CoP leiders. Hoe werken die dan samen met die CoP leaders? Is dat ook op regelmatige basis of dit ook enkel als een probleem is dat ze naar de CoP leaders gaan?

DVB: Er is natuurlijk een stukje grijs gebied waar een CoP zich mee bezig houdt en waar ANNI zich mee bezig houdt. De CoP's hebben ook discussie forum, en ik heb een probleem en ik ben op zoek naar een antwoord. De scheidslijn tussen CoP's en ANNI ligt eigenlijk een beetje bij het moment dat ik een probleem heb dat voldoende omvang heeft, wat het opstellen van een RFP, zo een nieuwsbrief rechtvaardigt, dan is eigenlijk de logische route om dat via ANNI te doen. Op het moment dat ik een vraag heb van: ik loop hier tegen een technisch probleempje aan, ik ben met deze activiteit bezig op het gebied van bijvoorbeeld corrosiebescherming, wie kan mij helpen? Dit is veel meer een vraag voor het CoP. Er zit eigenlijk wel eens een soort van natuurlijke scheiding tussen die twee dingen. In zoverre is de noodzaak voor de ANNI champions en de CoP leiders om regelmatig met elkaar te interacteren niet zo sterk aanwezig. Ik moet overigens zeggen dat een van de ANNI champions een dubbele rol heeft. Die is ook CoP leider. Dat heeft wel voordelen in bepaalde situaties.

JV: Hoe zit het met de resources dat het ANNI team krijgt?

DVB: Daar zie je eigenlijk een heel divers plaatje, zeker in het begin. Het is inmiddels doordat ANNI zich duidelijk gevestigd heeft als activiteiten is dat wat gemakkelijker geworden. Maar met name de eerste anderhalf, twee jaar was het een heel divers plaatje in de zin van zo'n ANNI champion: hoeveel tijd kan die nu aan ANNI besteden? Die tijdsbesteding varieerde van minder dan 5% tot meer dan 50%. Dat zie je dan ook terug in de professionaliteit waar je in staat ben die staat bent die taak invulling te geven. Dat betekend dus dat iemand die er veel tijd aan kan besteden, kan veel initiatieven nemen en kan ervoor zorgen dat de verankering in zijn organisatie veel sterker is dan iemand die er veel minder tijd aan kan besteden.

JV: Dus er zijn geen echte doelstellingen, van u moet er zoveel tijd aan besteden?

DVB: De verantwoordelijkheid ligt bij de business units. Sommige business units hebben dat in het begin op een andere manier gedaan dan ander business units. Zoals je weet onderkent men inmiddels dat dit goed werkt en dat je hier voordeel mee doet en die gevallen van minder 5% die zijn er eigenlijk niet meer. Misschien nog in één business unit die sowieso moeilijk met dit onderwerp omgaat. Maar bij alle andere business units is het behoorlijk verankerd, ook bij personen die zich sowieso op soort gelijke gebieden bezig hielden. Dus mensen die dit niet op hun lijstje erbij gekregen hebben. Iets wat

volkomen wereldvreemd was ten opzichte een andere taak stelling maar iets wat past bij zijn andere verantwoordelijkheden.

JV: Hoe zit u de verdere ontwikkeling van het ANNI team naar de toekomst toe?

DVB: Persoonlijk voor mij, er is nu iemand verantwoordelijk voor omdat ik aan een andere taak begonnen ben. Ik zie het zelf als je wilt dat dit een onderdeel van je cultuur is. En wij hebben dat in ieder geval in Akzo zo verwoord. Wij willen open innovators zijn. Dat staat in één van onze statements die we rond cultuur voor onze organisatie gedefinieerd hebben. Als je dat nastreeft zal je toch gedurende langere tijd dit soort mechanismen in plaats moeten laten. Het blijft gewoon open innovatie. Op het moment dat je op deuren klopt initieer je die dingen. Ik ben bang dat als je dat niet doet, dat het op een gegeven moment wat gaat uitsterven en dat zou jammer zijn. Cultuurverandering, en dit is een aspect van cultuur verandering, heeft zijn tijd nodig. En die tijd moet je er aan willen besteden en die willen we er ook aan besteden. Het ANNI team heeft morgen en overmorgen is er een face to face meeting. Dus het mechanisme gaat gewoon door en ik denk dat dat ook belangrijk is.

JV: Dus volgens u moet er vooral echt aandacht besteedt moet worden en dan zal blijven groeien?

DVB: De aandacht is zowel vanuit het team zelf dat ruimte heeft om bezig te zijn, als we naar het management om te volgen wat daar uit komt. Ook al is dat moeilijk hard te maken in euro's. Je kunt er natuurlijk wel een aantal dingen over zeggen. In zoverre, het managerial attention is ook wel iets dat belangrijk is.

JV: Heeft u misschien nog andere opmerkingen, specifiek over het team dan?

DVB: Ik denk dat een bepaalde mate van continuïteit van de ANNI champions is ook belangrijk. Dat zien we gelukkig terug. Als ik nu naar het team kijk en ik vergelijk het met 4,5 jaar geleden toen we begonnen. Dan is denk ik de helft van het team er nog wel. Dat is ook wel goed. Je moet niet ieder half jaar iemand anders op die stoel hebben zitten. Het is toch iets waar de weg weten en de manier van doen weten, personen kennen is belangrijk. Naast uiteraard een aantal formelere zaken die je opzet zoals een RFP proces of wat we proberen te implementeren, en sommige business unites hebben dat gedaan en andere zijn nog niet zo ver, op het moment dat je over je stages gate proces praat ervoor zorgen dat in bepaalde stagen, het aspect open innovatie echt concreet expliciet gevraagd wordt. Dan zijn dingen zoals continuïteit ook best belangrijk zijn.

Interview Case study subject 4: Shell GameChanger

Date: 22/11/2013 11:00-12:00

Organisation: Shell

Interviewer: Jonas Vanvoorden (JV)

Interviewee: Hans Haringa, Chaco Van der Sijp (GameChangers)

Medium: Skype conversation

HH: Zullen we ieder ons voorstellen?

JV: Dat is heel goed.

HH: Zal ik met mezelf beginnen. Ik ben Hans Haringa (HH). Ik ben bij Shell sinds 1982, dat is meer dan 31 jaar. Ik heb zeer technische dingen gedaan, maar ook minder technisch en heb globaal gewerkt. Mijn achtergrond ligt in de chemie en informatie technologie en ik ben bij GameChanger voor 3,5 jaar nu.

CS: Ik ben Chaco Van der Sijp (CS). Ik ben een metaalkundige. Ik ben pas recentelijk bij shell, niet zo lang als Hans. Ik werk pas 25 jaar bij Shell. Ik ben begonnen bij research op het gebied van aluminium legeringen bij een dochter van shell dat heette Billiton. En ik ben eigenlijk bij Shell via de achterdeur binnengekomen want Billiton was een dochter. Corrosion engineer, inspection manager, knowledge manager, reliability en nu dus open innovatie. En ik zit in hetzelfde team als Hans. Hans werkt overal in Nederland en ik werk meestal vanuit Amsterdam.

JV: Kunnen jullie ook kort even uitleggen wat GameChanger is?

CS: GameChanger is een concept dat is geboren in 1996, dat had toen als doel om het concept Silicon Valley binnen het bedrijf te halen waar mensen over wilde ideeën kunnen praten op een hele informele manier. Dus om zo een cultuur binnen het bedrijf zelf te hebben, dat is eigenlijk de achtergrond ervan. En dat werd gesteund door de top van Shell en daar werd ook geld voor gealloceerd. Dat is een team, dat heeft een zekere mate van onafhankelijkheid maar heeft dus ook een budget. En daardoor kan het dus met daadkracht dingen doen. Het mandaat van GameChanger, wat ze mogen of moeten doen, dat spitst zich toe op drie fronten. Het eerste is dat ze moeten kijken naar ideeën die potentieel de energiewereld drastisch kunnen veranderen. Met drastisch bedoelen we zo iets als dat impact op Shell, dat het Shell voor 10% kan veranderen. Je moet nu niet meteen Shell van de kaart wegvagen. Maar aan dat soort step change moet je denken. Dus dat is het eerste, het moet drastisch zijn en dus niet incrementeel. Het tweede aspect waar GameChanger zich moet mee bezighouden zijn dingen die niet bewezen zijn. Want als het nu al bewezen is, is het veel beter om de gewone research funnel te behappen. Dus onbewezen ideeën. En het derde is dat GameChanger zo veel mogelijk moet proberen en testen van verschillende concepten en zich niet moet toespitsen op één of twee. Dus het is echt proberen, proberen, proberen. Waardoor je dus ook heel veel faalt, maar wel alles hebt geprobeerd. En dat doen we dan door 'proof of concept' of 'fastest route to failure' zodanig te doen dat we dat snel doen en goedkoop. Dus het principe is: we geven liever weinig geld uit om iets snel te testen, dan dat we heel lang in een idee blijven hangen en zeg maar zoals ze in het Engels zeggen: to put all your egg in

one basket. En dan zijn er manieren hoe je dan zo een team inricht, maar daar hebben dat zo meteen wel over, die je dan in die drie aspecten (drastische innovatie, onbewezen ideeën, en dat je die snel en goedkoop doet) voor elkaar te krijgen.

JV: En die ideeën komen die vooral van mensen binnen shell of vooral van mensen buiten shell.

CS: De trend is steeds meer van buiten, toen GameChanger begon kwam denk ik 80% van de ideeën van shell. Dat was 15, bijna 20jaar geleden. Tegenwoordig is het bijna het omgekeerde.

JV: En zijn het vooral ideeën of gaan jullie ook echt op zoek naar problemen die jullie binnen shell hebben?

HH: Er zijn twee manieren. Primair zijn wij een groep die met mensen werken die ideeën hebben. De kern is een idee. En die ideeën krijgen wij op twee manieren. De eerste manier is heel passief, mensen submitten ideeën via Shell GameChanger, via de web portal. Dat gebeurt gewoon, al 15 jaar. Maar waarom dat gebeurd is enigszins onduidelijk, niet helemaal onduidelijk maar enigszins. Als er wat gebeurd in de olie en de gaswereld, bijvoorbeeld BP heeft een ongeluk in de golf van Mexico, dan krijgen wij ook ideeën om de rotzooi die gecreëerd is op te ruimen. Dus mensen zijn zich bewust dat zoiets als Shell bestaat en sommige mensen zijn intelligent genoeg om te denken dat ze misschien met Shell kunnen samenwerken, en zo komen we aan ideeën. Maar dat is heel reactief. Wij doen ook proactief ideation zoals dat heet. Dan proberen we op zoek te gaan naar mensen, en waar mensen zich ophouden die potentieel ideeën zouden kunnen hebben die voor ons van belang kunnen zijn. En dan proberen we met deze mensen te verbinden en een band op te bouwen. En wat uiteindelijk een ideeën influx moet genereren. En dat werkt, dat proberen we een beetje te focussen op bepaalde sub gebieden waar shell op zoek is naar oplossingen. Maar nog steeds is het gebied heel erg breed. Om je een idee te geven, wij noemen dat domeinen, en één domein dat heet extreme recovery, dat is het domein voor op een andere manier olie uit de grond te halen. Maar meer dan dat is het niet gefocuseerd zeg maar.

JV: Sinds wanneer zijn jullie het initiatief open innovatie gaan noemen, want jullie doen het natuurlijk al langer dan het idee Open Innovatie?

HH: Dat is een goede vraag, dan moet je denk ik eerst een definitie geven van open innovatie. En als je open innovatie definieert als bedrijven proberen oplossingen voor problemen niet alleen maar intern te zoeken, maar proberen daar actief externe partijen bij te zoeken. Als je dat als definitie van OI noemt, dan is Shell GameChanger eigenlijk al sinds het einde van de vorige eeuw, begin van deze eeuw actief met OI bezig. Er zijn inderdaad mensen die zeggen dat GameChanger met open innovatie bezig was voordat open innovatie als een term zo populair werd. Je kunt drie stadia herkennen. In het begin van GameChanger ondersteunde GameChanger vooral interne Shell mensen met ideeën. Dit was zeg maar primair, intern gefocuseerd. Zowel waar de ideeën vandaan kwamen als het verder opwerken van ideeën. Aan het begin deze eeuw werd het duidelijk dat er ook ideeën in de buitenwereld bestonden. Voornamelijk bij senior technische mensen die ideeën pikten op van de buitenwereld en vaak werd aan dat idee nog steeds intern gewerkt. Afhankelijk van projecten natuurlijk, dat Shell het nog steeds alleen bleef doen of in samenwerking met de externe partijen. En waar we nu eigenlijk zitten is dat we ons primair focussen op de buiten wereld, zowel voor de bron van het idee als het

opwerken van het idee. Dus GameChanger loopt wat dat betreft denk ik ver vooruit ten opzichte van andere Shell units doordat wij ons primair eigenlijk helemaal op de buitenwereld focussen, zowel het idee zelf als het opwerken van het idee. Wat er nog steeds opborrelt, dat doen we natuurlijk nog steeds. We zeggen niet: 'dat doen we niet'. Maar onze focus is heel erg extern gericht.

JV: En hoe ziet jullie toen er uit, hoe is het team georganiseerd?

HH: We zijn 12 mensen, 11 GameChangers en een manager. En we zitten in Amerika, in Houston. Daar zit de helft, inclusief de manager. En de andere helft zit hierin Nederland. In Nederland zitten we verdeeld over Amsterdam en Rijswijk. En ondergetekende, ik werk heel erg virtueel. Ik zie mij niet zo gebonden zijn aan die shell locaties.

JV: Dus het zijn dus allemaal fulltime mensen die daar inzitten?

HH: Ja, fulltime mensen, en het jaarlijkse budget inclusief onze eigen mankracht ligt ergens tussen de 20 en de 22 miljoen dollar. Zeggen hoeveel geld is er nu al uitgeven is via GameChanger is moeilijk, maar als je een getal wil hebben is dat rond de 300 miljoen dollar in de loop der jaren door GameChanger verstoot.

CS: Wat ook nog belangrijk is om te weten, dat is ook wel typisch shell. Mensen werken meestal nooit meer dan 3 of 4 jaar in een bepaald functie. Iedere 4 jaar is het team redelijk ververst.

JV: Dus jullie worden echt gepushed om na 4 jaar een andere rol op te nemen?

CS: Dat is niet per se alleen voor GameChanger, dat is algemeen in Shell. Maar voor GameChanger is dat ook wel gezond.

JV: Dus diversiteit is ook heel belangrijk, als jullie willen dat er altijd nieuwe mensen inkomen om de 4 jaar?

HH: Het team is eigenlijk gerekruteerd op maximale diversiteit zowel in technische achtergrond. Sjako is een metaaldeskundige en ik ben een soort van scheikundige in ruste. Maar we hebben ook een bioloog en een wiskunde. Dus heel divers. En ook qua type persoonlijkheid, buiten de technische achtergrond, is het ook heel divers. En er zit zelfs een zekere mate van diversiteit in leeftijd. Het zwaartepunt ligt aan mensen met meer shell jaren op de klok, dan jonge mensen.

JV: Dus het zijn wel allemaal mensen die vanuit shell komen?

HH: Ja

JV: Ook allemaal mensen met een technische achtergrond?

HH: Ja, toch allemaal met één of meerdere academische titels.

CS: Wat ook het geval is, iedereen brengt zijn eigenlijk netwerk binnen, niet alleen je discipline of je leeftijd maar ook je achtergrond van wie je kent. Het netwerk is misschien wel belangrijker dan je vakken.

JV: Dus een van de belangrijkste skills, is een netwerk bouwen. Welke andere skills zijn nodig?

CS: Hoe meer je het structureert, hoe moeilijker het wordt om creatief te zijn. Dus dingen moeten redelijk spontaan verlopen. Eén ding dat is wel belangrijk, het is niet de bedoeling dat de GameChangers zelf met ideeën komen maar dat ze goede ideeën herkennen. En voor je ze herkend moet je ze natuurlijk wel gaan zoeken. Daar zit eigenlijk het zwaartepunt. Je bent bijna een soort radar die naar de buitenwereld kijkt op zoek naar goede ideeën. En het snel goede herkennen van een goed idee dat is denk ik de belangrijkste vaardigheid van een GameChanger.

JV: En hoe kan iemand specifiek zo een rol invullen?

CS: Daar krijg je wel ervaring in. Wij hebben in ons achterhoofd altijd 4 criteria. Het eerste criteria is dat het een nieuw idee moet zijn, en liefst onbewezen. Dan moet je natuurlijk iets van je vak weten. Daarom de 12 GameChanger ook algemeen zich bezig houden met ideeën die dicht bij hun eigen vakgebied liggen. Dus je noemt het op zijn Engels dan 'Novelty'. Het tweede criterium is dat het toegevoegde waarde moet hebben. Daarvoor moet je ook iets van je vakkennis weten, maar niet alleen van je vak maar van het bedrijf en van de energiesector. Zodat je weet hoe dat idee de energiesector kan veranderen. Het derde criterium is kijken of het idee haalbaar of uitvoerbaar is. Daar komen een heleboel praktische kanten bij kijken. Dat is denk ik waar de GameChanger echt goede ervaringen in hebben en krijgen ook. Dat je namelijk heel snel kan zien of het clubje dat met een idee komt echt in staat is om dat idee te verwezenlijken. Het is niet de bedoeling dat GameChanger zelf dat idee gaat bewijzen, de mensen die met dat idee komen moeten dat zelf doen. Wij zijn alleen maar een supporter. Wij kunnen geld geven en kunnen mensen in contact brengen met andere experts. Meer dan dat kunnen wij niet doen. Dus mensen die achter hun idee zitten moeten wel de capaciteiten hebben om dat idee te realiseren. En daar hebben wij wel ervaring in. Wij zien heel snel of mensen in staat zijn hun idee zelf te bewijzen. Als vierde criteria is het moet wel relevant zijn voor Shell. We gebruiken het woordje shell voor interne communicatie maar voor externe communicatie zeggen dat het relevant moet zijn voor de energiesector.

JV: U zei daarnet dat u moet kunnen zien aan de mensen of ze ook capabel zijn om die ideeën te kunnen verwezenlijken. Dus jullie hebben daar ook people skills voor nodig om te dit te kunnen verwezenlijken?

CS: Correct, en Hans zei dat eigenlijk al een beetje. Het gaat inderdaad om het idee, maar het belangrijkste is misschien de mensen achter het idee. Als we op zoek zijn naar ideeën in de active mode, niet de reactieve mode, dan zijn er twee strategieën. Eén dat is zeg maar aan de wereld vertellen naar wat voor een type idee we op zoek zijn. Maar andere is op zoek zijn naar type mensen waarvan wij denken dat ze in staat zijn om met waanzinnige ideeën te komen. En dat laatste is iets dat wordt steeds belangrijker. Maar het is niet gemakkelijk want het is eigenlijk zoeken naar een speld in een hooiberg en je weet niet in welke hooiberg. En je weet eigenlijk niet goed hoe die speld er uit ziet.

JV: En daarvoor is jullie netwerk dan ook weer heel belangrijk?

CS: Vooral extern ja

JV: Wel taken nemen de GameChangers dan individueel op zich?

CS: In principe zijn alle GameChangers gelijkwaardig, maar nu hebben we allemaal persoonlijk bepaalde skills. Eén iemand is bijvoorbeeld goed in het brainstormen bij wijze van spreken. Eén andere is misschien goed om ervoor te zorgen dat iemand uiteindelijk een handtekening onder een contract zet, zeg maar de onderhandelingen. In de hele lifecycle van een idee heeft iedere GameChanger zijn specialiteit en zo vul je elkaar aan. Maar in principe zijn we allemaal gelijkwaardig. De officiële rol die een GameChanger heeft in een idee dat geaccepteerd is in de GameChanger funnel, dan heet een project bij ons. Onze officiële rol dat noemen we 'sponsor'. Wat normaal bij projecten zoets als een project leader noemt, maar een project leader doet ook echt het werk. Wij zijn meer het laissez faire. Wij zorgen ervoor dat we contact houden met de diegene die de ideeën uitvoeren, regelmatig. Ook als er problemen zijn, zijn we er. Maar we zijn meer een soort supporter, een soort sponsor. Dat is onze officiële rol.

JV: Verbinden jullie dan ook interne mensen met die ideeën?

HH: Ja, wij zitten helemaal aan het begin van de innovatie funnel. Wat wij doen, wij brengen ideeën naar wat wij 'proof of concept' noemen. In feite proberen wij het risico dat mensen denken dat aan het idee zit te reduceren zodat het idee een risico niveau krijgt zodat het behandelbaar en acceptabel wordt voor andere partijen in Shell. Wij zijn een idee derisking shop, en zorgen voor het 'proof of concept' dan kan de rest van shell die kan er wat mee. En afhankelijk van het idee kan het natuurlijk een heel lang traject zijn. Als het iets heel geeks is, dan zit het heel lang in GameChanger en als het iets is wat heel normaal is bij shell, dan kan dat proces heel snel gaan. En helemaal aan het begin van dat traject proberen wij connecties te maken met mensen die uiteindelijk, als het idee genoeg gederisked is, kunnen overnemen van ons. En als je dat niet doet, of niet goed doet, dan heb je het risico wel laten slinken maar dan heb je nog geen partijen die het van je wilt overnemen.

JV: Accepteren die interne mensen dan die ideeën van buiten, of is daar evolutie in geweest?

HH: Dat is een hele goede vraag. Je ziet dat dat steeds beter gaat eigenlijk. Maar dat gezegd hebbende, de traditionele Shell business is heel erg risk adverse. Dus je legt wel de vinger op de zere plek hier. Hoe kun er ervoor zorg dragen dat dit soort ideeën waar wij mee werken niet vastlopen zeg maar in het grotere bedrijf. Het concept van GameChanger is natuurlijk dat wij een soort van paraplu leveren zeg maar. Wij beschermen het idee van wat wij altijd de antibodies van het bedrijf noemen. Maar op een gegeven moment haalt GameChanger de paraplu weg en dan moet het idee op eigen voeten kunnen staan. En dat is afhankelijk van wat het idee is een heel moeilijk proces en gaat ook zeker niet altijd goed. Er zijn vele voorbeelden te bespreken waar het goed lijkt te gaan en waar als volgt struikelt verderop in Shell.

CS: En er zijn veel redenen waarom er een weerstand is. Er zijn verschillende typen antibodies. Er zijn bijvoorbeeld redenen dat een research groep vind dat zij de beste zijn en niet nieuwe ideeën accepteren en heel kritisch zijn en heel sceptisch. Dat zijn dus psychologische redenen, een soort 'not-invented-here culture'. Een andere reden kan zijn dat er nog steeds geld nodig is om een idee verder door te ontwikkelen en te optimaliseren. Zodat je dus een pilot kan hebben voordat je het werkelijk gaat implementeren. En daar heeft niet iedereen het geld daarvoor. Het is niet de bedoeling dat GameChanger de hele derisking doet. Wij doen het eerste stuk zodat er bewijs is dat

het concept werkt. Maar meer willen wij niet doen. Want willen ons systeem weer toespitsen op een nieuw en ander idee. Anders krijgen we dat we te veel met een paar ideeën bezig zijn en niet meer 100 ideeën. Dus daar zit een soort spanningspel, een financieel spannings spel. Er zijn verschillende soorten redenen waardoor wij echt hard moeten werken om zeg maar een idee door te drukken.

JV: Jullie zeggen dat het nu al beter gaat, komt dat omdat jullie voor een deel al bewezen hebben dat jullie ideeën succesvol kunnen zijn?

CS: Een trackrecord helpt, GameChanger heeft zeker een trackrecord. Ik denk dat de brand GameChanger heeft een hele goede reputatie zowel binnen als buiten shell. Dat helpt ook. Het geluk is dat meestal met brands, dat is wel uniek voor GameChanger, als brand als je dingen verkeerd doet, dus zeg maar verknalt kun bestaat die niet meer en dan duurt het te lang voordat je dat weer op bouwt. Het toeval wil dat wij in een vak zitten waarin het maken van fouten is toegestaan. Dat is eigenlijk een van onze mantra's: failure is a option. En ik denk dat dat ons wel geholpen heeft met het in stand houden van onze brand. Want dat is misschien wel een fundamenteel onderdeel van onze brand.

JV: Wat zijn volgens jullie de factoren die het succes van zo een team als GameChanger bepalen?

CS: Laat ik de eerste twee noemen. Dat laat ik hans het lijstje wel afmaken. Diversiteit is al genoemd. Het weten waar je het over hebt, dus je moet ervaring hebben. En het kennen van mensen, dus het netwerken. Innovatie kun je niet in je eentje doen, daar heb je meerdere mensen voor nodig. Je moet weten wie er in de wereld jou zou kunnen helpen.

HH: Als je de vraag stelt ten opzichte van de mensen, dan zijn naar mijn gevoel de belangrijkste karakteristiek voor een goede GameChanger is iemand die passie heeft om relatief nieuwe technologieën verder te krijgen richting toepassing. En dat is de karakteristiek dat een goede GameChanger maakt. Als je een bureaucraat bent die achter je bureau zit en zeg maar het proces draait, dan zal je niet echt succesvol zijn omdat succes komt met de passie en proberen obstakels op te ruimen om proberen verder te komen. De tweede die ik persoonlijk heel erg belangrijk vind, voor mij is GameChanger één grote sport van change management. Per definitie is innovatie verandering en hier hebben we het over potentieel hele grote verandering. Dus het spel van game changing is change management. En als je niet zo goed begrijpt hoe je grote systemen moet beïnvloeden vanuit het change management perspectief, dan kom je gewoon vast te zitten. GameChanger heeft zoals Chaco zei een sponsor rol, wij hebben allemaal onze eigen portfolio en binnen die portfolio zitten ideeën die vaak zelfs binnen het GameChanger team controversieel zijn. En je hebt je collega's nodig om te kunnen investeren in dit soort ideeën. Dus het change management spel begint al vanaf het allereerste moment. Het begint ook al de allereerste keer met de persoon of instantie praat die het idee naar GameChanger opgestuurd heeft. Dus eigenlijk is het rakfijn spel dat je speelt.

CS: En die change is niet alleen dat je je omgeving moet veranderen maar ook dat je het idee kan verbeteren. En dit zit in de passie die hans zei. Er komen wel eens mensen naar shell waarvan je denkt van: nou, de meeste mensen zouden met een killer face zeggen dat dat niet kan, of dat hebben we al wel eens eerder geprobeerd of van "dat wil toch

niemand". GameChanger kijkt daar met positieve ogen naar en wat wij zelfs willen doen is het idee nog waanzinniger maken, In plaats van het in de grond te boren. Dus we hebben een hele positieve instelling als het gaat over ideeën. Maar daarvoor willen we juist opstaan in de ochtend om dat gevecht aan te gaan om of mensen te overtuigen of om een idee nog beter te maken en dat is passie.

JV: Zijn er nog andere factoren die belangrijk zijn?

HH: De rest van de factoren zijn subsets, de speld van change management vereist netwerken, social skills, noem maar op. Ook een zekere mate van tegen de stroming ingaan. Het zijn allemaal subsets. Als je denkt via GameChanger carrière kan maken, dan gaat dat helemaal niet lukken. Je roeft hard tegen de stroom in. Daarom dat ook die gemiddelde leeftijd vaak wat aan de hogere kant ligt, van mensen die al carrière gemaakt hebben of daar niet meer om geven en gewoon hun passie proberen uit te oefenen.

CS: Wat je zou kunnen doen, als je de 4 criteria hebt: novelty, value, haalbaarheid en relevantie voor energie. In alle 4 heeft een GameChanger een actieve rol en een passieve rol. De passieve rol is dat we weten waar we het over hebben. Als iemand zegt van: "dit is very valuable", dat wij dus de realiteitszin hebben, dat wij kunnen zien hoe die waarde in elkaar zit. Maar als dat niet voldoende waarde heeft dat de GameChanger opeens een actieve rol kan krijgen door die rol aan te passen waardoor het wel waarde heeft. Dus als iets niet helemaal aan de criteria voldoet moeten we dat als een GameChanger kunnen zien dat dat het geval is maar ook in staat kunnen zijn om de, en dat noemen we dan de proponent, diegene die het idee proposed, om die te adviseren om het idee iets anders te doen. En zo voegen wij toe aan ideeën. En het mooie vind ik altijd van de GameChangers dat wij dat doen zonder met de eer te strijken. Wij doen dat om de proponent nog meer in de spotlight te zetten. Die moet uiteindelijk de credit krijgen van het idee. Dus we zijn niet uit om met de eer te strijken. En dit in een job description, als we opzoek zijn een GameChanger, daar staat één aspect dat een GameChanger moet een teflon like skin hebben. Daarmee bedoelen we dat als je met een idee aan het vechten bent en het blijkt niet te werken of niemand wil het, dat je dan niet met de pakken erbij neer gaat zitten maar dat je dat dan van je af kan schudden en kan zeggen: "oké, sommige ideeën werkt wel en anderen niet". En dat je meteen naar nieuwe ideeën gaat. Je moet niet meteen knocked out zijn als iets mislukt. Gewoon maar blijven proberen en dat ook een ongelofelijk spannings spel.

JV: Dus mensen die in jullie team zitten moeten ook heel positief zijn van persoonlijkheid?

CS: Heel optimistisch en niet meteen van de kaart worden geveegd.

JV: En zijn jullie ook problemen die voorkomen in GameChanger?

CS: Ja ik kan er eentje noemen, niet alle GameChangers zijn gelijk per definitie. We zijn het bijna altijd met elkaar oneens. In een positieve zin. Maar het betekend wel dat je bereid moet zijn om iets niet te doen, hoewel je er misschien zelf in gelooft ter wille van voorkomen dat iets gaat mislukken. Dat is gewoon heel moeilijk. Soms moet je toegeven dat iets niet werkt. En dat betekend niet dat het een falen is in de zin dat iets mislukt is. Het is falen in de zin van we hebben het geprobeerd en we weten dat het niet werkt en we hebben er uit geleerd. Dus je moet bereid zijn om 9 keer te falen iedere keer. Het is

dus een beetje zoals een kind dat probeert te lopen en telkens iets nieuws probeert en elke keer valt dat kind om. Dan krijg je wel blauwe plekken maar uiteindelijk ontdek je de beste manier om te leren lopen.

JV: En hoe meten jullie het uiteindelijke succes van het team?

CS: Daar zijn veel manieren voor, manieren waar we het soms mee eens zijn, en soms niet. Uiteindelijk zijn die 4 de belangrijkste houvasten voor GameChanger om te weten of we iets goed doen, of niet. Maar dat geld alleen maar voor 1 bewust idee. Dan gelden die criteria. Als je kijkt naar de collectie van die ideeën, de portfolio, dan is het belangrijk dat er een bepaalde flux is van ideeën. Zo moeten een aantal ideeën per tijdseenheid door onze funnel gaan. Ze hoeven niet allemaal lukken. Misschien 9/10 lukken niet, maar er moet een constante flux van ideeën zijn. En die ideeën moeten een bepaald spectrum behappen in de energiewereld. Dus van alle takken van windenergie tot geothermal tot traditionele olie. Er moeten een bepaalde breadth zijn en die ideeën moeten een bepaalde kwaliteit hebben. Dus ik zou zeggen: flux, breadth en kwaliteit en die zijn redelijk meetbaar maar niet gemakkelijk. Hans heeft een goede visie over hoe extreem een idee moet zijn.

HH: GameChanger heeft een missie, en die hebben al beschreven. Het vinden en ontwikkelen van ideeën die potentieel een drastische impact kunnen hebben op de Shell business. Maar in diezelfde missie staat ook dat het een steady stream moet zijn. Op zich is dat een beetje tegenstrijdig maar het is alleen maar tegenstrijdig als je de extremen van het spectrum opzoekt waarin wij opereren. En wat het eigenlijk betekend is dat een bedrijf als Shell, en de meeste bedrijven denk ik, die werken niet in extremen. Er is altijd een soort van bandbreedte waar binnen gewerkt wordt. En dat houdt dan in dat sommige ideeën als je die heel erg hard door een GameChanger lens zou bekijken, zou je kijken, die voldoet niet aan de drastische impact criteria. Maar het kan zeer zeker zijn dat het idee best een hele drastische impact kan hebben maar op een veel kleinere schaal of binnen een subgebied binnen Shell. Met andere woorden, daarom doe je ook aan portfolio managemeent waarbij je het hele spectrum van ideeën meeneemt waarbij wel geprobeerd wordt de natuurlijke drang van het bedrijf om naar de makkelijk kant van het idee te itereren. Weinig change management, de iteratie naar de makkelijke kan van het spectrum dat probeer je tegen te houden. Dus aan de ene kant probeer je zoveel mogelijk te focussen op de drastic end van de portfolio aan de andere kant sluit je jezelf niet af van de andere kant van de distributie curve. En je probeert binnen dat spanningsveld te opereren. En afhankelijk hoe de wind waait gaat het ene jaar beter dan het andere. Maar als je naar de GameChanger radius kijkt, de dingen die wij geleverd hebben over de functie van tijd. Dan zie je als je dat per jaar bekijkt of je kijkt naar de hele portfolio, dan zie je die portfolio terug. En dat is eigenlijk ook logisch. Het alleen maar concentreren op een stuk van zo een distributiecurve lijkt interessant. Want dan kun jij je beter focussen maar het probleem daarmee is dat je a priori niet zeggen van wat de winnaar worden. Als je 10 ideeën krijgt, het enigste wat je hebt is 10 ideeën. Er zijn mensen die dan zeggen: idee 7 gaat het worden en de andere zijn niet goed. De GameChanger methode is dat je naar alle 10 ideeën gaat kijken en dat je iets meer sophisticated probeert vooruitgang te boeken en ten alle tijden jezelf open houd. Vaak proberen wij het nog gekker maken, daarmee zou je zeggen dat je daarmee reduceer je de kans op succes, dat is ook zo. Maar potentieel verhoog je de impact ook. En als je dan nog steeds het vooruit weet te brengen. Dat is een beetje het spel. De 4 criteria gebruiken wij ook niet als een checklijst. Het zijn slechts 4 criteria. En mensen die pas bij

GameChanger komen, die moesten leren dat het niet een binair spel is. Om maar is een te noemen, de Why Shell vraag. Als je te maken hebt met een idee dat ver in de toekomst potentieel van toepassing kan zijn. Hoe Shell er over 20 jaar uit gaat zien ligt helemaal niet vast. Dus als je het over Why shell hebt, dan moet je uitkijken dat je niet je huidige denkkraam van hoe de firm Shell er vandaag uit ziet los laat op een idee dat ver in de toekomst potentieel toepasbaar wordt. Dan kan die Shell firma er wel eens heel anders uit zien. Dus zo een vraag van Why Shell is veel ingewikkelder en complexer en vergt ook veel discussie dan gewoon een boksje 'ja/neen'.

CS: En die distributie die Hans noemde wordt natuurlijk ook gegeven door de mate van creativiteit van mensen die met ideeën komen. Daar zit sowieso een distributie in, de genialiteit. En dan heb je nog het concept dat 'innovation lies in the eyes of the beholder'. Voor sommige mensen is incremental innovation een revolutie en voor GameChanger misschien weer niet. Daar worden wij niet koud of warm van. Dus het is ook relatief hoe mensen naar innovatie kijken. En GameChanger, omdat wij steeds tegen de stroom invechten, hebben we wel een bepaalde credibility nodig om fouten te kunnen blijven maken. En één van die instrumenten die we daarvoor gebruiken, en dat is natuurlijk een heel gewiekst instrument. Dat is dat wij soms ideeën succesvol ergens implementeren die relatief weinig risico hebben. En misschien niet zo een grote impact hebben maar wel onze reputatie boosten. Voor die redenen hebben we ook dat we af en toe ook wel wat makkelijkere ideeën ondersteunen om onze reputatie hoog te houden. Het is natuurlijk heel gevaarlijk spel. Want voor je het weet wordt je misbruikt. En daar zijn wij heel bewust in hoe wij daar mee om gaan. Maar die statistische distributie is soms onvermijdelijk door de spreiding van genialiteit van mensen en de onzekerheid hoe de toekomst er uit, maar soms doen we dat ook wel bewust om een stukje credibility in stand te houden. Dus ook een beetje een politiek spelletje.

JV: Hoe zien jullie eigenlijk de toekomst van GameChanger?

HH: Afhankelijk of ik goed of slecht geslapen heb, dit is een heel eerlijk antwoord wat ik je nu geef, ben ik positief en soms ben ik heel negatief. Daar zie je weer zo een distributiecurve in. En je moet je niet laten leiden naar de ene of andere kant. Het moraal van het verhaal is dat er een zekere mate van bescherming in zit in het feit dat GameChanger al ruim 15 jaar bestaat. Er zijn vele mensen in Shell die als ze de kans zouden krijgen het morgen zouden opheffen. Maar er zijn ook mensen die ons ook herkennen en erkennen, ondanks ze niet precies goed begrijpen hoe het nu eigenlijk werkt. Daar is waar ze moeite mee hebben want in een groot bedrijf moet alles vast liggen en volgens zeer nauwkeurige regels geëxecuteerd worden. En in ons vak is dat een stuk moeilijker. Maar als we dan even rustig gaan zitten zeggen ze: eigenlijk komt er een soort van continue stroom van dingen uit waarbij we niet precies begrijpen hoe dat nu allemaal tot stand is gekomen maar waarvan men wel zegt dat GameChanger ongeveer de enige unit is binnen Shell die dat kan. Dus mensen begrijpen het niet helemaal goed en zeggen "we zouden er graag vanaf willen want het is te ongecontroleerd. Maar kijk nu toch eens wat eruit komt, en dat is wel echt prettig". Dus er is een continue strijd tussen wat wij de core noemen, de kern van het bedrijf die het probeert te institutionaliseren en het te laten lijken zoals de rest van het bedrijf lijkt. Vis-à-vis dat mensen toch dan zeggen van "het is niet helemaal helder waarom het zo is, dus laat maar voorduren". En voor ons is dat het spel. Het spel om binnen een club als Shell dingen voor elkaar te krijgen die andere mensen nooit in hun leven voor elkaar zouden krijgen. Het antwoord op het jou vraag is. Wij hebben een aantal unieke dingen, wij zijn

semiautonom. Dat betekend dus dat GameChanger zelf beslist waar we aan willen werken. En zolang dat gehandhaafd blijft, deze semiautonomie, dan heb ik er wel geloof in dat het goed blijft presteren. Op het moment dat wij de beslissingsbevoegdheid over onze portfolio verliezen en dat mensen zeggen: er moet meer van dit of dat in, of het meer risico of minder risico dragen. Of je moet enkel ideeën uit China halen en niet uit Afrika. Zodra er meer hardere constraints worden opgelegd dan loopt het mis.

CS: Je kan wel zeggen dat er een bepaalde trend is dat als GameChanger niet met die trend meegaat, dat de toekomst van GameChanger er niet goed uit ziet. Je kan je wel voorstellen in deze wereld waar iedereen connected is gaan ideeën veel sneller. En het aantal ideeën is bijna exponentieel. Als GameChanger niet meegaat met deze efficiency en scalability, dan kunnen we de vlag misslaan. Scalability is een onderdeel waar GameChanger hard aan het werken is. Een ander is dat wij niet alleen bezig zijn met het technisch verbeteren van producten maar de wereld is ook meer naar services aan het kijken, zeg maar de software issues. En GameChanger moet zich daar ook meer bij bezighouden. Dus minder technisch en meer business models zeg maar. Dat is een trend. En het niet alleen maar focussen op bijvoorbeeld, we hebben hier een bepaalde vorm van windenergie en de technische hurdle is bijvoorbeeld de reliability van de transformatoren en dat je dus heel technisch bezig bent, en puur op ideeën gaat focussen. Nee, misschien moeten we meer op de mensen focussen, dat noemen dan communities. Dus scenes, zoals de rock en roll scene. Als je op zoek gaan naar nieuwe muziek, moet je naar een scene op zoek zijn en niet zo zeer op voorhand in je hoofd hebben, ik ben op zoek naar dat en dat idee. Het zijn samengevat drie dingen: scalability, meer naar de business models, de services kijken, en meer naar mensen zoeken in plaats van ideeën. En dat is een trend waar GameChanger zich op dit moment mee bezig houdt omdat dat de toekomst is. Als we dat niet doen heeft GameChanger ook geen toekomst.

Interview Case study subject 5: Unilever

Date: 6/12/2013 10:30-11:30

Organisation: Unilever

Interviewer: Jonas Vanvoorden

Interviewee: John Hague (VP Open Innovation)

Medium: Skype call to London

JV: Can you maybe give a short introduction of yourself and your role within Unilever?

JH: Yes, so my name is obviously John Hague, vice president of OI in Unilever. Unilever is a FMCG company. So I have been in Unilever 23 year and I've been running the OI team for just over 5 years. My background is material science but I've worked across the whole range of different R&D functions that Unilever has. We have a discover entity that does the research part and then design and deploy which puts things to market. So I've worked across all of that. The company itself is exit 2012 a 51 billion euro turnover company and we've been growing pretty fast by FMCG standards, a bit above the market although this year has been a bit tougher because the emerging markets are

slowed down. What unique is about Unilever is a number of things, but one is the footprint in developing and in emerging markets. So Unilever has about 57% of its business in developing and emerging markets. So that's unique in the industry, nobody else got quite that footprint. And that's really down to the angle of Dutch heritage that we carry business that we started 110-120 years in various parts of the world. All the major FMCG companies didn't do until much more recently.

JV: So you use an OI team to support your OI practices?

JH: Yes, So Unilever has been working with partners for longer. It depends on your definition of OI. And one of the things you must be try is to understand what is in and out of the scope in the definition of OI. The definition that we're using is: the integration of any new business proposition of technology that is proprietary, that you can't just access it in normal ways of business and is created or accessed through partnerships from the external world. So it's quite a broad definition and within that we include academic collaborations. We include strategic supplier collaborations that we have, as well as things such as venturing and creating new business with entrepreneurs. And also working with start ups and small to medium size enterprises to access technology and spin outs and those sorts of things. So it's a broad definition and it does include things that other people wouldn't class as OI, like supplier alliances, and like the major strategic relationships with academic partners. We've been doing parts of that for as long as anyone can remember. There has been a programme with major research institutes such as Cambridge universities and other places for 20-40 years. The crystallisation of OI is a strategic imperative happened around 2008. That was when my appointment was made. We said then the world of science and technology is acceleration, it goes outside the boundaries of our companies and if we don't work out how to be much more seamless and be accessing and sharing the science and technology and innovation that is happening in de wider world then we are going to be uncompetitive. You can pick these numbers of our website but we are not increasing our R&D spending in percentage of turnover. In fact the general direction of our R&D spend as a percentage of turnover is reducing. Which means that we try to achieve what the business wants, which is significant growth, the only way we are going to really access all the innovation we need is in partnerships. There are a number of things that factor in there. You know the recognitions of the rate of change in the science, technology and innovation environment in many parts of the world. And also the recognitions that we won't significantly increase our internal R&D footprint, It's just not going to happen. So that leads you to the obvious conclusion, there are two things you can do: you can make your existing assets more efficient or you can find ways to access and partner to bring the innovation you need to deliver. And we are trying to do both of those of course.

JV: So you have an OI team in the company, how is it structured in the company? How is it organised?

JH: So, there is one leader, that is me. That makes life pretty simple. This is not a diffused and dispersed team. I've seen example where people have been nominated as OI champions but spread all over the organisation, without any centralisation at all. That can work but our model is to go for a central team, a capability. A group of people that would own the thinking, the best practice, the processes and to some extend the creation of programme and the integration of that programme into the organisation. So it's a central team. The way it works is, just step back a bit how Unilever is structured to

understand how you create your team aligned to that structure. The organisation is a bit of a complicated organisation. It is a global business in every part of the world. There are 4 major categories in which we operate: Home care, personal care, foods and refreshments. You can all of this as a resource of our internet, our website. Thus 4 major categories in which we operate, and underpinning that, certainly in the world of R&D we have a corporate, we call it the global R&D group which houses a couple of things of relevance for OI. One is a strategic science group who are charged with looking at the integration of longer term break through science into all parts of the business. And secondly a new business unit which looks to find and generate new growth operations for Unilever through incubation. And that is actually very closely related to this strategic science group. In that the only way that some of the more radical and disruptive technology breakthroughs are going to see the light of day in the marketplace, are going to be though new businesses. It is often very difficult for the existing category structure to take those things to market. They're the most important parts of the organisation with respect to how you design an OI organisation that goes with it. So what we've said is let's have OI directors which are aligned to each of the 4 major categories. So I have a director who is embedded within personal care, a director embedded who is embedded within home care, one embedded within foods and one embedded within refreshments. They are four key people who are aligned to the categories and their role is to, in collaboration with the category organisation, to define and drive and enable the creation of partnerships that build the category innovation pipelines. That's what they do, they do that all day, day in day out. They are metrized on the value of the pipeline in each of those 4 parts of the organisation that is depended upon OI, and the number of big projects that we've got with OI dependence. They are very hard business financial metrics, pipeline metrics that we've put in place that they have to hit. I don't know how many people do this, but those hard metrics mean that you're forced to engage very very deeply with the category organisation and ensure that they are pulling on partnerships appropriately. There is not much resistance to that in the company because there is this wide recognition that we don't have all the resources for everything we need to do. So people are increasingly open to accessing capabilities through partnerships.

JV: Did the OI team support this open thinking, or did it grow from their selves?

JH: The company recognised it back in 2008. That was a strategic direction that the leadership of R&D said, We have to do this; it is a strategic imperative. We didn't start with that structure, but that doesn't matter. Having these people aligned to the categories and embedding OI into the categories and facilitating the creation and delivery of partnerships is a manifestation of a strategic direction that the company has set. What we're not trying to do is do something that is not agreed by the top of the organisation. If you go and talk to Paul Polman, the CEO and ask what does he think about OI. I think you'll get a very clear response and he'll say the same things that I'm saying. Given the resource constraint we're operating and the sort of challenges that the business faces it's an absolutely imperative that we work with partnerships to deliver the objectives of the business. There is no mismatch between what the OI team is trying to do and what the company wants in that respect. That doesn't mean that there aren't still people who are disbelievers or culturally it's difficult. There were 6500 people in R&D in Unilever there still are 6000. There are lots of people in the company who are used to running very large and almost self contained teams. So to suddenly switch from operating in that mode where you may have 700-800 in your operating line overall, to operating in a

mode which is much less dependent on vast numbers of people and much more dependent on the ability to leverage and manage partnerships. It's quite a shift in skills and culture. Everybody can do it, it's just a question of learning the skills, gaining the experience and there are some tools and techniques along the ways that people need to know and have. There is one block of the organisation, that is the people who are aligning to the 4 major categories which are the business pillars that Unilever operates in. The other thing we've recognised is that actually if you are going to be good at OI you need to be outward facing so we've not entirely aligned to just the business organisation. So what I've done is taken three parts of the world where we think it's more important to be outward facing than has been in the past. We've put in place directors responsible for accessing the external world in those geographies. We've a very strong presence in the UK, in the Netherlands, in the science technology community there and a lot of us sit already in those markets. So we already well serve with people who are connected in the European domain so we didn't need to do anything extra in Europe. But in North America we've put two directors in place who's specific remit is to have their eyes and ears open to the technology developments in the North American market and the innovation developments there. We've done the same in the Indian sub continent. We've got a director there who is building relationships with Indian companies and Indian academic institutes. We've a major lab in Bangalore as well, so that helps. He's got a home at an already group of collaborators inside Unilever who want to reach out. And also in China. So we've made appointments in those three areas. In each of those places there is a major R&D lab too, so these guys are not completely out on a limb, they are attached to a large block of Unilever's R&D programme. But their remit is to make the interface between Unilever and partnerships in those regions. So it has been recognised that there are vast regions in their own right and we can never cover everything. But as catalysts for enabling people in the programme to access innovation capability and innovation ideas in China, India or the US, that is what they do. So there is a block of people doing that. Now we've recognised we didn't need to do that in Europe, it was already happening but there are still a couple parts of the world where we're not actively chasing yet. Latin America is one. So we've have to one day think whether we do go there. And Brazil is the obvious place to start, and Africa and the Middle East and Singapore. So there are blocks of the world where we haven't yet placed an innovation presence. So to do that we've actually started to implement a concept called innovation ports. There are very new. We launched our first one this year in Israel. So we actually have on the ground in Israel a little Unilever office that is actually subcontracted to an innovation company in Israel and they act as our presence on the ground there and they're purpose is to draw innovation, ideas, entrepreneurs, and technology from the Israeli market which is one of the more dynamic ones in the planet. So we want to open more of those on places where we don't have a major R&D presence. So if you think of the category organisation as the way of embedding OI into the categories and the regional organisations which is at the moment in India, China and the US, plus this satellite organisation in Israel. They look externally and drawing from the market places where the technologies are happening. There is a third block we've called the specialists. There is a guy I have in the team who's job is to build strategic supplier alliances and he does that on behalf of the whole company and we do that for the strategic suppliers that have got a such a breath of R&D capabilities that we have programmes that transcend all the categories, therefore it's every difficult for anyone in the category to lead a relationship like that. And we've spend a lot of time over the past 3-4 years working out the mechanisms for interaction with strategic suppliers to make the innovation side of things

much more efficient. How you share IP, how you operate portfolio management, all those sort of things. So a person in my team is doing that and that is all he does. He's very good at it but that's all he does. I also have a person in the team who is a specialist who we call a deal architect. So his job is to think through the types of deal constructs we need with the external world and across different types of partnerships, focussing mainly on small to medium size enterprises where we find the idea and the IP and the commercial negotiations to be very tough. So there are a couple of specialists who are holding specific capabilities. There is one other specialist task in there which is scouting which is run by regional guys. So think it as interface with the programme, the guys who are embedded in the category, the face to the external world. People in the regions who are bringing in innovation in from the regions and then a few specialists who are driving process and driving the thinking about how you do deal architecture and alliance management and scouting and then you have the basic structure of the team.

JV: So these are all fulltime roles?

JH: Yes all of them. So that's the group of people, it's about 40 people strong in the organisation. You can always manage with more people but the idea is that we don't want to grow the central OI team any bigger. There are enough of us. We are catalysts, we are enablers, we drive embedding into programme, we set up deals in the first place, we do the scouting that finds new technology, we bring new ideas to the company, we work with our ventures group, the new businesses unit create entrepreneurial ideas that can be incubated. But really the bulk the actual work of driving OI into the business to be done by the category organisation or the strategic science groups. So we've got an organisation of about 40 OI people who are trying to lift the ability of more like 6000 people in Unilever to work in a seamless more entrepreneurial and open way. So we're very much as a central team, very much a catalyst, very much an enabler, very much a place where thought leadership happens. But we expect most of the OI to be done in the category organisation and the strategic science group. That's where the partnerships live and thrive.

JV: The OI team, would you call that whole 40 people? Or would you say it's more the 4 directors and the specialists?

JH: All of us are part of the OI team, all 40, and they are the OI team. We get together as a team, we meet as a team, we talk as a team. The 4 four guys, the specialists they disseminate what they know into the rest of us. And they are accountable for various things in the team. And the communication through the team is very important because to have any change of the regional people making anything useful for Unilever they have to be extremely close the category people in refreshments food, beverages and home care to understand what the business is looking for and where the opportunities lie. Thus it has to be a very dynamic and networked community to be successful. So definitely one team, more so than ever.

JV: And how do you cooperate and communicate in practice?

JH: There are various ways. I run a leadership team, we don't meet so often face to face, just twice a year. We try to restrict travel budget a bit where all my direct reporters get together. Once a year we get the whole OI team together, all 40 of us and then we set direction and look at the major things we need to work on as a team that are relevant for the whole of Unilever. In doing that, we draw a lot of support and input from the

category organisation and the strategic science group. The major forum for embedding OI into the category organisation we call the category OI forum. Each of the OI directors for the category runs one of these forums once a month and so over the course of the year there are 48. They are about embedding OI into the category organisation and they are shared by the category OI directors and the attendance to those meetings is every and anybody whose needed to contribute to the OI plans and targets for any given category so it's quite a wide ranging group. So that's the main mechanism for driving the OI. The other thing we do is lead and share a number of strategic partner relationships. For example I'm on the executive steering committee, at the moment there are just three major partnerships. At time it's has been as many as nine. What I've done in the past is getting them established and then have other people take on the leadership of these steering relationships. Those things are important to take a partnership view of the programme rather than just a Unilever view of the programme. They are actually very important meeting for the partners. So they're the main mechanisms for driving the OI agenda. And this category OI forum is really the central congruent of driving the impact of our team into the category organisation.

JV: So what kind of people need to be in the team? Who needs to be on the top of the team and who needs to be the specialists?

JH: I think this is a very good question. If you look at the profile of work levels. You've familiar with the concept of organisational hierarchy. I work at level 4. And our CEO must be level 7. So I'm a couple of layers below him. And people in my team go down to work level 2, so I have 3 and 2 in the team. My level is vice president, the layer below me is director, and the layer below those are managers. There are three kinds of managers: 2a, 2b and 2c. There is another five grades of non managements at least, certainly at R&D. So the way the team is structured is very senior. Of the 40, 13 work at level 4 or 3, and the rest work at level 2, most of those are senior level 2, they are level 2c. So we deliberately went for a very senior and impactful group relative to profile of the rest of R&D. So if you look at other organisation there is a pyramid shape. I know organisations are flattening but 70% of Unilever's R&D workforce is at work level 1. These are the five grades of non management. And I have one person in that bracket that is my secretary and actually there are two, there is also one in china as well. That is extremely unusual. It is a very different seniority profile to the average group in the company. So many of my directors don't have direct reports, or only one or two. It's not about managing large teams of people; it's about driving relationships and driving interfaces. So that's the first very stark different to the rest of Unilever and certainly the rest of Unilever R&D. I like it that way because it keeps a tight, simple structure and on the other hand there are challenges with career progression in such a small and senior team. But that is definitely the way we're going, more senior and more experienced and almost no junior in terms of job level people. I think the other thing we've seen is at the start, considering the people who came and joined me when I took this task on. The people who were dissatisfied with the way Unilever was doing innovation. They were people that were misfits in the existing organisation. So when the way successful innovation was running with large, often global internal teams, there were some people who were very good at that. They were not the people that came to OI. They are very different, they want to work differently and they see the future and see the power of partnerships. I ended up with a very interesting profile of people who were not well regarded inside Unilever but when you went to talk to the people who were working in the outside world, they were seen as

dynamic, engaging, enterprising, and so on. They were not good at managing big, global internal team but were very good at managing interfaces and managing the expectations and the relations with people in the outside world. You think those two skills would align but somehow they don't. There are things that people have to be good at such as managing global projects inside a company that require different skills and mind-sets. A lot of it comes down to the peoples' mind-set towards OI, so instead of commanding control which works in big global organisation where you got line reporting, you have to go on thrust and you have to go on relationships as a way to get things done. Instead of you setting all the objectives, you just don't expect who ever is reporting to you or working for you to just deliver those. There is a mutual setting of expectations and the consideration of what is it that is going to be successful for both companies. And people are used to the directive, top-down, this is how we're going to do it approach of management aren't going to be good at OI. Because it is more emergent as a leadership style, it requires listing to partners, it takes longer to come to agreements which a lot of people find frustrating, but it is absolutely essential to spend the time building relationships and understanding really what we're trying to do with partners and what partners want when they engage with us. Otherwise we end up with very poor interactions. So you can see that types of people that gravitated to OI in the first instance were a bit different and were not so successful driving the big global projects and the big global category R&D organisations. However what's happened over the past couple of years, a couple of the rising stars in the category organisation have come across and joined me. Which is great, because the smart people recognise that this is going to be the way of the future and they say: the more I can learn on how to do OI and the more I can pick up as an experience, I'm going to be ahead of the game in five years time when we still don't have more R&D spending and more people. But having learned the skills of OI would be a huge asset to some of these carriers in the future. So I'm starting to get that happened. People are coming to join me who were regarded as high performers in the mainstream organisation. So it's good, we call them the HP listers, when they started to come into my organisation I realised we were fully on the map. They are recognising they have to change their skills profile and their capability and competence profile to be able to work more effectively. It is good for them, and they have recognised it.

JV: So you already mentioned already a couple of the skills needs, such as relationship building and networking but which others are needed?

JH: We're not heavy on process but there is an OI process that we loosely apply. We call it want, find, get, manage. It is well known in the industry, I'm sure you've come across it. People out there, Gene Slowinski coined that phrase. He is one of the old OI gurus. The 'want' stage is all about defining what is the objective that you're trying to achieve, what is the problem that you not have got the solution to and that you're trying to tackle. And getting that defined in a way that is a compelling brief to partners or identifies exactly where a partner can play. There is an OI definition stage, that's a skill that is different in writing things down or crystalising things out, it makes partners engage or is compelling to partners. It is different in the way you define a project that is predominantly run through an internal team. We call it OI definition as the first sort of skill set that you need. And then quite often you need to be out there scouting. The scientists used to do literature searches but we defined an OI skill called scouting. We have a few experts in the company. There are a series of processes and strategic

partners we have for scouting now that we use and we can train people to use. That becomes a skill in the organisation. So scouting is a second one. The third thing is deal architecture. How on earth, once you found a partner do you structure a deal so that commercial, IP, legal, all of those things are tight up in a way that is conducive to both partners generating benefit. We spend a lot of time changing the mind-set of the company but I don't think you would be surprised to understand that if you talk to our attorneys who look after IP, their mind-sets are still, even today: Unilever should be owning as much of the IP as possible, this is how we gain commercial advantage. That position is actually completely against the concept of partnering, OI, how do you make most of the combined resources. In getting people to understand the role of intellectual property in OI and the fact that we don't need to own all of it. We just need to structure deals to get access to arising IP in relationships, that's an important thing. That's the whole deal architecture skill set. In the end the lawyers are going to write the agreements but we should be telling what to write not allowing them to dictate to us what is acceptable for the company. Because they always default to position of lowest risk to the company which is: we own everything. We had to break that paradigm in the company, we are more or less there. There are still a few pockets of resistance but we made a lot of progress on that. Some of our standard framework agreements that we use with all sorts of partners, we started it with the strategic supply partners, really contain a use it or lose it clause. If we create IP with a partner and it happens to be Unilever that owns the IP. If we don't take it to market, it is not quite automatic but close to an automatic right for a partner to exploit so they don't lose out on working with us. So that is important. I started with OI definition in the want stage, scouting in the find stage, deal architecture in the get stage and alliance management in the manage stage. Once you got a deal, how do you operate within in? What are the sorts of hard and soft things that need to be done to get the partnership to deliver? We got lots of alliance frameworks and we got plenty of good examples on how to structure joint steering boards or joint partnerships boards, what role they play, how they operate, that sorts of things. There are a lot of skills and capabilities in those four things I just described. People need to pick up and operate if they want to do good OI. Beneath it all are the softer skills which is more the empathy, much more the win-win mind-set, a little bit humility. There are still plenty of people in Unilever who think they are the best in the world. You get this sort of arrogance in big companies who have achieved a lot. So the mind-set that underpins all of that is really important. I would say that is still for the guys who are going to do really well in OI are the ones that flipped into that mode best and understand it as a fundamental construct of the way they have to operate.

JV: Do you think they have to be like that from the start, or can they learn to act like that?

JH: Oh yeah, despite all the frameworks and all the tools and training that we do. I tell everybody the best way to learn to do OI is to go and do some OI and you learn very quickly. And clearly we don't have people go and blunder into deal without any form of framework of understanding how they should behave but you can't hold everybody's hand in an organisation that's 6000 people large. So you have to accept there are going to be mistakes and people are going to learn. But they will need to jump in at the deep end with the best sort of partnering skills thought to them. What you find very quickly is that partnerships come down to people and people are all different so it's very different dealing with a company like BASF a major German chemical supplier than it is dealing

with a company that manufactures devices and appliances in China. You can't treat them the same you have to understand the cultural nuances as well.

JV: Not everybody needs to have the same ability in the skills, how are they divided over the team?

JH: Unilever has a whole dictionary of skill definition, I find this a little excessive at times but if you take a skill like deal architecture than you can go from basic appreciation, working knowledge, fully operational, leading edge. There are four classifications in there and we expect the guys who are specialists to be leading edge, world class. We expect everybody who's involved in OI to have a basic appreciation. And some of the people who are category OI directors they got a working knowledge of it, they can handle themselves in deal. People who are thought leaders and we nominated some thought leaders, they have to be leading edge. We have a couple of training modules that give people basic appreciation very quickly. So that means that nobody ever needs to go into a partnership conversation with a third party without any form of training. Everybody gets something. We have an intranet site that has everything accessible.

JV: What would you say are the major success factors of the team? What makes it so successful?

JH: Have we been successful is one question? And I think we have. When we started we started to monitor the impact of OI in the category pipelines and the number of deliverables that were using partnerships as the primary route to delivering the targets was down about 38%. Now this year it is around 80%. So there has been a significant increase in the amount of partnership that has been done in our category programmes. That is beyond my team; that is in the mainstream organisation. I think that is a success. And I think the number of big innovation that is going to market from our partners to win supplier innovation partners that is increasing. We've seeing the value of innovation in their pipelines as well. We're also starting to see some quite radical technologies come into the organisations from start ups and from small and medium size enterprises which we would have never looked at in the past. I can't tell you what they are. Cause we are still pre-launching and it's confidential. But on a number of metrics, this is been a success. Why has it been a success? I think we got the balance right between not pushing to hard on saying you must be doing this, you must be doing with these people. We need to do a bit. And embedding in the programme rather than challenging the programme was a really important thing. Another thing that drove success was for a while we got direct engagement of the CEO to push the categories to do it. We would have probably not have made so much progress because that got us over an activation barrier that was definitely there. That change from 38% of the projects using OI to 78%. There was a catalytic event from our CEO who helped us. He's not as engaged now but doesn't need to be, he knows the job is well underway. The other thing that has been helpful for is, we have been quite modest. When we going to the external community we haven't overpromised. The culture of our organisation is overall that we're pretty affiliative and we've also got a very powerful living plan. If you get a chance to get a look at that, you'll understand what I mean. Which gives the company a corporate mission that is very compelling so I think those ingredients: the culture of the organisation, the social mission, the deep roots in local markets means that a lot of the products we sell are tackling some of the biggest challenges of humanity. The simple act of washing hands is saving millions of lives and that makes us quite a

compelling organisation to engage with. We never had a problem convincing people to come and talk with us. That doesn't mean that we always work with them. But Unilever's brand and name is a very powerful attractor for people to come and talk to us. So that's been a success factor for sure. And I think the people in the organisation tend to be pretty good to work with and in reality tend to be very humble. We see if I would compare the contrast with for example P&G, we still see with the connect and develop they have been very bright, very big, very bold, promised a lot. I don't know if they deliver, I don't need to ask, it doesn't matter but I see a very different stance from P&G which isn't anywhere authentic to what the company is about. I think the other thing that helped us was crystallising to a single global organisation to do this as opposed to have it scattered all over the company. Unilever has come from a very fragmented past in that respect and traditionally it has been difficult to get things to happen globally in the company. People tended to like at single category or regional level. So in forming these global structures and giving them the power to act has been helpful.

JV: So really integrating it over the global categories?

JH: Yes this integration embedding is vital. The mainstream organisation, if you do nothing to try and help that, will not be receptive. We've seen it ourselves. If you turn up at somebody's door with a brilliant idea and you think it's brilliant but they don't have the resources to work on than it's a disaster, you're just pushing more work into people who are already too busy. It doesn't matter how good the idea is, if you're asking somebody who is already working 110% of their time to engage you get very poor engagement and bad outcome. So this point about defining the OI programmes for the categories and working with them to get them and selecting where they're receptive to take things on is really important. The technology pushing to companies that were already working flat-out is actually very challenging.

JV: Can you also name some problems coming forth in the team?

JH: I mention there is still the challenge of breaking down the 'we need to own everything mind-set' in partnerships, so the IP mind-set. We made big progress but I think there is still room to go and people in the organisation who still need to move on that. But it is moving over time. I think there is a challenge that is asymmetry that we've seen quite a bit. What I mean with that is that the motivation of one partner is asymmetric to the other. So one side has much more to gain than the other side. And if you have that situation, it's a scenario where one partner is less engaged and is more ready to pull or walk away and that is a dire circumstance for the other guy. So having this asymmetry is quite painful for people. And that's one of the reasons why we went for the use it or lose it strategy with our IP. So managing the asymmetry so people don't get hurt. Unilever is big enough to absorb shocks but if you're dealing with a small company and as Unilever you got a shift strategy on them and leave them high and dry, that could be devastating. So that's still a challenge and that makes a lot of companies weary of dealing with us. And you end up with quite tough conversations about who owns the IP, what the compensation is, who is paying for what because a lot of people have been burnt in the past by big companies changing direction and leaving the little guys high and dry. So that's still a challenge. I think resourcing it all is still a challenge, in our organisation with our static R&D budget, than opening more space to spend externally is

proving to be challenging. My personal view on this, I don't let it stand in my way because if you get your arrangements right than people will spend their own money on innovation if their confident you're going to go to market with them. So money is not necessarily a huge object but it is limiting in some circumstances. I think if people go into the OI with and mind-set that we have to have a gigantic fund than actually you are missing the point. A lot of stuff is happening out there already and a lot of people are prepared to invest if you can be the root to market for them. So it doesn't necessarily mean you need to spend a lot of money. We are seeing that the people like certainly the UK technology strategy board , the Dutch government, the horizon 20/20 guys in Europe are prepared to put significant funds into the right sort of partnerships. So there are ways in augmenting your R&D spend through partnership if you also are meeting the objectives of a national or a regional government like Europe. That's been very successful for us but the downside of that is that you end up with resources in your company not solely for delivering your own objectives, you have to meet the objectives of the government too, otherwise you're in trouble. We have a few cases like that were we've accepted partnerships with government money involved and the strategies changed and not relevant anymore but we have to remain committed which means resources are tied up in something that we actually no longer need. There is a risk there that if you take external funding to your programmes you have to be sure they are going to be the right ones for the long term.

JV: Do you maybe have some comments on the team that you would like to share?

The number one comment I would say it is going to evolve. It is not a static organisation, as the organisation becomes more adapt to OI in it's right, and if the category organisation does, the role of the guys that I lead will have to change. It should change over time. Where we're heading to over time is, the binary partnerships like strategic supplier alliances and the relationships with universities, we're teaching more and more and engaging more people. We're starting to leave those behind and we're starting to move into a new space which we call ecosystem innovation. It's the next wave of OI where actually rather then operating in the binaries we tend to look at ecosystems to get things done that we never could do alone. So an example of that, there is a consortium that is founded by the technology strategy board, it got British aerospace, BAE systems, ourselves, Sheffield university and a spin out from Sheffield university and we're working together on trying to get 3D printed components in factories in line. There is a lot of hype about 3D printing for producing things yourself at home, this may or may not happen but much more likely is that we will use inline 3D printing to create components in our factories in high speed lines. That is something we can never solve ourselves and we need a consortium or an ecosystem to do that. So we're moving more and more into that space now. So my guys are going to have to evolve into the leadership and the thought leadership of ecosystem ways of working and the rest of the organisation is come up what we call OI that we define today. They have come up a step and we've moved on. But that will require people to adjust and skills will move on. We probably will need to shape of the team a little bit to do that. So it's an evolution to always stay at the leading edge of OI.

Interview Case study subject 6: Natura

Date: 10/12/2013 13:00-14:00

Organisation: Natura

Interviewer: Jonas Vanvoorden

Interviewee: Adriano Jorge (Open innovation and networks manager) and Leonardo Garnica (Scientific Manager - Innovation Systems)

Medium: Skype call to São Paulo

AJ: Let's introduce myself. I'm Adriano Jorge I'm leading the OI team here in Natura. I'm working for Natura for the last 13 years and my past years were always related to R&D and innovation. And now I'm leading for 3 years the OI team here.

LG: My name is Leonardo Garnica. I did my master in industrial engineering focussing on science and technology management. I studied how the universities in Brazil have been transferring technologies to the market by licencing, patents or other kind of cooperation between universities and companies. I have been working here for 3,5 years and now I'm working on the Natura campus programme which is our OI programme to foster collaboration with universities, enterprises and entrepreneurs. I'm also working on funding and how to raise money from the government to put in our innovation process.

JV: How does Natura define OI?

AJ: We have been using OI for the last 7-8 years and we started just scouting new technologies and dealing with universities and then we have been changing for the last years. Now OI is for us more than just OI. It's innovation in networks. It's like a big ecosystem where we see different people and actors such as universities, suppliers, some service providers, also the customers and our sales channel, and to see potential in all of them to have contributions for our innovation process. We have different initiatives to bring them together and to open the space for them to bring their best ideas and to contribute to our innovation process. That's our general view on OI now. It's broad but it's like a big ecosystem, it faces it like a big ecosystem and then it has to create conditions to bring different people to work together.

JV: So you use an OI team to give structure to the OI. How is it organised in your organisation?

AJ: Before 2005 we were bracing OI with some funding agencies and also some universities. They didn't have a specific team dedicated for that but from 2005 we started a new team to do that. It started inside the R&D and technology department and now we have a group separated. It's like the same structure for the big innovation team that has like 300 people but it's not anymore inside the R&D structure. We have a team of 9 people working at that. I can tell you later how we are divided. If we count the trainees and the people working together we have 13 people dedicated to the OI team. But it's important to say that also the whole R&D team is now dedicated to OI because we have adopted OI as a model for innovation. All the researches for example that we have are constantly searching for new partners and establishing new partnerships. We as the OI team are providing the conditions to make them start and establish the best conditions.

We have basically four different cells and the first one is related to OI management. Here we are providing all the policies and all the partnership models and we are evaluating the

partners. We are providing the conditions for the researchers to establish the new partnerships. We have a group that for example meets every Wednesday with our researchers and if they have a new partnership we just bring to this group and this group has 2-3 people from my team and we are like a counsel that are advising people how to establish their partnerships because we have the relationship rules, all the conditions and all the models to establish these partnerships. And with that we can see that the whole ecosystem of partnerships that are being established in the whole innovation process. If you are talking about technology process or product process so we have two different funnels. For example now that we have almost 200 partners and in each project we can see what the partner is doing. It helps us to have a general view and to support people to establish these partners. This is what we call OI management. This is the first part of our job. Working on that we have a manager that reports to me and we have also an analyst and a trainee. So we have three people working with that. And they are basically supporting the whole process. They are creating the conditions to make the partnerships happen in different areas and in different R&D projects. And they also think about evaluation. Every time we have a programme

for relationship with these partners and every time we finish a project, the researcher evaluates these partners and then we consolidate all this data and we see how our network is performing. To see if they are delivering to Natura what we expect and then we have some plans to recognise the best ones. For example identify what is the best university or suppliers that are providing the best technologies for us. We are planning also to create some development plans for them to help them to develop. Actually our main strategy here is to strengthen our relationship with them to be close to them and to make them close to our strategy in order to have better results and the better inputs related to innovation. This is because we want to be the partner of choice of them. With some, the most strategic ones, we want to share our strategy and ask them to bring their best innovation to Natura.

LG: Just to share something more. We have two dimensions when we are evaluating the partners. One dimension is the results of that project, the technical results. We have another dimension looking at the institutional aspects of the partnerships. The partner has roles and policies, the majority of or partnering in terms on how they promote and foster partnerships. So we see these two dimensions because here at Natura we are very interested in how legal and how institutional strong partnerships are.

AJ: This part of my team is providing a set of different tools to help. It's like this structure to make the whole OI model work for the innovation team. This is the first part. The second one is where we deal with universities and some suppliers. It's the Natura campus programme. Natura campus was created as an official programme in 2006 and first it was designed to deal with universities and now it's also broader. Now we are dealing with universities, also suppliers and some specialists and so on. And it has basically two flows, one we have open calls for proposals where we get new ideas from the network. We ask from the network, we provoke them to build the future of innovation of Natura together and we are open for receiving new ideas. To give you an idea, last year we did that and we had more than 300 proposals and we have a deep process. For almost one year we were working on that. We selected 13 projects to fund and to develop in our cooperation with them. We have also challenges that we post on there. Not any challenge, when we have a very difficult challenge that we were not able to get solutions from our internal or from other partners, we post challenges to find

solutions. These are these two different flows. Also Natura campus works with a relationship programme. We are posting scientific content on our website. We are also on the social networks. Of course we want to convert these people to develop opportunities together in Natura but even if you don't have a challenge or an open call for proposal we want to be close to them and we want to discuss scientific knowledge with them. We want the doors open and any time they want to approach Natura en to bring in something into Natura, they can do that. This is the second part. Working on Natura campus we have basically two people in my team working on that. But they have different functions as will in the team. They are not exclusively working for Natura campus. After Natura campus we have created this year a programme for co-creation with the customers and last year we found it would be a very good opportunity because just to give you an idea, Natura is the leading cosmetic company in Brazil and we have 100 million customers in Brazil. It's huge and it's a very valuable brand here in Brazil. People just love this brand and it's top of mind here in Brazil. And we saw a very good opportunity to bring these people together and to open the doors for some specific cases to ask these people to co-create with us, new concepts and sometimes new ideas for projects for instance. It's quite new. It has been working for 6 months now and it's going quite good because we have almost 2000 people. It's an open network, it has the platform where people meet and discuss specific things that are important to Natura. We also have some meetings where we call some people, the people who are participating the most. We call them to come and meet in order to cooperate and sometimes we are developing together prototypes. This is the third part. And the last part that we have we call it networks intelligence. As we are growing our OI model, we saw a very good opportunity to start to study networks because we know that partners are not just points, they are in a big network. And if bring some intelligence and start to understand better how people are connecting. For example if a partner and this partner has many other connections with many different people. We have a good opportunity sometimes to access competences that we're not accessing yet. That's why we started it. And sometimes also for example I have a specific technology and I have different ways to search for example new technologies when I'm talking about sustainability but I can also apply this network intelligence in order to identify who are the most influential people in the network. And to reach them, I know that I have more chance to bring a good or big innovation to Natura.

LG: We believe that with that kind of intelligence we can potentialise the OI process. Turning it more productive and faster and we discovered that.

AJ: This is really now, it's something we are making and we really believe that this is the future of OI. Not just to have a problem and that I access a partner to solve my problem but to see it as a whole network and to bring this intelligence on how can I access this network to bring it faster and to bring it in a better way. We have here to work with co-creation we have basically also 2 people dedicated and to work with networking intelligence we have three people now. Basically this is the whole team. There is also another point I forgot to mention. We started a new OI cell in Amazon because last year Natura decided to improve its innovation process bringing in innovation from Amazon then we started there with an office and we have some researchers working there but our main strategy there is to make innovation networks and to establish partnerships and to access the different potential researchers and universities and suppliers that we have in that region. That's why we started a new OI cell there. We have one person from our

team that reports to me but that lives in amazon. And he is completely connected to all this work I have mentioned to you. And his main function is to apply all the structure that we have to OI specifically for this region. This is also a new model that we have doing for the last one year and a half.

JV: So what kind of people do you need in these specific roles? Do you have specific kinds of people in these categories?

AJ: This a very interesting question, for example my background I'm a pharmacist and I came from the R&D department. Leonardo is an administrator and we have some engineers, we have chemists, biologists. We have different kind of people. Most of them came from the technical area. But it's not a rule. We also for example Leonardo came from university. He was doing the same role at the university here in São Paulo. We normally look more for the profile because we have to have entrepreneurial people and some people that have a background related to partnerships and to OI. It is important too. But sometimes we have people that were working at the technical area and they didn't want to go ahead or move forward as a researcher or a scientific manager. They wouldn't like to stay in the lap. They decided to change because it has more management view but it is also important to understand the technical side but we're dealing inside and outside and we have to have very strong relationship behaviour also. Actually all people that work for this team have to have a very strong skill related to relationships because we are moving the internal people and we're providing a lot of things for the internal people and we are also connecting with external people. We are in the middle and then it's very important to have these relationship skills. I would say it's the most important skill for our job. We also need to have a very strategic view because we want to know what happens inside, where Natura is going and then try to connect it with the best people outside.

JV: What other skills are needed?

AJ: Apart from relationship skills and strategic view, sometimes for people who are dealing with partners they need to understand for example IP and different partnership models and for people that are dealing with the network must understand co-creation and now we have this network competence, this network intelligence competence or skills. You do need to be something for the whole team because as a team we are seeing these kinds of people as a network.

LG: it is important to not be a specialist but to know the digital platforms, how to use these kind of technical devise and IT. IT could help us to access these networks and what platform could be performed better to reach our goals. But the mainn skill I see all the time is communication, people are very motivated to do the work and to engage other people and to select the ideas and opportunities because every time people are accessing us to show something coming from outside or from inside we have to plug the things and to chose what things we would be better to plug in order that we would hold one. We have to see, to have this strategic view, in order to choose where our efforts could be delivered.

AJ: We have to see for alliance management it's important when you talk about suppliers and some partners we have to have this skill to manage alliances.

JV: You mentioned that the most important role of the link outside the company, but do you also take on other roles such as for example cultural change agent?

AJ: We always talk about that actually because when we bring new tool and new ways of innovation. For example when you are doing a platform for co-creation with customers it's new for our company and then we are promoting a change in our culture, in our innovation culture. All the things that we are doing are provoking, they are asking questions for the status quo. Sometimes we say that this work related to OI and networks innovation is innovating the way we do innovation. Of course we have all the support and the structure that we are providing, it's more management and more process but also we have different initiatives that are bringing some fresh ideas and some new ways of doing things.

JV: Do you also train the rest of the R&D department to be more open?

AJ: Sometimes we bring people to work with us on our different initiatives. It's our role to bring them together. And we have a formal training since this year, just for the networks intelligence because it is absolutely new for us and for the company and we are training people formally. But for the other things not yet, we plan to do that maybe for the next year. But for now we are just bringing people to work together with a kind of practice training.

LG: I think something is important to share with you, our relation with the law department and how law people have been contributing for us on developing new models of interaction, new models of contract and how to establish these kinds of partnerships together. We have this kind of team with law people in our OI team in there. We have a meeting every week and this week we have a very special opportunity to learn. Because we listen directly from the head of intellectual property lawyer and from the IP experts and from the OI experts focussing on enterprises or universities and we discuss these kinds of new models there and after the meeting everyone has his tasks to do, to build these models and implement these models. These kinds of meetings are every week to follow up on the initiatives and to evaluate these kind of initiatives.

AJ: It is very important to establish internal alliances to do our job; we don't have all the competences here. I would say that one of the most important connections is with the law team but we also have the financial people, the IP people and biodiversity and so on. It is very important to establish these alliances internally because we, like OI, it's a very bold disciplinary competence I would say. And we need to connect with the different people internally such as IT people and so on in order to move on.

JV: What would you say makes the team successful, what are the most important factors in the team that make it a success?

AJ: I would say it's the believe that this sorts of model works. And that it brings results for Natura and also for the whole network. I would say all people that work for this team have the same believe and passion for the topic. We truly believe that we can make a better innovation with that but also that we are spreading good results for a big

organisation. I would say that is the important factor for this team that works for me now.

LG: I would like to add something. With the collaboration model of working, Adriano has a gift way to work regarding how to promote motivation and collaboration among the people inside the team. And always looking for the long term objectives in our beliefs and our passions. I think as a colleague of the team I would say it is very important and I've been working in other teams here and the results are very much translated by these kind of collaboration way to do things.

AJ: We must be collaborative inside then we have to give them an example. We have a very different way for people working in different projects for the same time and we share everything that is happening and we ask for opinions, we like to bring contributions for our different people and different perspectives. I would say it is a different way to work and it is working very well.

JV: So would you say that people in the team need a special kind of personality?

AJ: Yes I would say that people should be collaborative for sure and we need people that like to establish relationships with other people. Sometimes we know people that like to work on their desk and they are more specialists and they don't like to connect and establish new relationships. It's very important behaviour. We need people who like to connect and like to meet new people and are very collaborative.

JV: Are there some important problems or roadblocks in the team?

AJ: Actually we are discussing a lot, especially this year. Because as a separated team, sometimes we don't have the power to make things move on in a faster way. Because all the time we have a very strong dependent relationship with the R&D team and then we need to go on their speed and sometimes it's a problem. Because sometimes we see new opportunities and they have to wait. We don't have the power to make things move forward because we are like an intermediate who are outside and who are inside. And it is actually a big problem in some cases and then we are studying some ways to have more independence and if we sometimes see a big opportunity or something new to do, we like to have the power to have these things move forward without this dependence. That is the biggest problem that we have now. But we are trying to find ways to have a solution for this problem.

JV: But are you positive that it will change in a good way? That you will get more independence?

AJ: Yes I think that we need to have a mixed model where we are still providing the structure and we are still working together, actually we will always have to work in a collaborative way even if we are more independent doing some new initiative. We will need to do it with collaboration because we are not specialists but we need to open new opportunities and new doors because sometimes we feel that we are losing some good opportunities for Natura, and sometimes that we do not have the power to make it move forward. But I can see it in a very positive way actually.

JV: How do you actually measure the success of the team? How do you see if it is successful?

AJ: Actually we have some objectives that we establish for the team each year and it's like a process for the whole company and then we always link these objectives to the corporate strategy and the innovation strategy and then check if people are reaching it. But we do something different things sometimes, in the reach for better results and we are flexible in order to recognise that and in order to recognise people for this work. This is the formal process. And when we talk about OI we are not strong yet when you talk about KPI's about OI. But we are working on that. Now we don't have metrics to do that and we are just looking at the strategy.

JV: How do you see the future of the team? How do you see it develop in the next years?

AJ: I don't think the team will grow a lot anymore but the team has grown, we were 3 people 3 years ago and then it has grown. But I don't see the team growing a lot anymore. Because we don't want to do all the things, we want to provide the tools for people. We want to have good processes and good tools for people doing OI out of our departments, this is very important for us. And we see the team doing and leading initiatives with more independence. Something that we'll add something to our innovation process because we see the potential. We have excellent people working on OI and we know these people are very capable to bring something really new and really disruptive ideas in for our innovation process and then we want give space for these people for that. Now they don't have space and time to do that. And then we want to organise all the things, the processes and tools, and to have more space and time to meet these new big initiatives.

JV: How divers is the team actually?

AJ: Yes it is important, actually I wouldn't say that most important thing is the background, the major of people but I would say it is important to have diversity. The most important thing is the passion for the topic and also the way people see collaboration. Because people that work here must see that collaboration is the way to improve innovation.

JV: Do you think experience is important?

AJ: yes it is important for sure. But it is also not the only factor. We have to have people with the entrepreneurial soul, people who are passionate to make things differently because for us OI is a way to do innovation in a new way. And therefore we need these kinds of people. The most entrepreneurial people are working here because they really believe that they are capable of proposing new things and make new things happen in the company.

JV: Do you see the people stay into the team for a longer period? Or do you see new people going and people going out?

AJ: I think that most people here find an opportunity to work in a different way and they have the opportunity to create new things all the time. And sometimes in other departments they don't have these chances and I think that is an important factor. As many came from the technical area and other people do not have a technical background. I don't see people leaving our team to work for the R&D department because our people came from there and they already had these experiences or people

do not have the background to work in a technical department for example. So yes I see people staying here for a longer time than normal. The turnover is low here. I would say that people would leave here to go abroad or to go to other company to do the same thing that we do here. And it's different at Natura because normally people often move a lot here from department to another one. But specifically for OI we don't see a lot of people moving internally, but maybe moving for another company, for a better opportunity or sometimes to do something different in their carrier like studying and so.

JV: Do you still have some other comments about OI teams? Something you would like to share?

AJ: I think we mentioned all the things.

LG: It's nice to comment something on how senior is a person to work on this team or not. And how is the balance between the senior people or more trainee people. Maybe Adriano can share something about that.

AJ: As we have this drive to always question the status and always ourselves if we are doing the best or if we have to create something new, or what kind of evolution we need to do. It's very important to have this balance. People that know OI and that are practicing OI for some time here but sometimes its also good to have people who stay here for 6 months, we have some trainee programme here at Natura and we sometimes we have some new people, some young people who come to stay with us for 6 months here and that's very nice. Because they bring fresh ideas and they bring new perspectives and it's very good. It's also nice not to keep the same team, to have people moving and sometimes doing some project with us because it also brings some new perspectives and fresh ideas.

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Datum: **14/01/2014**