

# Line managers' influence on innovative behavior of employees

Author: Matai Mutlu  
University of Twente  
P.O. Box 217, 7500AE Enschede  
The Netherlands

## ABSTRACT

This thesis aims to explain the influence of line managers on innovative employee behavior. The research question is: *How can line managers shape innovative climate and behavior among employees?* Several theories have been used for this research, such as the social exchange theory and the signaling theory. Social exchange theory shows that people tend to act reciprocal and that relationships are calculated on the overall worth by subtracting its costs from the rewards it provides. Signaling can be used to send strong signals about desirable behavior such as innovative behavior. The purpose of this research is to find out what type of line manager behavior can influence innovative employee behavior. To answer the research questions a qualitative case study has been conducted. The case that has been selected for this research is an innovative company called Thales Group, in Hengelo. Six respondents have been interviewed through semi-structured in depth interviews. Among these respondents were three line managers and three employees. To shape an innovative climate, signaling can be used by line managers to send strong signals towards employees about the desire of innovative behavior. Innovative employee behavior can be divided into different phases, where different employee behavior is seen. During these phases line managers can also be used to stimulate employees to act innovatively. For each phase, line managers can act different to stimulate employee behavior. It is important that line managers are aware of their influence to create and stimulate innovative climates and employee behavior. When line managers know that their role is big in this shaping process, they will be able to act upon it and send strong signals towards their employees.

**1<sup>st</sup> Supervisor: Anna Bos-Nehles**

**2<sup>nd</sup> Supervisor: Jan de Leede**

## Keywords

Innovative behavior, line manager behavior, innovative climate, employees.

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4<sup>th</sup> IBA Bachelor Thesis Conference, November 6<sup>th</sup>, 2014, Enschede, The Netherlands.

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# 1. INTRODUCTION

Innovation supports a long list of company goals, like increased profitability, higher revenue, costs containment and greater market share. Innovation means growth and the proof is in the numbers. Rosenberg (2004) Professor of Economics (Emeritus) at Stanford University, illustrates in his study that innovation is considered as a major force in economic growth. PWC (2012) claims that private companies that are more innovative, grow faster than non-innovative companies. Companies that make innovation a priority even have a double growth rate compared to non-innovative companies (PWC, 2012). Emphasis on innovation can also help companies grow its talent base so that the business attracts and retains those types of employees that create and sustain innovation. When companies are labelled as having a high innovative quotient, innovative employees will be seeking out the company (PWC, 2012). Thus, the fact that innovation is important to companies in order to grow, is known. However, the question is how can companies be innovative? How do companies create an innovative climate in order for employees to act innovatively? How can HRM support an innovative climate?

For many years, much research has been conducted about the linkage between HRM practices and firm performance. Becker and Huselid (1998) claim that it is becoming increasingly clear that the HRM system is one important component that helps organizations become more effective and achieve a competitive advantage. Bowen and Ostroff (2004) state that for HRM practices to be more than isolated acts, it is important that line managers and HRM professionals must master the theory behind HRM work.

Jackofsky and Slocum (1988), Payne (2000) and Schneider et al. (2002) say that the importance of strong or weak climates has begun to emerge in the HRM literature. Bowen and Ostroff (2004) say that when employees develop a shared interpretation of the organization's policies, practices, procedures, and goals and develop shared perceptions about what behaviors are expected and rewarded in the organization an organizational climate can act as a strong situation. Schneider (1990) adds to Bowen and Ostroff's theory, that the work on strategic innovation climate content is important. He explains that the more HRM practices send strong signals about what strategic goals are important for the company and what employee behaviors, relative to those goals are expected, supported and rewarded, the more these goals will be achieved.

Line managers should be able to explain conceptually how and why HRM practices lead to their outcomes and abstract from the preferred theory a higher level of reasoning for their day-to-day work. This way they can better explain why their work accomplishes its goals. Nehles et. al (2006) explain that line managers can be defined as the people who manage a team of operational employees of a day-to-day basis and that they are responsible for performing the HRM activities. Line managers are the link between HRM practices and employee behavior. It is up to the line managers to implement HRM practices into their behavior, because their behavior affects employee innovative behavior.

The studies mentioned above lead to the research gap that this particular research seeks to close. Thus based on these studies, one can state that HRM practices and line manager behavior are important and have an effect on innovative employee behavior is known. However, how do line managers shape this innovative climate? How are they able to stimulate employees to act innovatively? In this research I seek to find the exact behavior and actions from line managers that can create innovative climate and employee behavior. There are many

theories about HRM practices that influence climate and employee behavior, however the behavior of line managers also has a direct link to employees on the workplace. In this research the assumption is that line manager behavior can be a stronger factor that creates innovative behavior than HRM practices. This because, the implementation of HRM practices is a line manager's task since line managers are the bridge between practices and the work floor. If line managers fail to implement and translates these HRM practices into day-to-day work, then employees will not know what the company's policy is in terms of innovation. Thus line managers' behavior that has a direct link with the creation of an innovative climate and the stimulation of innovative employee behavior, is what this research aims to identify. To study this link, the social exchange theory by George Homans and the signaling theory by Michael Spence will be the leading theories. This research problem leads to the following research question(s):

***How can line managers shape innovative climate and behavior among employees?***

To answer the central research question, two sub questions are formulated:

## 1. What is an innovative climate?

The first sub questions is about innovative climates. In order to have innovative employees the company's climate has to be innovative. Otherwise, innovative employees will not be able to act innovatively and eventually they will either leave the company or stop being innovative.

## 2. What is innovative employee behavior?

In this sub question, innovative behavior will be defined. It is important to understand this behavior, because employees can have different types of behavior. For example, creative or entrepreneurial behavior. These types of behavior are also relevant for this research.

## 3. What type of line manger behavior leads to innovation?

Since this research is about how line managers can shape an innovative climate and employee behavior, it is necessary to study the different types of line manager behavior. One must seek to find which particular actions and behaviors of line managers result in an innovative climate and employee behavior.

## 1.1 The relevance of this research

The academic relevance of this research is specific for the HRM innovation academic field. To study employee and line manager behavior and the role of line managers in shaping innovative employee behavior is relevant for the field of innovative behavior. Identifying the typical line manager actions and behaviors that lead to innovative climates and employee behavior is very relevant for the HRM field, since most studies are about the linkage between HRM practices and innovation instead of line managers' behavior that influences employees directly. This study will be qualitative and besides the theories that will be used for this research, primary data will be collected through interviews with managers and employees to create new insights for this field. These insights will test the theories in practice and will be relevant for creating new theories about innovative behavior.

Besides academic relevance, this research also has practical relevance. Perhaps the practical relevance is even greater than the academic relevance. The value for companies to understand how innovative behavior can be shaped by line

managers is important, because innovative climate and innovative employee behavior leads to growth within companies. This enhances their position within the market and will increase their profit. Overall innovation means growth and the possibility to create innovation by shaping employee behavior thus also means growth.

## 1.2 Outline of this thesis

This thesis started with an introduction, introducing the main research problem, the research question, sub questions and the academic and practical relevance of this research. In the next chapter, the theoretical framework will be described and key concepts will be chosen for the rest of this study. After presenting the theories, the methodological part will be described. How is the data collected, what kind of methodology is used, how is the data analyzed are all sorts of questions that will be answered in that chapter. The fourth chapter will be an analysis and will consist of analyzed data and this analysis will lead to the answers of the sub questions. The fifth and last chapter will be a conclusion, in this chapter the main research question will be answered.

## 2. THEORETICAL FRAMEWORK

Research shows that HRM practices and line managers' behavior influence employee behavior. De Jong and Den Hartog (2007); Anderson et al. (2004); Zhou and Shalley (2003) all indicate that employees' innovative behavior depends much on their interaction with others in the workplace. Yukl (2002) adds that in general, leaders have a powerful source of influence on employees' work behavior. De Jong and Den Hartog (2007) claim that innovative behavior is no exception to this finding. Their study shows insights in behaviors that managers use to stimulate innovation among employees. The social exchange theory is a meaningful theory to explain reciprocal behavior between line managers and employees. Since this research seeks to find out what type of line manager behavior leads to innovative employee behavior, social exchange can be used to understand how the worth of the relationship between line managers and employees can be observed. This theory is a distinct approach in sociology that has emerged in the last two decennia and is founded by George Homans, John Thibaut, Harold Kelley and Peter Blau (Emerson, 2008). According to Blau (1964), social exchange, as here conceived, is limited to actions that are contingent on rewarding reactions from others. Implied is a two-sided, mutually contingent and mutually rewarding process involving transactions or simple exchange.

According to Stafford (2008), social exchanges involve a connection with another person, trust and not legal obligations, are more flexible and rarely involve explicit bargaining. The social exchange perspective argues that people calculate the overall worth of a particular relationship by subtracting its costs from the rewards it provides (Monge and Contractor, 2003). The worth of a relationship thus influences its outcome, or whether people will continue with a relationship or terminate it. When there is a positive relationship, the relationship is expected to endure. However when there is a negative relationship the expectation is that it will terminate.

When applying the social exchange theory to the causal connection between line managers' behavior and actions and innovative employee behavior, one can state that when employees perceive that line managers stimulate, help and support them in their daily activities, they will reciprocate this with innovative behaviors. This can be stated because, in addition to De Jong and Den Hartog (2007), Purcel and Hutchinson (2007) have found that employees commit towards

their job and are influenced by the quality of leadership behavior and by satisfactions with HRM practices. These aspects both have a very strong effect on employee attitudes. Thus, when line managers behavior, that translates HRM practices into day-to-day policy, has enough quality to influence employees to act innovatively and the HRM practices and rewards are satisfying for employees, these employees will be more likely to act innovatively. Thus the quality of line managers behavior and the HRM practices they can use, affects employees innovative behavior. It is all about the signals that line managers can send to employees, to make sure that employees know they will be rewarded for innovative behavior. However, for line manager to be able to signal positively about innovative behavior, the company's climate has to be innovative as well.

## 2.1 Innovative climates

Bowen and Ostroff (2004), leading figures on HRM theories and innovation, researched the role of the strength of the HRM system. In their research they claim that different business strategies are linked to different sets of HRM practices, based on the contingency perspective of strategic human resource management (Bowen and Ostroff, 2004). A strategy of innovation should foster adoption of HRM practices that share a focus on innovation; a strategy of customer service should be linked to a set of practices that center around service. They say that HRM systems influence employee attitudes and behavior, as well as organizational outcomes, through employee interpretations of the work climate. In other words, HRM practices lead to employee knowledge, skills, and abilities (KSAs) that, in turn, influence firm performance at the collective level (Schuler and Jackson, 1995). However the link between HRM practices and employee behavior lies in line managers' behavior. For it are line managers that implement and communicate HRM strategies and practices into the daily work of employees.

Bowen and Ostroff (2004) focus on climate in their research because of the interest in multilevel relationships, since both psychological climates, as individual-level perceptions and organizational climate as a shared perception at the firm level have been positioned as mediators of the relationship between HRM practices and performance (e.g., Kopelman et al., 1990; Ostroff and Bowen, 2000). Additionally, they claim, that climate is an appropriate construct for developing framework, based on the recent emphasis on climates around strategic objectives that are purported to enhance effectiveness (e.g., Schneider, 2000). Climate can be either psychological or organizational. Psychological climate, as Schneider (1990) puts it: is an experiential based perception of what people "see" and report happening to them as they make sense of their environment. This is relative to the goals the organization pursues; how employees are to perform their daily activities; the management practices under which employees work; and the perceptions of the kinds of behaviors that management expects, supports, and rewards (Schneider, Brief, and Guzzo, 1996). On the other hand, organizational climate is a shared perception of what the organization is like in terms of practices, policies, procedures, routines, and rewards, what is important and what behaviors are expected and rewarded (e.g., James and Jones, 1974; Schneider, 2000). It is based on shared perceptions among employees within formal organizational units (Bowen and Ostroff, 2004). This theory also confirms the expected reciprocal behavior in social exchange theory. Line managers on one hand translate HRM practices for organizational climate into work floor policy to influence employees. On the other hand line managers can also behave or act towards employees

on a psychological climate basis, so that employees know what behavior is expected or desired. For example, employees can receive boni from line manager when they behave innovatively.

Signaling certain messages, such as receiving boni for innovative behavior, leads us to the theory of signaling. This theory by Michael Spence is based on the fact that when two parties (individuals or organizations) have access to different information, the sender must choose whether and how to signal the information and the receiver must choose how to interpret it (Connelly et. al, 2011). Let's assume that the signal that is being sent, is the information that innovative behavior is favorable for the company and that it leads to boni. When the signal intensity is high, thus the signal that line managers find innovative behavior favorable, and the employee choses to receive this information and act upon it, innovative employee behavior is the benefit that line managers receive. This theory again shows that creating an innovative climate, by sending and receiving strong signals about innovative behavior, is important. And it can be linked to the social exchange theory, that says when employees show innovative behavior and they signal this to their line manager, they will be rewarded by the manager for their innovative behavior.

## 2.2 Innovative employee behavior

Innovative behavior can be defined as *an individual's behavior that aims to achieve the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures* (Farr and Ford, 1990). This definition shows that innovative employee behavior is closely related to employee creativity. Theories about innovation have repeatedly claimed that innovative behavior is broader than only creative behavior and that it also includes the implementation of ideas (King and Anderson, 2002). In other words, innovative employee behavior does not only include idea generation, but also behaviors that are necessary implement ideas and achieve improvements that will enhance personal and/or business performance (De Jong and Den Hartog, 2008). Creativity can be defines as the production of a new and useful idea that concerns products, services, processes and procedures (Oldham & Cummings, 1996; Amabile, 1988). Despite the similarities, there are also differences between creative and innovative employee behavior. West and Farr (1990) and Scott and Bruce (1994) say that unlike creative employee behavior, innovative behavior is explicitly intended to provide some kind of benefit. Innovative behavior has a more clear applied component and is expected to result in innovative output. However, creative employee behavior is a very crucial component of innovative employee behavior, especially in the beginning of the process (De Jong and Den Hartog, 2008). West (2002) adds that when problems of performance gaps are recognized and ideas are being generated in response to a perceived need for information, the creativity plays an important role in innovative behavior.

Zaltman et al. (1973) and Axtell et al. (2000) state that innovation theorist often describe the innovation process in two main phases, the initiation and implementation. The first stage/factor, is when the innovative idea is first adopted, the second phase is when the decision is made to implement the innovation (King and Anderson, 2002). De Jong and Den Hartog (2007) call these phases idea generation and application behavior.

When looking into innovative employee behavior more detailed, the theory of Kleysen and Street becomes interesting. Kleysen and Street (2001) discovered the principle dimensions of innovative behavior, they found five phases to categorize behaviors associated with individual

innovation. The first phase, opportunity exploration, related to the metaphor of traveling extensively through innovation opportunities in order to learn or discover more about them. The second phase, generativity deals with behaviors directed at generating beneficial change for the purpose of growing organizations, their people, products, processes and services. The third phase, formative investigation is concerned with giving form to and fleshing out ideas, solutions and opinions and trying them out through investigation. The fourth phase, championing, consists of the socio-political behaviors involved processes of innovation which are essential to realizing potential ideas, solutions and innovations. The fifth and final phase, application, involves working at making innovations a regular part of business as usual. In the table below, the five phases are presented along with the employee behavior per phase:

**Table 1. Innovation behavior phases and employee behavior (Kleysen and Street, 2001)**

Innovation behavior phases	Employee behavior
Opportunity exploration	Paying attention to opportunity sources Looking for opportunities to innovate Recognizing opportunities Gathering information about opportunities
Generativity	Generating ideas and solutions to opportunities Generating representations and categories of opportunities Generating associations and combinations of ideas and information
Formative investigation	Formulating ideas and solutions Experimenting with ideas and solutions Evaluating ideas and solutions
Championing	Mobilizing recourses Persuading and influencing Pushing and negotiating Challenging and risk-taking.
Application	Implementing Modifying Routinizing

As is shown in this table, every innovation phase had its own innovative employee behavior. However for this research it is not enough to know employee behavior for all innovative phases, the line manager behavior that can influence employee behavior is much more interesting. The next paragraph will give more insight into line manager behavior that can influence innovative employee behavior per innovation phase. Still, it is also interesting to know why some employees are innovative and some are not.

The main force through which individuals allocate effort to generate and implement innovative ideas, is motivation (Hartmann, 2005). The motivation to be innovative is at its highest level when employees have a strong identification with the organization. Therefore the company has a great role in creating this identification. Employees will then be motivated to

go beyond their designated role and get involved in spontaneous and innovative activities. The company plays a critical role in motivating innovative behavior, because it can create commitment among employees and create an innovative climate. When the company shows that they believe in innovation as an organizational value and when innovation-related norms prevalent the climate can be innovative (Hartmann, 2005). Hartmann (2005) also claims that a culture that motivates new solutions and innovative improvements in particular first of all prevents ideas from getting lost in daily business. He says it is important that immediate feedback is given and communication channels are provided for implicit knowledge, allowing for autonomous work and task identity. Managers should use a comprehensive reward and incentive system for initiating innovation projects. This way, an innovative climate can be created and innovative employees can be free to create new ideas.

There is much research about innovative employee behavior. Therefore looking beyond the existing theories, it is interesting to search for other related concepts, to create a broader theoretical framework, such as intrapreneurship. De Jong and Wennekers (2008) state that employees that take an initiative in organizations to undertake something are intrapreneurs. They claim, intrapreneurship relates to the individual level and is about bottom-up, proactive work-related initiatives of individual employees. There are many definitions is intrapreneurship. Vesper (1984:295, in Sharma and Chrisman 1999) states that intrapreneurship is employee initiative from below the organization to undertake something new; an innovation which is created by subordinates without being asked, expected or perhaps even given permission by higher management to do so. Pichot (1985) defines intrapreneurs as dreamers who do; those who take hands-on responsibility for creating innovation of any kind within the organization; they may be the creators or inventors but are always dreamers who figure out how to turn an idea into a profitable reality. When reading these different definitions of intrapreneurship, it is clear that this concept is related to creative and innovative behavior.

Major intrapreneurship activities include opportunity perception, idea generation, designing a new product or another recombination of resources, internal coalition building, persuading the management, resource acquisition, planning and organizing. Key behavioral aspects of intrapreneurship are networking behavior, out of the box thinking, initiative, taking charge, championing, willful behavior, finding a way, getting the job done and some degree of risk taking (De Jong and Wennekers, 2008). De Jong and Wennekers (2008) claim that intrapreneurship is basically a sequential process and intrapreneurial activities may be grouped in three phases. The first is 'vision and imagination', then 'preparation' and 'emerging exploration'. In reality these phases may overlap, and sometimes activities are partly carried out in recurring cycles and/or in a reversed order.

### 2.3 Line managers behavior

The stimulation of employee behavior is the line manager's job. Bowen and Ostroff (2004) explain that different leadership styles create different climates, which in turn, lead to different behavioral reactions and attitudes of employees. De Jong and Den Hartog (2007), say that organizations have to capitalize on their employees' ability to be innovative in order to be a more innovative company. In their research, they aimed to contribute to the literature on individual innovation by providing an inventory of leader behaviors that may influence employees' innovative behavior. Their focus is specifically on behavior that influence employees' individual innovative efforts. Previous

scholars focused more on innovative behavior in general, however this research focused on individual innovation and behaviors that leaders in knowledge-intensive services use to stimulate innovation among their employees. De Jong and Den Hartog (2007) identified 13 leader behavior that are proposed to influence either the innovation phases: idea generation or application behavior or both. In the table below, these line manager behaviors are presented constructs (for detailed information Appendix 1):

**Table 2. Innovation behavior phases and line manager behavior (De Jong and Den Hartog, 2007)**

Innovation behavior phases	Line manager behavior
Idea generation & application	Innovative role-modelling
Idea generation	Intellectual stimulation
Idea generation	Stimulating knowledge diffusion
Idea generation	Providing vision
Idea generation & application	Consulting
Idea generation & application	Delegating
Idea generation & application	Support for innovation
Application	Organizing feedback
Idea generation & application	Recognition
Application	Rewards
Application	Providing resources
Idea generation & application	Monitoring
Idea generation	Task assignment

These types of behavior are also explained by De Jong and Den Hartog (2007). The first behavior, innovative role-modelling, is explained as being an example of innovative behavior, exploring opportunities, generating ideas, championing and putting efforts in development. The second behavior, intellectual stimulation, is teasing subordinates directly to come up with ideas and to evaluate current practices. Stimulating knowledge diffusion, means stimulating open and transparent communication, introducing supportive communication structures like informal work meetings. Providing vision is all about communicating an explicit vision on the role and preferred types of innovation, providing directions for future activities. Consulting is described as checking with people before initiating changes that may affect them, incorporating their ideas and suggestions in decisions. Consulting is giving subordinates sufficient autonomy to determine relatively independently how to do a job. Delegating, the sixth behavior is acting friendly to innovative employees, being patient and helpful, listening, looking out for someone's interests if problems arise. Then comes, support for innovation, which is ensuring feedback on concepts and first trials, providing feedback to employees, asking customers for their opinion. Organizing feedback is typed as showing appreciation for innovative performances. Providing financial/material rewards for innovative performances is labeled as rewards. Providing resources means providing time and money to implement ideas. Monitoring ensuring effectiveness and efficiency, checking-up on people, stressing tried and tested routines (negative relationship). The last behavior type, task assignment is about providing employees with challenging tasks, make allowance for employees' commitment when assigning tasks.

The research of De Jong and Den Hartog (2007) shows that the range of identified leader behaviors is wide: as a

leader it seems impossible not to affect employees' innovative behavior. De Jong and Den Hartog revealed leader behaviors that can serve as a direct trigger to influence employees' idea generation and/or application efforts, but we also highlighted the impact of some general leader behaviors that are displayed as part of any leading profession. They claim that leaders vary in the extent to which they typically display consulting, delegating and monitoring behavior. These practices are likely to have a huge impact on employees' idea generation and application behavior. Actions, leaders can use to enhance individual innovation among their employees are consults on a structural base, ensuring that employees have sufficient autonomy in deciding how to go about their task, and support and recognize people's initiatives and innovative efforts. When companies want to encourage idea generation and application, they have to create a positive and safe atmosphere that encourages openness and risk taking. De Jong and Den Hartog (2007) also claim that excessive monitoring can have a negative effect, nevertheless some degree of monitoring is necessary to secure the effectiveness and efficiency of the firm's current operations. One should create a balance between stimulating innovative behavior and ensuring short-term effectiveness and efficiency for the company. Table 2 also contains behaviors shown by leaders with the explicit purpose of influencing individual innovation. For example, communicating a vision that explicitly incorporates the role and preferred types of innovation can stimulate idea generation and application behavior. Other example to stimulate this behavior is directly stimulating and probing employees to generate ideas, supporting open and transparent communication, creating knowledge sharing and diffusion, and assigning challenging tasks to employees. External contact on a frequently basis also seems to spark ideas. However, when the decision is made to implement a promising idea, additional risks are involved. It takes time and money to implement, but returns are never guaranteed. Also, when suggestions are never implemented people become de-motivated. Therefore, resources like organized feedback are needed to enhance employees' motivation and ability to reach successful implementation. It may also help to provide financial rewards to encourage the desired behavior (De Jong and Den Hartog, 2007).

All these forms of line manager behaviors can be used to influence innovative employee behavior. But to take it to another level, and to make it more concrete, the five phases of Kleysen and Street (2001) can be used to make a clear distinction to which line manager behavior can be appropriate in which phases (see table below). The line manager behavior was originally only categorized into two phases: idea generation and application. However, by using the explanation of each behavior type I managed to place these behavior types within the five phases.

**Table 3. Innovative employee and line manager behavior (Based on De Jong and Den Hartog (2007) and Kleysen and Street (2001))**

Innovation behavior phases	Employee behavior	Line manager behavior
Opportunity exploration	Paying attention to opportunity sources Looking for opportunities to innovate Recognizing opportunities	Intellectual stimulation Stimulating knowledge diffusion Providing vision Delegating

	Gathering information about opportunities	Innovative role-modelling Recognition
Generativity	Generating ideas and solutions to opportunities Generating representations and categories of opportunities Generating associations and combinations of ideas and information	Consulting Support for innovation Task assignment
Formative investigation	Formulating ideas and solutions Experimenting with ideas and solutions Evaluating ideas and solutions	Organizing feedback Monitoring
Championing	Mobilizing resources Persuading and influencing Pushing and negotiating Challenging and risk-taking.	Organizing feedback
Application	Implementing Modifying Routinizing	Rewards Providing resources Recognition

### 3. METHODOLOGY

The methodological chapter of this thesis is separated in two paragraphs, data collection and data analysis. To gain as much insight and depth as possible, I have chosen for qualitative empirical research. There are different ways to do a qualitative study, one of them is the case study. A case study implies that attention is directed to a specific case or phenomenon (Babbie, 2007). This research is a qualitative case study. The case that is selected for the research is a company called Thales Group, situated in Hengelo, the Netherlands.

#### 3.1 Case selection

Thales Nederland is the Dutch branch of the international Thales Group. This company has about 2,000 employees working at branches in Hengelo (HQ), Huizen, Houten, Delft, Enschede and Eindhoven. It specializes in designing and producing professional electronics for defense and security applications, such as radar and communication systems. Moreover, Thales Nederland acts a local point of contact for the complete portfolio of the Thales Group (Thales Group, 2014a). The reason I have chosen Thales Group for this case study is because the company claims to be an innovative organization. Thales Group says that their headquarter in Hengelo, is a relatively small company. Nevertheless, it offers the broadest naval radar portfolio in the world and Thales has become the second largest naval radar producer in the world. According to Thales Group (2014), in the more than 90 years of its existence, Thales Nederland has established a tradition of being highly innovative. For instance, in the sixties, the company was the



first to develop a digital fire control radar. More recently, Thales Nederland proved to be the first to produce a naval surveillance radar that is capable of detecting and tracking a Tactical Ballistic Missile. At present the company is focusing its innovative powers on the development of an integrated sensor mast that will again redefine the standard in naval radar technology (Thales Group, 2014b).

## 3.2 Data collection

For this research I have interviewed six people that work at Thales Group in Hengelo. Three line managers and from each line manager one employee have been interviewed through semi-structured interviews. I have chosen to interview both line-managers and employees because I believe it is of more value to use both insights. The reason that I interviewed the line managers is to have an insight in their view of the innovative climate and their own behavior to influence employees' innovative behavior. It is possible that managers think that they are stimulating employees to be innovative, however that employees do not feel free to behave innovatively. Therefore line managers can believe that they send strong signals about innovative behavior being desirable, however if these signals are not received then the signal was not strong at all. That is why I have chosen to interview three employees as well, so I can check whether the signaling from line-managers to employees is received.

Semi-structured in-depth interviews were used for this research, because people tend to talk unstructured when it comes to innovation and behavior. Conducting in-depth interviews is based on a general plan of inquiry but not a specific set of questions (Babbie, 2007). This means that there should not be many questions structured in advance. Semi-structured in-depth interviews rely on open-ended questions. A semi-structured interview must always be clear and neutral formulated. Besides these requirements, specification of the questions is also necessary because when a questions can be interpreted in different ways, it is important that the researcher can clarify his questions (Babbie, 2007). That is why I have chosen for a maximum of eleven questions for this research (Appendix 2). These questions/topics are derived from the theoretical framework. In advance, a researcher must decide on the topics to safeguard the quality of the research. However, I also think that during the interview there must be some opportunity for the respondents to tell more than they are asked. This way, I will be able to gain more information than I expected.

The interviews are recorded and transcribed to enhance reliability. Each interview lasts about one hour. The interviews are held in the Thales Group Hengelo company location. The day of the data collection, I went to Thales in Hengelo. I had to show my passport to the security to make sure that my name was on the list of appointments. After this check I got a badge and the gates were open for me for the rest of the day. It seemed that people were not free to walk in and out of the company. Before the interviews started, I told all the respondents that they would stay anonymous because both line managers and employees can talk freely. When employees or line managers have enormous critique on the innovative climate of Thales, and their names are mentioned in this research, they will feel restricted to express their real opinion. Therefore I have chosen to keep their names anonymous.

## 3.3 Data analysis

After collecting the data and transcribing, the analysis begins. For analyzing six semi-structured interviews, coding is an

appropriate analysis method. By transcribing and coding, the validity and reliability of the data can be increased (Babbie, 2007). I will start with open coding: Little pieces of data, that are important according to the researcher, are labeled and categorized. Equal output can be grouped in a later stadium. The second step is axial coding: Different themes are systematic related. I will begin to select the first interviews and chose meaningful fragments. After this I will choose whether the fragments were meaningful for this research. Then I will give the fragments a code (a name). This process continues. However, sometimes coding loses its rich and individual information, because coding is only focused on making it analyzable. That is why I also use the method axial coding. When it seems the coding is finished, sometimes respondents can present new and rich information. Therefore I will look if all the codes were enough to cover all the data. I will also cluster the codes and make head codes to distinct them from sub codes. The next chapter will present the actual analysis. The analysis will be built upon the three sub questions the themes that are chosen through axial coding, therefore the results will be divided sections about innovative climates, innovative employee behavior and line manager behavior.

## 4. RESULTS

The main purpose of this analysis is to answer the three sub-questions of this research. However, before answering the sub-question, the general findings of the data will be presented. Thales Group is, according to the company, a very innovative company. Thales Group (2014b) states that the present focus of the company is to be innovative in radar technology development. However to be innovative, there must be room for employees to behave innovatively. According to all the respondents, Thales is indeed an innovative company. However the innovation is mostly on products instead of processes, claim the respondents. Nevertheless, innovation also occurs on processes, just not as much as on products.

*Thales is innovative when it comes to products, not so much with processes and methods. Maybe because of bureaucracy. But most innovations, like I said come for products. Perhaps innovation lies within the employees themselves. Sometimes it are just individual who act innovatively. Perhaps the company can be more innovatively. There are some people who are just geniuses, they come up with the smart innovations (Line manager 2).*

This line manager confirms that most innovation happens on the products of Thales. She also believes that innovation mostly comes from the employee himself. All the other respondents have the same opinion. Line managers state that they have both innovative employees and non-innovative employees even though they receive the same line manager behavior or HRM practices.

### 4.1 Innovative climate

Analyzing the data, it became clear that even though innovative behavior indeed comes from the employee themselves, because in the same team, under one line manager both innovative and non-innovative employees are appearing. Nevertheless the company's climate seems to have a big role in stimulating this innovative behavior. Sometimes these types of companies have such an innovative climate that line managers are not really aware of their behavior to stimulate it. It seems like a second nature to them. It is only after asking certain questions it became clear that line managers indeed use particular behavior or actions to stimulate an innovative climate.

*Innovation is in our culture. So even if I don't tell my employees, they will see it on the work floor in their day-to-day activities (Line manager 1).*

*My team is loaded with work tasks for 80%, the other 20% is free for innovation. However not every department has this policy. Some departments really depend on innovation, those departments have this amount of free hours (Line manager 1).*

These quotes show that innovative climates can be implemented either on a psychological or organizational level. To create an innovative climate, signals have to be strong. Employees have to receive signals that innovation is desirable. Therefore line managers must send these signals. This is possible in different ways, the most obvious way is to tell employees that innovative behavior is desirable. This way line manager send signals about desirable behavior towards their employees. It is up to the employees to choose to receive this signals or not. Line managers can try to send these signals about desirable behavior to their entire team, but the line managers claim that not every employee is acting innovatively, therefore the receiver of the signal is also an important part of the success of an innovative climate. Either way, line managers have to send the first signal in order to make it clear that innovative climates and behavior is a positive thing. The following quote shows how a line manager can start by signaling at a very early stage:

*When an employee starts to work here. I immediately tell him/her that Thales has an innovative climate and that innovation is something valuable. When employees act innovatively, they sometimes get rewarded for their innovation. However, not too much, because we noticed that too much rewarding does not automatically lead to more innovation. Sometimes recognition is enough (Line manager 1).*

This quote confirms that signaling is important and that line managers can use this for creating an innovative climate. This quote also shows that rewarding too much does not necessary lead to more innovative behavior. At Thales Group, not every line manager rewards his employees for innovative behavior with boni. Some line managers use recognition as a reward. During the interviews it became clear that every line manager has his own way of creating an innovative climate. It also became clear that some departments have a higher innovative climate than other departments. For example the design and engineering departments have the highest innovative climate, for it is up to these department to create innovative products. Thales is an innovative company because its products are innovative, thus the departments creating these products must have the highest innovative climate in order to stay innovatively.

## 4.2 Innovative employee behavior

According to all the respondents, not all employees act innovatively. During the interviews it showed that line managers can try to influence employee behavior, but it is still up to the employee to act innovatively or not. When asking the respondents, if there are typical sorts of employees that act innovatively, it seemed that most MBO leveled employees act less innovatively than HBO leveled employees. Another fact is that line managers claim that older employees, that have been working at Thales Group for many years, seem to act more innovatively. This is because these employees are more familiar with the day to day work and therefore seem to have more time to act innovatively. Nevertheless, line managers state that when employees want to act innovatively, they will do it when the climate is innovative. Even though several departments have higher innovative climate. Even in the less innovative departments, innovative employee behavior is seen. The

following quote shows that innovative employee behavior can be in many different ways:

*There is a type of dangerous material that we use during our entire system. We all saw this as a problem, so one day an employee came up with some ideas on how to make it less dangerous. The art in this process, is to streamline it so that he can eventually build this actual innovation. He built it and later on it was implemented into our entire system. This can be actually seen as an innovation, however I never saw it like that. We just wanted to make a good product and we think of ideas around that product (Line manager 2).*

This employee behavior shows the idea generation and application/implementation. In the next quote, more phases are mentioned. It seems that innovative employee behavior has different phases, this is important to know because each phase needs another type of line manager behavior to stimulate the innovative employee behavior. It became clear, during the interviews, that both line managers and employees are not aware of this and that they see these phases as something natural. It is not that line managers are intentionally acting in a certain way during a certain phase. Therefore the interview question that literally asked to describe the entire process of innovation and the line manager behavior during every step of this process. Through the answers to this question, the entire innovation process, steps and both employee behavior and line manager behavior was shown very clear. The following quote shows this description of the innovation process:

*Once I had to make a new filter tester. There were many drawings for this new idea. However I chose to change the concept completely. This way we could test automatically and the tester could produce less expensive. After I chose not to use the existing drawings, I started drawing myself. The next step was to test my drawings with colleagues who were more experienced. After this I went to present it to my line manager. He was very positive about my ideas and stimulated me to go further. He also provided budget for my idea. So I made a concept and tested it on functionality and quality. After adapting a couple of times, my product was eventually good and I showed it to my line manager. He reacted very enthusiastic and he implemented it into our process. That gave me a very proud feeling (Employee 1).*

The quote shows more phases in the innovation process than the earlier quote. All employees and two of the line managers describe these same phases. It shows that the employee recognized an opportunity (phase 1). He was asked for a solution, however he generated an entire different idea (phase 2). He also experimented with his new idea (phase 3). He persuaded his colleagues and manager (phase 4). And eventually the idea was implanted and routinized (phase 5). This means that these phases are indeed present in the innovation process at Thales Group. This makes it more interesting to see how line managers can influence employee behavior per phase. When these phases are indeed present, each phase must also have typical line manager behavior to influence the innovation.

## 4.3 Line manager behavior

The collected data has shown that signals are important to create an innovative climate and that there are indeed more than two phases in the innovation process with different types of employee behavior. Still the question remains, what type of line manager behavior leads to innovation. During the interviews, both line managers and employees were asked to describe line



manager behavior per phase. The quote below shows a good example:

*In the first phase, I inform them about the opportunity they have to act innovatively. I also make sure that they are not overloaded with work, so that they don't have time to innovate. The second phase, is the idea generation. During this phase employees come to me. What I do to stimulate them coming to me is that I am available to them and try to be open, so that they don't see it as a big step to come and talk to me. To stimulate innovation, line managers have to be accessible and approachable. During the third phase, when they have to experiment with the innovation, I tend to let them experiment with new technologies, in forms of courses. The fourth phase is very important for the success of the innovation. During this phase the employee presents the innovation and I make a business case to see if the innovation has a return on investment. When I approve, I stimulate them and motivate them to implement their innovation. The actual implementation happens in the fifth phase, during this phase the employee presents his innovation to the colleagues. Then I have to 'give an ok' and the innovation can be implemented (Line manager 1).*

It seems that line managers have a huge role in the success of the innovation process. During the interviews it became clear that when employees have certain innovative ideas, they have to persuade their line manager in order to be able to implement the innovation. Therefore the right line manager behavior during the right phase is important for the stimulation of innovative employee behavior. When line managers are not enthusiastic about a certain innovative idea, they can shut off the entire innovation process and prevent innovative behavior from happening. Thus line managers have to understand the role they have in stimulating employees to act innovatively. The next quote shows that line managers indeed have to be persuaded to help their employees during the innovation process, because if the line managers do not help their employees, the implementation of the innovative idea is hardly possible.

*The period of perseverance and persuading costs the most money, also building the innovation. My involvement varies in these situations. When I am convinced I get really enthusiastic, and I stimulate them to go further. But when I don't understand the innovation the employee is on his own. When I see that they need help, I provide help (Line manager 2).*

Thus line managers can either stimulate or not, whenever they believe in the innovation, employees can expect a lot of support from them. But if not, the employee has to do it on his own. Off course line managers have to be critical towards innovations because only innovations that have a return on investment are worth it to invest in. Still the employees at Thales Group feel very stimulated by their line managers and claim that employees have their own choice whether to act innovatively or not. But that the line managers create a certain innovative climate, where every employee know that he/she has the freedom to innovate.

*I get all the freedom from my line manager to be innovative. The line manager makes sure that she is approachable and she is very involved in all the processes. At the end it is up to ourselves to innovate (Employee 2).*

Again this quote shows that innovative behavior can be influenced by line manager behavior. When line manager are approachable and they stimulate employees to be innovative, the employees who want to be innovative will be able to act innovatively. Off course the motivation of employees to act innovatively also plays an important role. Nevertheless, line managers have a huge amount of influence on employee

behavior, from stimulating to organizing feedback, rewarding and implementing.

The following table will show which types of behavior is found through the data collection. The innovative employee and line manager behavior that is found at Thales Group will be in cursive. The last column shows the innovative behavior types from the results of this research that are mentioned as examples.

**Table 4. Innovative behavior based on the results.**

Innovation behavior phases	Employee behavior	Line manager behavior	Results
Opportunity exploration	<u>Paying attention to opportunity sources</u> Looking for opportunities to innovate <u>Recognizing opportunities</u> <u>Gathering information about opportunities</u>	<u>Intellectual stimulation</u> <u>Stimulating knowledge diffusion</u> Providing vision Delegating <u>Innovative role-modelling</u> <u>Recognition</u>	During first conversation with new employee, innovative behavior is signaled as desirable  Line manager informs employees about innovative behavior opportunities  Stimulation innovation by saving 20% workload for innovative behavior
Generativity	<u>Generating ideas and solutions to opportunities</u> Generating representations and categories of opportunities Generating associations and combinations of ideas and information	<u>Consulting</u> <u>Support for innovation</u> Task assignment	Generating ideas and solutions for the filter tests  Line manager makes sure he is available and approachable
Formative investigation	<u>Formulating ideas and solutions</u> <u>Experimenting with ideas and solutions</u> <u>Evaluating ideas and solutions</u>	<u>Organizing feedback</u> Monitoring	Employees test the drawing with colleagues  Line managers stimulates employees to test new technologies.
Championing	Mobilizing recourses <u>Persuading and</u>	<u>Organizing feedback</u>	Employee presents filter tester to line

	<u>influencing</u> Pushing and negotiating <u>Challenging and risk-taking.</u>		manager. Line manager stimulated employee to proceed  Line managers makes a business case to see if innovation has ROI
Application	<u>Implementing</u> <u>Modifying</u> <u>Routinizing</u>	<u>Rewards</u> <u>Providing resources</u> <u>Recognition</u>	Boni  Line manager provides budget for innovation filter tester  Filter tester implemented and routinized  Employee proud feeling because of line manager's recognition  Line manager stimulates employees to implement innovation and 'gives ok'

## 5. CONCLUSION

The main question of this research was: *How can line managers shape innovative climate and behavior among employees?* To answer this question a qualitative case study has been done. Three line managers and three employees at Thales Group Hengelo were interviewed.

Line managers are able to shape an innovative climate. The most important part in shaping this climate is the knowledge they have in that they have this power to shape the climate. When line managers understand their own impact in the work floor climate, this is the first step. After knowing their own impact, they can start by sending strong signals about the desirableness of innovation. These signals are important because if the signals are not sent, the employees will not know that innovative employee behavior is desirable. Line managers have different ways of sending these signals. They can start during the job interview by mentioning that Thales is an innovative company and that innovative employee behavior is desirable. Besides this, line managers can provide employees with time, so that employees have the freedom to innovate. Because even if employees know that innovative behavior is desirable, and if they have an innovative idea, when they do not have time for it, they will not create an innovation. Line managers can also show recognition to show appreciation for

innovative performances of other employees, this way their colleagues will see the recognition and will know that the climate to innovate is present.

Besides creating an innovative climate, line managers are also able to shape innovative employee behavior. This shaping can be through the five different innovation behavior phases. During the first phase line managers claim to signal that innovative behavior is desirable. This signaling starts during the first conversation, during the interview with the employee. Line managers also inform their employees about innovative behavior opportunities. This can be typified as intellectual stimulation. Line managers also stimulate innovation by saving 20% of the employee's workload for innovative behavior. During the generativity phase, when employees are generating ideas and solutions to opportunities, line managers make sure that they are available and approachable. This way they give support for innovation. When employees are formative investigating, employees test the drawing with colleagues. Line managers stimulate employees to test new technologies and organize feedback. During the fourth phase, championing employees presents their innovation to their line manager. The line manager stimulates his employee to proceed and makes a business case to see if the innovation has return on investment. The last phase in the innovation process is application. Line managers reward their employees with recognition and boni. Line managers give an ok and also provide budget for innovation implementation and routinizing processes.

It is important that line managers are aware of the impact they have in shaping innovative climates and employee behavior. To stimulate employees in acting innovatively, line managers should be aware of the fact that stimulating is important through every phase of innovation. When line managers do not provide time, employees will not be able to innovate. When line managers provide time but are not approachable, employees will not easily go to their line manager to talk about their innovation. Thus each phase is important to stimulate.

## 5.1 Discussion and practical implications

The conclusion of this research shows that line managers can indeed shape an innovative climate and innovative employee behavior. When comparing the used literature of this study to the results and analysis, based on the interviews that were conducted, it can be stated that most collected data is in accordance to the literature and theories of this research. First of all, innovative climates can be shaped by signaling and the social exchange theory. During the interviews it became clear that line managers indeed use signaling to let employees know that innovative behavior is desirable. Thus the used theories about shaping innovative climates are visible in the analyzed data. Nevertheless, the collected data also shows that it is still up to the employees to choose to act innovatively. Hartmann (2005) also states that the main force through which individuals allocate effort to generate and implement innovative ideas, is motivation. Thus the second line manager's statement that most innovations come from the employees themselves, is in accordance with Hartmann (2005). However, even when employees want to be innovative and have the motivation. The motivation is at highest level when employees have a strong identification with the organization and the company has a great role in this (Hartmann, 2005). The fact that motivation has this much impact on innovative employee behavior, shows that despite every policy, HRM strategy, line manager behavior or signals, the employee decides in the end either to act innovatively or not.

Employees can commit towards their job and are influenced by the quality line manager behavior and by satisfactions with the HRM practices is stated by Purcel and Hutchkinson (2007). It is important that employees know that innovative behavior is desirable. Signals can be sent by line managers that innovative behavior is desirable and also make sure that the climate is innovative. Schneider (1990) makes a difference between psychological and organizational climate. Psychological climate focusses more on the employee's daily activities and individual behavior, whereas organizational climate focusses on practices, policies, procedures, routines and rewards thus a collective behavior or company culture. This distinction in innovative climate is also shown in the quotes of the first line manager. In one quote he claims that innovation is in their culture so he doesn't have to tell his employees because they will notice it on the work floor during their day-to-day activities. He adds that he loads his employees with only 80% of work activities so that they will have 20% of their time for innovative behavior, this can be seen as an organizational climate. An example of psychological climate behavior can be seen through the approachableness of the line manager towards employees to stimulate innovative behavior.

This line manager also mentioned that he rewards his employees for innovative behavior, but that this reward is not extremely because Thales Group believes that too much rewards don't lead to innovative behavior. Again, this is much in accordance with the social exchange theory, that claims the more innovative behavior has been rewarded in the past, the more likely employees will act innovatively. However that the more often in the recent past an employee has received a reward for innovative behavior, the less valuable any further unit of that reward becomes. Besides the social exchange theory, the signaling theory is also used for this research. Both theories were very useful for this research. First, the social exchange theory is useful because the stimulation of innovative behavior starts with the exchange between line managers and employees. Line managers which have a good relationship with their employees can stimulate and motivate them easier as a line manager that does not have a good relationship. The signaling theory is an addition on the social exchange theory, because signals that are strong and are received can lead to more innovative behavior. When the employee rates his relationship worth a lot it is still up to the signals for employees to know that innovative behavior is desirable.

When asking the respondents to describe an innovation process it became clear that more phases were described than just idea generation and implementation. The different phases that were described by the respondents can all be compared to the typical line manager behavior by De Jong and Den Hartog (2007). This whole process shows that line manager can use different types of behavior to stimulate innovation. All the types of behaviors are comparable to the behavior types that De Jong and Den Hartog (2007) describe. These behavior types were not shown during the interview, because the whole point was to check whether these types were mentioned. When looking at all these types, it is important to state that during every phase, a line manager behavior is important. Stimulating employees during the first phase is not less important than providing resources or organizing feedback. Every phase needs line managers to stimulate by behavior. However line managers do have a large amount of impact on the success of the innovation process.

## 5.2 Limitations and further research

This research is conducted for the purpose of a bachelor thesis. Due to lack of time, the numbers of respondents is limited.

Therefore the external validity is threatened. Not only the fact that one company such as Thales Group, can't be representative for all companies, but also because the sample of the respondents is not representative for the entire Thales Group company. Only the location in Hengelo has about 2000 employees. Therefore generalizability is not possible for this research. To tackle this limitation, further research can be conducted by using a bigger sample. When it is done at different companies the representation will be even more enhanced.

The second limitation of this research is the threat of selection. When respondents are selected for the study, the groups can be not equivalent. Besides this, the selection of respondents was made by one line manager, therefore he was able to provide me with respondents who all had the same view. To prevent selection, random sampling can be a solution. This way, all 2000 employees would have had the equal chance of being interviewed. However, again the lack of time lead to selection. Besides time, it would take the cooperation of the Thales Group president to get the opportunity to use his files of all employees in order to sample randomly. For future research, random sampling can be used to enhance the validity.

## 6. ACKNOWLEDGEMENTS

To write this research I have had very much support and inspiration from several persons. I would like to thank every person that supported me and gave me the inspiration that I needed. First of all, I would like to thank Thales Group Hengelo for giving me the opportunity to interview their line managers and employees. The respondents were very open during these interviews and I would like to thank them for their time and openness. When I began this research, I saw that Anna Bos-Nehles would be my supervisor. Through this acknowledgement I take the opportunity to thank her as well. From the beginning she was the one who gave me feedback in a clearly and good way. Besides that, in a period that I had no inspiration and I got stuck, she was very flexible towards me and she gave me the motivation to go on. In a later stage, my second supervisor Jan de Leede was also very motivating and inspiring. I would also like to thank him for the final motivation and inspiration. Last but not least, I would like to thank my wife, Sofia Mutlu- Numansen. She is the overall inspiration in my life and she supports me whenever and wherever is possible. Sofia also did that, of course, during this entire process.

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## Appendix 1: Line manager's behavior

<b>Innovative role-modelling</b>	Being an example of innovative behavior, exploring opportunities, generating ideas, championing and putting efforts in development	Idea generation & application
<b>Intellectual stimulation</b>	Teasing subordinates directly to come up with ideas and to evaluate current practices	Idea generation
<b>Stimulating knowledge diffusion</b>	Stimulating open and transparent communication, introducing supportive communication structures like informal work meetings	Idea generation
<b>Providing vision</b>	Communicating an explicit vision on the role and preferred types of innovation, providing directions for future activities	Idea generation
<b>Consulting</b>	Checking with people before initiating changes that may affect them, incorporating their ideas and suggestions in decisions	Idea generation & application
<b>Delegating</b>	Giving subordinates sufficient autonomy to determine relatively independently how to do a job	Idea generation & application
<b>Support for innovation</b>	Acting friendly to innovative employees, being patient and helpful, listening, looking out for someone's interests if problems arise	Idea generation & application
<b>Organizing feedback</b>	Ensuring feedback on concepts and first trials, providing feedback to employees, asking customers for their opinion	Application
<b>Recognition</b>	Showing appreciation for innovative Performances	Idea generation & application
<b>Rewards</b>	Providing financial/material rewards for innovative performances	Application
<b>Providing resources</b>	Providing time and money to implement ideas	Application
<b>Monitoring</b>	Ensuring effectiveness and efficiency, checking-up on people, stressing tried and tested routines (negative relationship)	Idea generation & application
<b>Task assignment</b>	Providing employees with challenging tasks, make allowance for employees' commitment when assigning tasks	Idea generation

(De Jong and Den Hartog, 2007)



## **Appendix 2: Interview question**

### **Interview line managers**

1. Could you introduce yourself?
2. How did you end up working at Thales?
3. Could you describe your work tasks at Thales?
4. How innovative is Thales, and how is this shown?
5. Which way is it clear on the work floor that Thales seeks to create an innovative climate?
6. How do you stimulate innovative behavior among your employees?
7. How are employees rewarded for innovative behavior?
8. If you look at your team, what is the ratio between employees that are innovative and people that are not?
9. How do you react on employees that are not innovative?
10. Can you give a specific example of an innovative employee and the entire process of the innovation.
11. If you take a look at the five phases of the innovation process presented by Kleysen and Street (2001), can you describe your own behavior?

### **Interview employees**

1. Could you introduce yourself?
2. How did you end up working at Thales?
3. Could you describe your work tasks at Thales?
4. How innovative is Thales, and how is this shown?
5. Which way is it clear on the work floor that Thales seeks to create an innovative climate?
6. How does your line manager stimulate innovative behavior among employees?
7. How are employees rewarded for innovative behavior?
8. Have you ever shown innovative behavior? If yes, describe the entire process.
9. If you look at your team, what is the ratio between employees that are innovative and people that are not?
10. If you take a look at the five phases of the innovation process presented by Kleysen and Street (2001), can you describe your line managers behavior?