

MASTER

The study of the relationship between employee's risk attitude and sales performance of KPN

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The study of the relationship between employee's risk attitude and sales performance of KPN

by

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Abstract

Purpose – Risk issue in the sales domain is not widely studied currently. This study aims to find the relationships between different types of risk attitude and sales performance. The resulting model enables sales managers and risk managers to pinpoint exactly where improvements of managing risk in the sales process should be made in order to enhance the sales behavior and competence of sales people.

Methodology – A conceptual model was developed based on studies about risk attitude and performance. We collected objective sales data within KPN and survey data from KPN salespersons. Then, we conducted regression analysis to test and empirically validated the model.

Findings – Three out of four types of risk attitude (Governance, Compliance, Strategic & Planning and Operational) are shown to be significant drivers of some sales performance indicators. The attitude of taking governance risk has a negative impact on sales performance, while the attitude of taking strategic and operational risk has positive impacts.

Theoretical implications – Risk attitude is proven to be a substantial trigger of performance and behavior in the sales domain. Four types of risk attitude have different influences on sales performance, but they should be valued equally.

Practical implications – In order to enhance the competence and behavior of salespeople with the help of risk management, internal training of managing risk should be conducted, and especially regulation and performance evaluation of rewarded risk should be introduced.

Key words – risk attitude, risk taking, managing risk, sales performance,

Preface

This master thesis is the result of my graduation research at KPN. It is also the last stage of my master program of Innovation Management at the Eindhoven University of Technology (TU/e). The project was conducted under the supervision of the department of Industrial Engineering & Innovation Science (IE&IS).

This journey also means that my career as a student has come to an end. The time spent on the project and at KPN leaves me great wealth and unforgettable memory. It was a period of both experiencing the operation of such a successful company and personal improvement. I would like to acknowledge the people accompanied with me along the journey.

First of all, I would like to thank my mentors from TU/e—Dr. Ad de Jong and Dr. Umut Konus for their tirelessly help suggestions and critiques. Adapting relevant theory in the practical situation in an academic way would not have been possible without your supervision.

Second, I want to thank Michel Degeling for giving me so many insights whenever I came across problems. I've also learned a lot about how to communicate with colleagues and adjusted my passive attitude through the study. All the professional experience and alternative solutions will be a fortune for me. I also want to say thanks to Harold Bredewold for helping me to finalize the questions and gather the sales figures, and Isabelle Horner for helping me to develop and deploy the questionnaire survey.

Last but not least, I'm grateful to my family, friends, roommates and everyone who supported me during the whole period, for their patience, understanding and inspiration.

Management summary

Introduction

Risk is the core and foundation of enterprise risk management, and it is always linked with uncertainty and threats. People's risk attitude is always affected by their expected or perceived value and the probability of achieving it. People's risk attitude has been widely measured by many studies in general, but we don't know a lot about people's specific risk attitude related to a specific organization.

People holding different attitude towards risk, which in turn has impacts on their behavior. Employee's behavior is affected by their risk attitude and other internal and external factors. Therefore, more understanding of people's risk attitude may help the managers to improve their control of employee's behavior, and the employee's performance.

Research methodology

The research methodology is divided into two parts, the exploratory research and confirmatory research. In the first phase, a conceptual model was developed with the help of literature review of previous studies. It linked risk attitude and sales performance based on basic relationship between attitude and behavior built up by the Theory of Planned Behavior (Ajzen, 1991). The second phase was performed in the Sales department of KPN. Salespeople serving large and SME enterprises were invited to an online questionnaire survey, and then the conceptual model is validated through quantitative analysis.

Results

The online survey was delivered to all 258 sales people working for Large and medium customers of KPN. The total number of responses obtained from the online survey was 113, resulting in a response rate of 43%.

In the test of hypotheses, sales performance was measured by two aspects. Both self-reported selling behavior (collected by questionnaire) and objective sales performance figures of the first three quarters of 2012 (provided by sales department) are used to reflect the sales performance in the model. All relationships between risk attitude and sales performance were investigated.

The results of the regression analysis indicate that most of the relationships predicted in the conceptual model are supported with at least one sales performance indicator or sales behavior indicator. Attitude of taking governance risk shows a negative impact on a large number of sales performance figures, while attitude of taking strategic & planning risk were proven to have positive impacts on

the sales performance indicator (the number of deals). No significant relationship was found between compliance risk attitude and sales performance.

Conclusion

For risk taking attitude towards four types of risk, three hypotheses were partially supported in various conditions except hypothesis about compliance risk attitude. In the test with subjective sales behavior, attitude of taking governance risk also showed a strong negative effect on three types of selling behavior along with operational risk attitude. As for the objective sales performance data, the negative relationship between governance risk attitude and sales performance still exists, and strategic & planning risk attitude and operational risk attitude possess positive impact on the number of deals made by the salespeople.

The research provides evidence that risk attitude is a substantial trigger of sales performance. Furthermore, this study shows that the attitude towards different types of risk needs to be considered separately, but of equal importance.

Reflection

The results of the research show that both positive and negative effects exist between risk attitude and sales performance. The attitude of taking governance risk, as hypothesized, has a negative impact on the sales performance. Meanwhile, the attitudes of taking strategic & planning risk and operational risk have more positive impacts on the actual sales performance. The results indicate the two sides of risk attitude. If the risk taking is about disobedience and breaking the lines, which is more related to governance risk, it will lead to worse performance. If the risk taking is more related to taking initiative and decision authority in order to try out new things, which is more related to strategic risk and operational risk, the sales performance at the end will increase. People's general risk taking attitude has a moderation effect on the relationships between risk attitude and performance. When people have a higher general risk taking attitude, two significant relationships will be stronger.

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1. Introduction

Sales is critical for the effective operation within an organization. With the increasing rate of business change, salespeople face demanding situations like rapid new product developments, corporate restructuring, and changing strategy (Rangarajan et al., 2004). Selling product often is not a routine process, so to improve sales performance is challenging. A lot of studies have been done in the field of how to improve sales performance, and most of these works have treated the characteristics of salespeople as potential predictors of performance.

Generally speaking, sales performance is supposed to be independent from enterprise risk management. However, with the internal and external changes that affect salespeople's work, challenges and risks emerge during the process of selling products. Ahearne et al (2010) and Krafft (1999) found the link between salespeople's risk attitude and their behavior. Attitude of sales people predict their behavior and performance to some extent.

Kahneman and Tversky (1979) stated that people tend to show risk aversion for gains and risk seeking for losses. People's risk attitude may change across domains. Rohrmann (2002) presented that individual risk orientations are not consistent across domains, and motivation of accepting risks also varies depending on different types of risk. He explained that different types of risk trigger individuals' different motivation of accepting it, which leads to various actual behaviors.

Kaplan(2009) introduced routine operational and compliance risks, strategy risks, and global enterprise risks as three-level risk hierarchy. Each level contains various extents of unknown, predictability and potential lethality. So far, little is known about the impact of these risks at the individual salesperson level and how these risk types affect salesperson performance. We extend the work of Kaplan on the type of risk and risk management by considering these types of risk to individual salespeople in selling products. Salespeople may show different risk attitude towards taking different types of risk, which in turn can have both positive and negative impact on their performance behavior. Therefore an important issue in this research is to study whether the direction of risk attitude's impact depends on the type of risk.

As indicated by Rohrmann (2002), individual risk taking attitude may change across domains and some other aspects. Salesperson who has a risk aversion himself could take a risk-taking move if they are constrained by sales quota of a specific product. On the other hand, people who have a risk propensity could also avoid the potential hazard if they are affected by the other attitudes (Darmon, 1997, Krafft, 1999). Therefore, people's risk attitude of taking the types of risk existing at work may be different from their general risk attitude. Whether the effect of risk taking towards

types of risk depends on people's risk taking in general is also worthwhile to be studied.

In this research, I will focus on the dominant sales department in KPN and detect whether the salespeople's different types of risk attitude have significant impacts on their performance of selling product.

1.1. Statement of the research

The previous chapter states the importance of studying the risk issues within the sales domain. Risk attitude may vary among sales people with different types of risk. The goal of this study is to investigate whether salespeople's risk attitude influences their sales performance, and to develop a model that helps to understand the relationships between them. Therefore, the main research question of this master thesis is stated as:

“To what extent drives salesperson's attitude towards different types of risk his or her sales performance?”.

Based on this main problem statement, some sub-questions are generated.

1. What are the different types of risk within the research context and their related theories?
2. Which types of risk attitude have an impact on salesperson's performance?
3. What should managers do to control salespeople's risk attitude?
4. Is the effect of risk taking towards types of risk depends on people's risk taking in general?

This research aims to improve the knowledge on people's risk attitude and performance within the sales domain. Firstly, it provides insights into which type of risk attitude drives salesman's performance. Secondly, it addresses the role of risk attitude in the sales department. Thirdly, it provides another angle of managing risk based on employee's suggestions.

1.2. Document outline

The theoretical framework by reviewing the previous literature on risk attitude, types of risk, and managing risk will be presented in section 2. Section 3 proposes the conceptual model and hypotheses, by integrating the result of literature study. Section 4 introduces the research methodology, the research context, and the development of the online questionnaire survey. Section 5 describes all the results of the data analysis to test the hypotheses. Section 6 demonstrates the both theoretical and practical conclusions, answers the research question raised in section 1.1 and explains the limitations of this study at the end.

2. Theoretical framework

This chapter describes the theoretical framework that forms the basis in the development of the conceptual model in chapter 3. It starts with a brief introduction of risk in section 2.1. In section 2.2 and 2.3, the current studies on risk attitude and types of risk are reviewed. Then in paragraph 2.2 literatures about managing risk in business context are reviewed, and the relation between risk attitude and behavior is described afterwards.

2.1. Risk attitude

2.1.1. People's risk attitude

People's risk attitude is always affected by their expected or perceived value and the probability of achieving it. People underweigh probable outcomes compared to outcomes with certainty (Kahneman and Tversky, 1979). In Prospects theory, it also stated that people tend to show risk aversion for gains and risk seeking for losses (Baird and Thomas, 1985; Bartol, 1999; Gray & Wert-Gray, 1999; Schwartz & Hasnain, 2002). Therefore, the combination of both probability and value of outcome determine the people's risk attitude.

Attitude can be defined as a "chosen state of mind, mental view or disposition with regard to a fact or state" (Hillson & Murray-Webster, 2006). One's attitude reflects his emotion and belief. It seems that risk is separate from attitude. However, risk and attitude share the same conceptual basement since they are both belief-based concepts (Stone & Mason, 1995). According to Hillson and Murray-Webster (2006), risk attitude could be defined as "a source of significant bias on decision-making and the effectiveness of the risk management process." They considered risk attitude as a part of decision-making process and measurement of risk management.

Since risk exists objectively, whether people aware of it or not may lead to different risk attitude, affecting the process of managing it. In the study of formulation of group risk attitude, conscious, sub-conscious and affective are suggested to be three primary causes of risk attitude, which in turn drives decision-making process (Murray-Webster & Hillson, 2008) as shown in Figure 1. Group consists of individuals, so the group risk attitude is the aggregation of individual risk attitude. Individual risk attitude shapes the group risk attitude and is more concerned in corporate risk management research. Krzysztofowicz (1993) even found that the group risk attitude is shaped by the individuals, but the subjects didn't show apparent tendency or whether risk aversion or risk seeking when they belong to a group. Therefore, the following content will be focused on individual risk attitude.

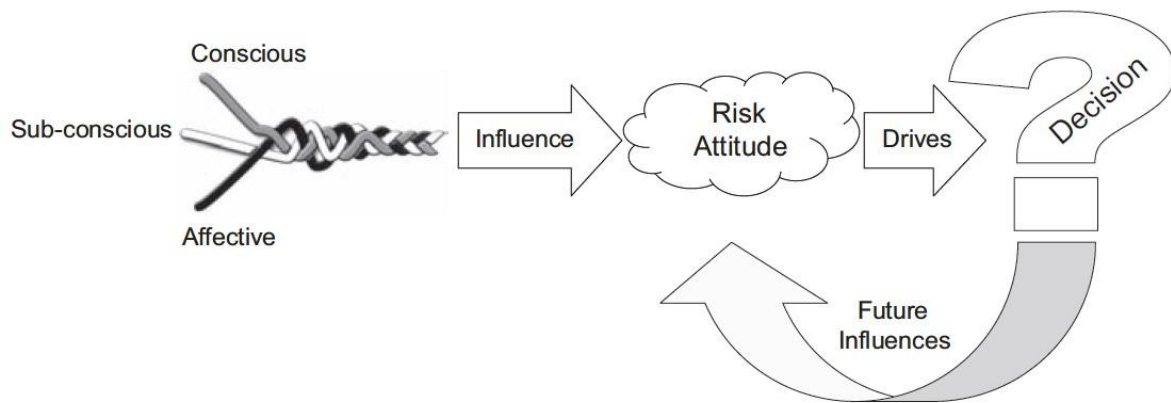


Figure 1. Influences on decision-making (Murray-Webster & Hillson, 2008)

People's thought is affected by the environment they work in and the people they live with, so as attitude. Consistency of risk attitude is an issue widely discussed in the risk literature. Consistency of risk attitude refers to the transformation of people's risk attitude in different environment or specific domain. There are many causes and potential uncertainties during business, and they are also where risks come from. Plenty of resources are gathered to help the decision-makers to make the right choice. Especially when the problem comes to risk attitude, they need more guarantee to make a risky move in an uninterruptedly changing and complex environment.

2.1.2. Risk attitude in business context

Risk attitude always relates to the role that a person played in front of a risk, so the risk attitudes from different perspectives of an organization vary. Employee and specifically salesperson's risk attitude show a relation with both organizational reason and individual reason (Darmon, 1997; Darmon, 1998; Rundmo, 2001; Shimizu & Udagawa, 2011).

2.1.3. Employee's risk attitude

Employees, as the majority in the organization, operate the company directly, so their risk taking attitude matter for implementation of any strategic and tactical decisions. Framing is one of the most frequently used methods of managers in order to helping employees making choices. Kahneman and Tversky (1979) addressed that individuals tend to make different decisions depending on how alternatives are worded or framed in risky situations. Employees prefer the alternative having a higher chance of success than the remainder. Individuals are less likely to take a major risk in order to achieve a gain (Bartol, 1999). Group size is also proven to be negatively related to people's risk-seeking attitude (Shimizu & Udagawa, 2011). They also give a different opinion about managers framing impact on employees in different group sizes. The research found that the change of people's attitude to risk does not differ across positive or negative framing, it does not lead to the disappearance of the framing effect in smaller group sizes(6 or 60 people) as proved

by the previous researchers. Employee's risk attitude is so eventful for the company since it has significant reflection on employee's behavior. The behavior of an individual is always affected by emotional and rational elements. Likewise, risk perception and behavior are made up of emotional as well as rational components. Researchers found that both the two components have effect on employee's reaction to risk. They were measured separately in most studies. Rundmo (2001) linked them together with the help of a questionnaire survey carried out among employees within 14 plants of Norsk Hydro. Individuals with higher rational judgment of risk show slightly but significantly more affective reactions to risk exposure (Rundmo, 2001).

2.1.4. Salespeople's risk attitude

Specifically, for salespeople, their risk attitude is similar to employee's risk attitude, but more relate to sales objectives or sales-oriented strategy plan. Selling objectives are the directions of sales activity, and it is the expression of sales strategy. It has a leading role in the infrastructure construction of sales department. Sales force governance system, containing basic structures (Knowledge Base, Dash-Board and Control Levers) and characteristics of sales governance (Centralized versus Decentralized, Outcome-Based versus Behavior-Based, and Quantitative versus Qualitative), relate to the selling objectives. The salesperson's risk attitudes are found to be function as a moderator of the relationship (Darmon, 1998). Sales quota-bonus plan (QBP) is always regarded as short-term application to stimulate salesperson's motivation and latent capacity. However, it also has a long-term impact on profit according to the change it brought to sales force morale and feeling of equity. Since sales quota-bonus relate salesperson's income highly to their performance and how the accomplish the set sales quota, it also leads to high risk. As expected, salesperson who is risk averse is more likely to prefer sharing risks through a low quota-bonus level, which is stood by decentralized QBP structure (Darmon, 1997). The management tools seem has a strong relationship with risk attitude of salespeople. A negative relationship is found between the adoption of more behavior-based control systems and an increase in risk aversion of salespeople (Krafft, 1999).

2.2. Type or risk

As found by studies in investment risk management and healthcare risk management, there are various types of risk affecting people's behavior. It would be interesting to find out that how risk attitude is shaped by different categories of risk in the business world.

Baird and Thomas (1985) developed a contingency model of strategic risk taking, which consists of the relationship between types of risk and risk taking attitude. They explained how risky information is spread from the environment to the problem

handler in the company. There are many causes and potential uncertainty during business, and they are also where risks come from. The specific types of risk in this research contain governmental regulation, competition, organizational values and some strategic problems.

Rohrmann (2002) provided several important definitions of main concepts of risk and risk taking attitude. Four types of new instruments of risk measuring questionnaires are examined. The results indicate that individual risk orientations are not consistent across domains, motivation of accepting risks also varies depending on different types of risk. It explains that different types of risk trigger individuals' different motivation of accepting it, which leads to various actual risk-handling behaviors.

Kaplan(2009) explored that risk management could be a key part of company's strategy execution. Basing on the strategy scorecard, he developed the risk indicator scorecard to measure the occurrence likelihood of the risky event and its subsequent adverse impact. He also introduced a risk hierarchy, which contains routine operational and compliance risks (level 3), strategy risks (level 2) and global enterprise risks (level 1) from low to high. The extent of unknown, predictability and potential lethality all increase across levels. Comparing to the level 1 risk, which is too hard to be measured and monitored in real operation, operational risk, compliance risk and strategy risk are indicated as risks that company should attempt to minimize their incidence.



Figure 2. Risk framework by Kaplan (2009)

2.2.1. Strategic risk and operational risk

Winfrey and Budd(1997) incorporated the relationship between environment and company when trying to define the strategic risks in company's risk management. They divide the strategic risks into company open risk, operation risk and competition risk. Yang(2002) also comes up with similar types of risk when studying strategic risks of group company. Environment risk, resource risk, strategy ability and developing direction are named by him.

Miccolis and Schneier(1998) studied the enterprise risk management in a luxury goods company and they develop a two-dimensional matrix to classify high-priority

risks basing on whether the risk is well-equipped and whether it has a familiar future. The four types of risk defined by the matrix are manageable risk, strategic risk, business as usual risk and adaptation risk. Strategy & planning risk and operational risk are recognized as main source of high-priority risks for company.

As for risk in project management, Vargas-Hernández et al.(2010) named seven types of risk including environment risk, technical risk, resources risk, integration risk, management risk, marketing risk and strategy risk in their competition of the importance of risk and innovation in the innovation project. Some specific type of risk, such as marketing risk and resources risk are also mentioned in the research. They contribute to the risk consideration in the operational level risk management.

Strategy & planning risk and operation risks are extensively considered in strategic risk management. A reason for this could be that implementation of strategy management always needs to consider multiple information of the company and the industry. Plenty of resources are gathered to help the decision maker to make the right choice. Especially when the problem comes to risk attitude, they need more guarantee to make a risky move in a changing and complex environment.

2.2.2. Compliance risk and governance risk

Financial risk, reputation and regulation are stated as three themes of considerable cross-sectional variation in practices by Power(2004). They play key roles in corporate operational risk management. Passive consequence led by damage to reputation and security problems are categorized into organizational impacts of risk by Knight(2006). Adverse publicity may cause public relation crisis, while localized incidents create safety dangerous for company. Davies et al.(2006) classified the business risk into three categories—processing risk, conduct risk, external risk. Threat from execution, regulation and external environment is considered in their classification.

Abrams et al.(2007) notice the increasing cost brought by mishandling of compliance problems in company. They address the incorporation of compliance risk in strategic management comprehensive manner with a research about IBM's enterprise risk management framework. Miccolis & Schneier (1998) set forth the importance of governance and compliance requirements to senior managers. They need to implement activities and manage employees according to the various regulations and governing boundaries in order to meet the shareholders' expectations.

Governance and compliance risks can be refined from the content discussed in this section. Different from rewarded risks, such as strategy risk, these two unrewarded risks also deserve to be attached importance.

2.3. Impact of risk attitude on behavior

As explained above, people may hold different attitudes towards risk, which in turn has impact on their behavior. However, there is not a fixed pattern of behavior. Salespersons who have risk aversion themselves could take a risk-taking move if they are constrained by sales quota of a specific product. On the other hand, people who have a risk propensity could also avoid the potential hazard if they are affected by the other attitudes. Therefore, we need to find out the general relationship between attitude and behavior in order to connect them together in the field of managing risk. The work of Kaplan (2009) defined several types of risk and linked them with risk management. Salespeople's individual risk attitude may also have impact on their sales performance.

2.3.1. Impact of employee's risk attitude on their behavior

In risk management, decision making is followed up with attitude towards risk. The behavior is a consequence of attitude. Risk attitude is a behavior predictor among employees.

Employees with subjective willingness to take risks tend to have a higher acceptance level of earning risk, and it also reflects in their occupation. The risk taking employees will probably work at an occupation with higher earnings risk (Bonin et al., 2007). Ghosh and Ray (1992) experimented on the impact of attitudes towards both risk and ambiguity on choice behavior. 101 undergraduate students are asked to choose from taking two different exams to pass a course (one with little ambiguity, one with more ambiguity). The results show that risk attitude to be dominant in predicting choice by comparing those taking one task versus those taking more. Ghosh and Ray (1997) explored the effect of risk attitude in decision making. 39 MBA students have to choose from four scenarios set up by defining risk and ambiguity into two levels (low and high) respectively. People who are fewer risk averse tend to show more decision confidence.

Specifically, the weightiness of sales performance in organization made it also valuable in academic research. Attitude of sales people predict their behavior and performance to some extent. Berger and Jaffe (1991) demonstrated the role of risk in determining the optimal commission rates for salespeople. In the research, they find that salesman's risk attitude affected their time allocation. The risk taking salesman may choose the time allocation strategy with higher expected commissions and also higher variability, while the risk-averse salesman may choose to earn less but also with a lower variability.

Ahearne et al. (2010) rose up some problems faced by senior managers in the new-product selling process. Selling new product could be treated as a riskier move than selling existing products, since there are not any previous experience and full of uncertainty. Salespeople's perception of new product stands for the confidence of

salespeople to sell a new product. Generally speaking, the more confidence they have, the better the result of new product sales. However, Negative relation between salespeople's perception of new product and salespeople's new product selling behavior is found during the research. The result shows that sales people with better perception of new product may lead to lower effort allocation on new product selling, which indicates a higher level of risk aversion. The adverse behavior also leads to lower performance on customer's perception of new product and worse sales performance eventually.

It seems there are few studies have been done in the area of salespeople's behavior. However, the salespeople, as employees, behave according to their attitude and affected by the surrounding environment and working atmosphere. The relationship between their risk attitude and behavior is worthwhile to be studied.

2.4. Managing risk attitudes and behaviors

People's risk attitude was affected by the environment and other internal aspects of company, and it has an impact on their performance. In order to manage people's behavior, it is sensible to manage their risk attitude. Some indication of managing risk attitude are stated in this section.

2.4.1. Managing risk

Miccolis and Schneier (1998) defined managing risk activities in enterprise level as *"a systematic approach to managing risk, which means that risk, risk factors, and mitigation programs are considered on a business-wide basis, internally and externally"*. Knight (2006) held a positive view on managing risk, and he depicts it as an integral and reduplicate process to improve existing business process. Managing risk is a systematic approach of manipulating risk internally and externally. Managing risk is a preliminary helping company to minimize the effect of threats (Power, 2004). Well-managed risk could transfer to be an opportunity of improvement and help company to break through bottleneck

Mostly, procedure of managing risk is supposed to be a systematical organization-level process of identifying potential events of uncertainty and effectively responding to it. Literatures about risk management discussed risk measurement and their added value for company or stakeholders (Collins & Ruefli, 1992). Therefore, managing the risk attitude and behavior of employees is a big issue for managers.

2.4.2. Managing risk attitudes and behaviors

As Ajzen (1991) and Cherrington (1989) described in their studies, people's attitude has a direct impact on behavioral intention, which in turn affects their performance. Basing on empirical studies, Bartol (1999) proposed that the compensation system for employees, which relates to risk and framing directly, could influence employee's

goal setting process, performance and even job satisfaction. Davies et al. (2006) came up with methodology to generate Key Risk Indicators in company's different business functions, and listed causal drivers for different types of operational risks. Human factor—people's risky behavior (turnover, fraud and theft) is one of the key drivers of various operational risks. Kaplan (2005) introduced the risk indicator scorecard by combining the occurrence probability and the consequence of the event. These help managers to determine the proper risk assessment and priority of mitigation initiatives, and more significantly, they create a general risk guide for employees.

In the previous section, we introduced how risk attitude and risky behavior is formed and affected in different situation. The managing methods are also indicated by the authors. Activities of managing risk is undertaken by people both individually and in the group, so the spotlight needs to be casted on how to inspire employees' risk attitude and improve their working environment.

One important element in managing risk attitude, which is often lacking, is creating a proper environment. West and Ford (2001) investigated the relationship between agency creative philosophy and creative risk taking, and they conclude that clearer identity needs to be created if the company wants to foster an environment of risk seeking among employees. Hillson & Murray-Webster (2006) also agree that the most significant aspect for a successful and effective way of managing risk is to create an appropriate culture among the employees. In order to ensure a successful risk management, some internal measures should be conducted, such as creating proper risk management culture, coherently managing the process and linking risk management to rewards (Graham, 2003).

Cherrington (1989) named needs and outcomes are two senses of motivation in individual behavior. He also presents that reward after evaluation and intrinsic motivation are two ways of motivating employees. Specifically, some studies have been done in the sales domain. Sales quota and compensation plan are tightly connected to the salespeople's working environment and motivation. Berger & Jaffe (1991) examined the role of risk in determining the optimal commission rates for salespeople. The result shows that when the salesman is risk averse, they prefer a compensation plan (commission rate) with larger variability, even if mean sales are identical. Craven et al. (1993) detected the influence of the sales control systems on sales force outcome performance. They found that the more a sales force control system is behavior-based, the more important it is that the sales force be risk averse, so use outcome-based control system to inspire their risk seeking attitude and behavior.

3. Conceptual model and hypotheses

This conceptual model is developed based on the previous study. The relationship between risk attitude and behavior is based on the Theory of Planned Behavior (Ajzen, 1991), and the four types of risk are generated based on risk framework defined by Kaplan(2009) and Risk Map developed by Deloitte.

3.1. The Theory of Planned Behavior

People holding different attitude towards risk, and it in turns has impacts on their behavior. However, there is not a fixed pattern of behavior. Salesperson who has a risk aversion himself could take a risk-taking move if they are constrained by sales quota of a specific product. On the other hand, people who have a risk propensity could also avoid of the potential hazard if they are affected by the other perceptions. Therefore, we need to find out the general relationship between attitude and behavior in order to connect them together in the field of managing risk.

Human behavior is hard to predict, since it is affected by many aspects internally and externally. Ajzen (1991) presented the theory of planned behavior as a way of understanding people’s intention of behavior and actual behavior (Figure 3). In the model, attitude towards the behavior, subjective norm and perceived behavioral control are three predictors of people’s intention to perform different behaviors. The intention of behavior and perceived behavioral control in turns affect people’s actual behavior. Intention is a crucial indicator of people’s behavior. As perceived by most people, higher intention leads to higher possibility of conducting the behavior and a better performance. The perceived behavioral control and are proven to explain a high level of variance of behavior.

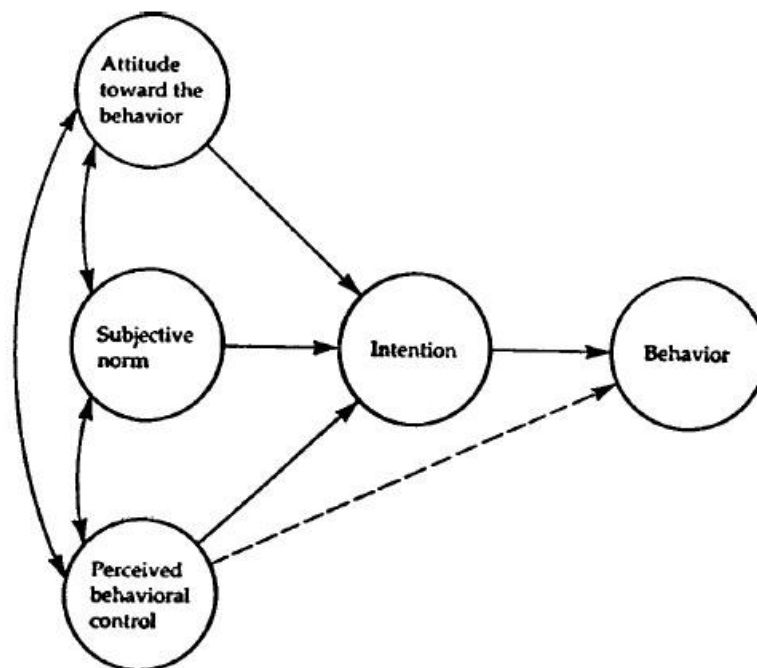


Figure 3. Theory of Planned Behavior (Ajzen, 1991)

Fu et al. (2010) test the model in the domain of selling new product. They set subjective norms, attitude toward selling the product and self-efficacy as the antecedents, and detect their impact on selling intention and performance of new product selling. All antecedents except subjective norms are found to have significantly positive influence in the model. In my study, intention is eliminated, since it is difficult to measure its impact on behavior in such a short period. The model of the Theory of Planned Behavior helped to build the relationship between risk attitude and sales performance..

3.2. Conceptual model

Basing on the strategy scorecard, Kaplan(2009) developed the risk indicator scorecard to measure the occurrence likelihood of the risky event and its subsequent adverse impact. He also introduced a risk hierarchy, which contains routine operational and compliance risks (level 3), strategy risks (level 2) and global enterprise risks (level 1) from low to high. Comparing to the level 1 risk, which is too hard to be measured and monitored in real operation, operational risk, compliance risk and strategy risk are indicated as risks that company should attempt to minimize their incidence. Governance risk is also discussed in Chapter 2.2.2 and 3.1.

Governance risk, strategy risk, operation risk and compliance risk are defined as the widely accepted four types of risks in enterprise risk management. Strategy risk and operation risk are rewarded risks, while governance risk and compliance risk are unrewarded risks. They make up the majority uncertainty and threats that the company need to worry about in risk management. Deloitte developed the Risk Intelligence Map and indicate five types of risk—Governance, Strategy and planning, Operations/infrastructure, Compliance and Reporting. Specifically, reporting risk function as an internal risk for audit company and an auxiliary risk of financial for service company. Therefore, governance risk, compliance risk, strategic & planning risk, and operation risk are gathered here as four dominant types of risk.

The moderators included are salespeople's experience and general risk attitude. The moderation effects are based on the previous studies (Ahearne et al., 2010; Fu et al., 2010; Rohrmann, 2002).

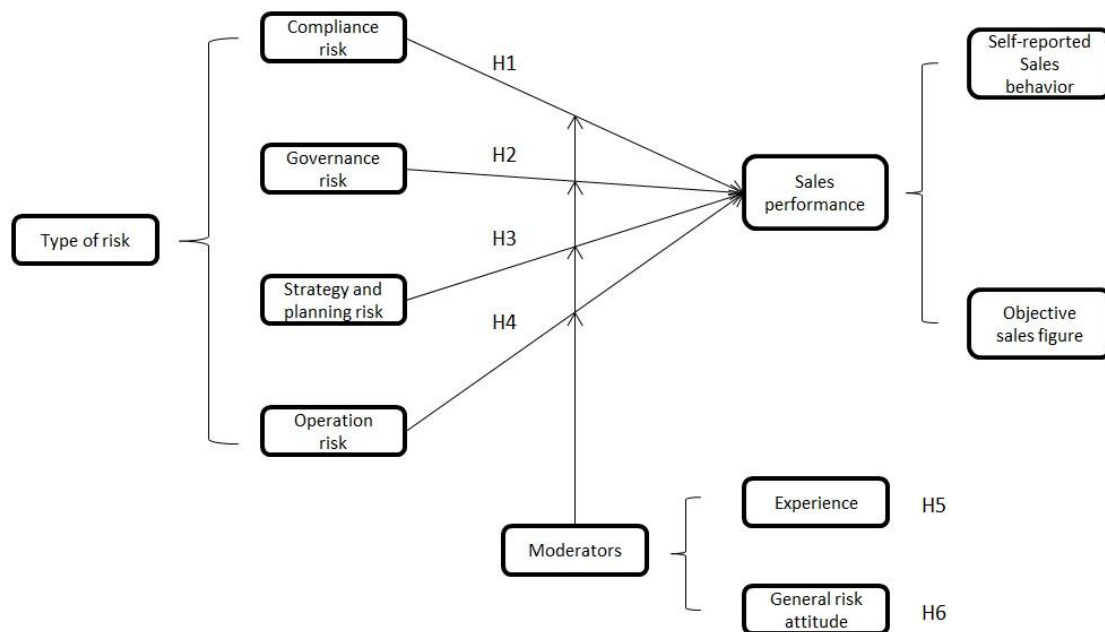


Figure 4. Conceptual model

3.3. Hypotheses

3.3.1. Compliance risk and governance risk

Ensuring the compliance to legal regulations and governance guidelines are sine qua non condition to controlling business behavior (Kharbili et al., 2008). Compliance refers to laws and legal guidelines that have been designed in order to protect companies and their stakeholders from manipulations of the financial data. Consequently, violating compliance risk has both short-term (e.g. cost savings, reduced governance complexity) and long-term (e.g. judiciary pursuits, market confidence) consequences (Agrawal et al., 2006). Abrams et al.(2007) notice that mishandling of compliance problems in company will lead to increasing cost of the company.

Klapper and Love (2003) found that better corporate governance is highly correlated with better operating performance and market valuation. The result indicated that a violating governance requirements will lead to low performance. Colquitt et al. (2007) showed that trust propensity explained incremental variance in the behavioral outcomes. Trust is treated as a variable of governance, so taking the risk of not trusting others will show worse outcome.

Basing on the previous discussion, taking governance and compliance risks are more related to disobedience and breaking the lines. Then, both of them are hypothesized to have negative relationships with sales figures.

H1a. *Salespersons with lower risk taking propensity of compliance risk have a relatively better self-reported sales behavior.*

***H1b.** Salespersons with lower risk taking propensity of compliance risk have a relatively higher sales performance.*

***H2a.** Salespersons with lower risk taking propensity of governance risk have a relatively better self-reported sales behavior.*

***H2b.** Salespersons with lower risk taking propensity of governance risk have a relatively higher sales performance.*

3.3.1. Strategic & planning risk and operational risk

Strategic & planning risk and operational risk are more related to the type or risk in previous studies. The authors of much of the literature on innovation and general management have assumed that risk taking has a positive influence on performance (Kanter, 1983; Schon, 1971). Aaker and Jacobson (1987) argued that risk had a positive influence on performance and found support for that opinion by using business data. Pennings & Smidts (2000) found that managers' risk aversion is an important predictor of actual market behavior by lottery measures and tightly related to innovativeness and market orientation by psychometric scale. Risk aversion was negatively correlated with innovativeness and market orientation in their experiment. De Jong et al. (2003) stated that risk attitudes of employees seem particularly relevant with their performance in the context of self-managing teams. By delegating authority to employees, they have more freedom and are assumed to decide themselves on how to deal with customer demands proficiently. As a consequence, employees also bear more responsibility and can take more risks with regard to innovative decisions in complex service situations.

In contrast with the previous two types of risk attitude, taking strategic and operational risk seem to relate to taking initiative and decision authority, which is more positively affected. Therefore, these two types of risk are hypothesized to have positive relationships with sales figures.

***H3a.** Salespersons with higher risk taking propensity of strategic and planning risk have a relatively better self-reported sales behavior.*

***H3b.** Salespersons with higher risk taking propensity of strategic and planning risk have a relatively better sales performance.*

***H4a.** Salespersons with higher risk taking propensity of operation risk have a relatively better self-reported sales behavior.*

***H4b.** Salespersons with higher risk taking propensity of operation risk have a relatively higher sales performance.*

3.3.2. work experience and general risk taking attitude

Working experience is incorporated as demographic variables in many social science studies. Specifically, both experiences in the sales territory and in the company are discussed as moderators in the study of Ahearne et al. (2010). They found that salespeople with high levels of experience tend to exert considerably less effort when they hold stronger product perceptions. Early et al. (1990) also found that experience had a moderation effect on performance in their study of task strategy and performance. More experience will lead to more effectiveness, and better capability of risk taking. Therefore, the effect of experience on sales performance will be tested in this research as well.

H5. Sales experience moderates the main effect. When sales experience is high, the negative effects of risk attitude on performance will be weaker, while the positive effects will be stronger.

General risk attitude is usually tested in the study of risk attitude and performance. Pennings and Smidts (2000) made use of three questions to get the general risk attitude by using a psychometric scale. Risk attitude was shown to be more agreement to self-reported measures of innovativeness, market orientation, and the intention to reduce risk. Dohmen et al. (2011) asked the subjects the following question “How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?”, in order to get their general risk attitude. The question about risk-taking in general generates the best all-around predictor of behaviour, such as self-employment, participation in activities. Grund and Sliwka (2006) find support for the theoretical prediction that risk attitudes determine sorting into performance pay jobs. Zaleskiewicz (2001) found that people’s stimulating risk taking was related to the preference for ethical and gambling risks and was associated with personality features connected with arousal seeking, impulsivity and strong sensation seeking. He designed ten questions to measure people’s stimulating risk taking attitude. It will be tested both as a predictor and a moderator in this research.

H6. General risk attitude moderates the main effect. When people’s general risk attitude is high, the negative effects of risk attitude on performance will be stronger, and the positive effects will be stronger as well.

4. Research methodology

4.1. Context of study

4.1.1. Company description

KPN is the market leader of telecommunications and IT service in the Netherlands. After being privatized by the Dutch government in 1994, KPN did a lot of mergers and acquisitions, which made it the leading service provider in the Netherlands and also serious contender in Benelux and Germany. It offers wireline and wireless telephony, Internet and TV service to end-users and IT solutions to business customers.

KPN adopts Individual product brand strategy and possesses many brands serves multi-level customers, such as Telfort, BASE, XS4ALL, Getronics and I-Basis in different business. They have been performed steadily in revenues for the last a few years. They reported to achieve 13.02 billion Euro revenue and an EBIT of 5.1 billion Euros. At the end of 2011, 31.084 FTEs from KPN serve for 44.5 million customers in total. Figure 5, 6, 7 show some key figures of KPN in 2011.

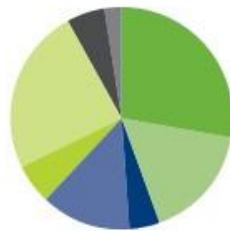
Customer figures*	
Wireline customers	4.0 million
Mobile customers	36.6 million
Internet customers	2.5 million
Television customers	1.4 million
* Figures at December 31, 2011	

Figure 5. Key figures of KPN in 2011 (1)

Market shares*		
The Netherlands	Fixed telefonie	>45%
	Mobile telefonie	~45%
	Broadband	40%
Mobile international	E-Plus	15.9%
	BASE	~19%
* Figures at December 31, 2011		

Figure 6. Key figures of KPN in 2011 (2)

Revenues



€13,022m

(2010: €13,324m)

Consumer	28%
Business	17%
Wholesale & Operations	4%
Corporate Market (Getronics)	13%
iBasis	6%
Germany	24%
Belgium	6%
Rest of World	2%

EBITDA



€5,138m

(2010: €5,476m)

Consumer	20%
Business	15%
Wholesale & Operations	33%
Corporate Market (Getronics)	0%
iBasis	1%
Germany	26%
Belgium	5%
Rest of World	0%

Figure 7. Key figures of KPN in 2011

4.1.2. Role of sales in KPN

Customer is regarded as the center of KPN's business. As stated in their mission and strategy, providing expected quality and reliability to satisfy customer demands is treated as the foundation for growth. KPN has already transformed from a product-oriented organization to a customer-oriented organization. They put in a very high position in strategy making and daily operation.

As one of the largest companies in the Netherlands, KPN owns the largest sales department of the Netherlands. KPN sales contain three levels: Getronics (450 largest companies), Large enterprises (30,000 large companies) and other sales (800,000 SMEs in the midmarket). They provide different services to different levels of customers. Approximately, 500 people are employed in the main six locations in the Netherlands. 1.1 billion is invested to improve sales and customer service annually. While competing in the open and complex market, they are constantly looking for new opportunities on the market with a sight that is always sharp and tuned to sales growth.

The sales department of KPN values the demand of customers in the first place. Customers are viewed as the backbone of the organization. Aiming at factually, correctly and credibly respond to the needs of customers, they try to understand the customers through having a conversation with them on every conceivable issue. All the salespeople keep thinking, analyzing and advising customers until the day they

leave. The only success criteria are a satisfied customer of KPN and growth for the entire organization.

Sales and marketing departments are quite integrated in KPN and perform a lead role in the decision making of the business market division. Because of that, their decision and propensity could remarkably affect the operation of the other department. The structure of sales & marketing department is shown in the figure 8.

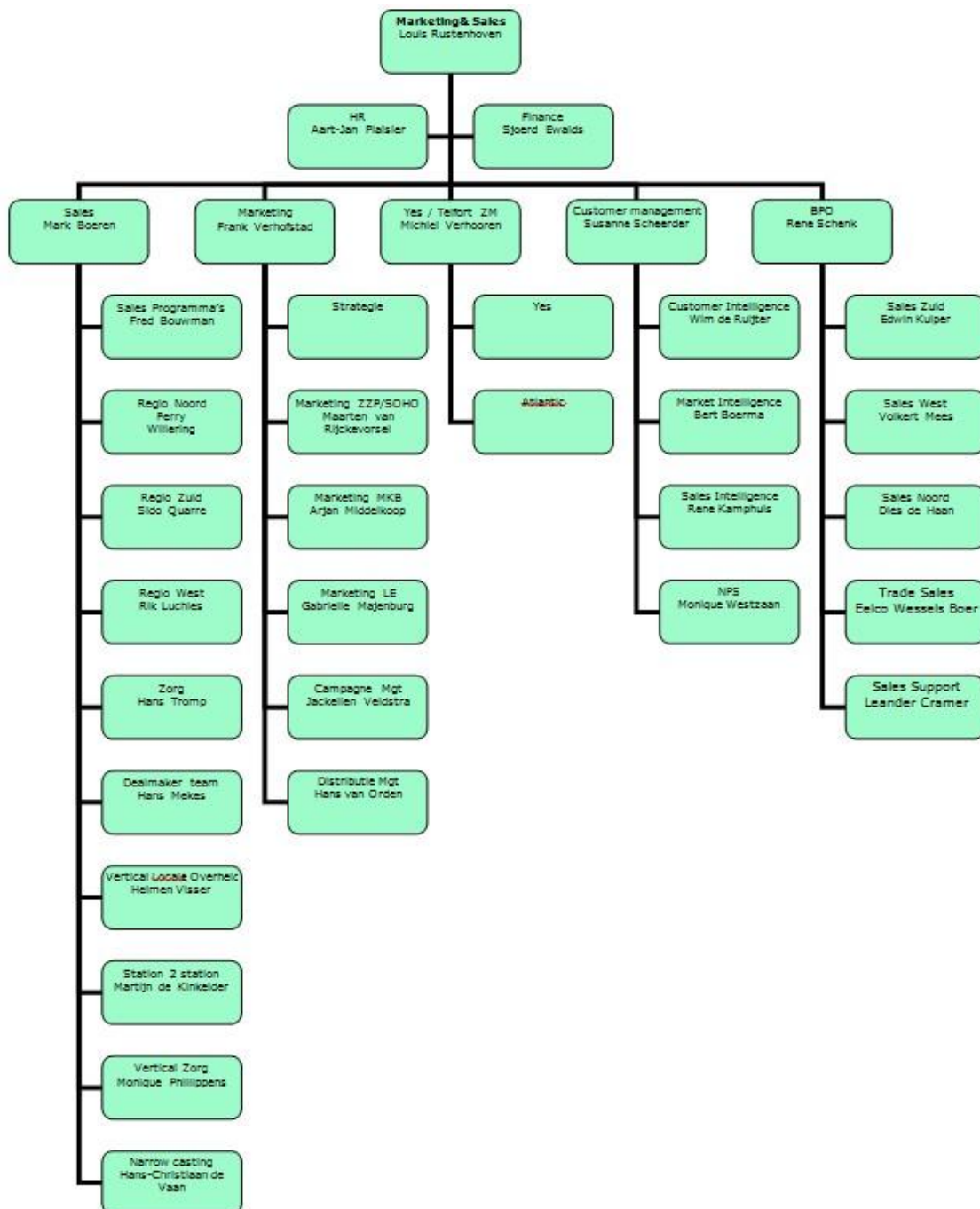


Figure 8. The structure of sales & marketing department in KPN

4.1.3. Role of risk in KPN

KPN defines risks as “any uncertainties regarding the achievement of its main objectives under the ‘Strengthen–Simplify–Grow’ strategy”. They treat risks also as opportunities, so they are tightly related to the organization. Risks are those events or range of events that can withhold KPN or KPN segments from achieving its objectives. In contrast, opportunities are those events or range of events that can result in a higher than expected performance. Opportunities and risks are identified through a comprehensive analysis of latent requirements of customers.

ISO31000 is a widely accepted international standard for risk management, and it is prepared by the ISO Technical Management Board Working Group (Purdy, 2010). In the standard, the relationship between the principles for managing risk, the framework in which it occurs and the risk management processes are depicted. ISO31000 is served as a guideline in KPN, and it is used as the foundation for risk management process. Risk management cycle is part of the regular business planning & control cycle of KPN. The scope of risk management within KPN is broadly bucketed into five categories: strategic, operational, financial, compliance and financial reporting. They reflect their main stakeholders: customers, competitors, employees, regulators and investors.

Strategic & Business Risk Assessment (SBRA, before known as ERM) is the revised approach in which KPN manages its Strategic, Operational and Financial risks and opportunities. It complies with ISO 31000, characterizes KPN’s key values “Simplicity, Trust and Personal” and reflects the five categories of risk domains. SBRA aims to identify, assess and manage the uncertainties in order to safeguard the objectives are achieved, and stakeholders’ needs are satisfied. SBRA guidance and reporting requirements for segment management were built up in 2010. The structure of KPN’s objectives and uncertainties definition are shown in figure 9.

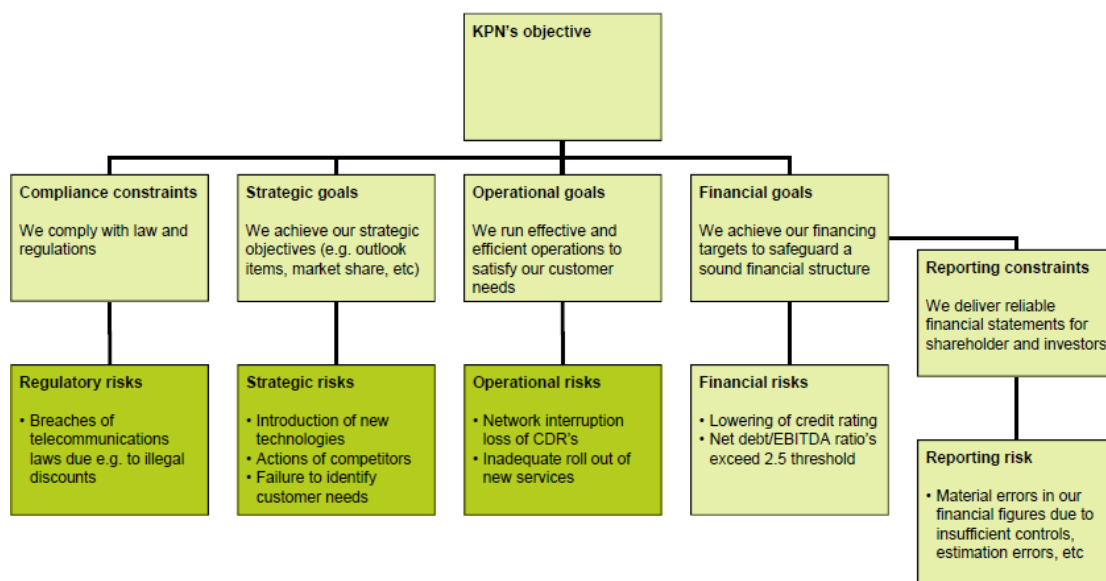


Figure 9. Objectives and risks of KPN

Business Continuity, Security & Quality (BSQ) is another approach conducted within KPN. It creates value by providing advices on performance helping to avoid risks found through a customer survey in terms of continuity, security and quality problem of service. A market research about area of security & continuity was done in 2011, and BSQ helps senior management determine to improve security and continuity capabilities to fulfill latent needs and requirements of customers.

Risk management is also widely implemented in KPN's daily operation. In terms of financial risk, KPN's activities are exposed to currency risk, interest rate risk, credit risk and liquidity risk. The overall risk management program focuses on detecting unpredictability of financial markets and seeking methods to minimize potential downsides of financial performance. As for supply chain risk, they are defined in KPN's procurement policy. The supply chain risk concerned in KPN is based on three risk assessments, and they are financial, socio-ethical and environmental aspects.

Now, risks are managed at a granular level in KPN, from the enterprise level, to business unit level, to product level, to process level, to application and system level, to employee level, to line item. Currently, the focus of risk management is on compliance aspects, e.g. privacy, SOx, telecommunications law, information security, business continuity, etc.. However, these are mostly unrewarded risks. They need to shift to a balanced approach of unrewarded and rewarded risks, such as direct reflection on revenue from sales.

4.1.4. Relating sales and risk management in KPN

KPN Business Market is continuously searching for possibilities to increase revenues. Net Promoter Score is one of those opportunities. In uncertain times, the importance of risk management increases. However, risk management is not always perceived as a 'business' function. The research is to demonstrate an evidence-based relation between risk management performance and sales performance. To prove statistical correlation between performance indicators for risk management and performance indicators for sales with evidence of value creation for risk management linked to sales.

KPN's sales department is quite leading in decision making of the business market division. Therefore, evidence that shows a significant positive sales return of risk management would help to create a better awareness and conduction of risk management within sales people, leading to a pull on risk management among the rest organization. They would like sales and marketing to perceive risk management as a powerful instrument to generate revenue from sales (by addressing risks at customers) and to prevent risks within KPN (by addressing managing customer expectations and quality in delivery of services to customers).

Financial figures are always considered to be closely connected to internal risk management in a company. However, according to the unique internal structure of KPN, sales people need to be shown the evidence relates to their business. There are a lot of studies have been done within KPN concerning risk management, including SBRA and BSQ. However, they are more focusing on the unrewarded risk management aspects, such as governance risks and compliance risks. Now, KPN would like to emphasize more on rewarded risk management, measurable financial figures, especially sales revenue, should be proven to be relevant. This is what this research could contribute to.

Knight (2006) depicted risk management as an integral and reduplicate process to improve existing business process. Managing risk is a systematic approach of manipulating risk internally and externally. In Sales & Marketing department of KPN, risk management contributes to the improvement of continuous management. Instead of negative treatment of risk, positive treatment of risk can stand for being open to new ideas, or thinking out of the box. In the context of this study, taking a risk means 'exploring new ways of selling'.

4.2. Research objective

The scientific objective of this study is to further elaborate the role of salespeople's risk attitude and how it affects salespeople's performance. It aims to provide a complete picture of the relationship between risk attitude and behavior in the domain of sales. The mechanism between attitude and behavior is investigated by previous studies and matured framework, but it has never been done in the field of sales. This will be done by verifying empirically the conceptual model introduced in chapter 3.

The practical objective of this study is to evaluate how to manage salespeople's attitude based on the research results. The results provide insight into whether managing risk has a significantly effect on sales figures. The reason and suggestions behind both positive and negative relationships between types of risk and performance would be investigated. Implications of managing risk will be generated with the help of employees' preference.

4.3. Research Approach

The research approach indicates the main steps of the whole research. It is dedicated to solve the problem stated in section 1.1. In general, the research methodologies are the combination of qualitative and quantitative approaches (Onwuegbuzie and Leech, 2005). Basing on the literature study, the four types of risk is widely studied in the business context, but not in the field of sales. Except for empirical studies, the relationship between risk attitude and behavior will also be

tested in the context of KPN. The proposed approach is presented in figure 10. The phases of this research will be explained respectively in this section.

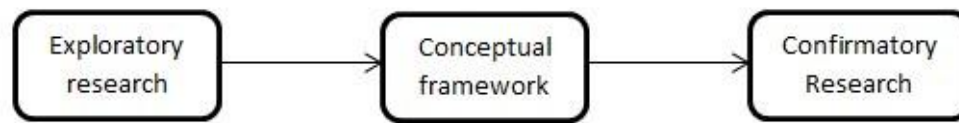


Figure 10. Research Methodology

The exploratory research phase is done by literature study. The literature review part has been described in chapters 2, which is mainly about the previous studies in the field of managing risk. It provides the theoretical basis for the conceptual model in chapter 3 and support for the remainder of the research. Most of the theory is derived from high-quality journals in the field of management and marketing (Journal of Marketing, The Journal of Personal Selling & Sales Management, Journal of the Academy of Marketing Science), and they are searched through important academic publishing databases (e.g., ABI/Inform, Science Direct, and Google Scholar). Furthermore, also some related marketing and risk management textbooks have been used to gain a broader perspective on the topics.

The conceptual model of the relationship between risk attitude, types of risk and sales performance will be tested in this research. Quantitative approach is chosen as the method to conduct the phase of confirmatory research. The quantitative data is collected through the use of a structured questionnaire survey, which is based on the literature study and the context of KPN. Online survey by using “SurveyWorld” is chosen according to the requirement of KPN customer satisfaction department. The aim of this research is to look deep into the risk attitude and how it relates to performance of the employees of the Marketing & Sales department. Contact list is provided by Marketing & Sales department and the survey is arranged by the experienced employees in the Customer Satisfaction department, which could help to increase the response rate. More detail of the online questionnaire is described in section 4.4. Later on, the quantitative analysis will be conducted with the help of SPSS and Microsoft Excel.

4.4. Online questionnaire

The goal of the questionnaire is to retrieve general demographic variables, which may be moderators of the relationship between risk attitude and sales performance, and secondly, to test the exact risk attitude hold by the different salespersons, their perspectives of products & service of KPN, and their sales performance in the first three quarters of 2012. There is no existing questionnaire available that is designed for the specialty of our research. However, some elements are present in the questionnaires of previous studies (Ahearne et al., 2010; Dohmen et al., 2011; Pennings & Smidts, 2000). Using these existing items risk attitude and some internal

risk management tools of KPN, we are able to build up our own questionnaire. In combination with the interviews, the surveys will provide quantitative data to make a synergistic view of the linkage between risk attitude and sales performance.

In addition, the Risk Map developed by Deloitte, which is used as the base of risk management in KPN also provide dimensions for different types of risk in the questionnaire. Meanwhile, the result of internal brainstorm of risk guidance in KPN also provides valuable sub-questions for measuring risk attitude. As for the performance, all sales figures and useful financial figures are acquired in the financial department. A Screenshot of the questionnaire is shown in figure 11.

►Vraag 11
Wanneer het nieuwe producten betreft...

	1 (volledig oneens)	2	3	4	5 (volledig eens)	weet ik niet
ben ik proactief in het verkopen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
geef ik snel op wanneer ik het product aan een klant verkoop die lastig te overtuigen is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
anticipeer ik op potentiële problemen bij het verkopen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hou ik constant mijn ogen open voor verkoopkansen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
scan ik actief naar behoefte aan nieuwe producten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ken ik de veiligheidsrisico's voor de klant met betrekking tot de producten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 11. Screenshot of the questionnaire

4.4.1. Research setting

This research is carried out within KPN, which is the market leader of telecommunications and IT service in the Netherlands. A brief company introduction could be found in section 4.1. A background study (including meeting with employees from KPN) was conducted as a pretest of the questionnaire research in order to understand the real risk management situation in KPN and amend the property and statement of questions. With the help of around five employees of KPN, the study spots light on the real concerns from the salesperson perspectives, and functions as reference for the questions rose in the questionnaire. The questionnaire survey will reveal the relationship between the risk attitude and sales performance of salespeople in KPN with Likert scale questions.

4.4.2. Sample

Since the research is aiming to detect the relationship between risk attitude of sales people and their performance, the participants of the research are all sales

representatives and account managers from the Sales department of KPN. An invitation of filling the questionnaire survey was sent to 258 employees serving large and SME corporates. Specifically, people working in the Sales & Marketing department are divided into three sales region based on geographical locations and two types of customers (Large and SME). The expected response rate is 30% (based on previous surveys).

4.4.3. Data analysis

Because the expected sample size is numerous, the data is probably normally distributed after a normality test (Field, 2005). Depending on the exact measurement scale which mostly is interval scale, different parametric tests can be executed. A first test to begin with is to see whether the sample is representative for the whole population. Relevant validity and reliability tests will be done in the first place according to the collected data. Factor analysis will be conducted to test whether the four types of risk are the four main factors for risk attitude. Aiming to figure out the basic relationships between all the variables in the model. If the fundamental linkage is tested to be solid, regression analysis will be used to determine the regression function for sales performance, test the moderation effect of sales experience and general risk attitude, and examine the fitfulness of the conceptual model.

5. Research Results

In this chapter, the results of the questionnaire survey explained in section 4.4 will be presented. First, descriptive analysis of the characteristics of the sample and descriptive analysis are presented in section 5.1 and 5.2. Next, missing data and outlier of the sample are examined in section 5.3. Then, the measurement model is validated in section 5.4 and hypotheses are tested in section 5.5.

5.1. Sample size characteristics

The questionnaire was delivered to all 258 sales people working for Large and medium customers of KPN. The total number of responses obtained from the online survey was 113. This result is the combination of response from first invitation and the reminder one week later, and the specific response was 82 and 31 respectively. The response rate was 43%, which was much higher than the average response rate of KPN's internal survey (30%).

5.1.1. Missing data

Based on the main questions in the questionnaire, the missing value analysis in SPSS (Appendix A, table 16) shows that 31 cases contain at least one missing value. The survey is about to investigate the relationship between risk attitude and sales performance. OTP (On target performance) is the only one sales performance figure that provided by KPN in the beginning. Considering the importance of performance indicators in this research, the missing value of OTP is also taken into account. The number of missing cases increases to 44, on the other hand, only 69 cases were described as complete cases (Appendix A, table 17).

Because the total sample size is small, the missing value percentage is comparably high. Since every question is designed as mandatory, this result can be explained completely by the option "I don't know" that was added to each question. A further examination of the missing value and the associated supplement methods are described in section 5.3.1.

5.1.2. Demographic variables

Among the total sample size, 85% were male and only 15% were female (Appendix A, figure 17), and it shows that there are much more salesmen than saleswomen in the Sales department of KPN. The age distribution of salesperson is in a good balance. People in 30s and over 40 contribute a little bit more than 85% of the total. The work experience of salespeople is measured by two questions—Time worked in sales profession and Time worked in KPN. Surprisingly, a considerable amount of salespeople (43%) only worked as salesperson for less than 10 years, and most of the employees (55%) only worked for KPN for less than 10 years. After combining these two figures, the average work experience of 60% salespeople are around 10 years or even less. The result indicated that the sales team of KPN contains a large number of

employees who have quite a lot working experience but not as a salesman consistently.

5.1.3. Company-related characteristics

Five products are provided as choices for the salespeople, and a considerable number of salesmen (over 75 percent) sell more than one products to customers. Specifically, about 65% salesmen sell all of the five products. Mobile (including Mobile data) and Fixed Data (incl. Internet) are most mentioned products that the salespeople are selling currently.

The sample is almost equally come from three sales regions of the Netherlands, which stands for a good sampling. As for the distribution of type of customers, people serving large corporates are 67% more than the people who serve medium-size corporates (Appendix A, figure 22).

5.2. Descriptive analysis

Apart from the analysis results, the research also aims to provide some risk management tips from the angle of the employee. Therefore, questions were generated based on previous studies of managing risk (Berger & Jaffe, 1991; Cherrington, 1989; Craven et al., 1993; Kaplan, 2005; West & Ford, 2001).

An environment of risk seeking among employees could be fostered if the company prefers a risk taking environment (West & Ford, 2001). It is also proven to be possible to be conducted in KPN. The mean value is 3.39, which is slightly higher than 3. It indicates that the respondents' agreement of the importance of risk taking environment in formulating their risk taking propensity.

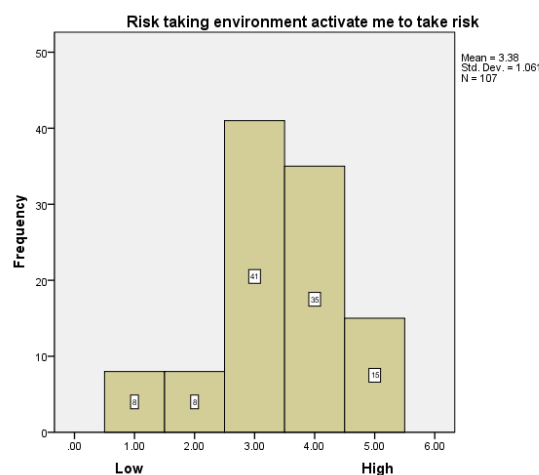


Figure 12. Risk taking environment

Employees also show different risk taking propensity when there is extra monetary bonus or intangible rewards (Berger & Jaffe, 1991; Cherrington, 1989). This effect is not reflected in the sales employees of KPN. Five questions are raised up in this part.

The highest mean among the five questions is 2.62, which discloses that most of them prefer not to take the risk even they could get more bonuses from the success. People who answer the question with “4” and “5” are considered as a risk taker in this case, the percentages of risk taker out of all respondents are calculated (Table. 1).

Situations	Mean	Percentage of taking risks
Praise from Manager	2.56	19.09%
Praise from colleagues	2.22	12.61%
More bonus	2.60	23.64%
Higher commission rate	2.59	22.22%
KRI	2.58	19.35%

Table 1. Risk taking percentage and reward systems

Considerable amount of respondents claims that they won’t take a risk even in the situation of getting more bonuses, increasing commission rate, more praise from the manager or their colleagues (Appendix A, figure 28-31). This is a surprising result, since most employees will be inspired by either monetary rewards or value recognition. However, KPN’s salespeople are reluctant to take a risk (trying new ways of selling in this case) even if they can get more rewards for doing so. They don’t even want to incorporate a KRI (Key Risk Indicator) into the evaluation of their performance (figure 13). The reason behind could be that most of the salespeople are risk averse, or they have already had a high satisfaction level of their job. Hereby, they will not be attracted by more rewards when making decisions whether they need to take a risk.

However, basing on the current results, we can still conclude that people prefer monetary rewards rather than invisible rewards, such as praise. About a quarter of salespeople will take the risk if they get more bonus or higher commission rate.

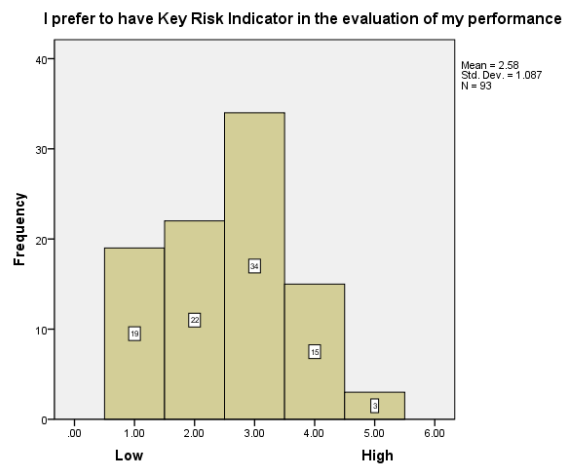


Figure 13. Risk taking and performance evaluation systems

Salespeople always shows different preference on performance evaluation systems. Outcome-based performance and behavior-based performance are two major evaluation systems. Selling product is a complicated process, so the salesman may prefer to take a risk or try something new if they have an outcome-based performance evaluation system (Craven et al., 1993). However, this effect is also non-significant among KPN's sales. The mean value of both situations is smaller than 3, and only 7 more respondents prefer to take the risk in the outcome-based system than in the behavior-based system (Appendix A, figure 32-33). The product map consists of much more matured products than new products, so the salesmen are quite familiar with the existing selling process. Few of them would experiment with new ways of selling if there is a pressure of performance.

In general, salespeople of KPN are disinclined to change their risk taking propensities in traditional situations. Change of reward systems and performance evaluation systems would not materially affect their risk taking decisions.

There are also some other interesting results from the items for risk attitude. Almost all items share the mean value that lower than 2.5, which indicate overwhelmingly loath to take a specific type of risk, only one question received mean value larger than 3, which indicated a slight propensity of risk taking. The salespersons are more likely to take the risk of misalignment of development program and business plan of the department, comparing to the other types of risk.

5.3. Missing data

As stated in section 4.3, the data were collected and transformed into SPSS and Microsoft Excel (Open questions). Since the general conceptual model is about to test the relationship between risk attitude and sales performance, which is only relationships between independent variables and dependent variables, no other software was used in this research.

The description of the sample size characteristics has shown that not all cases could be counted as completed cases because of missing data. Considering that the objective of this research is to test the conceptual model with data collected from KPN sales department, the deployment of multivariate analysis requires a minimum number of data to achieve a proper result.

Missing value is always detected either by variables or by cases. Those cases or variables with higher than 10% missing values are always dropped from the sample (Hair et al., 2009). Before conducting the missing value analysis in SPSS, two types of questions were deleted from the test list. As for managing risk (MR) questions are suggestive questions and have nothing to do with the main effect, it could also be omitted.

First, a manual check of the cases was done. There are twelve cases containing more than 10% missing values in the data, and five out of twelve contains more than 15% missing values (Table 2). There are some other questions related to the company but not related to this research are also included in the survey, which received more missing value. Taking that into account and also considering the sample size for this research is relatively small and the minimal requirement for an effective multivariate analysis, and only the five extreme cases were moved from the sample list.

Case	Number of Missing	Percentage of Missing
18	8	13.8
76	8	13.8
48	7	12.1
105	6	10.3
94	6	10.3
56	6	10.3
35	6	10.3
49	12	20.7
13	18	31.0
64	12	20.7
23	33	56.9
4	19	32.8

Table 2. Missing value detection

Second, missing value analysis is conducted by included all remainder variables, which are items that help to measure each proposed construct (Appendix A, table 18). The result shows that there is no variable containing more than 10% missing values. Therefore, no items need to be deleted from the data.

Third, the randomness of the missing data was determined by using the Little's MCAR test. Missing completely at random (MCAR) refers to the situation that the cases with missing values are not able to be distinguished from cases with complete data (Hair et al., 2009). The result of this test (Chi-Square=1726.613, DF=1567, sig. =0.003) is significant. After including items of Use of Rules (UR) and Managing risk (MR), the result of this test (Chi-Square=2734.195, DF=2585, sig. =0.02) is still significant. It classified the missing data as being MAR (Missing at Random) thereby allowing the remedy of median replacing or EM imputation.

In order not to break the distribution of the data, which may lead to less reliability, the prudent approach—EM approach is adopted. This approach imputes all missing values with maximum likelihood values. It is based on the observed relationships among all the variables and injects a degree of random error to reflect uncertainty of imputation (Rubin, 1987). Since the survey was conducted by using a five-point Likert

Scale, the value generated by EM approach was first rounded to 0.5 and then replace the missing values of each item.

As for the sales performance data, only 82 cases were linked with their sales performance of the first three quarters of 2012. Therefore, the effective sample size for demographic analysis is 113, while the effective sample size for analysis between risk attitude and sales behavior is 108. The effective sample size for analysis between risk attitude and sales performance reduces to 82.

5.4. Validity and reliability

In this chapter, the validity and reliability are tested by using factor analysis and reliability analysis.

Validity refers to how well a measurement instrument actually measures the construct it is intended to measure. The discriminant validity of a construct is the extent to which a construct is truly different from other constructs (Hair et al., 2009). For the independent constructs of the conceptual model, questions about salespeople's attitude towards taking different types of risk are asked.

Factor analysis examines interrelationships among a larger set of variables and then attempts to explain them in a terms of their common underlying dimensions. a factor analysis would reveal that whether the analysis is actually measuring as designed, and whether the questions designed for one construct are actually recognized as measuring the same construct (Hair et al., 2009). In this research, the independent variables are risk attitude and the dependent variables are objective sales figures, so factor analysis for risk attitude questions should be enough. However, some subjective questions about behavior of selling new products and selling existing products was added, extra examined selling behavior were also finished.

First, the principal component analysis was conducted to the questions about attitudes towards four types of risk — Compliance risk(CR), Governance risk(GR), Strategic and Planning risk(SR) and Operational risk(OR) (Table 3). Except the only one question designed for report risk went into the component of compliance risk, the rests are well categorized in their own component (SR_1 showed equal weight in two types of risk, but it was categorized into Strategic risk attitude as designed). Report risk is also part of KPN's risk map, but not functions as a main type of risk. When designing the questionnaire, the author was trying to incorporate more potential type of risk. However, because report risk is actually part of financial risk, the design of this question is trying to transfer this idea into sales work by stating "reporting key sales metrics to the manager". It is still describing compliance situation. Therefore, we classify this question into attitude towards compliance risk, and there are four types of risk in the model in the end.

Items	Component			
	Compliance risk attitude	Governance risk attitude	Strategic & planning risk attitude	Operational risk attitude
CR_5	,879			
CR_3	,867			
CR_1	,806			
CR_7	,759			
CR_4	,717			
CR_6	,706			
CR_2	,675			
GR_1		,764		
GR_4		,728		
GR_2		,637		
GR_3		,622		
SR_1			,556	
SR_3			,791	
SR_2			,759	
OR_1				,843
OR_2				,648
OR_3				,566

Table 3. Rotated component matrix of attitudes towards four types of risk (Compliance risk (CR), Governance risk (GR), Strategic and Planning risk (SR) and Operational risk (OR))

Five similar questions are designed for both selling existing product' behavior (SEP) and selling new products' behavior (SNP). Another six questions are designed for personal successful sales behavior comparing to colleagues (SPC). All these three types of questions are validated by principal component analysis (Table 4).

Items	Component		
	Behavior of selling existing products	Behavior of selling new products	Selling behavior comparing to colleagues
SEP_1	,801		
SEP_4	,783		
SEP_3	,774		
SEP_5	,655		
SEP_2	,443		
SNP_3		,819	
SNP_4		,817	
SNP_1		,732	
SNP_2		,720	
SNP_5		,692	
SPC_2			,802
SPC_4			,799
SPC_5			,764
SPC_1			,677
SPC_3			,655
SPC_6			,470

Table 4. Component matrix of sales behavior

Reliability refers to the degree to which the measurement instrument yields each time the consistent result. The reliability analysis provided by SPSS could provide the inter-item correlation matrix, and, most importantly, the Cronbach's Alpha. The Cronbach's Alpha measures the degree of difference within the same construct, so it is also called the internal consistency or the internal consistency reliability of the test.

Reliability construct	Cronbach's Alpha	Number of items
Selling existing products behaviour	0.721	5
Selling new products behaviour	0.797	5
Selling products behaviour	0.787	6
Managing risk	0.917	8
Attitude towards Compliance risk	0.917	7
Attitude towards Governance risk	0.746	4
Attitude towards Strategic and Planning risk	0.640	3
Attitude towards Operational risk	0.659	3
Selling products behaviour in total	0.868	16
Attitude towards types of risk	0.891	17
General risk attitude	0.858	7

Table 5. Cronbach's Alpha

A commonly accepted rule of thumb for describing internal consistency using Cronbach's Alpha is that the acceptable value should be larger than 0.7. As shown in the table above, most of the constructs obtain good Cronbach's Alpha, and the constructs with more items tend to have higher Cronbach's Alpha. In the previous factor analysis, Attitude towards strategic and planning risk and attitude towards operational risk were not explored as concrete components. The types of risk are generated depending on Kaplan (2009)'s risk framework, which is also adopted as basic risk structure in KPN. Both of them still had 0.6 plus alpha, so they were maintained in the research.

5.5. Hypotheses test

The results in previous section have shown that all independent and dependent constructs score well on validity and reliability. Factor analysis revealed that the constructs designed were actually the components of the relative variables. As for sales performance, selling behavior/proactivity (collected by questionnaire), self-reported sales performance and objective sales performance figures (provided by sales department) are collected to reflect the sales performance in the model. Therefore, all the relationships between them will be investigated.

Multiple regression analysis is a statistical technique that can be used to analyze the relationship between a single dependent variable and multiple independent variables (Hair et al., 2009). As indicated by the conceptual model, risk attitude as independent variables contains multiple constructs, while the sales figure could be

treated separately as single depend variables. Hypotheses were then tested by estimating the beta coefficients of linear regression analysis (the strengths of the relationship between the dependent and independent variables), and significance of the relationship between constructs and sales figures.

5.5.1. Attitudes towards types of risk and selling behavior

Four types of risk were defined in the conceptual model, accordingly four types of risk taking attitude were formed by asking questions related to these four types of risk. All four types of risk taking attitude were tested with the selling behavior indicators respectively (Table 6, 7, 8). Governance risk taking attitude influenced all three indicators, while operational risk taking attitude also entered the regression equation of selling new products as a passive predictor.

Independent variables	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	-.093		.419	1.642
Governance risk attitude	-.208**	-.286**	.004	1.201
Strategic & Planning risk attitude	.087		.395	1.290
Operational risk attitude	-.152**	-.195**	.049	1.201
Age	-.023		.803	1.043
Experience of Sales	.141		.119	1.021
Experience in KPN	-.056		.538	1.014
Gender	-.088		.332	1.013
Type of Customer	-.093		.301	1.017

Table 6. Regression coefficients, Dependent variable: Behavior of selling existing products (R square=0.165, N=108)

Independent variables	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	-.078		.487	1.642
Governance risk attitude	-.237**	-.274**	.005	1.201
Strategic & Planning risk attitude	-.002		.982	1.290
Operational risk attitude	-.242**	-.259**	.008	1.201
Age	-.128		.152	1.043
Experience of Sales	.063		.477	1.021
Experience in KPN	-.112		.204	1.014
Gender	-.024		.783	1.013
Type of Customer	-.037		.681	1.017

Table 7. Regression coefficients, Dependent variable: Behavior of selling new products (R square=0.200, N=108)

Independent variables	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	-.058		.600	1.341
Governance risk attitude	-.167**	-.220**	.022	1.000
Strategic & Planning risk attitude	-.143		.174	1.236
Operational risk attitude	-.046		.661	1.201
Age	-.029		.768	1.043
Experience of Sales	-.002		.984	1.021

Experience in KPN	-.137		.152	1.014
Gender	-.085		.374	1.013
Type of Customer	.008		.931	1.017

Table 8. Regression coefficients, Dependent variable: Selling behavior comparing to colleagues (R square=0.048, N=108)

Corporate governance principles include process and policies related to core value and objectives. The result of descriptive analysis found out that the salespeople of KPN had a high organization identity. It was reflected in the governance risk taking attitude's negative impact on selling behavior. People with higher risk taking propensity of governance issues are proven to have worse self-reported selling behavior. If they cannot understand the organization's core concept completely and be in agreement with it, they cannot feel free to strive for their own sales target.

Operational risk in sales department is underscored in the ability of fitting with changes in the environment and marketplace demands. Salespeople need to anticipate and then satisfy customer and market preferences. In general, selling new products requires faster reaction than selling existing products. This forward-looking perspective is particularly important in selling new products. People who would like to take the risk of working with insufficient information about customer need and inefficient process are proven to act worse in proactivity of selling new products.

As indicated by the R-square, approximately 20% of the variation in the sales proactivity indicators could be explained by the risk attitude. The R-square in the last regression model is relatively low, so the fitness of risk attitude's prediction on sales behavior comparing to colleagues is worse. Governance risk taking attitude (**H2a**) and operational risk taking attitude (**H4a**) are shown to have negative impacts on self-reported sales behavior, while the rest two have no significant relationships with the dependent variables. For the four hypotheses, only **H2a** is supported. **H4a** is shown to have opposite impact, and **H3a** and **H1a** are not.

Additionally, people's proactivity of selling new products and existing products were affected by different types of risk attitude with discrepant coefficients. A further observation of the coefficients of table 6 and table 7 showed that the higher attitude of taking governance risk or operational risk cause lower sales proactivity of selling new products.

5.5.2. Attitudes towards types of risk and sales performance

A test between attitude of taking four types of risk and the performance data were also conducted. Three sales performance figures—number of deals won, Total number of deals and hit ratio were collected to conduct the test with risk attitude. The total number of cases with these figures is 82.

Strategic and planning risk refers to salespeople's strategic decisions to achieve their business objectives. Competitor analysis, alignment of behavior and objectives in

organization level and department level are both embodied. Unlike the results in the test of sales behavior, strategic & planning risk taking attitude and operational risk taking attitude showed positive influence on the number of sales deals. The coefficients showed that risk taking attitude have more impact on the number of deals closed. Governance risk attitude has a negative impact, which is similar to the result of sales behavior. As indicated by the R-square, approximately 25% of the variation in the sales performance indicators could be explained by the risk attitude. It also proved that risk attitude have a considerably prediction of salespeople's performance. Basing on the data of first three quarters of 2012, **H2b**, **H3b** and **H4b** are supported, and **H1b** is not.

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	1.980		.757	1.713
Governance risk attitude	--13.466**	-.283**	.028	1.446
Strategic & Planning risk attitude	15.303**	.382**	.002	1.328
Operational risk attitude	10.518*	.203*	.079	1.689
Age	-7.249		.378	3.298
Experience of Sales	-2.716		.656	1.670
Experience in KPN	9.827		.123	2.716
Gender	-8.660		.406	1.224
Type of Customer	-3.560		.635	1.253

Table 9. Regression coefficients of attitudes towards types of risk and number of deals won (R square=0.253, N=82)

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	-.250		.983	1.713
Governance risk attitude	-12.348		.254	1.446
Strategic & Planning risk attitude	18.365**	.260**	.036	1.328
Operational risk attitude	30.193**	.342**	.015	1.689
Age	-10.265		.484	3.298
Experience of Sales	-2.936		.787	1.670
Experience in KPN	5.877		.603	2.716
Gender	-6.796		.715	1.224
Type of Customer	-14.126		.293	1.253

Table 10. Regression coefficients of attitudes towards types of risk and total number of deals attempted (R square=0.235, N=82)

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
Compliance risk attitude	.029		.474	1.713
Governance risk attitude	-.074*	-.260*	.053	1.446
Strategic & Planning risk attitude	.054*	.226*	.078	1.328
Operational risk attitude	-.018		.667	1.689

Age	-.040		.448	3.298
Experience of Sales	-.026		.490	1.670
Experience in KPN	.077*	.352*	.055	2.716
Gender	-.049		.440	1.224
Type of Customer	.041		.388	1.253

Table 11. Regression coefficients of attitudes towards types of risk and hit ratio (R square=0.134, N=82)

5.5.3. General risk attitude and moderation test

General risk attitude is first tested as an independent variable in the regression model of all sales figures. Unfortunately, no significant relationship was found in the regression analysis. The tests of moderation effects were then conducted within the regression analysis. Moderation effect was then tested by using the centering interaction (Aiken & West, 1991).

First, a moderation test between experience and hit ration is done (Appendix, table 20), but no significant moderation is found. The result rejects **H5**. Then, the potential moderation of risk attitude in general is investigated As shown by the tables following, two moderations was found in the relationship between attitude of taking strategic risk and the number of deals (table 12) and the relationship between attitude of taking governance risk and hit ratio (table 4). The R-square of the regression analysis of the number of deals won (from 0.253 to 0.286) and hit ratio (from 0.134 to 0.209) were increased after incorporating the moderator, it denoted that the moderation effect enhanced the prediction of risk attitude in the analysis. The result also showed that moderation exists in these two analyses. On the other hand, for the regression of the total number of deals attempted, the R-square decreased after incorporating the moderators (from 0.235 to 0.169). Since, no moderation was detected, the moderation undermined the original relationship between risk attitude and dependent variable.

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
CR_centered	-1.344		.842	1.942
GR_centered	-10.217*	-.215*	.099	1.577
SR_centered	17.470**	.437**	.001	1.465
OR_centered	9.879		.184	2.060
Exp_Sales_centered	-5.424		.330	1.442
Exp_KPN_centered	4.114		.397	1.642
Gender_centered	-9.342		.360	1.306
Type of customer _centered	-3.034		.680	1.255
Risk attitude in general (RAG) _centered	-1.427		.771	1.226
CR_RAG_centered	-12.699		.172	1.987
GR_RAG_centered	-11.164		.181	1.901
SR_RAG_centered	13.662*	.274*	.068	2.071

OR_RAG_centered	11.194	.238	2.351
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Table 12. Moderation regression coefficients of attitude towards types of risk and number of deals won (R square=0.286, N=82)

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
CR_centered	-.559		.965	1.942
GR_centered	-7.630		.514	1.577
SR_centered	14.254		.136	1.465
OR_centered	29.368*	.333*	.040	2.060
Exp_Sales_centered	-4.274		.686	1.442
Exp_KPN_centered	.743		.936	1.642
Gender_centered	-19.710		.310	1.306
Type of customer _centered	-11.550		.411	1.255
Risk attitude in general (RAG)_centered	-3.649		.696	1.226
CR_RAG_centered	-1.825		.917	1.987
GR_RAG_centered	8.269		.601	1.901
SR_RAG_centered	2.553		.856	2.071
OR_RAG_centered	-7.039		.695	2.351

Table 13. Moderation regression coefficients of attitude towards types of risk and total number of deals attempted (R square=0.169, N=82)

Independent Variable	Beta	Standardized Coefficients	Sig.	VIF
CR_centered	.021		.628	1.942
GR_centered	-.061		.116	1.577
SR_centered	.076**	.316**	.018	1.465
OR_centered	-.033		.484	2.060
Exp_Sales_centered	-.047		.180	1.442
Exp_KPN_centered	.047		.125	1.642
Gender_centered	-.020		.758	1.306
Type of customer _centered	.042		.367	1.255
Risk attitude in general (RAG)_centered	-.004		.884	1.226
CR_RAG_centered	-.036		.532	1.987
GR_RAG_centered	-.107**	-.307**	.043	1.901
SR_RAG_centered	.067		.155	2.071
OR_RAG_centered	.092		.126	2.351

Table 14. Moderation regression coefficients of attitude towards types of risk and hit ratio (R square=0.209, N=82)

Dawson and (2006) developed a two-way interactions tool based on the study of Aiken and West (1991). In order to show the effect intuitively, graphics were made by conducting the interaction interpretation in Excel. Since the centered method is calculated by deducing the mean value from the original value, negative value happened in this case.

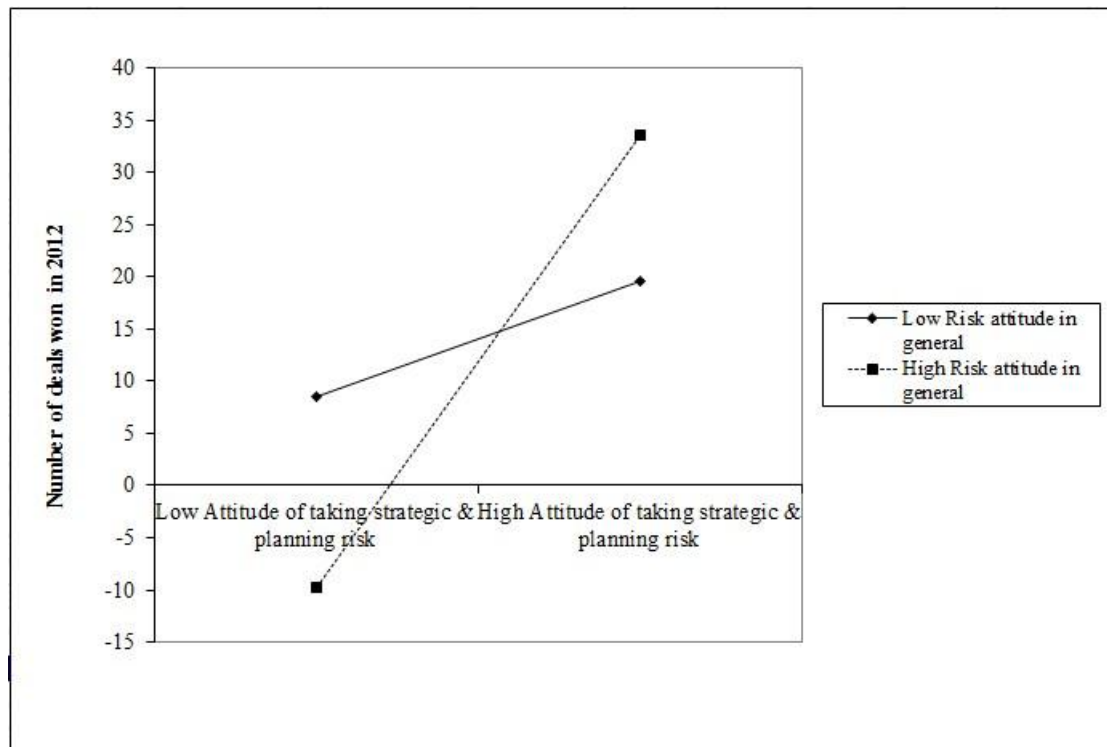


Figure 14. Moderation regression coefficients of strategic & planning risk taking attitude and number of deals won (R square=0.286, N=82)

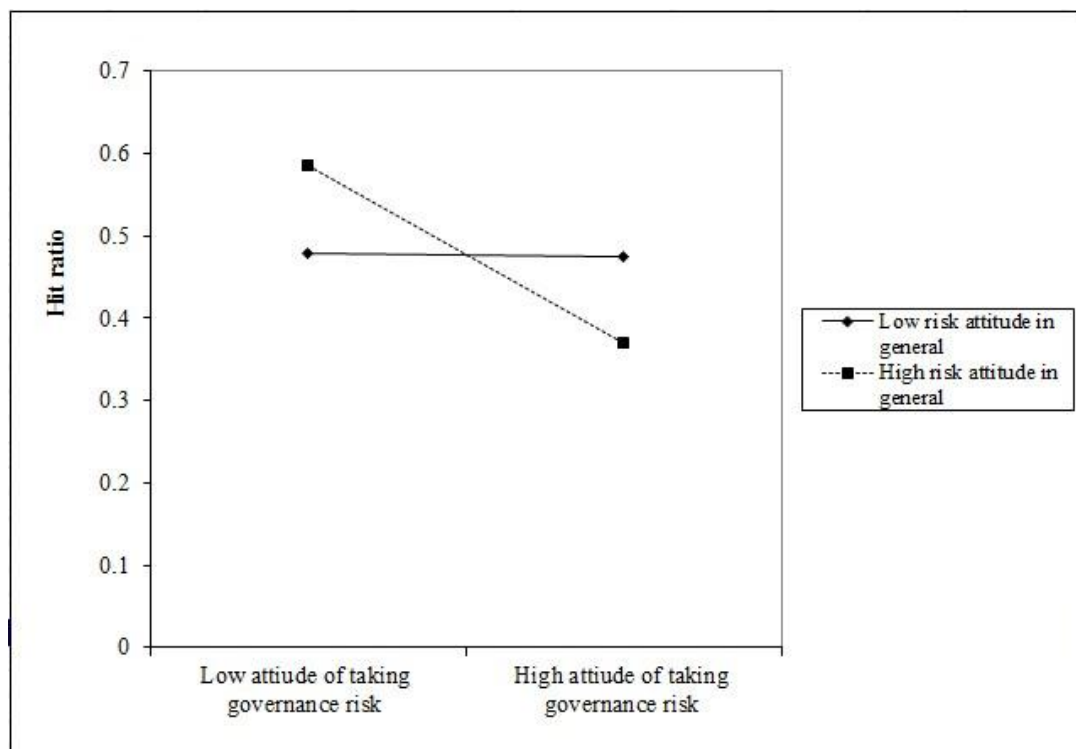


Figure 15. Moderation regression coefficients of governance risk taking attitude and hit ratio (R square=0.209, N=82)

Strategic & planning risk taking attitude was proven to have a positive impact on the number of deals won. The relationship was moderated by the risk attitude in general.

The positive effect is stronger when general risk taking attitude is higher. People with higher propensity of taking risk in general will have more impact on people who also have higher propensity of taking strategic risk. It is to say, when two salespeople both have a high propensity of taking strategic risk, the one with higher risk taking attitude in general will show higher sales performance. On the other side, if both of them have a low propensity of taking strategic risk, the one with lower risk taking attitude in general will show higher sales performance.

General risk attitude's moderating effect on hit ratio is similar to the previous one according to the diagram. The negative relationship between governance risk taking attitude and hit ration becomes stronger when general risk attitude is higher. Hence, **H5** is rejected while **H6** is supported by the sales figure.

In sum, the overall result of hypotheses test is shown below. Most of the hypotheses were supported with at least one significant result. **H1** and **H5** received none from the test, and **H4** is proven to have opposite results on subjective selling proactivity and objective performance (table 15).

Hypothesis	Sales behavior	Actual sales figure
H1a	X	
H1b		X
H2a	+	
H2b		+
H3a	X	
H3b		+
H4a	-	
H4b		+
H5	X	X
H6		+

Remark: Supported(+), Opposite effect(-), not supported(X)

Table 15. Result of hypotheses test

6. Conclusion

General conclusion of the performed analysis is presented first in section 6.1. Secondly, the practical recommendations for managing risk in the sales department are presented in section 6.2. In section 6.3, the researched questions proposed in section 1.1 are reviewed and answered. Finally, the limitations of this research are addressed and suggestions for future research are made in the last section.

6.1. Theoretical conclusion

This study set to determine the drivers of salespeople's risk attitude on their sales performance. The conceptual model is based on the types of risk developed by Kaplan (2009) and the Theory of Planned Behavior (Ajzen, 1991). It compared the impact of risk attitudes towards four different types of risk. Sales performance is divided into objective sales performance and subjective sales behavior. The results of this study have shown that not all the hypotheses concerning the relationships were supported.

For risk taking attitude towards four types of risk, the four hypotheses were partially supported in various conditions. In the test with subjective sales behavior, attitude of taking governance risk showed a significantly negative impact, while attitude of taking operational risk showed same influence on self-reported proactivity of selling both existing and new products. In the test with objective sales performance figures, attitude of taking governance risk also showed a strong negative effect on three performance indicators, while strategic & planning risk attitude and operational risk attitude were proved to be positive predictors of the sales performance.

The relationship between attitude and behavior constructed by the Theory of Planned Behavior (Ajzen, 1991) is verified by this study in the sales domain. The risk framework of Kaplan (2009) is originally developed for corporation level risk management. It is extended by this research to the individual salespeople level. The types of risk facing by the company are actually the same types of risk facing by the employees. Specifically in the sales department, challenges and risks emerge during the process of selling products. The results reveal that three out of four types of risk have either positive or negative impact on salespeople's performance and proactivity of selling. This additional evidence is important because empirical evidence on the relationship between these constructs and overall literature about risk attitude in the sales domain is limited.

The complete model synthesized two methods of evaluating risk attitude. By showing various significant findings between risk attitude and sales performance, it provides evidence that risk attitude is a substantial trigger of sales performance. Furthermore, this study shows that the attitude towards different types of risk needs to be considered separately, but of equal importance. They have either positive or

negative impacts on a portion of the actual sales figures. The relationship between risk taking attitude and a specific financial data should all be valued in the improvement of internal risk management. The study also revealed that people's general risk attitude have a moderation effect on their risk taking behavior.

6.2. Practical conclusion and managerial implication

The results and conclusions of this study also call for managerial recommendations to KPN. The results indicate that for salespeople of KPN who is competing within a challenging market managing risk attitude and improve internal risk management have added value to sales performance. This section suggests a number of recommendations to enhance managing risk of KPN sales.

6.2.1. Risk taking environment and personality

Risk taking attitude is acknowledged to be important for sales people, but how can KPN recognize whether the salespeople's risk taking propensity. Taking risk is defined as trying new innovative ways of selling, and it is shaped by work environment and need of the company. People indicate that they will take the risk if the company asks them to do so even if they won't take it personally (in the open questions).

The introduction of personality test in the human resource process of selecting salesmen should be helpful. The risk taking attitude of a salesman may not be the vital factor to determine whether he should be hired, but KPN should master the risk taking attitude of their sales team. The survey revealed that salespeople in KPN showed strongly risk averse. The moderation test also revealed that people's general risk attitude moderate relationships between risk attitude and performance. Both positive and negative relationships would be stronger when general risk taking attitude is high. Selecting risk averse people in the very beginning would be helpful to avoid risk taking in some case and also achieve higher sales performance at the end.

As indicated by the survey, if the salesperson is completely risk averse, it may lead to negative impact on their sales performance. Cultivating proper environment to encourage salespeople to try new ways of selling when working will pay off in their sales performance.

6.2.2. Improving risk awareness of sales people

Though not all hypotheses were supported in section 5.5, all types of risk attitude were proven to have a either positive or negative influence on at least one sales figure. It uncovered the fact that risk management is strongly recommended to be included in the sales department.

Currently, sales people don't have a proper recognition of managing risk in their daily work. They don't have a lot of new products, so trying new ways is always

neglected. However, risk is not something that could be well managed when you're facing it. Proving the importance of risk attitude in sales work and improve the position of risk management in sales is the objective of this survey. Some results here showed the link between risk and sales performance. It is worthwhile to be valued in the changing market.

Risk-related training should be introduced to the training program in department level. Compliance, strategic and planning, operational and governance risk are the four types of risk discussed in this study. Their relationships with the particular sale figures are stated in section 5.5. Reinforcing the salespeople's perception of strategic & planning risk and operational risks and cultivate a proper risk taking attitude towards them will be helpful.

6.2.3. Balance of different types of risk

Currently, the focus of KPN's risk management is on compliance aspects, e.g. privacy, SOX rules, telecommunications law, information security, business continuity, etc.. A shift to a balanced approach of different types of risk is necessary.

The negative relationship between compliance risk taking attitude and performance doesn't exist. Since KPN has been conducted high-pressured compliance management since a few years ago, this result is out of expectation. First, by looking deep into the questions, they were mainly about management controls and regulations. Autonomy should be granted since salesmen prefer less management involvement or controls. Second, by combining the complaints and suggestions in open questions, the current internal communication process is considered as bureaucratic, complex and inefficient. They also complained a lot about frequent reorganize, and this could be one reason that why people start to take less care of compliance risk. Considering the situation that salesmen had low knowledge of SOX rules, compliance risk management methods should be improved. Less reorganize, more autonomy and more efficient internal communication will help people focus more on their work and increase their respects of compliance rules.

Governance risk taking attitude is the only one risk attitude that showed strongly negative influence on almost all sales performance. Governance risk refers to understanding the business and strategy of the company and alignment of their own behavior. People didn't show a strong risk averse towards this type of risk, and people that violated the core value and strategies of the company showed significant low performance in the end. Therefore, the strongly negative relationships implied that it should be respected carefully. Governance risk was proven to be negatively linked with many performance or behavior indicators, which reflected a comforting result of current corporate risk management.

Now the management should also pay attention to the other two types of risk. The strategic & planning risk and operational risk contain issues such as tracking customer preference, adequate analysis of competitors, being involved in an efficient work process and aligned development program with department. These two types of risk are proven by this study to be related to sales performance as well. Specifically, they show strongly positive impacts on the number of deals a salesman can successfully close. Making use of these two types of risk by providing sufficient sales support and enhancing internal communication process has a strong potential to increase the number of deals. Rules and reward system should be established according to the performance evaluation of aspects from these risks. Autonomy is also mentioned in the strategic & planning risk. People who prefer the situation that the manager has few appropriate involvement in my work is shown to have higher sales performance. The result confirmed the importance of decentralization and effective work process in the sales once again.

6.2.4. Competence and behavior

According to the descriptive analysis in section 5.2, Salespeople of KPN show a general tendency of risk averse, either for rewards or praise. They also show their strangeness of compliance rules (SOX) and lack of interpersonal trust.

Priority, customer, team, influence, result, changes are mentioned in the evaluation form of salespeople, and specific measurement questions are also listed. Comparison between general sales performance and the detailed performance on that form should be done in order to make an exhaustive and targeted plan of increasing personal competence and behavior.

Simplicity, personal and trust are named as three core value KPN. It also affects the competence and behavior of sales people. There are two facts need to be noticed in order to make use of the result of the survey to improve competence. First, governance risk attitude (containing trust) is passively linked with sales behavior. Second, questions designed to ask about “trust” had low scores. Detecting people’s trust crisis with internal survey and building up the common sense of trust will help both managers and employees to understand each other and trust each other.

Furthermore, performance of selling new products should be incorporated in the performance evaluation of salespeople. Though KPN doesn’t have a lot of new products launched every year, it is still important to stimulate the sales people selling new products, but not focusing on the existing products package all the time.

6.2.5. Managerial implication based on questionnaire

People showed strong risk taking propensity in two governance risk questions— “I’m willing to take the risk of not having adequate understanding of the organization’s business” and “I’m willing to take the risk of having an over-emphasis on my short-

term performance”. Sales department is always treated as strongly profit-driven. People sometimes will be over-emphasis on their short-term performance if there is a sales target need to be achieved. However, the result showed that the violation of these two situations will lead to significantly low sales performance at the end. Periodical quiz of company business and customer business can be conducted. The bonus mechanism of sales people can be related to more aspects other than revenue. People with less pressure on short-term performance will not initiate taking governance risk, and it will lead to higher overall sales performance.

People also showed strong risk taking propensity of taking strategic & planning risk. 10% of the respondents indicated that they would like to take the risk of having inadequate analysis of the competitors, and more surprisingly, 37% of the respondents stated that they would like to take the risk of misalignment of personal training/development program and business plan of the department (company). The current research showed that strategic & planning risk has a positive impact on sales performance. The results reflect salespeople’s displeasure of the current sales support process. It also joined with the fact that salespeople are lack understanding of organization’s business. Regular training mentioned in 6.2.2 becomes more necessary. Salespeople’s need of sales support should be valued and investigated, and then a better support system and corresponding evaluation system can be built.

Basing on the descriptive analysis in section 5.2, a conclusion that people prefer monetary rewards rather than invisible rewards can be drawn. About a quarter of salespeople will take the risk (try out new ways of selling), if they get more bonuses or higher commission rate. In order to stimulate people’s risk taking attitude of strategic risk and operational risk, which has significantly positive influence on sales behavior and self-reported performance, KPN can consider to set higher risk-taking related commission rate, or bonus of trying new ideas for salespeople.

The salespeople also show more preference for Key Risk Indicator comparing to the others. Displaying the quantified risks in color-coded charts or heat maps enables managers to understand the impact of risks on goals easily and quickly. If the maps can be drilled down into, managers can study each goal in relation to its corresponding risks. They can also help ascertain how each unit or department is managing risks (Kapoor & Valencia, 2011). The existing KRI dashboard, which is visible measure linked with sales performance, need to be made use of by the sales managers and therefore be able to be evaluated by the risk managers.

6.3. Answering research questions

In the first chapter, the main research question was defined along with four sub-research questions. During the study, these questions have all been dealt with and here will be answered in this section. First, the sub-research questions will be

answered. Then, this section will be wrapped up with the answer for the main research question.

1. What are the different types of risk within the research context and their related theories?

Risk is the effect of uncertainty on the realization of goals (ISO 31000). Risk is not always treated as a threat, but also as improving opportunities. Knight (2006) depicted risk management as an integral and reduplicate process to improve existing business process. In Sales & Marketing department of KPN, risk management contributes to the improvement of continuous management. Instead of negative treatment of risk, positive treatment of risk can stand for being open to new ideas, or thinking out of the box. In the context of this survey, taking a risk means 'exploring new ways of selling'. In this research, only four types of risk are considered, and they are compliance, strategic & planning, operational and governance. In the risk-related theories, there are way more types of risk, such as environment risk and financial risk.

2. Which types of risk attitude have an impact on salesperson's performance?

All four types of risk taking attitude drive sales performance to some extent except compliance risk attitude. Attitude of taking governance risk executed negative effects, while the other two types of risk attitude have positive impacts on sales performance.

3. What should managers do to control salespeople's risk attitude?

Improve the risk awareness among sales people and balancing rewarded risks and unrewarded risks are the most important two implications for the managers. less pressure on short-term performance, better support system and corresponding evaluation system can also be implemented according to the problems found by the survey.

Less reorganize, more autonomy and higher efficient internal communication will help people focus more on their work and increase their respects of compliance rules. In order to stimulate people's risk taking attitude of strategic risk and operational risk, which has significantly positive influence on sales behavior and self-reported performance, KPN can consider to set higher risk-taking related commission rate, or bonus of trying new ideas for salespeople, and encourage managers to make use of the KRI dashboard.

4. Is the effect of risk taking towards types of risk depends on people's risk taking in general?

People's risk attitude in general doesn't have a significantly direct impact on the sales performance. However, it was proven to have moderation effect on the relationship between strategic & planning risk taking attitude and the number of deals won. When two salespeople both have a high propensity of taking strategic risk, the one with higher risk taking attitude in general will show higher sales performance. On the other side, if both of them have a low propensity of taking strategic risk, the one with lower risk taking attitude in general will show higher sales performance. The negative between governance risk taking attitude and hit ratio is also moderated by general risk attitude in the same way.

Main research question: To what extent salesperson's attitude towards different types of risk drives their sales performance".

All four types of risk attitude except compliance risk attitude are found to be highly connected with at least one type of sales behavior or sales performance. The coefficient and influencing function is different, but all of them are significant. For objective sales figures, governance risk taking attitude has a negative impact, while all the other two risk taking attitudes have positive impacts with a higher coefficient.

6.4. Limitations

The last part of the thesis will elaborate the limitations of this research and will also point to suggestions for future research. Firstly, though the literature of risk attitude is extensive, the literature concerning the relationship between risk attitude and sales performance is quite limited. The theoretical model of this research is based on the relationship between attitude and performance built up by the Theory of Planned Behavior. The study makes a contribution to the relationships between attitudes towards four types of risk and sales performance. Detailed connections and coefficients are also detected. Also additional research could replicate this study in other background settings by using the similar types of risk to further validate the model.

Secondly, the instruments to measure the attitude towards the four types of risk were not available from the literature. Questions were generated by using internal materials and Risk Map developed by Deloitte. They were proven to have a high validity and reliability, but still need further psychometric test. Secondly, the scope of the survey is limited. The questionnaire was designed to be only answered by the salespeople. All sales representatives and account managers are involved, but the total participants are only 256 persons. The survey was conducted online and activated by e-mail invitation. In order not to add bias of the respondents artificially, not any stimuli methods were used to increase the response rate, which resulting in a response rate of 43%. Fourthly, KPN doesn't have performance evaluation criteria for selling new products, which limited the comparison between performance of selling existing products and new products. Last but not least, the salespeople in the

sample tended to show risk averse overall. It brought to the fact that there are few cases show risk taking propensity, which limited the result of comparison between risk taker and who is risk averse.

As for the company's internal improvement, there are two aspects could be further investigated. Comparison between general sales performance and the detailed performance evaluation form should be done in order to make an exhaustive and targeted plan of increasing personal competence and behavior. The questions for trust scored a low mean value, so effort should also be made to detect the problem and improve interpersonal trust within the company. The other factors in the Theory of Planned Behavior, such as intention, perceived behavior control could be included in a relatively long-term research.

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Appendix A: Analysis result

1. Missing value

Case	# Missing	% Missing
55	1	1.7
61	1	1.7
90	1	1.7
92	1	1.7
102	1	1.7
1	2	3.4
28	2	3.4
113	1	1.7
41	3	5.2
25	2	3.4
46	3	5.2
26	4	6.9
62	2	3.4
73	3	5.2
87	3	5.2
15	5	8.6
59	4	6.9
18	8	13.8
76	8	13.8
48	7	12.1
105	6	10.3
21	4	6.9
94	6	10.3
50	5	8.6
56	6	10.3
35	6	10.3
49	12	20.7
13	18	31.0
64	12	20.7
23	33	56.9
4	19	32.8

Table 16. Cases with Missing value (OTP excluded)

Case	# Missing	% Missing
17	1	1.7
37	1	1.7
45	1	1.7
47	1	1.7
51	1	1.7
52	1	1.7

53	1	1.7
65	1	1.7
66	1	1.7
99	1	1.7
100	1	1.7
104	1	1.7
106	1	1.7
92	2	3.4
113	2	3.4
55	1	1.7
61	1	1.7
90	1	1.7
102	1	1.7
1	2	3.4
28	2	3.4
73	3	5.1
62	2	3.4
46	3	5.1
26	4	6.8
25	3	5.1
41	3	5.1
21	4	6.8
94	6	10.2
87	3	5.1
15	5	8.5
59	4	6.8
18	9	15.3
76	8	13.6
35	6	10.2
56	6	10.2
50	6	10.2
105	6	10.2
48	8	13.6
49	12	20.3
13	18	30.5
64	12	20.3
23	33	55.9
4	20	33.9

Table 17. Cases with Missing value (OTP included)

2. Demographic

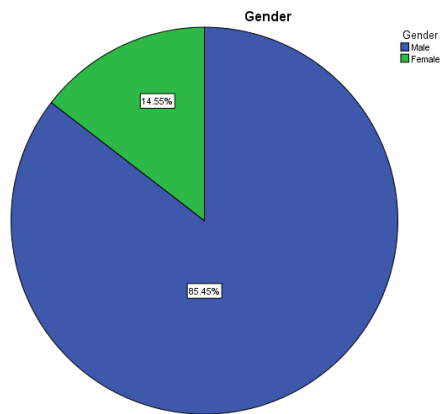


Figure 16. Gender

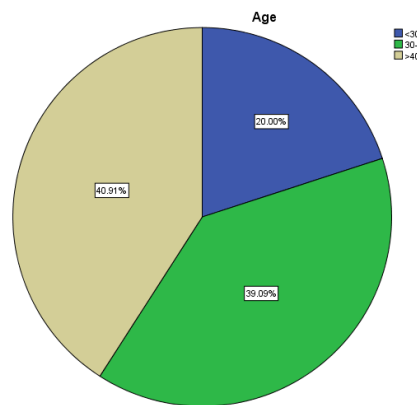


Figure 17. Age

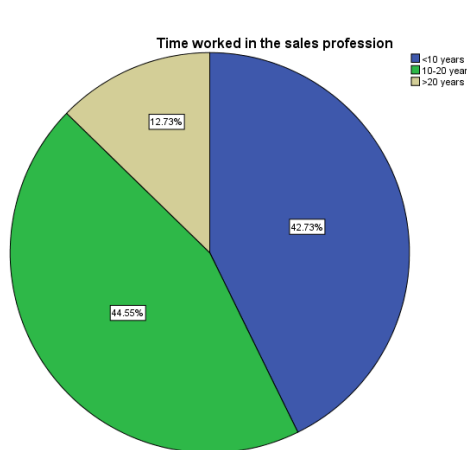


Figure 18. Time worked in the sales profession

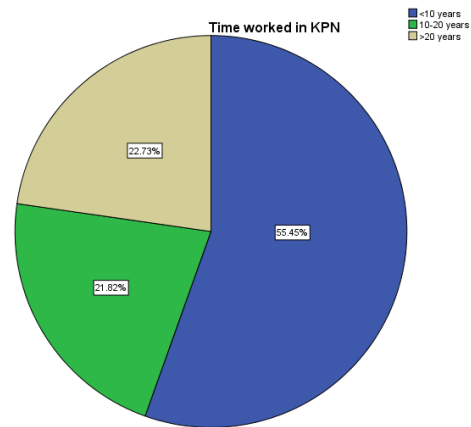


Figure 19. Time worked in KPN

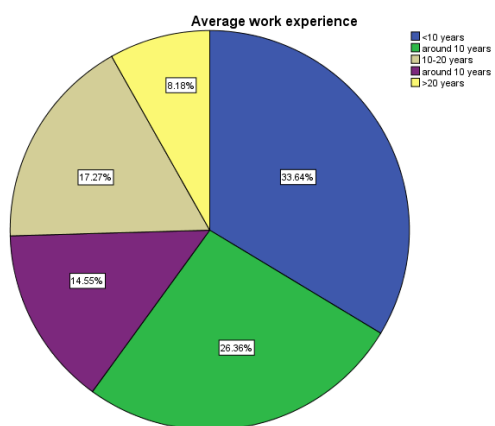


Figure 20. Average work experience

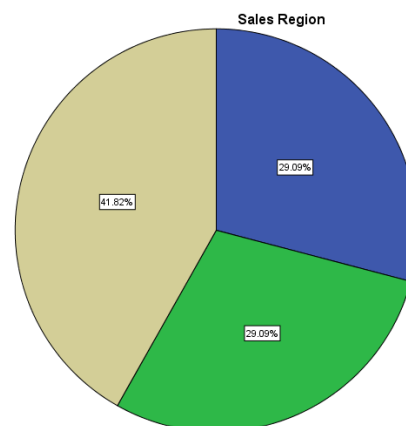


Figure 21. Sales region

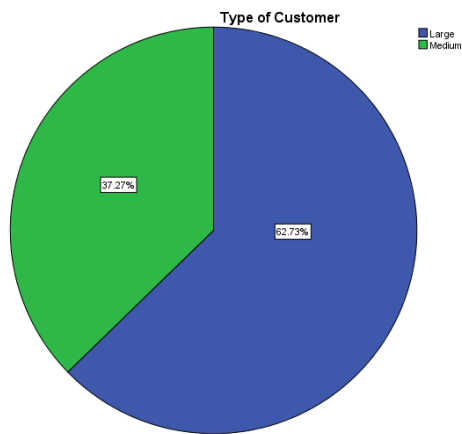


Figure 22. Type of Customer

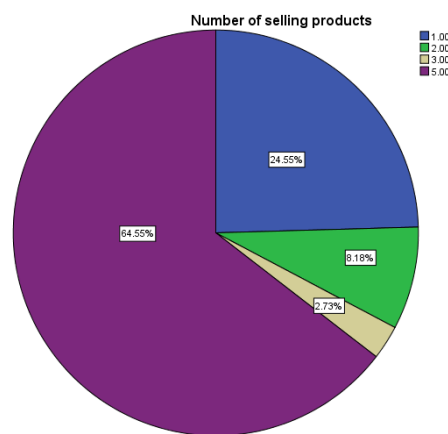


Figure 23. Number of selling products

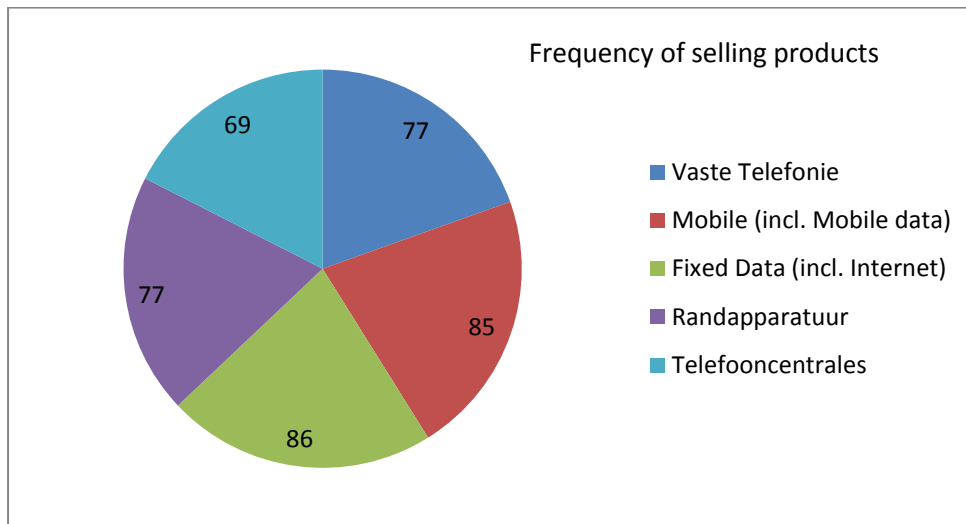


Figure 24. Frequency of selling products

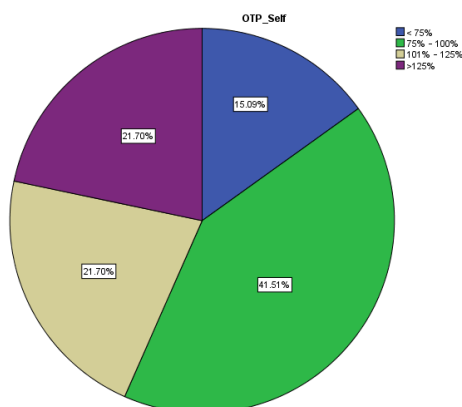


Figure 25 Self-reported OTP

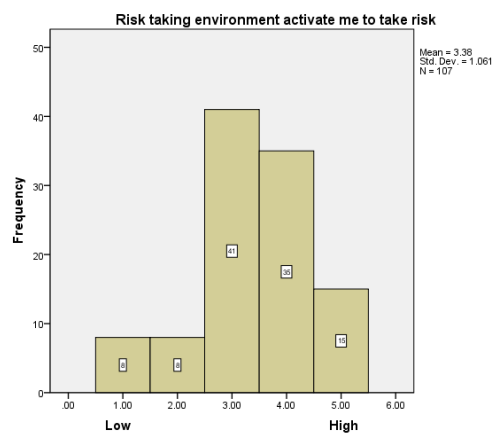


Figure 26. Risk taking environment activate me to take risk

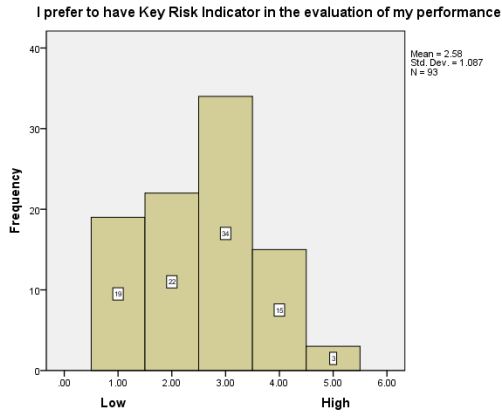


Figure 27. I prefer to have Key Risk Indicator in the evaluation of my performance

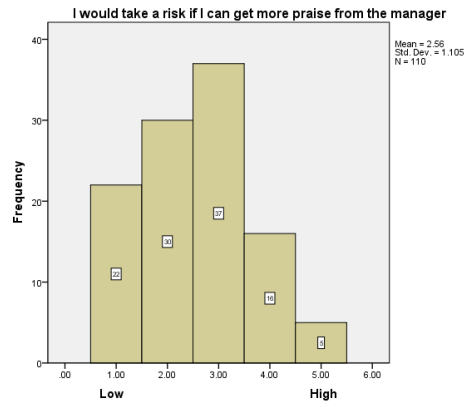


Figure 28. I would take a risk if I can get more praise from the manager

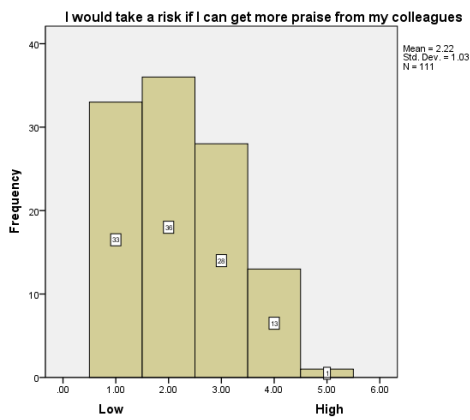


Figure 29. I would take a risk if I can get more praise from my colleagues

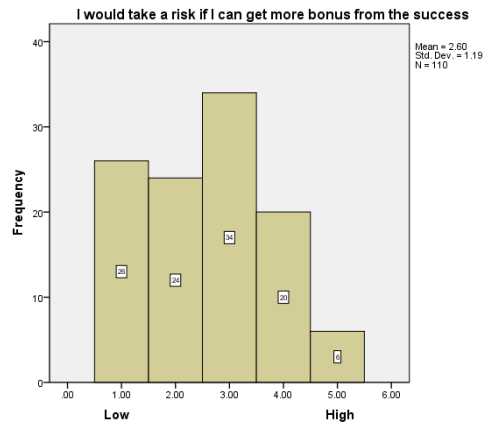


Figure 30. I would take a risk if I can get more bonus from the success

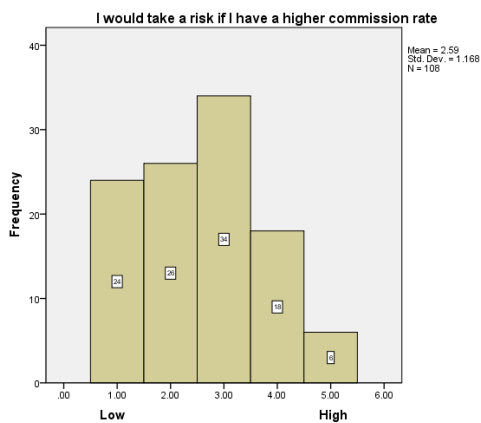


Figure 31. I would take a risk if I have a higher commission rate

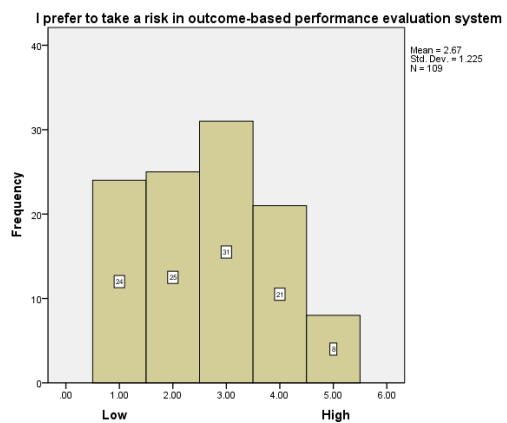


Figure 32. I prefer to take a risk in outcome-based performance evaluation system

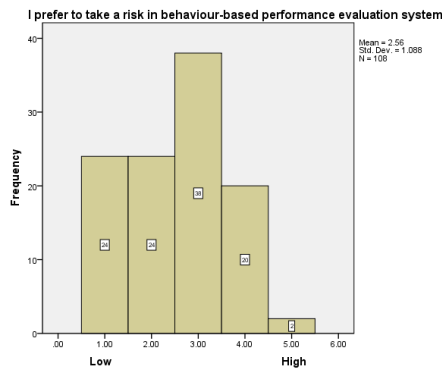


Figure 33. I prefer to take a risk in behavior-based performance evaluation system

3. Missing value analysis

Univariate Statistics

	N	Mean	Std. Deviation	Missing		No. of Extremes ^b	
				Count	Percent	Low	High
NPS_1	113	8.6283	1.47112	0	.0	5	13
NPS_2	113	9.3363	1.10688	0	.0	7	0
CV_1	113	3.9912	.72575	0	.0	.	.
CV_2	113	4.1504	.70989	0	.0	3	0
CV_3	113	4.3982	.72629	0	.0	2	0
CV_4	112	4.1429	.87875	1	.9	6	0
CV_5	113	4.3451	.81031	0	.0	2	0
CV_6	113	4.1681	.78947	0	.0	3	0
CV_7	113	3.2212	.99763	0	.0	0	0
CV_8	113	4.1504	.79306	0	.0	3	0
CV_9	113	3.8230	.89871	0	.0	2	0
SEP_1	112	4.4018	.72857	1	.9	1	0
SEP_3	112	3.9286	.69379	1	.9	.	.
SEP_4	112	4.5357	.61408	1	.9	1	0
SEP_5	112	4.3750	.65931	1	.9	1	0
SEP_6	110	3.9091	.84099	3	2.7	.	.
SNP_1	112	4.3214	.72552	1	.9	2	0
SNP_3	111	3.9279	.83896	2	1.8	0	0
SNP_4	112	4.4286	.62550	1	.9	1	0
SNP_5	112	4.3393	.72972	1	.9	1	0
SNP_6	110	3.6727	.98716	3	2.7	4	0
SPC_1	103	3.7767	.71307	10	8.8	0	0
SPC_2	105	3.4952	.72223	8	7.1	0	0
SPC_3	106	3.2264	.79622	7	6.2	1	0
SPC_4	107	3.5047	.88354	6	5.3	2	0
SPC_5	109	3.8716	.78293	4	3.5	0	0

SPC_6	103	3.6699	.79691	10	8.8	1	0
KR_1	113	3.9469	.95282	0	.0	0	0
KR_2	113	3.2832	1.23541	0	.0	14	0
KR_3	113	4.3186	.74720	0	.0	4	0
KR_4	113	4.4779	.65598	0	.0	1	0
RAP_1	111	3.7297	.91399	2	1.8	1	0
RAP_2	99	3.3737	.87582	14	12.4	2	0
RAP_3	108	3.6944	.89085	5	4.4	0	0
GR_1	109	2.1376	1.05819	4	3.5	0	0
GR_2	111	1.5676	.78186	2	1.8	0	3
GR_3	107	1.9626	.82331	6	5.3	0	5
GR_4	109	2.4312	1.01258	4	3.5	0	0
GR_5	111	2.0541	.95192	2	1.8	0	0
SR_1	111	2.3153	.92424	2	1.8	0	0
SR_2	104	1.9904	.86457	9	8.0	0	5
OR_1	104	1.7981	.79293	9	8.0	0	2
OR_2	102	1.9804	.91175	11	9.7	0	0
OR_3	108	3.0556	1.22156	5	4.4	0	0
CR_1	109	1.5138	.76515	4	3.5	0	1
CR_2	108	1.8981	.81962	5	4.4	0	3
CR_3	109	1.6972	.84442	4	3.5	0	3
CR_4	107	1.6168	.83151	6	5.3	0	3
CR_5	106	1.8396	.88519	7	6.2	0	4
CR_6	105	2.0571	.95905	8	7.1	0	0
RE	110	1.6000	.85884	3	2.7	0	4
UR_1	105	4.6952	.59037	8	7.1	.	.
UR_2	85	4.4118	.80614	28	24.8	1	0
UR_3	109	4.6789	.60676	4	3.5	1	0
UR_4	112	4.6964	.55083	1	.9	0	0
MR_1	107	3.3832	1.06084	6	5.3	8	0
MR_2	93	2.5806	1.08670	20	17.7	0	3
MR_3	110	2.5636	1.10485	3	2.7	0	5
MR_4	111	2.2162	1.03049	2	1.8	0	0
MR_5	110	2.6000	1.19017	3	2.7	0	6
MR_6	108	2.5926	1.16841	5	4.4	0	6
MR_7	109	2.6697	1.22516	4	3.5	0	0
MR_8	108	2.5556	1.08803	5	4.4	0	2
Gender	113	1.1416	.35019	0	.0	.	.
Age	113	2.2035	.74593	0	.0	0	0
X_3	113	1.6814	.68486	0	.0	0	0
X_4	113	1.6549	.82126	0	.0	0	0
Region	113	2.1239	.82519	0	.0	0	0
TypeofCustomer	113	1.3894	.48978	0	.0	0	0

OTP_Self	113	2.4867	.97390	0	.0	0	0
NOPS	113	3.7434	1.76159	0	.0	0	0
OTP	93	37.2489	16.63698	20	17.7	0	0

a. . indicates that the inter-quartile range (IQR) is zero.

b. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

Table 18. Missing value analysis

4. Correlation analysis

Correlations

		Risk attitude in general	Compliance risk attitude	Governance risk attitude	Strategic & planning risk attitude	Operational risk attitude	Behavior of selling new products	Behavior of selling existing products	Selling behavior comparing to colleagues
Self-reported OTP	Pearson Correlation	.012	.003	-.011	-.237**	-.027	.138	-.045	.247**
	Sig. (2-tailed)	.901	.972	.910	.013	.783	.154	.642	.010
	N	108	108	108	108	108	108	108	108
OTP	Pearson Correlation	.102	-.171	-.187	-.053	-.098	.020	-.025	.202
	Sig. (2-tailed)	.370	.131	.099	.644	.390	.860	.829	.074
	N	79	79	79	79	79	79	79	79
OTO transfer into ratio	Pearson Correlation	.021	-.171	-.212*	-.086	-.097	-.019	-.017	.208*
	Sig. (2-tailed)	.833	.077	.027	.376	.320	.847	.860	.031
	N	108	108	108	108	108	108	108	108
OTP rate	Pearson Correlation	.106	-.167	-.203	-.059	-.067	.035	-.004	.223*
	Sig. (2-tailed)	.353	.142	.072	.607	.556	.760	.971	.048
	N	79	79	79	79	79	79	79	79
Number of deals won in 2011	Pearson Correlation	.097	.087	-.079	.160	-.050	-.002	.058	-.151
	Sig. (2-tailed)	.558	.597	.632	.330	.763	.993	.728	.360
	N	39	39	39	39	39	39	39	39
Total number of deals in 2011	Pearson Correlation	-.027	-.221	-.320*	-.126	-.088	.192	.257	-.101
	Sig. (2-tailed)	.871	.176	.047	.443	.595	.242	.114	.542
	N	39	39	39	39	39	39	39	39
Hit ratio in 2011	Pearson Correlation	.146	.315	.113	.205	-.009	-.209	-.125	-.101
	Sig. (2-tailed)	.374	.051	.493	.209	.958	.201	.449	.540
	N	39	39	39	39	39	39	39	39
Number of accounts	Pearson Correlation	-.117	.042	-.022	.040	.153	-.006	.004	.173
	Sig. (2-tailed)	.232	.671	.819	.679	.116	.952	.970	.075
	N	107	107	107	107	107	107	107	107

Number of deals won in the first three quarters of 2012	Pearson Correlation	-.017	.106	-.065	.334**	.227*	-.004	-.070	.080
	Sig. (2-tailed)	.877	.342	.561	.002	.040	.973	.529	.472
	N	82	82	82	82	82	82	82	82
Total number of deals in the first three quarters of 2012	Pearson Correlation	-.030	.151	.066	.276**	.310**	-.120	-.116	.077
	Sig. (2-tailed)	.790	.176	.553	.012	.005	.283	.299	.490
	N	82	82	82	82	82	82	82	82
Hit ratio in the first three quarters of 2012	Pearson Correlation	-.041	.036	-.151	.142	.014	.145	.058	.031
	Sig. (2-tailed)	.712	.750	.175	.204	.897	.194	.603	.784
	N	82	82	82	82	82	82	82	82

Table 19. Correlation matrix

5. Moderation test

6. Model	Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
	B	Beta		VIF
CR_centered	.035		.410	1.793
GR_centered	-.077*	-.270*	.057	1.541
SR_centered	.051		.124	1.464
OR_centered	-.021		.645	1.753
Age_centered	-.047		.382	3.387
Exp_Sales_centered	-.026		.510	1.679
Exp_KPN_centered	.084**	.384**	.050	2.950
Gender_centered	-.046		.486	1.251
TOC_centered	.031		.551	1.451
CR_ExpK_centered	-.004		.932	1.699
GR_ExpK_centered	.039		.393	1.572
SR_ExpK_centered	.002		.949	1.436
OR_ExpK_centered	-.019		.730	2.039

Table 20. Moderation regression coefficients of experience of KPN and number of hit ratio (R square=0.166, N=82)

Appendix B: Questionnaire with coding

In the following table the questionnaire that was sent out by e-mail to KPN customers can be found. The construct to which an item belongs has been specified as accurately as possible.

Part one: General questions

Dimension	Items	Reference	Coding
Net Promoter Score	1. How likely is it that you would recommend working at KPN to third parties?	Reicheld, 2003	NPS_1
	2. How likely is it that you would recommend the services of KPN to third parties?	Reicheld, 2003	NPS_2

Core value	To what extent are you agree with the following statement		
	You seek to understand the other	Simplicity	CV_1
	You create a simple solution		CV_2
	You communicate simple		CV_3
	You talk about your own responsibility and behaviour	Personal	CV_4
	You tackle challenges, share success and learn from disappointments together		CV_5
	You know the other, ask for help and offer help		CV_6
	You decide to trust the other	Trust	CV_7
	You share your expectations, make clear agreements and follow through		CV_8
	You provide constructive feedback and actively seek for it		CV_9

	1. To what extent do you agree or disagree with the following statements concerning the existing products, I...		
Behaviour of existing new products	...am proactive in selling the existing products.	Borgh, 2009	SEP_1
	...anticipate potential problems with selling the existing products.	Borgh, 2009	SEP_2
	...am constantly on the lookout to identify opportunities to sell the existing products.	Borgh, 2009	SEP_3
	...actively scan the need for the existing products.	Borgh, 2009	SEP_4
	...know the security risks for the customer in relation to the products		SEP_5
	2. To what extent do you agree or disagree with the following statements concerning the new products, I...		
Behaviour of selling	...am proactive in selling the new products.	Borgh, 2009	SNP_1

new products	...anticipate potential problems with selling the new products.	Borgh, 2009	SNP_2
	...am constantly on the lookout to identify opportunities to sell the new products.	Borgh, 2009	SNP_3
	...actively scan the need for the new products.	Borgh, 2009	SNP_4
	...know the security risks for the customer in relation to the products		SNP_5
	3. Compared to colleagues in general I am, for selling products, more successful in...		
Selling behaviour comparing to colleagues	... gaining significant share of customer	Borgh, 2009	SPC_1
	... generating high level of sales volume:	Hultink & Atuahene 2000	SPC_2
	... quickly generating sales:	Hultink & Atuahene 2000	SPC_3
	... exceeding sales targets set:	Hultink & Atuahene 2000	SPC_4
	... assisting the sales manager in achieving the objectives:	Hultink & Atuahene 2000	SPC_5
	...know the security risks for the customer in relation to the products		SPC_6

Part two: Knowledge of rules at KPN

	Knowledge and usage of the rules		
Knowledge of rules	To what extent are you informed about the ND5 rules where KPN to must meet		KR_1
Usage of rules	To what extent do you follow up the ND5 rules where KPN to must meet		UR_1
Knowledge of rules	To what extent are you informed about the SOX rules where KPN to must meet		KR_2
Usage of rules	To what extent do you follow up the SOX rules where KPN to must meet		UR_2
Knowledge of rules	To what extent are you informed about the OPTA rules where KPN to must meet		KR_3
Usage of rules	To what extent do you follow up the OPTA rules where KPN to must meet		UR_3
Knowledge of rules	To what extent are you familiar with the privacy rules where KPN to must meet		KR_4
Usage of rules	To what extent do you follow up the privacy rules where KPN to must meet		UR_4

Part three: Attitude towards risk

	Questions		
Risk	I enjoy risk taking.	Zaleskiewi	RAP_1

taking attitude in general		cz, 2001	
	I am attracted by different dangerous activities.	Zaleskiewi cz, 2001	RAP_2
	While taking risk I have a feeling of a very pleasant flutter.	Zaleskiewi cz, 2001	RAP_3
	I make risky decisions quickly without an unnecessary waste of time.	Zaleskiewi cz, 2001	RAP_4
	I often dare to do risky things which other people are reluctant to do	Dahlback, 1990	RAP_5
	I think that I am often less cautious than people in general	Dahlback, 1990	RAP_6
	I think I am often rather bold and fearless in my actions	Dahlback, 1990	RAP_7

Part four: Situations of risk

	Questions		
Managing risk	Risk taking environment activate me to take risk	West & Ford 2001	MR_1
	I prefer to have Key Risk Indicator (similar to KPI) in the evaluation of my performance	Kaplan 2005	MR_2
	I would take a risk if I can get more praise from the manager	Cherrington 1989	MR_3
	I would take a risk if I can get more praise from my colleagues	Cherrington 1989	MR_4
	I would take a risk if I can get more bonus from the success	Cherrington 1989	MR_5
	I would take a risk if I have a higher commission rate	Berger & Jaffe 1991	MR_6
	I prefer to take a risk in outcome-based performance evaluation system	Craven et al., 1993	MR_7
	I prefer to take a risk in behaviour-based performance evaluation system	Craven et al., 1993	MR_8

	In order to achieve a better sales performance		Coding
Governance risk	I'm willing to take the risk of not having adequate understanding of the organization's business		GR_1
	I'm willing to take the risk that my behaviour is not aligned with KPN's core value (Personal, Simplicity and Trust)		GR_2
	I'm willing to take the risk that my behaviour is not aligned with KPN's long-term strategy		GR_3
	I'm willing to take the risk of having an over-emphasis on my short-term performance		GR_4
Strategic and	I'm willing to take the risk of having inadequate analysis of the competitors.		SR_1

planning risk	I prefer the situation that the manager has few appropriate involvement in my work		SR_2
	I'm willing to take the risk of misalignment of training/development program and business plan of my department(company)		SR_3
Operational risk	I'm willing to take the risk of not tracking information that I need		OR_1
	I'm willing to take the risk of being involved in an ineffective/inefficient work process		OR_2
	I'm willing to take the risk of not following and make use of the change of customer preferences		OR_3
Compliance risk	I'm willing to take the risk that the external or internal regulations are not always met.		CR_1
	I'm willing to take the risk of inadequate preventative controls in my work		CR_2
	I'm willing to take the risk of inadequate corrective controls in my work		CR_3
	I'm willing to take the risk of inadequate repressive controls in my work		CR_4
	I'm willing to take the risk of inadequate detective controls in my work		CR_5
	I'm willing to take the risk of inability to communicate potential risks across lines of business		CR_6
	I'm willing to take the risk of not reporting key sales metrics to my manager.		RE

Part five: Geographic information

Question	Options		Coding
Your Gender	Male Female		X_1
Your age	<30 30-40 >40		X_2
Time worked in the sales profession	<10 10-20 >20	Ahearne et al., 2010	X_3
Time worked in KPN	<10 10-20 >20	Ahearne et al., 2010	X_4
Sales region	East West South		X_5
Type of customer	Large Medium		X_6
Your familiar product	Vaste Telefonie Mobile (incl. Mobile data) Fixed Data (incl. Internet) Randapparatuur Telefooncentrales		X_7
Do you have any final questions or comments about the research?			X_8