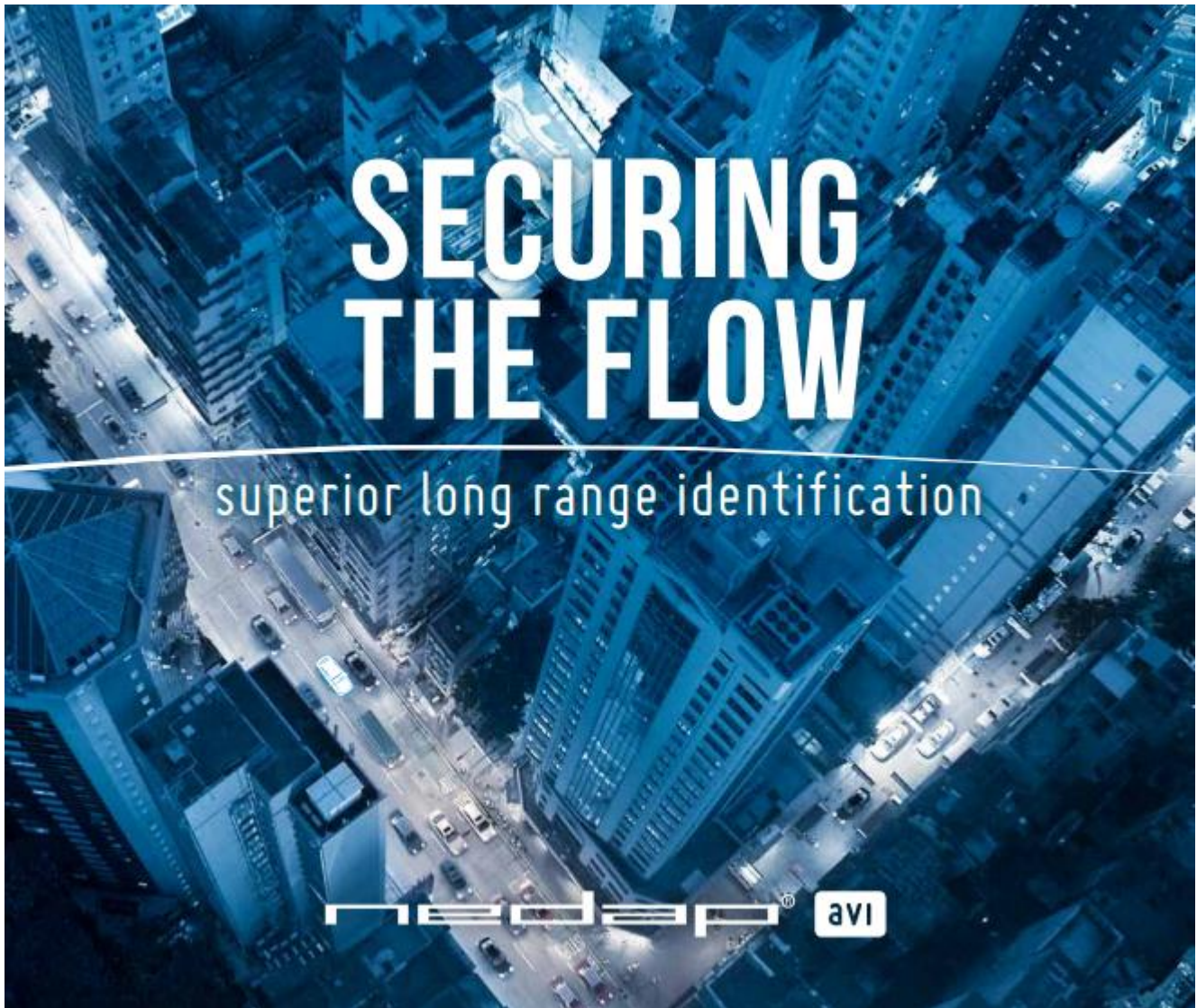


# The effect of relational governance on business partnership performance: a Nedap AVI case.



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# **The effect of relational governance on business partnership performance: a Nedap AVI case.**

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## **Abstract**

The aim of this research is to assess the effect of relational governance on business partnership performance. A conceptual model with three associated hypotheses is developed and tested. Business development managers of Nedap AVI (interviews), a technology company from the Netherlands and their global network of business partners (survey, N=41) provided data for the empirical analysis. The results show that establishing and building trust & commitment are of major importance in order to develop effective and successful business relationships with business partners. Relational governance, a construct existing of the dimensions; joint planning; joint problem solving; trust & commitment has a significant positive effect on one of the two performance indicators used in this study, perceived satisfaction (hypothesis 1). There is no evidence being found regarding a positive effect of relational governance on the other performance indicator that is adopted, sales growth rate (hypothesis 2). This research also investigated whether there is a mediating effect of perceived satisfaction on the sales growth rate. This assumption (hypothesis 3) cannot be confirmed based on the results of this study.

Keywords: Relational Governance, Business partnerships, Management, Trust, Commitment

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## Table of Contents

1. Introduction.....	1
1.1. Theory and hypothesis .....	3
2. Methods.....	5
2.1. Participants.....	5
2.2. Data collection .....	6
2.3. Measures .....	7
3. Results.....	10
3.1. Interviews.....	10
3.2 Survey .....	12
4. Discussion & Conclusions .....	16
4.1. Conceptual model and general conclusions.	16
4.2. Limitations of the study .....	17
4.3. Implications to theory .....	18
4.4. Practical implication and recommendations	18
Appendixes .....	20
Appendix 1: Partnership Success model.....	21
Appendix 2: Integrated framework for relationship management	22
Appendix 3: Survey among Nedap AVI business partners	23
References.....	28

# 1. Introduction

Entering into a business partnership is a commonly used method for expanding sales, markets and growing a company. However, the majority of all companies fail to establish successful, long-lasting partnerships. Previous studies indicate that the failure rate of partnerships is as high as seventy percent (Kalmbach et al, 1999; Kok & Wildeman, 1999). Greenhalgh (2001) argues that the management of these partnerships will be the key factor to success. This research focuses on relational governance as a mode to manage an existing business partner network in a more effective way and ultimately increase business partner performance. The aim of relational governance is that two independent, but closely related firms can reduce their range of activities and concentrate on a few core competencies in order to collaborate more effectively together (Prahalad & Hamel, 1990). Due to high competition it has become more difficult for companies to differentiate themselves from competitors only on traditional categories like product/service quality, price or functionalities. The perceived quality of a customer's interaction with a company (e.g. how fast, easy, efficient and reliable the process is) can make or break the relationship with customers (IBM, 2006). Especially within a business-to-business model, the success of a company is largely driven on the success of the business partnerships that they maintain. Strong long-term relationships can lead to customer loyalty and increased profitability (Athanassopoulou, 2009; Clark, 1997; Hallowell, 1996; Reichheld and Sasser, 1990; Storbacka et al., 1994). Partnerships are defined as purposive strategic relationships between independent firms who share compatible goals, strive for mutual benefit, and acknowledge a high level of mutual interdependence. They join efforts to achieve goals that each firm, acting alone,

could not attain easily (Bleeke & Ernst, 1991; Powell, 1990).

Nedap Automatic Vehicle Identification (from here on Nedap AVI), a technology company from the Netherlands which operates in a b-2-b environment and maintains a global network of business partners is used as a case. The central research question within this research is: *To what extent do relational governance mechanisms increase the sales growth rate and the degree of perceived satisfaction among current Nedap AVI business partners?*

Nedap AVI develops and produces all kinds of short and long-range Radio Frequency Identification (RFID) solutions for people and especially vehicles. Within the past decade Nedap AVI has expanded its business and established a global network of distributors, system integrators and other partners. The objective of these relationships is to create a mutual benefit for both parties. AVI is currently active in about 60 countries worldwide. This worldwide expansion drift leads to a number of challenges. Part of this is maintaining expansion growth. The success factors of expansion throughout these years were: co-operation with strong business partners (clients), the development and introduction of easy-to-integrate and reliable products, close client relationships and approachable barriers for partners to sell Nedap AVI products. Although the past decade was considered to be successful, AVI has difficulty to reach the next stage of the organizational lifecycle, the formalization stage (Daft, 2007). There was for example no clear structure on how to manage an increasingly amount of business partners, there were no sales targets, planning and there was no structural communication with clients. According to the current business unit manager, Nedap AVI stayed too long in the entrepreneurial stage and is currently stuck in the collectivity stage.

Nedap AVI has not been growing anymore for the last two years. With the current approach towards partnerships, it seems unlikely to reach the proposed strategic goals of expansion and especially sales growth on the short term, which are aims of Nedap's board. In order to reach the formalization stage of the organizational life cycle, AVI desires to establish strong, lasting relationships with existing business partners and apply a form of relationship governance in order to enhance structure and manage their business partner network in a more effective way. As a start, the expansion drift of Nedap AVI is not aimed at entering new countries and partnerships anymore, but at intensifying activities and projects together with existing business partners.

This research will investigate to what extent relationship governance is already implemented within their existing business partnerships and the feasibility of implementation of any missing elements. Successful practical implementation of relationship governance should ultimately lead to increased business partner performance.

The conceptual model that is tested within this research is to a certain extent based on the integrated framework for relationship management which is developed and tested

by Claro, Hagelaar and Omta (2003) (appendix 2). Their framework affords a concrete and testable approach for evaluating the impact of relational governance mechanisms on business partner performance.

These authors investigated the influence of the determinants of the transaction, dyadic, and business environment level on relational governance and ultimately on performance. The focus within this research lays on the latter; the effect of relational governance mechanisms on two performance indicators; perceived satisfaction; and the sales growth rate. The different dimensions of relational governance and perceived satisfaction are developed from previous studies. The origin and operationalization of all variables that are incorporated in this conceptual model are explained in the theoretical framework. The conceptual model (figure 1) with three associated hypotheses is developed and tested.

Claro et al (2003) assumed that a higher level of relational governance will lead to a higher level of perceived satisfaction and a higher sales growth rate. The first two hypotheses within this conceptual model are in line with the work of Claro et al (2003). The extent of relational governance is gauged through the strength

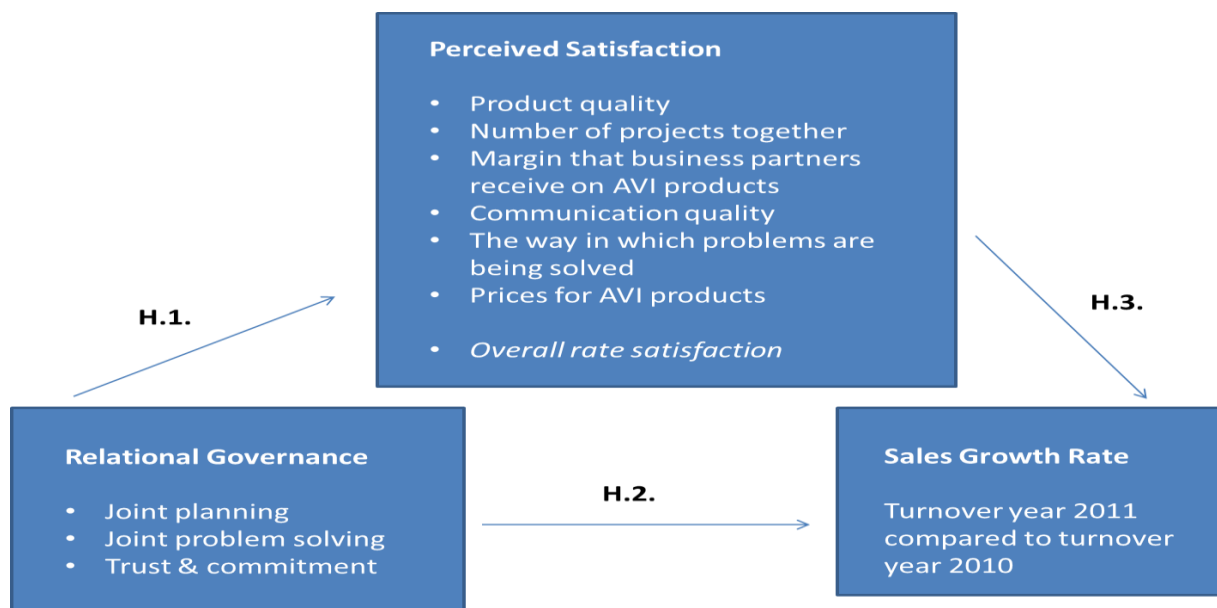


Figure 1. Conceptual model

of relational norms prevalent in exchange (Noordewier et al., 1990). Nedap AVI wants to establish long-lasting business relationships with their existing business partners. The first hypothesis tests whether there is a positive relationship between RG and the performance indicator, perceived satisfaction.

*Hypotheses 1: The higher the level of relational governance, the higher the level of perceived satisfaction.*

As, Nedap's board has prepared targets regarding the annual turnover of its business units, a financial performance indicator is used in the conceptual model (fig.1); sales growth rate. The purpose of applying relational governance is ultimately sales growth.

*Hypotheses 2: The higher the level of relational governance, the higher the sales growth rate.*

The conceptual model (figure 1.) responds to some limitations of the work of Claro et al (2003). Within their study, they only included suppliers, whereas this study includes both parties involved in the dyad: the business development managers of Nedap AVI and a global network of subsidiaries, system partners and distributors. In addition to the hypotheses on the direct link between relational governance and performance indicators proposed by Claro et al (2003), this model also tests whether perceived satisfaction has a mediating effect on the sales growth rate. *Hypotheses 3: Perceived satisfaction has a mediating effect on the sales growth rate.*

The overall purpose of this research is to investigate the effect that relational governance mechanisms have on two performance outcomes: perceived satisfaction (H.1.), and the sales growth rate (H.2). By using Nedap AVI as a case, this research provides better customer insights and tests whether relational governance can be applied in order to

make current collaborations more effective and ultimately increase the performance of their business partner network. The third hypothesis is added to make a contribution to the international business literature.

## **1.1. Theory and hypothesis**

In this literature overview the following topics will be elucidated; purposes of forming partnerships in a business-to-business environment; key relational constructs; the determinants of partnership success; and the way partnerships should be governed in order to increase performance.

Partnerships are intensively explored within a business-2-business market environment (Landeros & Monczka, 1991; Mohr & Spekman, 1994; Smith, Carroll, & Ashford, 1995; Spekman, 1988).

Organizations form partnerships for different purposes. As stated by Powell (1987), the most common reasons are: access to new technologies or markets; ability to provide a wider range of products/services; economies of scale in joint research and/or production; access to knowledge beyond the firm's boundaries; sharing of risks; and access to complementary skills to enhance their capabilities to improve product quality, innovation, and market reach (Mohr & Spekman, 1994; Porter, 1985). Nedap AVI has established a global network of business partners in order to access new markets and to complementary skills. Business partners have to sell AVI products to end-users and provide them with service and support.

There is no consistency in previous literature about the key factors of success regarding business partnerships. There is no universalistic approach that ensures partnership success. Mohr and Spekman (1994) developed a partnership success model (appendix 1.) and proposed that the attributes necessary for establishing a successful partnership include

commitment, coordination, interdependence and trust.

Morgan and Hunt (1994) introduced the commitment-trust theory in which they proposed that commitment and trust are the key mediators within the exchange between two organizations, which are essential for building a relationship. The presence of trust and commitment within the business relationships between Nedap AVI and its business partners is tested within this research.

Trust has generated a substantial amount of research from different disciplines. It is a complex construct with multiple meanings and dimensions. Trust is often linked with other constructs such as opportunism, uncertainty and power. Although there is no comprehensive definition, all definitions of trust suggest that trust involves one party having confidence in, or relying on another party to fulfil its obligations (Anderson & Narus, 1990; Moorman et al, 1993; Morgan & Hunt, 1994; Nicholson, 2001; O'Malley & Tynan, 1997). The presence of trust in a relationship will lead to more open communication, higher quality decision-making, risk taking, cooperation, satisfaction in the decision-making, and relationship commitment (Beccerra & Gupta 1999; Kim & Frazier 1997; Svensson 2006). Previous studies assign trust as a determinant of relational governance or as a consequence of relationship nature (e.g., Anderson & Narus, 1990; Anderson & Weitz, 1989; Doney & Cannon, 1997). According to Bradach and Eccles (1989) trust acts as a lubricant of relational governance of business relationships.

Beside trust, commitment is another important variable within a business-2-business environment. Without commitment, it is unlikely that trading partners will be able to work closely and cooperatively together (Dwyer et al. 1987; Gundlach et al. 1995). Commitment represents the buyer's perception that the relationship with a particular supplier is so

important that it is worth investing special effort to maintain it indefinitely. It also reflects a long term relationship orientation (Anderson & Weitz, 1992). When trading partners are committed to each other they are more willing to cooperate and comply with each other's requests, be flexible, share information and engage in joint problem solving (Tellefsen, 2002). The way both constructs, trust and commitment, are conceptualized within this research is elaborated within the methods section.

As mentioned above, Nedap AVI desires to establish long-term business relationships and manage their business partner network in a more effective way by implementing a governance structure. The importance of relationship governance is evident in the literature. Relationship governance can be clustered into three major types: market governance, hierarchical governance and relational governance (e.g., Bradach & Eccles, 1989; Ghosh & John, 1999). Market governance refers to arm-length transactions. Within arm-length transactions, both parties involved, act independently from each other and are only focused on self-interest, there is no relationship. Hierarchical governance refers to business relationships that are characterized by formal contracting, the extent to which a relationship is regulated by rules, procedures and fixed policies (Haugland, 1999).

Relational governance (RG) is a mode to coordinate business relationships. This governance type focuses on the emotional aspects within a business relationship. It refers to a social institution that governs and guides exchange partners on the basis of cooperative norms and collaborative activities (Heide & John, 1992; Macneil, 1980; Zaheer & Venkatraman, 1995). It also reflects the degree to which joint actions are established in a business relationship (Bensaou & Venkatraman, 1995; Heide & Miner, 1992). Relational governance can enhance coordination, lower transaction costs, and improve

exchange performance (Dyer & Singh, 1998; Macaulay, 1963). There is no consistency within previous research regarding which of these governance structures is best and whether a business relationship should be governed through contractually fixed terms, through emotional aspects and agreements without formal contracts or through a combination of both (Faems et al, 2008). For example, some studies (Luo, 2002; Poppo & Zenger, 2002) have provided evidence that complex contracts facilitate trust building, whereas other studies (Lyons & Mehta, 1997; Malhorta & Murnighan, 2002) have concluded that complex contracts negatively influence the level of trust between partners. The degree of trust is also considered to be culture and context dependent. It should decrease considerably as cultural diversity and differentiation increases. (Gefen et al, 2005). Faems et al (2008) mentioned three issues regarding the way contractual and relational governance have been examined during the years. The first issue reflects that some studies only focused on the degree of formalization instead of the content of the corresponding contracts. Other studies that examined the design of contracts, ignored the way such structural elements are applied in practical situations (Bell et al., 2006). Final complaint by Faems et al (2008) is that previous studies only focused on relational processes at the managerial level. The interaction between managerial level and operational level is ignored (Currall & Inkpen, 2000).

A preliminary analysis with the business unit manager of Nedap AVI regarding their methods and procedures towards collaboration with business partners made clear that the business relationships in this context are mainly based on relational/emotional aspects rather than contractually fixed terms. Because Nedap AVI is merely involved in so called trust-based relationships it is a useful case to test whether relational governance mechanisms

can bring more structure regarding partnership management and ultimately achieve increased satisfaction and sales performance among business partners. In line with previous research, perceived satisfaction is selected as a performance indicator within this research (Claro et al, 2003; Morgan & Hunt, 1994). If two parties achieve their mutual goals it will lead to satisfaction with the partnership (Anderson & Narus, 1990). Customer satisfaction is widely accepted as a strong driver for behavioural outcomes like repurchase intentions, word-of-mouth, loyalty (Ravald & Gronroos 1996; Liljander & Strandvik 1995).

## 2. Methods

### 2.1. Participants

The units of analysis for this research are the business relationships between business development managers of Nedap AVI (interviews) and their global network of existing business partners (survey). The Nedap AVI team for business development exists of five male and one female business development managers, who are located at the Nedap headquarters in Groenlo, the Netherlands. Each of them have their own field of play, they are responsible for the sales within their own geographical region. Nedap AVI has offices in the USA, Singapore, United Arab Emirates and Italy. Within these countries, four male regional chief business developers offer local support. They are extensively being informed about the purpose of this research and have provided a database of contact persons that is being used for the survey. Because Nedap AVI is currently active in about 60 countries worldwide, a survey was the most appropriate method to get a high number of respondents and to collect relevant data from this population. Main objective of this survey was to investigate the extent to which relational governance mechanisms are already present in existing business relationships that Nedap AVI

maintains and their effect on perceived satisfaction and ultimately sales growth. Additional was to receive data from different types of business partners within different demographic regions. The survey is, after pretesting being sent to 137 persons in total. 44 persons have filled out the online questionnaire. Three of these questionnaires were partially unusable because of missing answers on important questions. This resulted in a response rate of 32%. Commercially responsible employees of distributors, system integrators, OEM partners and technology partners have contributed to the survey. 93% of the respondents were male and 7% female. They had a *mean* age of 46 years old. The respondents were established in 18 different countries all over the world. Most of the companies have been doing business with Nedap AVI since three until five years.

## **2.2. Data collection**

As mentioned above data is collected through personal interviews with business development managers of Nedap AVI, who are established at the Nedap headquarters and a survey among their existing business partners. The purpose of combining these two methods of data collection was to get inside information of both parties involved and to get data about experiences that were perceived during the events that have taken place over a longer period of time.

The aim of the interviews was to get a better understanding of how business development managers of Nedap AVI experience collaboration with their partners, their procedures and methods. The interviewees were i.e. asked about the way they currently manage their business partner portfolio; the balance between formal and emotional agreements; how they experience the presence of trust, commitment, and satisfaction within their relationships; whether there is long-term orientation; the existence of joint planning

and how they deal with problem situations that arise in the course of the relationship. The questions within the survey (appendix 3) were merely related to the conceptual model and associated hypothesis. There are some other questions included that are irrelevant to this study but relevant to current matters that Nedap AVI is facing, e.g. how business partners experience the new website ([www.nedapavi.com](http://www.nedapavi.com)), their knowledge level regarding (new) AVI products and need of product training. Some of these questions are not being used for this research, but will give Nedap AVI insight on how their business partners experience these issues.

The interviews for this research have occurred in October and November of 2011. The interviews had a semi-structured character. Each interview session has lasted approximately one hour. At the end of each session, the respondents were asked to provide a list of contact persons of their business partners. The business development managers that are established in foreign countries were asked to provide a similar list by email. All these data have been collected in a database of contact persons. This database was used to send the survey to an accurate list of potential respondents. The units of analysis of this survey were individual persons who represent the companies that currently maintain a business relationship with Nedap AVI. The survey is not related to a specific job or function, because tasks and responsibilities are related to different job titles within this industry. Preferably the person that fills out the survey had direct contact with a business development manager of Nedap AVI on regularly basis during the previous year.

The survey was prepared with an online survey tool, called SurveyMonkey. The survey consists of 43 questions in total. The questions within the survey are based on literature research and previous case studies (Claro, Hagelaar, & Omta, 2002; Claro, Hagelaar, & Zylbersztajn, 2002).

Most of these questions are on a 7 point Likert scale adopted from previous studies (Bensaou & Venkatraman, 1995; Heide & John, 1988). Likert scales make it possible to interrogate difficult to quantify data and to transform these data to an ordinal measurement level. Respondents should indicate to what extent they agree with certain statements (e.g. 1=strongly disagree, 7=strongly agree). There were also some open- and closed-ended questions included. For two questions in the survey a contingency question was implemented. The survey is compiled to receive data on different levels; individual; company and dyad. In this way the perception that respondents have regarding their business relationship with Nedap AVI as a whole is conducted, but also how they experience the collaboration with the relevant business development manager, both in real-time as in retrospect. Through the online survey tool, a web link is created, which is being sent by email to the contact people from the database. Besides the web link to the survey the potential respondents are being informed in this email about the background of the researcher; the master assignment; goal of the research; and clear instructions regarding the survey. The estimated time to fill out the questionnaire was 5 - 10 minutes. The survey was conducted in English and for the business partners in the Netherlands, in Dutch. The survey data was collected within a period of two months. In total 4 reminders were being sent.

### 2.3. Measures

The independent variable within this study is relational governance. RG contains the existence of the following characteristics within this research; joint planning, joint problem solving, and the existence of both, trust & commitment. As presumed relational governance will have a positive effect on the performance indicators; perceived satisfaction; and the sales growth rate. Joint planning will ensure mutual

Relational Governance
<b>Joint planning</b>
1. Our company plans ahead for the next year together with Nedap AVI.
2. Our company provides Nedap AVI with sales forecasts for the upcoming period.
3. Predictability of changes in; products; prices; and marketing.
4. Nedap AVI and our company are committed to continuously improving the relationship
<b>Joint problem solving</b>
1. Dealing with problems that arise in the course of the relationship in the best possible way.
2. Based on experience, we feel that Nedap AVI always keeps promises made to us.
3. The responsibility for getting things done is shared.
4. We are willing to take an extra step without expecting something in return immediately.
<b>Trust and Commitment</b>
1. We feel that Nedap AVI's contact person always acts and communicates in a respectful and honest way.
2. In general, we believe our partnership with Nedap AVI will be beneficial to our business.
3. Maintaining a good long-term relationship with Nedap AVI is important to us.
4. In our company, we feel that it is worth the investment to maintain a close relationship with the Nedap AVI contact person.
5. Duration of the relationship up to now. <input type="checkbox"/> < 1 year <input type="checkbox"/> 1-3 years <input type="checkbox"/> 3-5 years <input type="checkbox"/> >5 years

Figure 2. Operationalization of relational governance

expectations, clarity and specifies cooperative efforts from the start of the relationship (Dwyer, Schurr and Oh, 1987). Joint Planning refers to the extent to which future contingencies and consequential duties and responsibilities in a relationship have been made explicitly ex-ante (Heide & John, 1990 and Heide & John, 1992). The degree of joint planning within the relationship between Nedap AVI and its existing business partners is measured by;

- the existence of joint planning;
- the predictability of changes in the following aspects in the business; prices, marketing activities and new products;
- whether sales forecasts are being provided;

- and whether partners are open minded for improvements in the relationship.

The second dimension of relational governance that is adopted within this research is joint problem solving. Joint problem solving is measured by;

- The extent to which recent disagreements with a partner have been productively resolved;
- The responsibility of getting things done in the relationship;
- whether the organization always keeps promises that are being made;
- and whether parties have the willingness to do an extra step without expecting something in return immediately.

The existence of both, trust and commitment within a business relationship is the third dimension of relational governance within this study. Without commitment, it is unlikely that trading partners will be able to work closely and cooperatively (Dwyer et al. 1987; Gundlach et al. 1995). Long-term orientation and whether it is worth the investment to maintain the relationship are the variables that are added to measure commitment.

According to Mayer, Davis and Schoorman (1995) trust consists of three dimensions; ability, benevolence and integrity. Ability refers to the skills, competencies and characteristics that a company possesses to supply a certain level of service and support. Ability in this case refers to whether business partners are capable to install Nedap AVI products properly and are able to provide excellent support to end users as a result of investments in required training and support offered by AVI. Product quality is an important aspect on the other side of the dyad. It is important that business partners consider the business relationship as beneficial to their own business. Benevolence is the extent to which a

company believes that the other organization will lend a hand. To measure benevolence, a survey question is included about the willingness to maintain a long-term relationship. The last dimension that Mayer et al (1995) mention, integrity refers to the perception of values that both parties have. To measure integrity, honesty is an important dimension. So the question, whether the business partner agrees that his or her business development manager acts honestly in negotiations and whether they keep promises at all time is included. Trust is divided in interpersonal and inter-organizational trust. Interpersonal trust in this case refers to trust in the business development manager of Nedap AVI and trust in the sales responsible employee from the business partner. Inter-organizational trust refers to trust in the company as a whole.

The following aspects of trust and commitment make it possible to measure the degree of these constructs together within a business-2-business relationship.

- whether it is worth the investment to maintain a close relationship;
- duration of the business up to now;
- respectful and honest communication;
- business relationship is considered to be beneficial;
- whether there is a long-term relationship orientation.

Relational Governance
<b>Joint planning</b>
1. Our company plans ahead for the next year together with Nedap AVI.
2. Our company provides Nedap AVI with sales forecasts for the upcoming period
3. Predictability of changes in; products; prices; and marketing
<b>Joint problem solving</b>
1. Dealing with problems that arise in the course of the relationship in the best possible way
2. We are willing to take an extra step without expecting something in return immediately
3. The responsibility for getting things done is shared
4. Nedap AVI and our company are committed to continuously improving the relationship

Figure 3. Operationalization of performance indicators

Previous research on the performance of business relationships has generally focused on two kinds of indicators, objective and affective ones (Bensaou & Venkatraman, 1995; Mohr & Spekman, 1994; Zaheer et al, 1998). The conceptual model (fig.1.) includes both types of performance indicators: perceived satisfaction (affective) and the sales growth rate (objective) (e.g. Claro et al, 2003; Mohr & Spekman, 1994). The conceptual model is focused on the perceived satisfaction of both parties involved in the dyad. Perceived satisfaction will be measured in line with the findings of Lages et al (2004). These authors stated that satisfaction consists of three items. The first item is related to the fact that a satisfied business partner considers the association with Nedap AVI to be successful. The second item assesses the extent to which the business partner is overall satisfied with Nedap AVI. Finally, the third item refers to the degree to which the business partner's expectations that they had prior the collaboration were achieved.

Perceived satisfaction toward communication; prices; margin; problem solving; and potential projects together (Claro et al, 2003) are included in order to create an overall view regarding perceived satisfaction of business partners towards their business relationship with Nedap AVI.

The development of the sales growth rate is measured by the turnover per business partner in the year 2011, compared to the turnover per business partner in the year 2010.

### 2.3.1. Reliability and validity

Data analysis regarding the survey data is carried out in SPSS. First of all, a factor analysis is conducted in order to reduce all the fifteen variables from the survey into three factors; joint planning; joint problem solving; and trust & commitment (figure 4). The variable "duration of the business up to now" did not load on any factor.

Therefore this variable is excluded from the analysis. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy had a score of .729. This measure varies between 0 and 1. A value of .6 is a suggested minimum. Bartlett test of sphericity was significant (.000). These tests should be passed before a factor analysis can be conducted (Fabrigar et al, 1999).

After the factor analysis, the Cronbach Alpha's of the three factors of relational governance are measured in order to test the internal consistency among the survey questions. The results and scales of the different constructs are reported in fig. 5.

Rotated Component Matrix	Component		
	Joint Planning	Trust & Commitment	Joint problem solving
Joint planning	,909		
Marketing activities	,902		
New products	,889		
Changes in prices	,699		
Continuously improve business relationship	,582	,348	,517
Sales forecasts for upcoming period	,466		
Longterm orientation		,929	
Beneficial to business		,854	
Worth the investment to maintain close relationship		,812	
Honest contact person		,718	,403
Willing to do an extra step			,920
Responsibility is shared			,776
Joint problem solving		,518	,702
Based on experience always keeps promises		,562	,657

Figure 4. Factor analysis

The variables that loaded on the same factor are indexed by the means of the answers into three sub-dimensions joint planning ( $\alpha=.829$ ), joint problem solving ( $\alpha=.832$ ), trust and commitment ( $\alpha=.895$ ). Thereafter these three sub-dimensions are being merged in the same way to one construct, relational governance ( $\alpha=.741$ ).

The Cronbach's alpha's can be considered as good (George & Mallery, 2003). This means that the individual items that are merged to a general construct produce similar scores. For example; a respondent that agrees with all statements (variables) that are related to joint problem solving, also experiences the general construct at a high degree.

Perceived satisfaction is measured by six different items. These items are being merged to one construct with a Cronbach's Alpha of  $\alpha=.650$ . This construct is also indexed by the means of the answers on relevant questions. The Cronbach's alpha for perceived satisfaction could have been above the required 0.7 (Nunnally, 1978) if the item, satisfaction regarding the number of projects together was deleted. However this item is in line with the findings of Claro et al (2003) on which this list of items in survey questions are based.

To measure the feeling of overall satisfaction that business partners experience regarding their business relationship with Nedap AVI, one single item is included. The respondents are being asked to rate their overall satisfaction on a scale of 1 (lowest) till 10 (highest). This resulted in a mean of  $M=7,8$ .

## 3. Results

### 3.1. Interviews

Nedap AVI is a business unit that develops (new) products and sells these products mainly within a business-to-business context. There is in general no contact with end users for service and support. The image of AVI is therefore largely driven by the way their business partners' deal with their customers (end-users). Business partners have to perform at a high level; the expectations that the interviewees have towards business partners are quite similar. They expect that their partners provide care to Nedap AVI products, that they are capable to install these products properly, and are able to provide excellent service

and support to their customers. It is also important that the business partner knows what the benefits are to apply an AVI solution instead of substitute products offered by competitors. At the end it is all about sales, partners have to put effort in selling AVI products. To achieve all this, support from the Nedap AVI headquarters is needed and business partners have to be managed in a proper way. One of the interviewees describes the ideal situation regarding collaboration;

*"First of all, a (potential) partner has to know you and the products that you offer. Collaboration starts when both parties foresee opportunities in the market. Business partners have to be able to sell AVI products on a frequent base, install AVI products in a proper way and be able to offer excellent service and support."* (I.01).

#### 3.1.1. Communication

The quantity of communication between the business development managers and their business partners differs. Generally it depends on the number of projects in progress in a specific region.

Communication takes mostly place by phone and email. Often the business development managers bring a visit to their partners. It is also common that business partners are invited for a visit to the Nedap headquarters in Groenlo, the Netherlands. However, each of the business development managers is responsible for a large region. They have to make trade-offs in planning their visits. To be present on events, like Ifsec, an international global security event; Intersec, a trade fair and conference for government entities; or Intertraffic, an international tradeshow for the traffic industry and about fifteen other tradeshows, is also a way to maintain contact with existing partners. These events are also intended to increase awareness, acquire leads and come into contact with new potential partners. The characteristics of communication differ

between cultures according to the business development managers;

*“For instance in the United Kingdom; a lot of deals are being closed after the regular business hours, for example during a dinner or in a bar. Socializing and to grant each other something is hereby very important. Within Russia, people first have to get to know you personally before they answer any phone call from you at all. Nigeria is a relative new country for AVI activities. Because of the risk of traveling in this country, communication takes only place by phone and email”* (I.02).

### 3.1.2. Training and support

Training and support takes mostly place at the start of a partnership. However, it is very important to maintain a high level of product knowledge among business partners. The interviewees expect from their partners that they are willing to acquire the required knowledge. Collaboration takes also place on other areas, like marketing. An example of such collaboration is to be represented together at events, like tradeshowes.

### 3.1.3. Long-term orientation

Long-term relationship orientation is important to all business development managers of AVI. In general the communication is experienced by the interviewees as being more open and informal, as they get to know their business partner better. Some of them give even insights in their tenders. Inside information about competitors is also an advantage that is a result of a good relationship with a partner.

*“At some point in time you know what you can expect from your business partners in positive and negative ways. This can be taken into account within future exchanges”* (I.03).

### 3.1.4. Trust and commitment.

About their way of collaboration with business partners, all participants, except for one, share the same opinion. They

prefer a business relationship based on trust and commitment above a contract oriented relationship. In terms of this research they prefer a business relationship that is governed through relational governance above a partnership that is governed through contractual fixed terms (hierarchical governance). This person is used to work with contracts within his previous jobs. According to him contracts decrease risks and uncertainty within a business relationship and it will secure future exchanges. He is currently looking for a way to create synergy between contractual and relational governance within his region. One of the business development managers had some bad experiences in the past with contracts for business partners. According to him relationships within this branch that are governed by a clearly written contract have not proven to be more successful regarding sales, it just slowed down business.

*“Preferably it has to be possible to order Nedap AVI products via a quick phone call instead of via adjusted slow procedures supported by written terms and conditions”* (I.04).

According to the interviewees except for a few exceptions, all existing partnerships are based on agreements without a formal contract. An example of an extensive contract in Nedap AVI terms is contained with a company, established in Kiev, Ukraine. This partnership is merely governed by a contract for a project around the football stadiums for Euro 2012 which has taken place in Poland and Ukraine.

### 3.1.5. Joint planning.

Currently the existence of joint planning is minimal according the interviewees. Most of them strive for joint planning in the future. According to one of the business development managers it is hard to provide a clear planning for Nedap AVI products.

*“These products are not very complex and are applied merely at the end of large building projects. For example if a new*

*(commercial) building complex is being built, Nedap AVI products are applied in the last phase of the project when the parking area and the entrances to this area have to be secured” (I.05).*

#### *3.1.6. Joint problem solving.*

Because there are in general no contracts, it is sometimes hard to reprimand business partners in case of disappointing performance or if targets are not being achieved. However, within this industry reprimanding a partner on performance can harm the business relationship intensely. This is for most of the interviewees an important reason, not to work with a contract. Joint problem solving, which is part of relational governance, can be used as a substitute in case of problems that occur in course of the business relationship. The business development managers of Nedap AVI have good experiences with this dimension of relational governance. If required, they organize a meeting with all people involved to discuss relevant issues. During these meetings mostly both parties do concessions. *“Within ninety-nine percent of the cases both parties solve problems together peacefully (I.04)”*.

### **3.2 Survey**

#### *3.2.1. Objective results survey*

The sample size of the survey (N=41) is relative small. However, this has no negative influence on the internal validity. The survey is filled out by different types of business partners, who are established in eighteen different countries all over the world. It gives a good representation off the whole business partner network. The results of the survey regarding relational governance confirm most of the statements from the interviews. Almost all respondents state that their relationship with Nedap AVI is based on emotional aspects (trust, commitment) and agreements without a formal contract. Especially the respondents, who are established in the United States of

America, strongly disagree on the statement “a formal contract decreases risks and uncertainty in a business relationship”. This fact is remarkable, because the USA is known for its legal claim culture. The business partners in Europe give more value to formal contracts.

Practically all participants believe that it is worth the investment to maintain a close and good long-term relationship with Nedap AVI. They are willing to do an extra step without expecting something in return immediately and are committed to continuously improve the relationship. Thirty percent of the business partners state that there is a need of training within their organization, especially regarding the relative new Nedap AVI products. They are willing to invest in resources in order to provide service and support at a high level. Except a few, all respondents agree that Nedap AVI’s business development manager always act and communicates in a respectful and honest way. It can be concluded that trust and commitment are present within the existing business relationships that Nedap AVI maintains. The statements that measure the existence of joint planning led to fluctuating answers. Some respondents stated that their company plans ahead for the next year together with Nedap AVI; others deny that there is joint planning. All respondents have good experiences with joint problem solving. They maintain a good relationship and deal with problems that arise in the course of the relationship in the best possible way.

#### *3.2.1. Multicollinearity problem*

The correlation matrix (figure 6.) shows that several independent variables are highly correlated with each other. Some independent variables score >0.6. This causes the problem of multicollinearity. Multicollinearity in this case does not reduce the predictive power and reliability of the conceptual model and the effect of relational governance on perceived

Survey	Variables	Measure	Mean	St. dev	Min.	Max.
<b>Joint Problem Solving <math>\alpha = .832</math></b>						
# 27	Both parties deal with problems that arise peacefully together	Scale (1-7)	5,8	1,17	3	7
# 28	Willing to do an extra step, without expecting something in return immediatly	Scale (1-7)	5,46	1,07	2	7
# 29	Responsibility of getting thing done is shared	Scale (1-7)	5,56	0,92	3	7
# 21	Based on experience Nedap AVI always keeps promises made to us	Scale (1-7)	5,98	1,03	3	7
<b>Joint Planning <math>\alpha = .829</math></b>						
# 23	Our company plans ahead together with AVI	Scale (1-7)	4,24	2,18	1	7
# 26	Our company provides Nedap AVI with sales forecasts for the upcoming period	Scale (1-7)	2,68	2,02	1	7
# 22a	Predictability of changes in prices	Scale (1-7)	4,92	1,36	2	7
# 22b	Predictability of changes in products	Scale (1-7)	4,3	1,29	2	7
# 22c	Predictability of changes in marketing	Scale (1-7)	4,06	1,55	1	7
# 30	Willing to continuously improve relationship	Scale (1-7)	5,66	1,06	4	7
<b>Trust &amp; Commitment <math>\alpha = .895</math></b>						
# 19	Our contact person always communicates in a respectful and honest way	Scale (1-7)	6,07	1,19	3	7
# 12	Our business relationship with AVI is considered to be beneficial to our business	Scale (1-7)	5,88	1,31	2	7
# 13	Maintaining a longterm relationship with Nedap AVI is important to us	Scale (1-7)	6,18	1,01	3	7
# 20	It is worth the investment to maintain a close relationship with Nedap AVI	Scale (1-7)	5,98	1,19	2	7
<b>Perceived Satisfaction <math>\alpha = .650</math></b>						
# 33	Product Quality	Scale (1-7)	6,13	0,88	4	7
# 34	Number of potential projects together	Scale (1-7)	4,53	1,24	1	7
# 35	Margin that bp receive on AVI products	Scale (1-7)	4,31	1,26	2	6
# 36	Communication quality	Scale (1-7)	6,03	1,06	3	7
# 37	Way problems are being solved	Scale (1-7)	5,79	1,15	2	7
# 38	Prices for AVI products	Scale (1-7)	4,33	1,25	2	6
# 39	<b>Overall Satisfaction</b>	Scale (1-10)	7,8	1,36	5	10
<b>Sales growth Rate</b>						
# 32	Turnover per bp in 2011 vs turnover 2010	Percentage	18,3	43,5	-44	144

Figure 5. Variable characteristics

	Variables	Mean	Std. Dev	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Perceived Satisfaction among business partners	5,17	,76	1,00														
2	Our business relationship with AVI is considered to be beneficial to our business	5,88	1,31	,496**	1,00													
3	Maintaining a longterm relationship with Nedap	6,18	1,10	,543**	,855**	1,00												
4	AVI is important to us	6,07	1,19	,586**	,551**	,722**	1,00											
5	Our contact person always communicates in a respectful and honest way	5,98	1,19	,433**	,669**	,778**	,599**	1,00										
6	It is worth the investment to maintain a close relationship with Nedap AVI	5,98	1,03	,455**	,470**	,571**	,649**	,575**	1,00									
7	Based on experience Nedap AVI always keeps promises made to us	4,92	1,36	,509**	,23	,484**	,32	,366*	,05	1,00								
8	Predictability of changes in prices	4,30	1,29	,32	,15	,376*	,21	,27	,09	,691**	1,00							
9	Predictability regarding the introduction of new products	4,06	1,55	,33	,363*	,30	,12	,344*	,19	,419*	,660**	1,00						
10	Predictability of changes in marketing activities	4,24	2,18	,407**	,29	,336*	,18	,30	,18	,431**	,712**	,708**	1,00					
11	Our company plans ahead together with AVI	2,68	2,02	-,06	,07	-,05	-,13	,19	,14	,16	,19	,418*	,354*	1,00				
12	Our company provides Nedap AVI with sales forecasts for the upcoming period	5,80	1,17	,589**	,476**	,581**	,622**	,530**	,575**	,578**	,337*	,22	,28	,13	1,00			
13	Both parties deal with problems that arise peacefully together	5,46	1,07	,372*	,27	,385*	,501**	,359*	,423**	,444**	,28	,25	,26	,14	,689**	1,00		
14	Willing to do an extra step, without expecting something in return immediatly	5,56	,92	,339*	,29	,384*	,484**	,30	,364*	,510**	,377*	,16	,403**	,15	,615**	,680**	1,00	
15	The responsibility of getting thing done is shared	5,66	1,06	,503**	,563**	,548**	,356*	,517**	,411**	,618**	,438**	,519**	,447**	,29	,711**	,680**	,480**	1,00
15	We are willing to continuously improve relationship																	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Figure 6. Correlation matrix

satisfaction. However, it will affect the influence of each individual independent variable. Multicollinearity makes it for example difficult to conclude to what extent for example “honest and respectful communication” has on the general construct perceived satisfaction.

### 3.2.2. Relational governance and performance

The first hypothesis: *the higher the level of relational governance, the higher the level of perceived satisfaction* is tested through a regression analysis of relational governance and the performance indicator perceived satisfaction. An alpha level of  $\alpha=.05$  is adopted on all regression analyses within this research. First, a regression analysis is performed with relational governance as one construct. Another is applied to investigate the effect of the individual dimensions of RQ; joint planning; joint problem solving; trust & commitment on perceived satisfaction.

Besides perceived satisfaction as a construct existing of six dimensions, the effect of the relational governance mechanisms is also measured on the overall satisfaction rate that respondents gave regarding their business relationship with Nedap AVI. Figure seven shows that relational governance has a significant positive effect on perceived satisfaction and on the overall rate of satisfaction. Hypothesis one is supported. The coefficient results show that the existence of joint problem solving has the most influence compared to the other two individual constructs on perceived satisfaction. This dimension had a significant positive effect on both measures of satisfaction.  $R^2$  indicates only a predictive accuracy level of .318 of relational governance on perceived satisfaction. However, this level is acceptable compared to previous studies (e.g. Claro et al, 2003).

A linear regression analysis concerning the effect of relational governance on the sales

Regression matrix H.1			
N=41 p<0.5	B	s.e.	p
<b>Individual constructs of RG on perceived satisfaction</b>			
(constant)	2,019	.662	.004
Joint planning	.105	0.095	.278
Joint problem solving	.276	0.120	.027
trust & commitment	.183	.154	.243
$R^2$	.415		
F	8,529		
<b>Relational governance on perceived satisfaction</b>			
(constant)	2,176	.607	.001
Relational governance	.562	.112	.000
$R^2$	.396		
F	24,961		
<b>Relational governance on overall rate satisfaction</b>			
(constant)	2,975	1,159	.014
Relational governance	.906	.215	.000
$R^2$	.318		
F	17,758		

Figure 7. Regression matrix H.1.

growth rate, turnover per business partner in 2011 compared to turnover in 2010, found no support for the second hypothesis: *The higher the level of relational governance, the higher the sales growth rate*.  $R^2$  had a level of only .003 (figure 8). A low level of predictive accuracy is in line with previous studies (e.g. Claro et al, 2003; Mohr & Spekman, 1994). None of the individual dimensions; joint planning; joint problem solving; trust and commitment had a significant effect on the sales growth rate within this research (figure 8). Within the distribution of sales growth there was a lot of fluctuation.

Regression matrix H.2			
N=41 p<0.5	B	s.e.	p
<b>Individual constructs of RG on sales growth rate</b>			
(constant)	8,743	50,718	.864
Joint planning	-8,626	8,027	.291
Joint problem solving	-3,331	10,331	.749
trust & commitment	11,639	12,264	.350
$R^2$	.060		
F	.636		
<b>Relational governance on sales growth rate</b>			
(constant)	31,95	47,116	.503
Relational governance	-2,544	8,697	.503
$R^2$	.003		
F	.086		

Figure 8. Regression matrix H.2.

Based on the period wherein the data for this research is conducted, there is no meaningful explanation possible why some companies performed better than other.

Hypothesis three investigates whether perceived satisfaction has a mediating effect on the sales growth rate. According to Baron and Kenny (1986), there are four steps required to demonstrate a mediating effect. The first required step they describe is a statistical significant effect from, in this case relational governance on sales growth rate. However, hypothesis two in which this relationship is being tested, is rejected. The second requirement is a statistical significant effect from perceived satisfaction on the sales growth rate. A linear regression analysis (figure 9) has demonstrated that there is also no significant effect detected between these variables. Because these first two requirements are not accomplished the remaining two steps are superfluous. There can be concluded, that there is no mediating effect of perceived satisfaction on sales growth within the scope of this study, hypothesis three can be rejected.

Regression matrix H.3			
N=41 p<0.5	B	s.e.	p
<b>Perceived satisfaction on sales growth rate</b>			
(constant)	49,82	53,122	.359
Perceived satisfaction	-6.052	10.201	.557
R <sup>2</sup>	.011		
F	.352		

Figure 9. Regression matrix H.3.

## 4. Discussion & Conclusions

### 4.1. Conceptual model and general conclusions.

The aim of this research was to assess the effect of relational governance on business partnership performance. The conceptual model, considered a positive effect of relational governance on two types of performance indicators; perceived satisfaction (affective) and sales growth rate (objective).

The main findings are that relational governance has a significant positive effect on perceived satisfaction, measured in two ways; as a construct of six items and by the overall rate that respondents gave on satisfaction toward their business relationship with Nedap AVI. This means that a business partnership characterized by a high degree of mutual trust and commitment in combination with joint actions like planning and the way problems that arise in course of the business relationship are being solved, will increase the degree of satisfaction. Previous studies have shown that perceived satisfaction among business partners enhance repurchase intentions, word-of-mouth, and loyalty (Ravald & Gronroos 1996; Liljander & Strandvik 1995). In line with these findings Nedap AVI can assume that a business relationship which is characterized by a high level of perceived satisfaction will in any case be beneficial to their business.

Joint problem solving is the most encompassing determinants affecting perceived satisfaction and the overall rate on satisfaction within this study (empirical analysis). This research added trust and commitment as a dimension of relational governance. The results of the interviews and survey show that establishing and building of both, trust and commitment are of major importance in order to develop effective and successful business relationships with business partners. Joint planning is less relevant within the scope of this study. All these findings match with the findings of previous research (Claro et al, 2003). The support of the first hypothesis highlights that a business relationship based on trust, commitment and a collaborative approach can lead to business partner success.

Unfortunately, there is no empirical evidence been found that relational governance has a positive effect on the sales growth rate within the scope of this

study (H.2 is rejected). Claro et al (2003) found evidence for this hypothesis. However, their model had also a low level of predictive accuracy with  $R^2 = .04$  and a significance level of .05. The sales growth rate that is used in this research, gives an indication of the turnover per respondent in the year 2011 compared to the turnover in 2010. The global financial crisis (GFC), which led to a decline in economic activity in many industries, including the security and parking industry where Nedap is mainly involved, could have biased this data. Claro et al (2003) used sales data spread over five years. Another reason why they found evidence for this hypothesis could have been a larger sample size (N=174) or another industry, Dutch suppliers of potted plant and flower products.

This research also investigated whether there is a mediating effect of perceived satisfaction on the sales growth rate. This assumption (H.3.) cannot be confirmed based on the results of this study.

Hypothesis three is rejected.

#### *4.1.1. Presence of relational governance mechanisms within existing partnerships.*

The survey and interview results confirm the assumption of the preliminary analysis. Compared to the other forms of relationship governance; market and hierarchical governance, relational governance is actually the most appropriate to implement within the Nedap AVI case. This research investigated to what extent RG mechanisms are already present within existing partnerships, plus the feasibility of implementation of any missing elements in order to manage their business partner network in a more effective way. The results of the interviews and survey turned out that RG is without being aware, to a certain extent implemented by Nedap AVI. Both, trust and commitment are already present within existing business relationships.

Business partners do trust Nedap AVI and its business development managers. They

also state that their business relationship with Nedap AVI is beneficial to their business. Another dimension of RG, joint problem solving is also present within the existing partnerships. Both business development managers and survey respondents do have good experiences with joint problem solving. They maintain a good long-term relationship and deal with problems that arise in course of the relationship peacefully. Both parties involved do have the intention to maintain a long-term partnership together and are committed to continuously improving the relationship.

Joint planning is not (yet) structurally implemented. Respondents and interviewees respond differently on the presence and need towards this dimension of relational governance. About fifty percent of the business partners respond that there is little or no planning together, the other half indicates that they do have joint planning.

## **4.2. Limitations of the study**

The following limitations should be taken into account by the implication of the study. First of all, the results are based on a cross sectional design. Although the respondents are being asked about their experiences both, in real-time as in retrospect there is no survey conducted before and after applying relational governance as a medium to increase business partner performance.

The units of analysis within this study are linked to one single company, Nedap AVI. A company which develops and produces of (new) products in a niche market area. The results can only be reproduced in similar contingencies. The sample size and response rate are relative low (N=41). In case of relational governance a more personal approach in contacting possible respondents by for example phone calls could have increased the sample size. Within this study it was problematic to collect data in this way due to a lack of contact information for all potential

respondents, partners established in different time zones and a limited time for data collection. The sales growth rate as a performance indicator is added to provide the study with an objective measure. This measure was problematic. As mentioned above the sales related data is collected in years of global financial crisis. This fact could have disturbed the analysis regarding the second and third hypothesis. The problem of multicollinearity, which is mentioned in the results section, should be taken into account when one is interested in the effect of certain individual independent variables on the performance indicator(s). For example a larger sample size could have solved this problem.

#### **4.3. Implications to theory**

The conceptual model (fig.1.) that is developed and tested within this study is to some extent based on previous work of Claro et al (2003). These authors created an integrated framework for relationship management (appendix 2.). The first and second hypothesis which aim that a higher level of relational governance will lead to a higher level of two performance indicators, perceived satisfaction and sales growth rate. Beside the company's interest, this study contributes to the international business literature by exploring whether perceived satisfaction has a mediating effect on the sales growth rate.

The addition of trust and commitment as a dimension of relational governance is another contribution to the literature.

Whereas previous research assigned trust as a determinant or consequence of the way business relationships are governed (e.g., Anderson & Narus, 1990; Anderson & Weitz, 1989; Doney & Cannon, 1997), this study investigated the presence of trust together with commitment as required dimensions of relational governance. Relational governance reflects the degree to which joint actions are established in a business relationship (Bensaou & Venkatraman, 1995; Heide & Miner, 1992). The results that are presented in this

article show that the presence of both trust and commitment in combination with joint actions like joint planning and joint problem solving have a fortifying effect on the performance indicator perceived satisfaction (figure 7).

By circumstances there is no evidence being found that relational governance has a positive effect on the sales growth rate. The same is valid for a possible mediating effect of perceived satisfaction on the sales growth rate.

Future research should test these two hypotheses (H.2 and H.3) with a larger sample size. Another recommendation is to add more companies within different industries. The sales data should ideally be collected over a longer period. A larger sample size (survey) will enlarge the accuracy of the data and will result in a smaller margin of error. Future research that includes more companies (in different industries) could enhance the external validity and generalizability of the research. Sales data that is collected over a longer period in time could exclude coincidences that have disturbed data in certain periods and will lead to a more accurate overview regarding sales development over years. Another recommendation is to examine a (possible) relationship between perceived satisfaction and sales growth rate in more detail. Maybe there is a confounder variable that disturbed the third hypothesis.

#### **4.4. Practical implication and recommendations**

Based on the results from this research there can be concluded that most aspects of relational governance already exist within the current business partnerships that Nedap AVI maintains. Problems that arise are being solved peacefully; people do trust the commercial responsible people; the organization as a whole and are committed to maintain a long-term relationship. There can be concluded that AVI is on the right track to implement relational governance successfully.

The interviews and survey turned out that joint planning will be the most problematic dimension of relational governance to implement. Both, business development managers of AVI and their business partners react ambiguous referring the existence and need of joint planning. It will be hard to implement joint planning which will be merely dedicated to sales and future exchanges. However, a planning with other important themes like marketing activities, structural communication, new product launches, prices, training and support is feasible to implement in order to increase structure in their collaborations.

Especially product training should get more attention in the near future, by adding it in a (yearly) planning. Currently (new) business partners get only extensive product training at the start of the collaboration with Nedap AVI. Because AVI has no direct contact with its end-users, it is very important to maintain product knowledge at a high level within the companies that sell AVI products in order to ensure excellent service and support to end users. Thirty percent of the survey respondents stated that there is need for product training within their company. In particular (large) companies with a high labor turnover rate deserve training and required support on a regular base.

At the moment every business development manager has his own methods, procedures, personal relationships and ideas on how to manage the business partners in their own geographical region. In order to implement relational governance in a structural way, all business development managers should manage their business partner network in a more similar way. The focus should be at establishing strong long-lasting business relationships with the companies that they are dealing with instead of individual persons which are for example sensitive to labor turnover.

If Nedap AVI succeeds to implement joint planning together with their business

partners on several important themes, establish a more structural way of communication and try to involve more people within their partners company, relational governance will be successful implemented.

## **Appendixes**

## Appendix 1: Partnership Success model

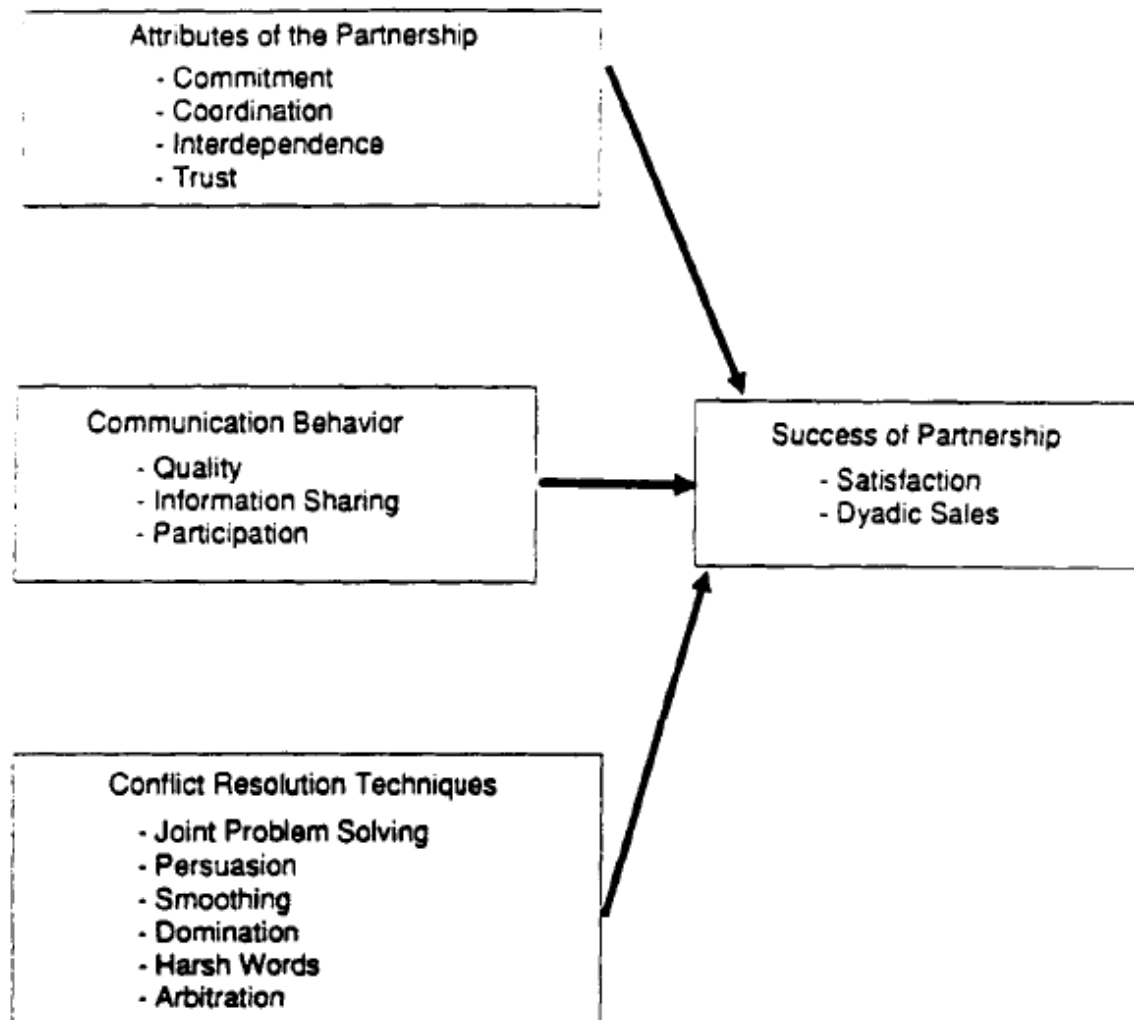


Figure 1. Factors associated with partnership success

Source: Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: Partnership attributes, communication behavior and conflict resolution techniques. *Strategic Management Journal*, 15, 135– 152.

## Appendix 2: Integrated framework for relationship management

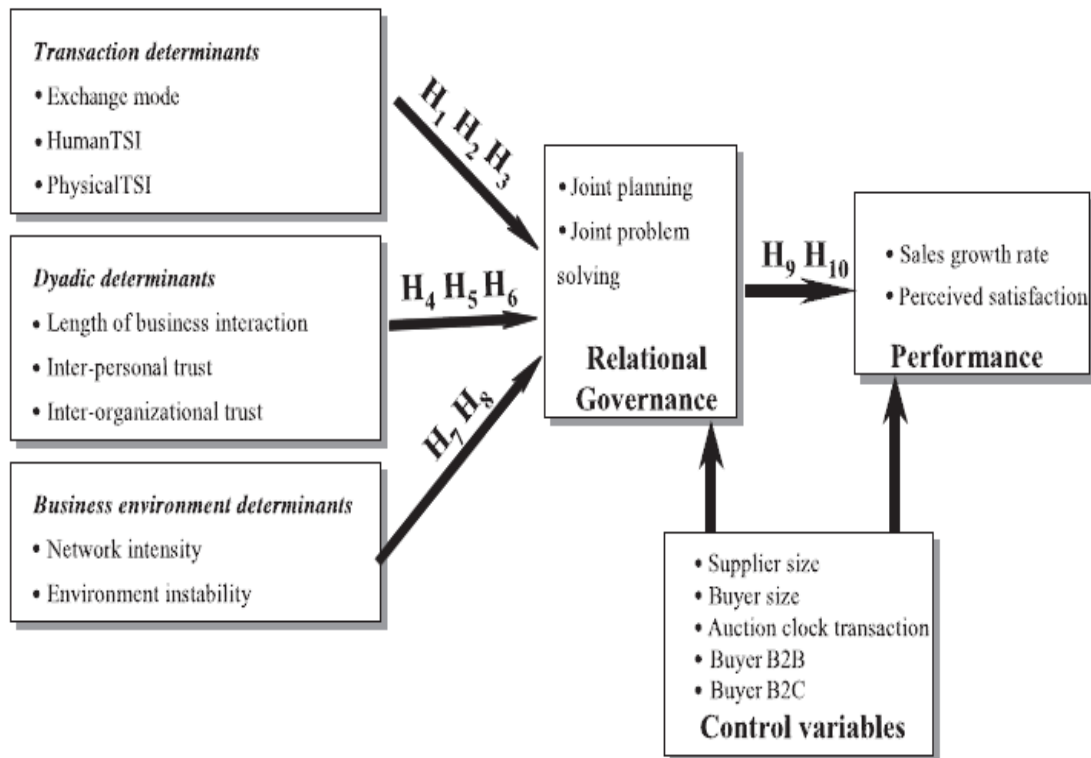


Fig. 1. The integrated framework for relationship management.

Source: Claro, D.P., Hagelaar, G. and Omta, O., 2003. The determinants of relational governance and performance: how to manage business relationships? *Industrial Marketing Management*, 32 (8), 703-716.

### Appendix 3: Survey among Nedap AVI business partners

Dear Sir, Madam,

Prior to the questionnaire I would like to thank you for your time and effort. My name is Symen Polman. I'm studying Master Business Administration at the University of Twente, Enschede, the Netherlands. This questionnaire is part of my master assignment at Nedap AVI. The questions are especially focused on the business relationship between your company and Nedap AVI. Your input can help Nedap AVI to get a better understanding on how current business partners perceive the collaboration with Nedap AVI and their contact person (business development manager). The results of this questionnaire will be treated confidentially and are only being used for my master thesis. It will take you about 10 - 15 minutes to fill out this questionnaire. Thank you!

#### Profile

My gender is: ☐ Male ☐ Female

My age is: .... Years

The name of the company I am working for is: .....

The company is established in (Country): .....

The company can be categorized within the Nedap AVI supply chain network as (only 1 answer):

- ☐ Distributor  
☐ System integrator  
☐ Dealer  
☐ <sup>1</sup>OEM (original equipment manufacturer) partner  
other, (please specify): .....

Is your company more related to: ☐ Security ☐ Parking ☐ Both ☐ Other (Please specify)

Have you recently visited the new website of Nedap AVI; [www.nedapavi.com](http://www.nedapavi.com) ?

☐ Yes ☐ No

How would you rate [www.nedapavi.com](http://www.nedapavi.com) on a scale from 0 to 10? (1 = lowest, 10 = highest) ..

Do you have any suggestions for improvements regarding the website?

.....  
.....

The following 6 questions are about Nedap AVI products. On the website <http://www.nedapavi.com/products/> you will see an overview of all Nedap AVI products.

1. Are you aware of the existence of the following Nedap AVI products?

Nedap TRANSIT Reader	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
Nedap TRANSIT Entry	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
uPASS Reach	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
Vehicle Management Controller	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
SENSIT	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
ANPR (licence plate reader)	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No

2. If some of the products are relatively new to you, would you invest in acquiring knowledge about these (new) Nedap AVI products?

☐ Yes, a lot of time

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<sup>1</sup> . These group of business partners purchase products from Nedap AVI, integrate them within their own (security) solution and sell them under their own brand name.

- ☐ Maybe, sometime  
☐ No, not at all

3. Is there currently a need for training regarding Nedap AVI products within your organization?  
☐ Yes                      ☐ No                      ☐ Maybe
4. Would you consider adopting these 'new' Nedap AVI products into your own product portfolio?  
☐ Yes                      ☐ No                      ☐ Maybe
5. Do you understand the benefits of the Nedap AVI products that you sell?  
☐ Yes                      ☐ No                      ☐ Partially
6. How would you rate the importance of Nedap AVI products within the portfolio of your organization on a scale from 1 - 10? (1=lowest, 10=highest) .....
7. How long has your company been doing business with Nedap AVI?  
☐ <1 year                      ☐ 1-3 year(s)                      ☐ 3-5 years                      ☐ >5 years                      ☐ I don't know
8. How long have you personally been doing business with Nedap AVI?  
☐ <1 year                      ☐ 1-3 year(s)                      ☐ 3-5 years                      ☐ >5 years                      ☐ I don't know

***The following questions are on a 7-point Likert scale. Can you please encircle the number that is most appropriate to your situation?***

9. We have invested time and effort to learn about Nedap AVI's products at the start of the relationship.  
not at all                      1                      2                      3                      4                      5                      6                      7                      very much
10. After initial product training, our company keeps investing in resources to provide service and support to customers at a high level.  
not at all                      1                      2                      3                      4                      5                      6                      7                      very much
11. Our company is capable to install Nedap AVI products properly and is able to provide excellent support to end users.  
Strongly disagree                      1                      2                      3                      4                      5                      6                      7                      Strongly agree
12. In general, we believe our partnership with Nedap AVI will be beneficial to our business.  
Strongly disagree                      1                      2                      3                      4                      5                      6                      7                      Strongly agree
13. Maintaining a good long-term relationship with Nedap AVI is important to us.  
Strongly disagree                      1                      2                      3                      4                      5                      6                      7                      Strongly agree
14. Our relationship with Nedap AVI depends on explicitly described and clearly written contract terms.  
not at all                      1                      2                      3                      4                      5                      6                      7                      very much
15. If your answer is close to 'not at all'; Would you prefer to have a formal contract?  
☐ Yes                      ☐ No                      N/A

16. The contract with Nedap AVI includes in detail everything that we feel is important.
- |            |   |   |   |   |   |   |   |           |     |
|------------|---|---|---|---|---|---|---|-----------|-----|
| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very much | N/A |
|------------|---|---|---|---|---|---|---|-----------|-----|
17. Over time we have developed ways of collaboration with Nedap AVI without the need to put that agreement into a contract.
- |                   |   |   |   |   |   |   |   |                |
|-------------------|---|---|---|---|---|---|---|----------------|
| strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | strongly agree |
|-------------------|---|---|---|---|---|---|---|----------------|
18. A contract decreases risks and uncertainty in a business relationship.
- |                   |   |   |   |   |   |   |   |                |
|-------------------|---|---|---|---|---|---|---|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | strongly agree |
|-------------------|---|---|---|---|---|---|---|----------------|
19. We feel that Nedap AVI's contact person (business development manager) always acts and communicates in a respectful and honest way.
- |                   |   |   |   |   |   |   |   |                |
|-------------------|---|---|---|---|---|---|---|----------------|
| strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | strongly agree |
|-------------------|---|---|---|---|---|---|---|----------------|
20. In our company, we feel that it is worth the investment to maintain a close relationship with the Nedap AVI contact person.
- |                   |   |   |   |   |   |   |   |                |
|-------------------|---|---|---|---|---|---|---|----------------|
| strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | strongly agree |
|-------------------|---|---|---|---|---|---|---|----------------|
21. Based on experience, we feel that Nedap AVI always keeps promises made to us.
- |                   |   |   |   |   |   |   |   |                |
|-------------------|---|---|---|---|---|---|---|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | strongly agree |
|-------------------|---|---|---|---|---|---|---|----------------|
22. Please estimate the extent to which you can predict changes in the following factors;
- (a) Pricing of existing products
- |                       |   |   |   |   |   |   |   |                  |
|-----------------------|---|---|---|---|---|---|---|------------------|
| Totally unpredictable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very predictable |
|-----------------------|---|---|---|---|---|---|---|------------------|
- (b) Introduction of new products
- |                       |   |   |   |   |   |   |   |                  |
|-----------------------|---|---|---|---|---|---|---|------------------|
| Totally unpredictable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very predictable |
|-----------------------|---|---|---|---|---|---|---|------------------|
- (c) Planned marketing activities
- |                       |   |   |   |   |   |   |   |                  |
|-----------------------|---|---|---|---|---|---|---|------------------|
| Totally unpredictable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very predictable |
|-----------------------|---|---|---|---|---|---|---|------------------|
23. Our company plans ahead for the next year together with Nedap AVI.
- |            |   |   |   |   |   |   |   |           |
|------------|---|---|---|---|---|---|---|-----------|
| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | very much |
|------------|---|---|---|---|---|---|---|-----------|
24. If you're answer is close to 'not at all'; Would you prefer a planning?
- ☐ Yes                      ☐ No                      N/A
25. Which of the following topics are (or have to be) included in the planning?
- ☐ Prices
- ☐ Marketing activities
- ☐ Training and Support
- ☐ Sales strategies
- ☐ New product launches

☐ Other, namely .....

26. Our company provides Nedap AVI with sales forecasts for the upcoming period.

Not at all                      1            2            3            4            5            6            7            very much

27. Nedap AVI and our company maintain a good relationship and deal with problems that arise in the course of the relationship in the best possible way.

strongly disagree            1            2            3            4            5            6            7            strongly agree

28. In our business relationship with Nedap AVI, we are willing to take an extra step without expecting something in return immediately.

strongly disagree            1            2            3            4            5            6            7            strongly agree

29. In our relationship with Nedap AVI, the responsibility for getting things done is shared.

strongly disagree            1            2            3            4            5            6            7            strongly agree

30. Nedap AVI and our company are committed to continuously improving the relationship

not at all                      1            2            3            4            5            6            7            very much

31. Would you be interested in attending a Nedap AVI business partner day?

☐ Yes                      ☐ No

32. What were the sales of the Nedap AVI products in Euros in the year 2011? What were the sales in the year 2010? .....

.....

To what extent are you satisfied about the following aspects of the business relation between your company and Nedap AVI;

33. Overall product quality

very unsatisfied    1            2            3            4            5            6            7            very satisfied

34. The number of potential projects together.

very unsatisfied    1            2            3            4            5            6            7            very satisfied

35. Margin that your company receives on Nedap AVI products

very unsatisfied    1            2            3            4            5            6            7            very satisfied

36. Quality of the communication with the Nedap AVI contact person

very unsatisfied    1            2            3            4            5            6            7            very satisfied

37. The way in which problems are being solved and inquiries are being handled.

very unsatisfied    1            2            3            4            5            6            7            very satisfied

38. Net prices of Nedap AVI products.

very unsatisfied    1            2            3            4            5            6            7            very satisfied

39. How would you rate your overall satisfaction with Nedap AVI on a scale from 1 - 10?

40. Finally, do you have any suggestions for improving our products/services and especially on how to improve Nedap AVI’s business partner network and the way we manage it?

Comments:  
.....  
.....  
.....  
.....

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