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Becoming a preferred customer: the influence of contextual factors external to the dyadic buyer-supplier relationship

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Sincerely thank you all!

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Abstract

The strategic importance of purchasing and supply management has increased due to development within the supply markets. Firms are competing for the best resources from their suppliers and it is not self-evident that firms collaborating with their suppliers achieve a competitive advantage. Suppliers should, therefore, be seen as a key source of competitive advantage and innovation whereby a buyer should try to achieve a preferred customer status. Previous research has shown that the obtained resources from suppliers vary between buyers and their competitors which presents the appearance of a selective process by suppliers for their resources. Supplier satisfaction is a necessary condition for becoming a preferred customer and, since preferred customers benefit from higher product quality and innovation, more customer support, higher delivery reliability, lower prices, and lower costs, it consequently leads to achieving a competitive advantage. The main goal of this research is to investigate external factors, more precisely environmental uncertainty and dependency, to the dyadic buyer-supplier relationship influencing the tendency to assign a customer as preferred. This research replicates and extends previous empirical research on supplier satisfaction. The findings indicate that dependency directly influences the tendency to assign a customer as preferred. Furthermore, the findings also show that demand uncertainty negatively moderates the influence of supplier satisfaction on becoming a preferred customer.

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Index of abbreviations

AVE	Average Variance Extracted
FMCG	Fast Moving Consumer Goods
HTMT	Heterotrait-monotrait
NPD	New Product Development
PCA	Principal Component Analyses
PLS	Partial Least Squares
RDT	Resource Dependency Theory
RQ	Research Question
SEM	Structural Equation Modelling
SET	Social Exchange Theory
SPSS	Statistical Package for the Social Sciences
SRMR	Standardized Root Mean square Residual
SS	Supplier Satisfaction
TCE	Transaction Costs Economics
TCT	The Contingency Theory

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1. Introduction: a shift of research focusing on the significance of a preferred customer status in order to achieve competitive advantage

1.1 Obtained resources from suppliers vary between buyers and their competitors which presents the appearance of a selective process by suppliers for their resources

Practices such as global sourcing and the increasingly rely on purchasing from an international supply base are more and more implemented by organizations (Steinle & Schiele, 2008, p. 4; Trent & Monczka, 2003, p. 26). The strategic importance of purchasing and supply management has increased due to these developments (van Weele & van Raaij, 2014, p. 68). In the last decades, attention has increased for the term ‘’reverse marketing’’, introduced by Leenders & Blenkhorn in 1998, among scholars in the field of supply management (Baxter, 2012, p. 4; Leenders & Blenkhorn, 1988, p. 2). This viewpoint, whereby customers are competing for capable suppliers, is the opposite of the classical marketing view which focuses on the competition for customers. The increased attention for the topic of preferred customership and supplier satisfaction has two reasons (Schiele, Calvi, & Gibbert, 2012, p. 1178). Firstly, the supply base of firms is decreasing, especially in mature markets, since it offers several benefits such as lower transaction costs and economies of scale. The decreased supply base leads to a reduction in suppliers which reshapes the market structure to an oligopolistic supplier market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). Secondly, since non-core activities are outsourced more often and because of more open innovation, buying firms are becoming more dependent on their suppliers (Rahmoun & Dababi, 2012, p. 106; Schiele, 2012, p. 1178). These suppliers are becoming more integrated with the buying firm and the importance of the remaining suppliers is consequently increasing (Cannon & Perreault Jr, 1999, p. 444).

Firms are competing for the best resources from their suppliers and it is not self-evident that firms collaborating with their suppliers achieve competitive advantage since there are ‘other sharks in the water’ (Pulles, Schiele, Veldman, & Hüttinger, 2016, p. 1). Therefore, Schiele, Veldman, and Hüttinger (2011, p. 18) argue that suppliers should be seen as a key source of competitive advantage and innovation whereby a buyer should try to achieve a preferred customer status. Previous research has shown that the obtained resources from suppliers vary between buyers and their competitors which presents the appearance of a selective process by suppliers for their resources (Takeishi, 2002, p. 328).

Steinle and Schiele (2008, p. 11) stated that a firm is seen as a preferred customer if the supplier offers the firm preferential resource allocation. Preferred customers benefit from higher product quality and innovation, more customer support, a higher delivery reliability, lower prices and lower costs according to Nollet, Rebolledo, and Popel (2012, p. 1187). Besides, several other studies confirmed the benefits a preferred customer status offers which therefore shows the significance of the topic (Pulles et al., 2016, p. 9; Vos, Schiele, & Hüttinger, 2016).

1.2 Scope of the research: exploring contextual factors external to the dyadic exchange relationship between the buyer-supplier relationships influencing supplier satisfaction in order to achieve a preferred customer status

Supplier satisfaction is a necessary condition for becoming a preferred customer according to Schiele (2012, p. 4). Despite the importance of supplier satisfaction in order to achieve a preferred customer status, less attention is paid to antecedents of supplier satisfaction focused on indirect procurement (Vos et al., 2016, p. 2). Therefore, this paper will replicate the study of Vos et al. (2016) and develop an ever more comprehensive model of supplier satisfaction focused on indirect procurement. Hereby new unexplored antecedents of supplier satisfaction are added to increase the explanatory power.

The study of Hüttinger, Schiele, and Schröer (2014, p. 697) was focused on the automotive industry. Although this industry is relevant in revealing buyer-supplier characteristics, it can hardly be generalized to all industries; ‘’[…] the results can hardly be generalized to all industry settings […] in other industries, other factors or weights could emerge’’ (Hüttinger et al., 2014, p. 713). Since antecedents of supplier satisfaction can be industry-specific, this paper contributes to the existing literature by exploring antecedents of supplier satisfaction and preferred customer status for another industry, namely the Fast-Moving Consumer Goods (FMCG) industry. Besides the automotive industry, the FMCG industry is also one of the most ‘competition-driven’ industries and continually in a state of dynamic transition according to Oraman, Azabagaoglu, and Inan (2011, p. 189), which shows the significance of supplier satisfaction in this industry as well.

Furthermore, despite the importance supplier satisfaction in order to achieve a preferred customer status, little attention has been paid to contextual factors influencing the buyer-supplier relationship (Vos et al., 2016, p. 4621). Based on the contingency theory,

Miller (1979, p. 296) states that organizations must design their strategies based on the environmental context the organization is operating in since there is no universal set of strategies which are optimal for every business; ‘’organizations are complex entities and the relationship between two variables may be influenced by many contextual conditions’’. Hereby, the contingency theory argues that since organizations are open systems, they respond to the shifts in their environment (Forker & Stannack, 2000, p. 31). Therefore, the environment an actor operates in, influences the buyer-supplier relationship (Forker & Stannack, 2000, pp. 31-32). Organizational theory proposes that external uncertainty shapes the interactions between organizational structure and according to several scholars are managerial actions influenced by the external environment (Gelderman, Semeijn, & Mertschuweit, 2016, p. 229; Lu & Yang, 2004, p. 595). Besides, it is commonly argued that the dependency between buyers and suppliers is significant in the understanding of a buyer-supplier relationship (Caniëls, Vos, Schiele, & Pulles, 2017, p. 341). Pfeffer and Salancik (1978) described organizations as interconnected systems who, in order to survive, are in need of resources which consequently generate power-dynamics and dependency between actors. A balanced mutual dependence between buyers and suppliers is superior to other buyer-supplier relationships according to Villa and Panizzolo (1996, p. 42) since asymmetric dependence is too risky and creates vulnerability. However, Caniëls et al. (2017, p. 343) argued that dependence asymmetry could actually foster relationships and so the satisfaction of suppliers. Because of the decreased supply base of firms and because non-core activities are outsourced more often, the market structure has reshaped to an oligopolistic supplier market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). Therefore, the power dynamics created between actors has changed too and plays a significant role in the understanding of the buyer-supplier relationship and should, thus, be taken into account as well. Hence, the main goal of this research is to investigate external factors, more precisely environmental uncertainty and dependency, to the dyadic buyer-supplier relationship influencing the tendency to assign a customer as preferred.

To summarize, the aim of this research is, firstly, to replicate the study of Vos et al. (2016) in a new context (namely the FMCG industry) focused on indirect procurement. Secondly, the aim of this research is to further extend the research of Vos et al. (2016) by adding new unexplored factors influencing supplier satisfaction. Due to the findings of Meena and Sarmah (2012), purchasing/finance policies do significantly influence the level of supplier satisfaction. Besides, according to several previous research, timely payments

and payment practices directly influence supplier satisfaction as well (Essig & Amann, 2009, p. 105; Maunu, 2002, p. 98; Soetanto & Proverbs, 2002, p. 14). Therefore, the influence of the constructs billing/delivery and order on supplier satisfaction will be added to the model of (Vos et al., 2016). Finally, the third and most significant aim of this research is to investigate contextual factors, such as environmental uncertainty and dependency, influencing the relationship between supplier satisfaction and achieving a preferred customer status.

Therefrom, the following research question (RQ) divided into 2 sub-questions will be answered:

RQ 1: Which factors external to the dyadic buyer-supplier relationship influences the tendency to assign a customer as preferred?

> *Sub-RQ 1a: Does environmental uncertainty influences the buyer-supplier relationship and so the tendency to assign a customer as preferred?*
>
> *Sub-RQ 1b: Does dependency influences the buyer-supplier relationship and so the tendency to assign a customer as preferred?*

Hence, this paper will contribute to the existing literature by means of the following. Schiele et al. (2011, p. 18) argues that suppliers should be seen as a key source of competitive advantage and innovation whereby a buyer should try to achieve a preferred customer status. Supplier satisfaction is a necessary condition for becoming a preferred customer (Schiele et al., 2012, p. 4). Since antecedents of supplier satisfaction can be industry-specific according to Hüttinger et al. (2014, p. 713), this paper contributes to the existing literature by exploring antecedents of supplier satisfaction and preferred customer status for another industry, namely the Fast-Moving Consumer Goods (FMCG) industry. Furthermore, because of the decreased supply base of firms and because non-core activities are outsourced more often, the market structure has reshaped to an oligopolistic supplier market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). Because of these changes, the power dynamics created between actors has changed too which plays a significant role in the understanding of the buyer-supplier relationship. Hence, this paper contributes to the existing literature by researching contextual factors external to the dyadic buyer-supplier relationship such as environmental uncertainty and dependency. By exploring new antecedents of supplier satisfaction and by assessing the influence of supplier satisfaction on achieving a preferred customer status and so receiving preferential treatment, a practical contribution will be given. A more

comprehensive model of antecedents of supplier satisfaction in different industry settings, will show firms factors influencing supplier satisfaction more precisely in order to achieve a preferred customer status, and so, receive preferential treatment.

The remainder of this paper is structured as follow. The next chapter will discuss the theoretical background of the concept of a preferred customer and the change in purchasing philosophy. Thereafter, factors influencing supplier satisfaction will be discussed. Consequently, its influence on achieving a preferred customer status and the benefits derived from it will be reviewed. Following will be the methodology section in which the methods used in this analysis will be explained. Finally, the results will be presented, discussed and a conclusion will be given including the limitations of this study and future research directions.

2. Theoretical Framework

2.1. The significance of supplier satisfaction in indirect procurement

The main difference in products in supply management occurs between direct and indirect procurement according to Chopra and Meindl (2007). Whereas direct procurement includes all purchased products that are necessary for the production process of the company, indirect procurement includes all the products or services which are not directly related to the production process, but which are needed to ensure day-to-day business. Direct procurement, therefore, consists of raw materials or components of the final products and indirect procurement includes products and services such as office supplies, cleaning services or telecommunication equipment (Chopra & Meindl, 2007). Whereas direct procurement consists of approximately 60% of the total purchasing expenditure in a typical firm (and so indirect procurement for about 40%), direct materials only account for 20% - 40% of all purchasing transactions (Neef, 2001; De Boer et al., 2003, p. 911). Furthermore, since the volumes and predictability are normally lower for indirect procurement, indirect procurement requires far more purchasing transactions than direct procurement (Neef, 2001). Hence, the processing costs compared to the value of the transactions are higher for indirect procurement as well (Chopra & Meindl, 2007). Also, indirect procurement includes usually a larger number of potential suppliers, a wider range of goods and services to be purchased and more non-standardized items which increase the complexity significantly (de Boer, Holmen, & Pop-Sitar, 2003, p. 911; Nandeesh, Mylvaganan, & Siddappa, 2015).

Despite the above-mentioned complexity of indirect procurement and the substantial share of the total expenditure of companies, research in the field of supply management primarily focuses on direct procurement. Hence, the goal of this paper is to identify and build an even more comprehensive model of supplier satisfaction for indirect procurement.

2.2. History of the concept preferred customership

Only quite recently attention has increased for the concept of being a supplier's preferred customer. The traditional viewpoint where suppliers used to compete for buyers, has changed to buyers trying to be more attractive to their suppliers in order to achieve preferential treatment (Hüttinger, Schiele, & Veldman, 2012, p. 1194; Schiele et al., 2012, p. 1178). This increase in research focusing on supplier satisfaction and customer attractiveness is driven by a decreasing supply base of firms in certain industries (Maurer, Dietz, & Lang, 2004, p. 9; Schiele et al., 2012, p. 1179), an increasing amount of responsibilities in the supply chain to suppliers, as well as the change to a more open way of innovation, whereby firms from the focal company's network are involved in innovation activities (Schiele et al., 2012, p. 1178). These drivers lead to more and more research about the term ''reverse marketing'', introduced by Leenders & Blenkhorn in 1998, among scholars in the field of supply management in order to compete successfully for suppliers' business (Leenders & Blenkhorn, 1988, p. 2). Hottenstein (1970) was one of first who did research in the field of preferred customership and found that many businesses have a list of preferred customers based on future expectations or prior experiences (Hottenstein, 1970, p. 46). Also, Blenkhorn and Banting (1991) mentioned the importance of a proactive attitude towards suppliers by attractiveness in order to receive what they actually need (Blenkhorn & Banting, 1991, p. 187). More recently, Schiele (2006, p. 931) concluded that firms 'may want to become the 'preferred customer' of such valuable innovative supplier to ensure commitment''. Later on, Schiele (2012, p. 47) found that customers pursuing a strategy focused on achieving a preferred customer status with their core suppliers can benefit from supplier's innovativeness before competitors get access to the innovations of the supplier.

Based on previous literature in the field of the social exchange theory (SET), Schiele et al. (2012, p. 1180) developed a model of preferred customership. As you can see

in figure 1, the model describes the significant influence of customer attractiveness and supplier satisfaction on achieving a preferred customer status.

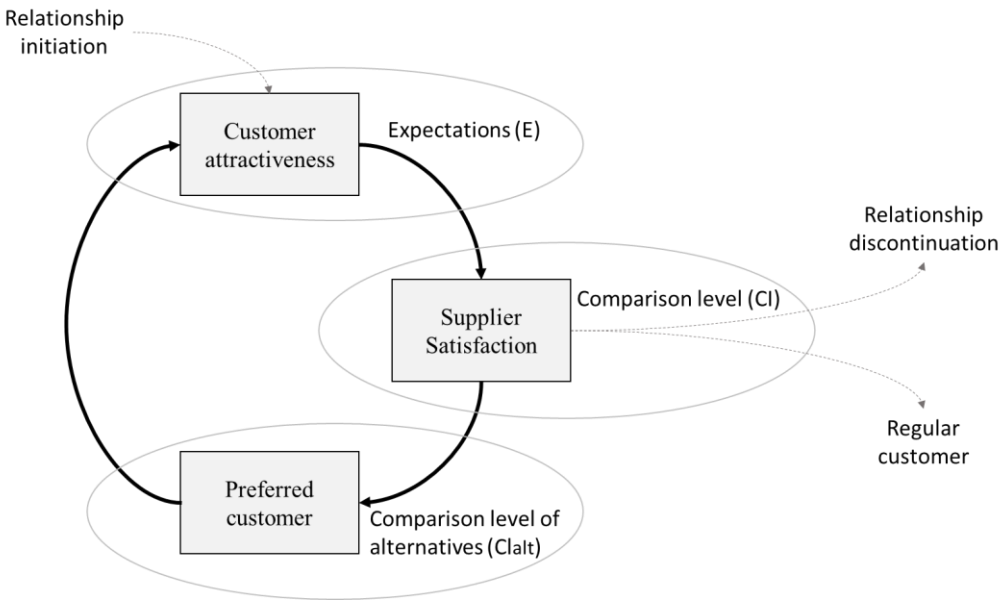

Figure 1 - Cycle of preferred customership (Schiele et al., 2012, p. 1180)

Consequently, supplier satisfaction is seen as an antecedent for achieving a preferred customer status. The literature in the field of preferred customer status and preferential treatment derived therefrom, 'received little attention' and is still in its 'infancy' according to (Hüttinger et al., 2012, p. 1203).

2.3. Changed purchasing philosophy: reverse marketing

In order to gain a sustained competitive advantage, price-oriented supply strategies are not always sufficient enough anymore since suppliers are limited in the availability of resources, which has changed the traditional purchasing philosophy (Hüttinger et al., 2012, p. 3). This changed purchasing philosophy is also named as 'reverse marketing' (Leenders & Blenkhorn, 1988, p. 2). To ensure future competitiveness, strategic supply management is necessary to become a preferred customer of key suppliers. Supplier satisfaction is hereby a necessary condition for achieving a preferred customer status (Schiele et al., 2012, p. 4).

Although customer satisfaction is a widely known and extensively studied concept, supplier satisfaction is on the other hand largely unexplored. Wong (2000, p. 427) was one of the first that mentioned the importance of both the satisfaction of the customer and the supplier; 'partnering efforts should also take into consideration the satisfaction of the supplier'. Hereby, Wong (2000, p. 429) stated that a cooperative and relational approach towards the supplier, results in a supplier which is satisfied with the collaboration. The importance of the suppliers of an organization is very significant since a tight and close working relationship between suppliers and customers offers many opportunities for firms in almost every industry (Pulles et al., 2016, p. 1). Previous research has shown the improvements in performance because of collaborations with suppliers (Bernardes & Zsidisin, 2008, p. 209; Krause, Handfield, & Tyler, 2007, p. 258). Besides, previous research has shown that suppliers are the determinants of the success of an organization (Dwyer, Schurr, & Oh, 1987, p. 11) Services from external suppliers represents a major proportion of the total sales which is mostly even higher than the own contribution to the value creation (Burt et al., 2003, p. ; Leenders et al., 2006, p.). Suppliers could provide resources like ideas, capabilities and materials leading to competitive advantage which might not have been achieved otherwise (Koufteros, Vickery, & Dröge, 2012, p. 96).

2.4. Current factors influencing supplier satisfaction

2.4.1 Growth opportunities, reliability, relational behaviour, and profitability as major factors influencing the level of supplier satisfaction

Hüttinger (2014) came up with a model whereby eight relational antecedents of supplier satisfaction were analysed; (1) growth opportunity, (2) innovation potential, (3) operative excellence, (4) reliability, (5) support, (6) involvement, (7) access to contacts and (8) relational behaviour.

A supplier's 'growth opportunity' received attention since, according to the SET, parties strive for value creation and will continue the relationship as long as the satisfactory rewards continue (Hüttinger et al., 2014, p. 704). Especially larger and more prestigious firms are able to create value for their suppliers since a valuable reference can give suppliers access to new markets (Walter, Ritter, & Gemünden, 2001, p. 368). The opportunity to obtain substantial volumes of business and this market functioning, therefore, increases the level of satisfaction of a supplier.

Also can value be created through benefits deriving from joint innovation development. Suppliers try to establish relationships with customers who are at the lead of technologies and who are in the possession of a high level of expertise according to Walter et al. (2001, p. 368). Besides, Essig and Amann (2009, p. 105) explained that technical competence is a significant determinant of the level of supplier satisfaction. Therefore Hüttinger et al. (2014) included the construct of 'innovation potential'.

A distinctive factor in influencing supplier satisfaction are the simple processes within an organization (Hüttinger et al., 2014, p. 704). This construct, called operative excellence, is in line with the assumptions of Essig and Amann (2009, pp. 105-106) who stated that the order processes and billing/delivery procedures do have a direct impact on supplier satisfaction. Also, Maunu (2002, pp. 91-92) mentioned the dimension of forecasting/planning and its influence on supplier satisfaction in his research. Complying with the agreements by the buying firm is, however, seen as one of the most important factors influencing supplier satisfaction according to Hüttinger et al. (2014, p. 704). This construct, which is defined as 'reliability', involves each type of commitment; both written and oral agreements. Following up these commonly agreed rules is therefore seen as a significant factor influencing supplier satisfaction.

Furthermore, the amount of perceived support by the customers is considered as an important factor influencing supplier satisfaction which includes technical assistance or site visits and is therefore included in the model of Hüttinger et al. (2014, p. 704). The amount of collaboration in joint projects and timely information about changes that will take place are the prevalent elements of supplier involvement. If early supplier involvement is implemented successfully, it influences supplier satisfaction positively according to Maunu (2002, p. 94). Hence, the construct 'supplier involvement' is included in the model of Hüttinger et al. (2014).

Moreover, the construct 'contact accessibility' is added and refers to the contact and coordination aspects in the buyer-supplier relationship which could be highly important. The availability of a direct contact person within the company in case of questions or problems is significant to suppliers and so influences the level of satisfaction (Essig & Amann, 2009, p. 110).

Finally, the 'relational behaviour' of a customer is introduced in this model. Because supplier satisfaction is primarily influenced by cooperative relationships according to several

previous research, the construct of relational behaviour is included and refers to openness and reciprocity of their customers (Hüttinger et al., 2014, p. 704).

To summarize, the following construct and antecedents were included:

Table 1 - Definitions of constructs - Hüttinger et al. (2014, p. 703)

	Definitions	Reference
Constructs		
Supplier satisfaction	Supplier satisfaction is defined as a positive affective state resulting from an overall positive evaluation of the aspects of a supplier's working relationship with the buying firm	Anderson and Narus, 1984; Dwyer et al., 1987
Preferred customer status	Preferred customer status is a relative status which is awarded by the supplying firm to its favorite customer(s). Relative to standard customers, preferred customers are offered preferential resource allocation	Steinle and Schiele, 2008
Antecedents		
Growth opportunity	Growth opportunity refers to the suppliers' ability to grow together with the buying firm and to generate new potential business opportunities through the relationship	Walter et al., 2001; Walter et al., 2003
Innovation potential	Innovation potential is understood as the supplier's opportunity to generate innovations in the exchange relationship due to the buying firm's innovative capabilities and its contribution in joint innovation processes	Schiele et al., 2011
Operative excellence	Operative excellence is the supplier's perception that the buying firm's operations are handled in a sorrow and efficient way, which facilitates the way of doing business for the supplier	-
Reliability	Reliability is defined as the supplier's perception that the buying firm acts in a consistent as well as reliable manner and fulfills its agreements	Hald et al., 2009
Support of suppliers	Support of suppliers as offered by the buying firm is characterized as its effort or assistance to increase a supplier's performance and/or capabilities	Krause and Ellram, 1997
Supplier Involvement	A customer's supplier involvement describes the degree to which the supplier's staff participates directly in the customer's product development team and is entrusted with developing product ideas	Handfield et al., 1999
Contact accessibility	A customer's contact accessibility refers to the availability of a person who intensively shapes and advances exchange processes and reflects the buying firm's willingness to develop structural bonds with the supplier	Walter, 2003
Relational Behaviour	Relational behavior refers to the buying firm's behavior towards the supplier with regards to the relational focus of exchange capturing multiple facets of the exchange behavior such as solidarity, mutuality, and flexibility	Palmatier et al., 2007; Griffith et al., 2006

Therefore, as you can see in figure 2, the following eight constructs have been analysed by Hüttinger et al. (2014, p. 711). Based on their PLS-based analyses, it is found that growth opportunities, reliability and relational behaviour do have a significant impact on supplier satisfaction. On the other hand, innovation potential, support, operative excellence, contact accessibility and supplier involvement did not show a significant effect on supplier satisfaction in their sample (Hüttinger et al., 2014, p. 712).

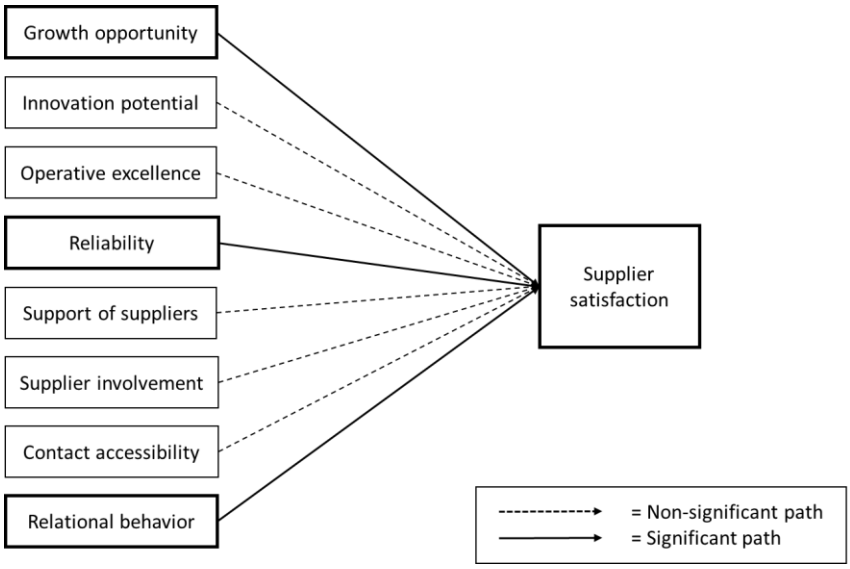

Figure 2 - Hüttinger et al. (2014, p. 711)

Vos et al. (2016) replicated and extended the model of Hüttinger et al. (2014, p. 711) whereby a ninth variable, profitability, was introduced. Several previous research mentioned the difference between economic and social perspectives and so it is argued that satisfaction consists of both economic and non-economic factors (Geyskens, Steenkamp, & Kumar, 1999, p. 224). According to Kauser and Shaw (2004, p. 36), is the level of satisfaction influenced by factors such as profitability and sales growth next to relational factors. Also, other scholars specialized in supply research, such as Essig and Amann (2009, p. 105), stated the equal importance of both economic and relational aspects. However, Hüttinger et al. (2014, p. 711) only included 'growth opportunity' and didn't include the profitability of the relationship in their research. Hence, Vos et al. (2016, p. 4618) included the construct 'profitability' in their model as a ninth variable influencing SS and found a significant influence on SS.

2.4.2. Supplier satisfaction in order to receive a preferred customer status and consequently receive preferential treatment

Besides the added variable profitability, Vos et al. (2016, p. 4618) also included the intention and behavior of the supplier as a consequence of SS into the model. Suppliers do have the choice to assign different customers different statuses according to H. Schiele, R. Calvi, and M. Gibbert (2012, p. 10). To obtain a preferred customer status, suppliers must be satisfied since satisfied suppliers allocate their best resources to preferred customers over regular customers (Hüttinger et al., 2012, p. 1195). Consequently, suppliers who are dissatisfied with the relationship invest their resources in other relationships. Since it is found that satisfied suppliers do have a higher tendency to assign the buyer a preferred status, Vos et al. (2016, p. 4618) included the influence of SS on a preferred customer status in their model and found that supplier satisfaction had indeed a significant influence on the tendency to assign a customer a preferred status.

Furthermore, Vos et al. (2016, p. 4615) introduced a control variable to assess the length of the relationship. This due to the findings of Nagati and Rebolledo (2013, p. 185) which showed that the length of the relationship between a buyer and supplier significantly influences the relational outcomes.

Besides, Vos et al. (2016, p. 1) included the consequence of a preferred customer status. A preferred customer is defined as ‘a buyer whom the supplier allocates better resources than less preferred buyers’. Being a preferred customer can therefrom provide a variety of benefits (e.g., first access to new technology or the allocation of scarce materials in times of high demand) according to several previous research (Hüttinger et al., 2012, p. 1195; Ramsay, 2001, p. 1; Vos et al., 2016, p. 1). Therefore, Vos et al. (2016, p. 4615) proposed that awarding a customer with a preferred customer status has a positive impact on giving preferential treatment. Their findings confirmed their expectations and found a significant influence of a preferred customer status on preferential treatment. Therefrom, as you can see in figure 3, Vos et al. (2016, p. 4618) came up with the following model for indirect procurement.

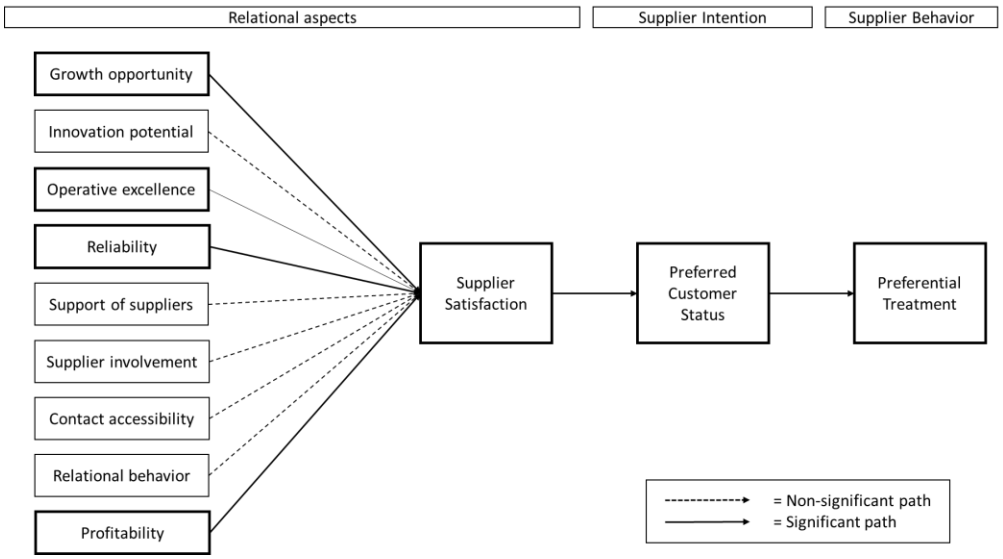

Figure 3 - Vos et al. (2016, p. 4618) – Indirect Procurement

2.4.3 Interrelations of antecedents: the distinction between first- and second-tiers antecedents

Furthermore, Vos et al. (2016, p. 4614) made a distinction between direct and indirect procurement in their analysis. They confirmed partially the findings of Hüttinger et al. (2012, p. 1204) and found that growth opportunity and reliability, but not relational behaviour, had a significant positive influence on supplier satisfaction. Additionally, the findings of Vos et al. (2016, p. 4621) showed that operative excellence had, in contrast to the study of Hüttinger et al. (2014), a positive impact on supplier satisfaction for indirect procurement.

Moreover, Vos et al. (2016) improved the original model of Hüttinger et al. (2014) and included the interrelations of antecedent whereby a distinction is made between first- and second-tier antecedents to order the antecedents into a causal hierarchal model as you can see in figure 1. This due to theoretical reasoning that certain antecedents influence each other according to Vos et al. (2016, p. 4621). Since both economic and relational factors are critical factors of supplier satisfaction, first-tier antecedents were stated as growth opportunities, profitability, relational behaviour and operative excellence. Subsequently, innovation potential, support, reliability, involvement and contact accessibility were stated as second-tier antecedent. As you can see in figure 4, The findings of the revised model of Vos et al. (2016, p. 4620) showed that all first-tier antecedents do have a significant impact on supplier satisfaction regardless of the context of procurement.

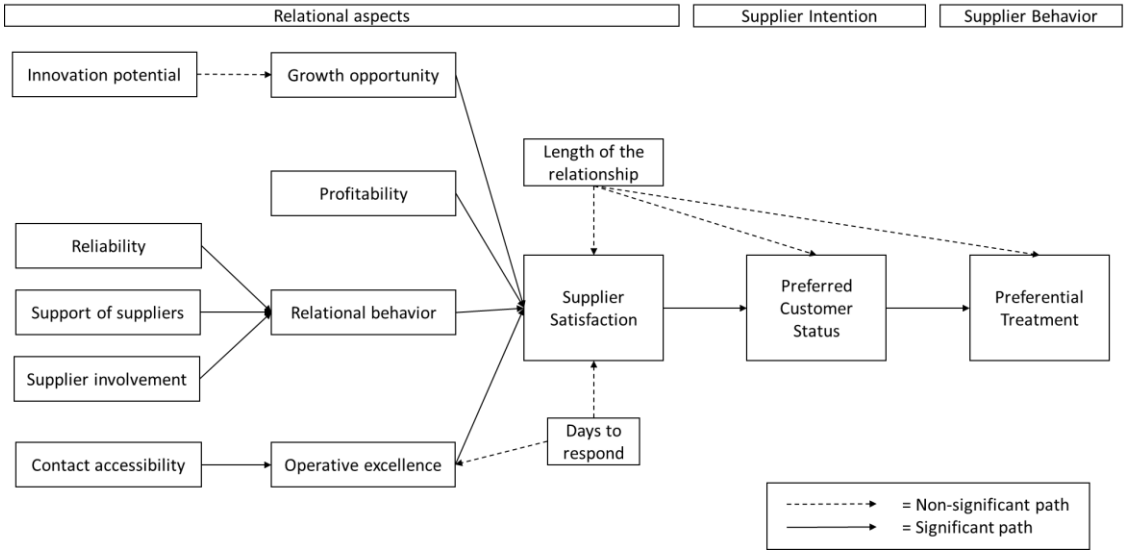

Figure 4 - Vos et al. (2016, p. 4620) – Revised model for indirect procurement

2.5. New antecedents of supplier satisfaction: Billing/delivery and Order influencing operative excellence

Meena and Sarmah (2012, p. 1238) stated that based on the opinion of suppliers and conducted literature review, purchasing policy, payment/finance policy, coordinating policy and corporate image are the main dimensions affecting supplier satisfaction. Also, the results of Meena and Sarmah (2012) confirmed the significant influence of purchasing and payment/finance policy on supplier satisfaction. The purchasing policy of buying firms includes various activities such as the delivery of goods and services, the ordering process and all these activities that have a direct impact on the satisfaction of suppliers (Essig & Amann, 2009, p. 105; Maunu, 2002, pp. 91-92). Furthermore, timely payments of the goods or services and payment practices directly influence supplier satisfaction according to several previous research (Essig & Amann, 2009, p. 105; Maunu, 2002, p. 98; Soetanto & Proverbs, 2002, p. 14). Since payment habits, i.e. payment terms and billing delivery, influence the liquidity of firms, it could therefore be very significant to suppliers (Ng, Smith, & Smith, 1999, p. 1109). Therefore, Essig and Amann (2009, p. 104) state that ‘buyers need to identify the key elements that the supplier values the most in terms of ordering, receiving, and payment conditions and procedures’.

Also, Essig and Amann (2009, p. 106) proposed a supplier satisfaction index including an operative level dimension with the subordinate indicator groups ‘billing/delivery’ and ‘order’. The subdimensions ‘billing/delivery’ includes factors such as

the payment habits, payment procedures and delivery deadlines, and 'order' includes factors such as the ordering procedure and adherence to long-term contracts. This due to previous research of Maunu (2002, p. 43) who stated that common business processes (such as the delivery of goods and services) are affected by both a financial factor and a time aspect, which therefore influences supplier satisfaction. In this regard, client payment habits and payment/receiving procedures as well as adherence to arrangements and long-term contracts, influence supplier satisfaction (Maunu, 2002, p. 30; Wong, 2000, p. 427).

2.6. The impact of environmental uncertainty and dependency on becoming a preferred customer

2.6.1. RDT, TCE, and TCT as the theoretical foundation for analysing uncertainty and dependency

2.6.1.1. Resource Dependency Theory

The theoretical framework underlying uncertainty and dependency as an influencing factor will primarily follow the inter-organizational relationship theories of the resource dependency theory (RDT), the transaction cost economics (TCE) and the contingency theory (TCT) and will, therefore, be discussed in the following sections.

The supply base of firms is decreasing, especially in mature markets, since it offers several benefits such as lower transaction costs and economies of scale (Schiele et al., 2012, p. 1178). The decreased supply base leads to a reduction in suppliers which reshapes the market structure to an oligopolistic supplier market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). This reduction in the number of suppliers has the consequence of becoming more dependent on fewer suppliers which increases the risk for the buyer as well. This theoretical issue deriving from the buyer-supplier relationship has been discussed in many scholars (Hesping & Schiele, 2015, p. 140). The Transaction Cost Economics (TCE) for example, defines dependency in terms of transactional specific assets, which consequently influence the exchange behaviour between transaction partners (Fink, James, & Hatten, 2011, p. 78).

It is commonly argued that the dependency between buyers and suppliers is significant in the understanding of a buyer-supplier relationship (Caniëls et al., 2017, p. 341). The theoretical foundation for dependency lies in the resources-dependence theory proposed by Pfeffer and Salancik (1978) based on several earlier scholars, including the work of Emerson (1962), Blau (1964) and Jacobs (1974). Based on the resource-dependency theory

of Pfeffer and Salancik (1978), an organization can be described as inter-connected systems in need for resources in order to survive which consequently generates power-dynamics and dependence between actors (Caniëls et al., 2017, p. 2). In 2003, twenty-five years after the first introduction of the resource dependency theory of Pfeffer and Salancik, a second version of the book was published examining the legacy of the RDT as an influential work in current research and its relationship to other theories (Pfeffer & Salancik, 2003, p. xi). In this second book, Pfeffer and Salancik (2003) stated that the level of resource dependency is determined by three key factors: the importance of the resource, the number of alternatives for the resource and the amount of 'discretion' over the resource.

Scheer, Miao, and Palmatier (2015, p. 700) defined dependence as 'an actor's need to continue its relationship with an exchange partner in order to achieve its desired goals'. Companies operating in markets of high technological uncertainty are likely to be in the position that they are dependent on the access to the technological knowledge of buyers and are therefore in the need to continue the relationship in order to achieve the desired goals. Based on the resource dependency theory, dependency creates vulnerability and should therefore be avoided. The dependence literature argues that a balanced mutual dependence between buyers and suppliers is superior to other buyer-supplier relationship (Villa & Panizzolo, 1996, p. 42). However, suppliers could still be satisfied in situations of high dominance of the buyer. Although very large retailers squeeze their suppliers for example, the suppliers could still be satisfied because of the growth opportunities offered by working with the concerning buyer (Bloom & Perry, 2001, p. 380). Hence, although it is commonly argued that dependency should be avoided and that dependence asymmetry leads to inefficient relationships, dependency may actually foster relationships and so supplier satisfaction according to Caniëls et al. (2017, p. 343).

Hence, Caniëls et al. (2017, p. 343) did research on the effects of balanced and asymmetric dependence on supplier satisfaction and found that mutual dependence positively influences supplier satisfaction. Furthermore, Caniëls et al. (2017, p. 343) found, surprisingly, asymmetric dependence can be related to even higher levels of supplier satisfaction. Furthermore, Schiele and Vos (2015) did research to the risks deriving from a closer collaboration and so the dependency on just a view or only one supplier in the field of NPD and found that buyers can accept the risk of being dependent, as long as the buyer is assigned as preferred customer (Schiele & Vos, 2015, p. 139). Offering greater volumes to a few suppliers will not only lead to better prices, closer collaboration with a smaller

amount of suppliers may be a viable way for committing suppliers to contribute to NPD (Schiele & Vos, 2015, p. 144). Therefore, the reverse marketing perspective should be applied in order to become attractive and so receive a preferred customer status.

2.6.1.2. Transactional Cost Economics

Furthermore, one of the most predominant theories in managerial studies is the transactional cost economics (TCE) introduced by Oliver E. Williamson (1979), who identifies the transactional relationship between a buyer and supplier as the unit of analysis (Huo, Ye, Zhao, Wei, & Hua, 2018, p. 155). The commitment of TCE to organizational theory led to a wide range of empirical contributions using the transaction cost economics, such as the make or buy decision or the verification of the right contract mode (Macher & Richman, 2008, p. 28). The transaction costs economics has been one of the most dominant institutional theories that contribute to the decision whether to in- or outsource, also described as the make-or-buy decision of a firm (Shook, Adams, Ketchen Jr, & Craighead, 2009, p. 6). The transaction costs economics has mainly be applied to decisions regarding how to best organize transactions in a host of different business fields based on the comparative costs of adopting, planning, and monitoring tasks under alternative governance structures (Macher & Richman, 2008, p. 30). Besides the application of the transaction costs economics theory to business-related studies, Macher and Richman (2008, p. 4) found that TCE is increasingly applied to other studies such as political science, public policy, law, health and even agriculture.

The TCE theory argues that minimizing exchange costs and maximizing transactional efficiency is the key driver of managerial decisions in inter-organizational relations (Krolikowski, 2017, p. 54). The two main drivers of the transaction cost economics are costs, consisting of coordination and transaction costs, and uncertainty due to the external environment (Fink, Edelman, Hatten, & James, 2006, p. 504). One of the core concepts of TCE is, as mentioned, uncertainty and states that transactional costs comprising of coordination and transactional risks are higher. However, not all potential contingencies can be taken into account by specifying exchange contracts (Grover & Malhotra, 2003, p. 459). Since uncertainty is a key characteristic of risk, high uncertainty consequently leads to higher levels of risk (Yates & Stone, 1992, p. 1).

Transaction cost economics classifies transactions based on three measures: how much and what form of asset specificity is present (1), how often do the transactions occur (2), and how much and what type of uncertainty surrounds the transactions (3) (Oliver E. Williamson, 1981, p. 555). Hereby is uncertainty concerned with the (lack of) ability to anticipate on important contingencies encompassing the transaction (John & Weitz, 1988, p. 337).

2.6.1.3. The Contingency Theory

The contingency theory analyses organizational issues from a contextual perspective (Jayaram, Xu, & Nicolae, 2011, p. 62). The structures and processes of an organization are shaped by the environment the organization is operating in. Hence, organizations should, in order to maximize their performance, match their processes and structures based on the environment according to the contingency theory (Flynn, Huo, & Zhao, 2010, p. 59). The essence of the contingency theory states that there is no universal set of strategies which are optimal for every business according to Yu, Cadeaux, and Song (2017, p. 212). Therefore, organizations must design their strategies based on the environmental contexts the organization is operating in; ‘’organizations are complex entities and the relationship between two variables may be influenced by many contextual conditions’’ (Miller, 1979, p. 296).

Hereby, the contingency theory argues that since organizations are open systems, they respond to the shifts in their environment (Forker & Stannack, 2000, p. 31). Therefore, the environment an actor operates in, influences the buyer-supplier relationship according to Forker and Stannack (2000, pp. 31-32); ‘intensified market competition and faster technological change over the past two decades have driven companies to search harder, scrutinize more carefully, and develop more fully their supply base’ (Hahn, Watts, & Kim, 1990, p. 3). Those actions have been a response to ‘primary uncertainty, random acts of nature, and unpredictable changes in customer preference’ (O.E. Williamson, 1989, p. 145).

2.6.2. Uncertainty in the external environment influencing the buyer-supplier relationship

2.6.2.1. Managerial actions are influenced by the external environment

Organizational theory proposes that external uncertainty shapes the interactions between individuals, organizational structure and performance (Lu & Yang, 2004, p. 595). Based on the contingency theory, the structures and processes of an organization are shaped

by the environment the organization is operating in (Flynn et al., 2010, p. 59). Therefore, managerial actions are influenced by the external environment according to several scholars and therefore influences the buyer-supplier relationship as well (Gelderman et al., 2016, p. 229). Furthermore, companies operating in markets of high technological uncertainty are likely to be in the position that they are dependent on the access to the technological knowledge of buyers and are therefore in the need to continue the relationship in order to achieve the desired goals. Based on the resource dependency theory, dependency creates vulnerability and should be avoided (Pfeffer & Salancik, 1978). Hence, uncertainty in the external environment might create dependencies which therefore influences the buyer-supplier relationship too.

Environmental uncertainty is described as 'unanticipated, unpredictable changes in circumstances surrounding an exchange' by Noordewier, John, and Nevin (1990, p. 82). Huo et al. (2018, p. 156) specified three dimensions of environmental uncertainty which are demand, supply, and technology uncertainty (Chen & Paulraj, 2004, p. 123; Lee, 2003, p. 106; Pagell & Krause, 1999, p. 309). Demand and supply uncertainty reflects the rate of changes in demand and supply and are therefore specific uncertainties on business levels, while technological uncertainty is uncertainty on general market level and represents the rate of changes of technologies within the market environment according to Huo et al. (2018, p. 156). Since this study is analysing the buyer-supplier relationship from the perspective of the supplier, the construct supply uncertainty will not be measured. Furthermore, according to Kumar, Stern, and Achrol (1992, p. 247) are demand and competition uncertainty the main dimensions of environmental uncertainty in a supply chain. Therefore, the external environment the supplier is working in is divided into three constructs; technological uncertainty, demand uncertainty, and competition uncertainty.

2.6.2.2. Technological uncertainty as a major external factor in the external environment and its influence on supplier satisfaction

Gelderman et al. (2016, p. 229) mentions the significance of technological uncertainty and states that technological uncertainty is a major external factor in the external environment of firms. Bstieler (2005, p. 272) defines technological uncertainty as the complexity, instability, and unpredictability of relevant technologies and the future development of it. Also, Huo et al. (2018, p. 156) define technological uncertainty as 'the extent of changes and unpredictability of logistics-related technologies'. Hughes and Perrons (2011, p. 7) stated that the complexity of the product influences the mix of weak and strong

ties since more complex products require more exchange of information, an inter-firm co-operation and more closely aligned operations. Hereby the strength of these inter organizational ties will increase. Rapid changing technologies within an industry, a large number of developed products because of new technological breakthroughs and a large number of technological developments within the industry influences the degree of technological uncertainty (Bstieler, 2005, p. 272). Especially in the context of strategic management and new product development, is technological uncertainty a critical factor in external uncertainty (Land, Engelen, & Brettel, 2012, p. 522; Sicotte & Bourgault, 2008). Technological uncertainty is generally seen as an important factor influencing perceptions and actions of managers (Gelderman et al., 2016, p. 229), and might, therefore, influence the level of supplier satisfaction and the tendency to assign a customer as preferred as well. Buyer-supplier relationships are also embedded in a technological context and therefore plays an important role in the social-capital relationship (Gelderman et al., 2016, p. 229). The moderating impact of technological uncertainty is based on the relevance of it to an organization's product development and so the preference and demands of its customers. Preference of customers and so the preference of suppliers may shift as a result of technological change (Jaworski & Kohli, 1993, p. 473).

Since uncertainty is a key characteristic of risk, high uncertainty consequently leads to high levels of risk (Yates & Stone, 1992, p. 1). One of the core concepts of the transaction cost theory, as stated above, is uncertainty and states that bounded rationality increases problems in uncertain situations: not all potential contingencies can be taken into account by specifying exchange contracts and exposing buyers to supply risk (Grover & Malhotra, 2003, p. 457). The transaction costs theory states that transactional costs, comprising of co-ordinational costs and transactional risks are higher. Although those risks are difficult to measure according to Grover and Malhotra (2003, p. 473), those risks are reflected in the supply risk management performance (Hoffmann, Schiele, & Krabbendam, 2013, p. 201). Since technological unpredictability is an example of environmental uncertainty, it leads to adaptation problems in the supply chain according to (Hoffmann et al., 2013, p. 201). Furthermore, firms are easily surprised by changes in a rapidly changing environment since it is difficult to write a contract including all possible future outcomes (Hoffmann et al., 2013, p. 201).

2.6.2.3. Demand uncertainty as the second factor of the external environmental

As mentioned above, Huo et al. (2018, p. 155) divided environmental uncertainty into three dimensions which are technological, supply and demand uncertainty. Whereas technological uncertainty is uncertainty on general market level, supply and demand uncertainty are specific business-level uncertainties. Demand uncertainty reflects forecasting errors, irregular orders, etc. and is measured in terms of fluctuation and variation of demand in the market (Chen & Paulraj, 2004, p. 123). Demand uncertainty is very significant since the influence goes back into the whole supply chain; ‘’Forecasts have traditionally served as the basis for planning and executing supply chain activities. Forecasts drive supply chain decisions, and they have become critically important due to increasing customer expectations, shortening lead times, and the need to manage scarce resources’’(Boone, Ganeshan, Jain, & Sanders, 2018, p. 170). Begen, Pun, and Yan (2016, p. 125) analyzed the impact of demand uncertainty and uncertainty reduction efforts on the quantity of production and total costs. Hereby, Begen et al. (2016) argue that environmental uncertainties create exchange hazards resulting in opportunism which is mentioned as a central concern in outsourcing relationships due to several studies. Furthermore, Raju and Roy (2000) found that firms can increase its profit by decreasing forecasting errors, and changes in forecasting precision lead to large influences on the profit of a firm when uncertainty in demand is high. This shows the significance of demand uncertainty within the buyer-supplier relationship and will, therefore, be included in this research.

2.6.2.4. Competition uncertainty as the third factor of the external environmental

The third environmental uncertainty taken into account in this research in order to describe the influencing factors of the external environment will be competition uncertainty. According to Kumar et al. (1992, p. 247), are demand and competition uncertainty the most important dimensions of environmental uncertainty. Competition uncertainty is hereby described as the competitive activity in the market of the supplier such as the increasing strength, and the amount of, competitors. Therefore, Yu et al. (2017, p. 213) investigated the influence of environmental uncertainty, divided into demand and competition uncertainty, as a moderating factor mediating the effects of logistics service quality on supplier satisfaction. The results confirmed that environmental uncertainty strengthens the positive effect of logistics flexibility on relationship satisfaction (Yu et al., 2017, p. 221). Also, Porter’s five forces describe the significance of competition in analysing the environment

(Porter, 2008, p. 8). One of the five forces, the threat of new entrants, refers to the possibility that profits will be eroded by new entrants in the market (Indiatsy, Mwangi, Mandere, Bichanga, & George, 2014, p. 77). New entrants can occupy the position that the organization, or a competitor of the organization, once held (Porter, 2008, p. 8). Since external uncertainties shape the interaction between individuals, organizations and performance according to organizational theory (Lu & Yang, 2004, p. 595), competition uncertainty is very significant in analysing the external environment. Therefore, competition uncertainty will also be included in this research in order to analyse the buyer-supplier relationship as a moderating factor influencing the tendency to assign a customer as preferred or regular.

3. Hypothesis

Based on the provided literature framework, the hypothesis of this research will be discussed in this chapter. Hereafter, the methodology used to test the stated hypothesis will be discussed in chapter 4; Methods. Finally, the results and conclusion will be presented in chapter 5 and chapter 6 respectively.

3.1. First-tier antecedents positively influence supplier satisfaction: Growth opportunity, profitability, relational behaviour and operative excellence

The findings of the revised model of Vos et al. (2016) showed that all first-tier antecedents (growth opportunity, profitability, relational behaviour and operative excellence) do have a significant impact on supplier satisfaction regardless of the context of procurement. The social exchange theory argues that organizations that strive for value creation will, hence, continue the relationship as long as the satisfactory rewards continue (Blau, 1964, p. 2). Working with large and prestigious customers give valuable references what enables suppliers to enter new markets and acquire new business (Walter et al., 2001, p. 368). Besides this functioning of the market, increasing substantial volumes of business increases supplier satisfaction as well (Hüttinger et al., 2014, p. 704). In line with the social exchange theory, a relationship must create value for the supplier in order to continue the relationship. Profitability is therefore, next to growth opportunities, a significant aspect of the creation of value and so influences the level of supplier satisfaction (Vos et al., 2016, p. 4614). Next to economic factors influencing supplier satisfaction, findings in current literature show that the level of supplier satisfaction is primarily influenced by a relationship-

based, cooperative supply strategy (Nyaga, Whipple, & Lynch, 2010, p. 101). Hence, it is expected that relational behaviour positively influences supplier satisfaction. Finally, the perception that the operations of the buying firm are efficiently arranged, positively influences supplier satisfaction according to Hüttinger et al. (2014, p. 704). This because it consequently facilitates the way of doing business for the supplier. Therefore, the first hypothesis is formulated as:

Hypothesis 1: Growth opportunity (H1a), profitability (H1b), relational behavior (H1c) and operative excellence (H1d) do have a positive impact on supplier satisfaction

3.2. New antecedents of operative excellence: billing/delivery and order

Meena and Sarmah (2012, p. 1238) stated that based on the opinion of suppliers and conducted literature review, purchasing policy, payment/finance policy, coordinating policy and corporate image are the main dimensions affecting supplier satisfaction. Also, the results of (Meena & Sarmah, 2012, p. 1245) confirmed the significant influence of purchasing and payment/finance policy on supplier satisfaction. Besides, client payment habits and payment/receiving procedures as well as adherence to arrangements and long-term contracts, influence supplier satisfaction (Maunu, 2002, p. 30; Wong, 2000, p. 427). Hüttinger et al. (2014, p. 703) defined operative excellence as 'the supplier's perception that the buying firm's operations are handled in a sorrow and efficient way'. Since the construct of operative excellence solely focuses on forecasting and a transparent decision-making process, the construct 'billing/delivery' and 'order' will be included as second-tier antecedent influencing operative excellence. Therefore, the second hypothesis is formulated as:

Hypothesis 2: Billing/delivery (H2a) and order (H2b) have a positive influence on operative excellence

3.3. Supplier satisfaction as a necessary condition for achieving a preferred customer status

Previous research has shown that the obtained resources from suppliers vary between buyers and their competitors which presents the appearance of a selective process by suppliers for their resources (Takeishi, 2002, p. 328). Suppliers have the chance to give different statuses to different customers (H. Schiele et al., 2012, p. 1178). To achieve a

preferred customer status, supplier satisfaction is a necessary condition (Hüttinger et al., 2012, p. 11). Also, Vos et al. (2016, p. 1) found that supplier satisfaction positively influences awarding the buyer a preferred status. Therefore, the third hypothesis is formulated as:

Hypothesis 3: Supplier satisfaction has a positive influence on the tendency to assign a preferred customer status

3.4. Buyer-supplier dependency influencing the level of supplier satisfaction and the tendency to assign a customer as preferred

Although studies argue that a balanced dependency within the buyer-supplier relationship is critical in supplier satisfaction, and that based on the RDT dependency must be avoided, suppliers can for instance still be satisfied because of the growth opportunities offered by the dominant buyer (Bloom & Perry, 2001, p. 380). Additionally, partners who are highly dependent on each other are also highly orientated on the relationship causing an improved relationship. Besides, dominant buyers could provide guidance and share knowledge during the buyer-supplier relationship (Caniëls et al., 2017, p. 6). Moreover, (Gaski, 1984, p. 41) stated that the non-usage of a dominant position within an inter-organizational relationship actually improve the satisfaction of the dependent organization. Hence, Caniëls et al. (2017, p. 343) did research on the effects of balanced and asymmetric dependence on supplier satisfaction and found that mutual dependence positively influences supplier satisfaction. Furthermore, Caniëls et al. (2017, p. 343) found, surprisingly, asymmetric dependence can be related to even higher levels of supplier satisfaction. Therefore, hypothesis 4a is formulated as:

Hypothesis 4a: The level of supplier dependency positively influence the level of supplier satisfaction

Moreover, Scheer et al. (2015, p. 700) define dependence as ’an actor’s need to continue its relationship with an exchange partner in order to achieve its desired goals’. Therefore it might that, although a supplier is not satisfied, the customer is still assigned as preferred if the supplier is dependent on the customer in order to achieve its desired goals. Therefore, hypothesis 4b is formulated as:

Hypothesis 4b: The level of supplier dependency positively influence the tendency to assign a preferred customer status

3.5. Technological uncertainty as a moderating effect influencing the tendency to assign a customer as preferred

Since technological uncertainty is commonly seen as an important factor influencing perceptions and actions of managers (Gelderman et al., 2016, p. 229), it could therefore influence the tendency to assign a customer as preferred as well. Both the study of Song and Montoya-Weiss (2001, p. 27) as Land et al. (2012, p. 521) found that the perceived technological uncertainty had a significant moderating effect influencing NPD. Innovation is, according to Hall, Matos, Silvestre, and Martin (2011, p. 1148), a quest and creation process of knowledge requiring the reduction of uncertainty.

Based on the resource dependency theory, Scheer et al. (2015, p. 700) defined dependence as 'an actor's need to continue its relationship with an exchange partner in order to achieve its desired goals'. Companies operating in markets of high technological uncertainty are likely in the position that they need access to the technological knowledge of buyers according to Gelderman et al. (2016, p. 229). This increases dependency on their buyers as well. Therefore, since the buyer might be crucial to the supplier in order to achieve the desired goals, the supplier might, in order to secure the relationship and so achieve its desired goals, assign a customer more easily as preferred when the supplier operates in a technological uncertain market. Besides, in order to secure sustainable organizational performance, suppliers operating in technological uncertain markets are likely to invest more in the buyer-supplier relationship (Gelderman et al., 2016, p. 229). Hence, hypothesis 5 is formulated as:

Hypothesis 5: Technological uncertainty positively moderates the relationship between the level of supplier satisfaction and the tendency to assign a customer as preferred

3.6. Demand uncertainty as a moderating effect influencing the tendency to assign a customer as preferred

Next to technological uncertainty, demand uncertainty is very significance for analysing environmental uncertainties and so for analysing the interactions between organizations (Huo et al., 2018, p. 155; Lu & Yang, 2004, p. 595). This due to previous

scholars who argued that managerial actions are influenced by the external environment (Gelderman et al., 2016, p. 229). Demand uncertainty reflects the number of forecasting errors, irregular orders, etc. and is therefore measured in terms of the fluctuation and variation of demand within the market (Chen & Paulraj, 2004, p. 123). Demand uncertainty and fluctuations in customers' requirements influence the whole supply chain and has, therefore, a significant impact on the profitability of firms (Raju & Roy, 2000). Therefore, it is expected that suppliers operating in an uncertain market in terms of demand, are less likely to assign one customer as preferred over other customers since the demand is highly fluctuating. Hence, although a supplier can be highly satisfied with a certain supplier, the tendency to assign that customer as preferred might be less strong since it would be too risky to increase the relationship with just one or a few customers. Based on the resource dependency theory, it is too risky to be dependent on only one or a few customers, and might therefore be avoided, if the demand within the market is highly fluctuating, since maintaining strong relationships with other customers as well is crucial. Conversely, suppliers operating in a highly uncertain market in terms of demand, are dependent on other customers as well and therefore assign, although the supplier is satisfied, less easily a customer as preferred since the supplier must adjust to the environment it is operating in according to the contingency theory. Accordingly, hypothesis 6 is formulated as:

Hypothesis 6: demand uncertainty negatively moderates the relationship between the level of supplier satisfaction and the tendency to assign a customer as preferred

3.7. Competition uncertainty as a moderating effect influencing the tendency to assign a customer as preferred

Since suppliers working in a competitively uncertain market are faced with high threats of new entrants and an increasing strengths of competitors, it is likely that these suppliers try to establish long-term relationships in order to secure future business; firms operating in highly uncertain markets are likely to invest more in the buyer-supplier relationship in order to secure sustainable organizational performance according to Gelderman et al. (2016, p. 229). The essence of the contingency theory states that there is no universal set of strategies which are optimal for every business according to Yu et al. (2017, p. 212). Therefore, organizations must design their strategies based on the environmental contexts the organization is operating in (Miller, 1979, p. 296). This means that, even when

the supplier is not satisfied at all, it is expected that suppliers who are operating in markets of high competitive uncertainty, assign customers more easily as preferred in order to maintain a long-term relationship. This because the supplier is, in order to secure future business, dependent on the customer according to the resource dependency theory. Hence, hypothesis 7 is formulated as:

Hypothesis 7: competition uncertainty positively moderates the relationship between the level of supplier satisfaction and the tendency to assign a customer as preferred

3.8. Preferential treatment due to a preferred customer status

A preferred customer is defined by Pulles et al. (2016, p. 1) as 'a buyer whom the supplier allocates better resources than less preferred buyers'. Being a preferred customer can therefrom provide a variety of benefits (e.g., first access to new technology or the allocation of scarce materials in times of high demand) according to several previous research (Hüttinger et al., 2012, p. 1195; Ramsay, 2001, p. 1; Vos et al., 2016, p. 1). A preferred customer status ultimately to preferential treatment. Therefore, hypothesis eight is formulated as:

Hypothesis 8: A preferred customer status has a positive influence on providing preferential treatment to that supplier

To summarize, the following model will be researched.

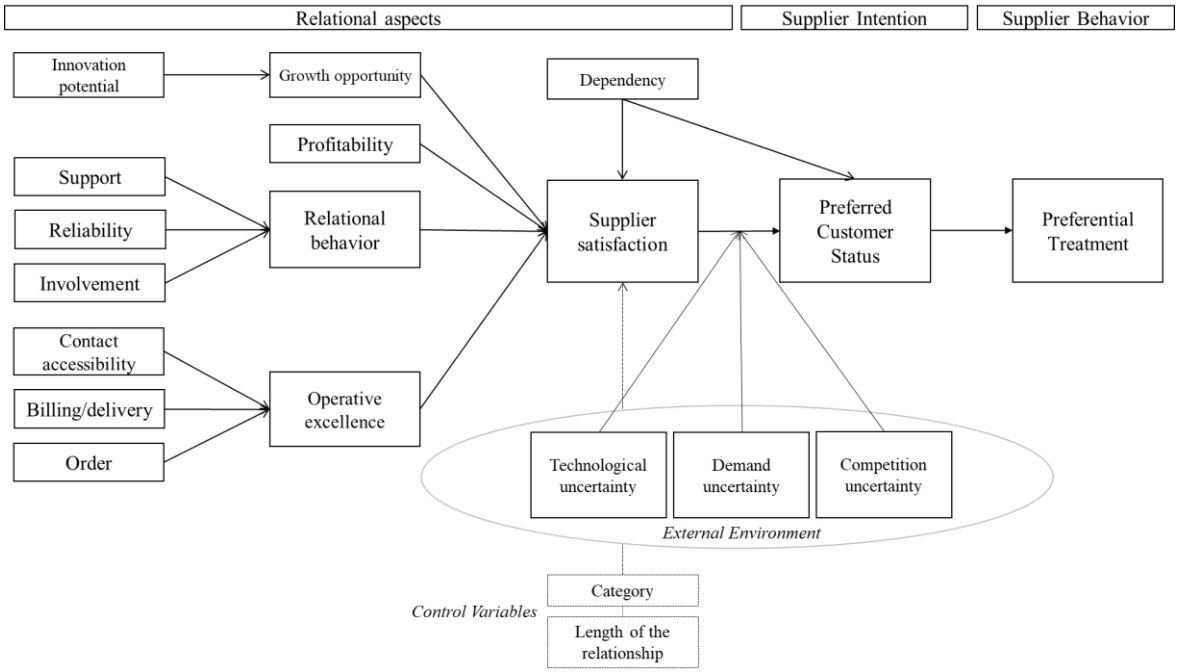

Figure 5 - Researched model

4. Methods: a partial least square (PLS)-based statistical analyses is used

4.1 Data collected from a global supplier within the Fast Moving Consumer Goods industry was analysed using a partial least square (PLS) analyses

This study builds further on, and are partially replications of, the researches of Hüttinger et al. (2014) and Vos et al. (2016). Vos et al. (2016, p. 4621) stated that replication in combination with extending on this research is very valuable in obtaining new and deeper insights in this field of research in order to help scholars to build more coherent research models. Since a greater population in different contexts will increase the possibility to generalize results. The study of Hüttinger et al. (2014) collected data at an automotive manufacturer for direct procurement and Vos et al. (2016) at a chemical company on indirect procurement. This study, however, collects data from the indirect procurement department of a firm operating in the fast-mover-consumer-goods (FMCG) industry. Hereby two categories of indirect procurement are investigated, namely, the categories called IT & Purchased services (ITPS) and Move. Whereas the category ITPS includes products such as IT, Hard- and software and several HR-related services such as insurances, training,

recruitment and commercial services, the category Move consists of logistic services such as transport and warehousing. To control for the effects of the different categories of indirect procurement, a control dummy variable is introduced.

4.2. Literature Review Approach

As a start of this study, a systematical literature research was conducted on the most important subjects in the Purchasing & Supply Management field. Since a theoretical background provides the basis of a solid empirical research, existing literature in the field of supplier satisfaction, preferred customer status, belling delivery, order and the environmental uncertainty are researched. Recent articles were used in order to define a good search strategy and as the basis for describing the constructs. Hereby was the paper of Hüttinger et al. (2012) used as a basis for supplier satisfaction and achieving consequently a preferred customer status. Using these search terms, literature and theory have been searched and analysed in a structured manner, for which the Scopus database was used for finding and collecting the relevant articles. Based on the title, abstract, and keywords, articles have been assessed and selected. The summary of the search results can be found in table 2. Furthermore, also other databases were used when the articles needed couldn’t be found via the Scopa Database, such as Google Scholar, Sciencedirect and FindUT.

Table 2 – Literature Search

Search	Initial hits	Limited to 2012 – 2019	Hits only in relevant subject areas	Usable and assessed papers	Search Key
'supplier satisfaction'	3,872	787	337	19	TITLE-ABS-KEY(Supplier satisfaction) AND (LIMIT-TO (PUBYEAR, 2012-2019) AND (LIMIT-TO (SUBJAREA,"BUSI"))
'Preferred customer'	1,954	892	268	15	TITLE-ABS-KEY(preferred customer) AND (LIMIT-TO (PUBYEAR, 2012-2019) AND (LIMIT-TO (SUBJAREA,"BUSI"))
'Billing delivery'	1,131	479	8	5	TITLE-ABS-KEY(Billing delivery) AND (LIMIT-TO (PUBYEAR, 2012-2019) AND (LIMIT-TO (SUBJAREA,"BUSI"))
'Order'	4,880,215	1,930,572	51,760	6	TITLE-ABS-KEY(Order) AND (LIMIT-TO (PUBYEAR, 2012-2019) AND (LIMIT-TO (SUBJAREA,"BUSI"))
'Environmental uncertainty'	41,714	21,745	1,587	17	TITLE-ABS-KEY(Environmental uncertainty) AND (LIMIT-TO (PUBYEAR, 2012-2019) AND (LIMIT-TO (SUBJAREA,"BUSI"))

4.3 Survey Design and measured used

To answer the research question a quantitative research method will be used. Hereby a multi-item scale will be used to measure the independent and dependent latent factors. The revised model of Vos et al. (2016), which is a replication of the research of Hüttinger et al. (2014), will be used as the basis of this study.

Therefore, the items measuring the first- and second-tier antecedents of supplier satisfaction, and the formative constructs 'preferential treatment' will be identical to Vos et al. (2016). Additionally, the reflective constructs 'billing/delivery' and 'order' will be introduced in this research. The constructs billing/delivery and order will be measured using the questionnaire of Essig and Amann (2009, p. 110) as you can see in Appendix A. Furthermore, the influence of the technological, demand, and competition uncertainty of the market in which the supplier operates will be included in this research. Therefore, the questionnaire of Gelderman et al. (2016, p. 232), which is based on the measures of Bstieler (2005), will be used (Appendix B) in order to assess the technological certainty of the market in which the supplier operates. In order to assess the level of demand and competition uncertainty, the questionnaire Yu et al. (2017, p. 217) will be used which can be found in Appendix C. To assess the supplier's dependency, the questionnaire of Caniëls et al. (2017, p. 350) will be used which can be found in Appendix D. The preferential treatment measure will be based on the research of Pulles et al. (2016) as you can see in Appendix E.

Besides, a control variable will be introduced to assess the length of the relationship. This due to the findings of Nagati and Rebolledo (2013, p. 185) which showed that the length of the relationship between a buyer and supplier significantly influences the relational outcomes. Furthermore, also a control variable will be introduced in order to control for the effects of the different categories within indirect procurement that are involved in this research.

All items are measured on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Additionally to the independent and dependent variables of this study, the questionnaire includes questions related to the corporate and national culture of the suppliers. Besides, general questions about both the characteristics of the suppliers as relational aspects, such as the length of the buyer-supplier relationship as the size of the supplier, are included in this research.

4.4 Data collection and sample: 139 completed questionnaires have been conducted from suppliers in eight different countries

The quantitative data used for this study is, as mentioned above, collected from the indirect procurement department of a global supplier within the FMCG industry. Two categories within the procurement department are included in this research; ITPS and Move. The data is collected in seven different countries for both categories within Central and

Western Europe, consisting of Portugal, Spain, France, Poland, Benelux, Germany and the UK. Per category and per country, the top 20-25 most important suppliers are selected based on the following criteria: only strategic or important suppliers, not unique, suppliers can be included. Besides, the concerning suppliers cannot be in a tender process at the time being contacted and must all be active suppliers.

Per category and per country, the concerning buyer provided a list of the top 20-25 most important suppliers in terms of annual spend. This list included the name of the contact person of the supplier and his/her email address. Therefore, in order to increase the response rate, the email sent to the suppliers started with a personal salutation and was send to the direct email address of the contact person, so email addresses such as info@companyxy.nl were avoided.

This led to 309 contacted suppliers of which 66 responded (21.4% response rate) in the first week. After exactly one week, another 27 suppliers were contacted and a first reminder was sent to the suppliers who were contacted first. This led to 336 contacted supplier and after exactly two weeks 123 responses were collected which equals a response rate of 39.8%. Finally, the last reminder was sent to the 27 suppliers who were contacted later which led to 143 conducted questionnaires in total.

To ensure that the respondent had enough knowledge about the buying firm to fill in the questionnaire and so to make sure that the respondent was capable of assessing the relationship, a control question was added to the questionnaire. The question, which was stated as ‘I know BuyingFirmXY good enough to answer all the questions in this questionnaire’, was assessed also using a 1-5 Likert scale. Those respondents who answered 1 or 2, which equals ‘strongly disagree’ and ‘somewhat disagree’ were eliminated from this research. Therefore, a total of 139 completed questionnaires have been conducted which equals a response rate of 41.6%. Table 3 gives an overview of the several characteristics of the respondents.

Table 3 - Respondents Characteristics

Country of respondents

	Frequency	%
UK	22	15.8
Benelux	18	11.5
Germany	8	5.8
France	18	12.9
Poland	19	11.5
Spain	27	19.4
Portugal	15	10.8
Other	12	12.2
Total	139	100.0

Length of the relationship

	Frequency	%
< 5 years	32	23.0
5 - 10 years	51	36.7
11 - 20 years	34	24.5
> 20 years	22	15.8

Most common e-classification

	Frequency	%
14. Logistics (Service)	85	61.2
41. Marketing	20	14.4
25. General Serice	6	4.3
Other	28	20.1

Number of employees

	Frequency	%
< 10	15	10.8
10 - 50	31	22.3
51 - 250	49	35.3
250 - 1000	28	20.1
> 1000	16	11.5

Furthermore, an important condition in order to generalize the sample to the entire population is to check whether the collected data represents the view of the whole sample (Armstrong & Overton, 1977, p. 396). Hence, a non-response bias analyses is conducted whereby the early respondents, the first 25 per cent of the respondents, are compared to the late respondents, the last 25 per cent of the respondents. This based on the assumption that the non-responses represents the late-responses (Pulles et al., 2016, p. 134). Therefore, all answers on all questions used the questionnaire are analyzed using an independent T-test. The results show that 66 out of the 69 answers between the early and the late respondents are not significantly different at $p < 0.05$ (Appendix F). However, since 3 out of the 69 answers are significantly different, non-response bias might have an impact on the results and, hence, should be taken into account when generalizing the results.

4.5 Statistical method used: Partial Least Squares (PLS) path modelling

The conducted data from the sent questionnaire was empirically tested by means of the SmartPLS 3.0 software of Ringle, Wende, and Becker (2015). This Partial Least Squares (PLS) Path modelling method is chosen because of, in contrast to regression that only allows one dependent variable, its ability to test whole models consisting of a cause-effect

relationship including latent variables. Besides, a PLS analysis is preferred in predictive rather than explanatory research according to Hair Jr, Hult, Ringle, and Sarstedt (2016). Furthermore, the PLS method is very popular among scientists and practitioners because of, according to Henseler and Sarstedt (2013, p. 566), four reasons. Firstly, since PLS path modelling makes no assumptions about the tested population or the scale used for measurement, PLS can also be used when the distribution is highly skewed. Secondly, the use of the method has highly improved since the development of modern software with open packages of PLS path modelling and the graphical used-interfaces. Thirdly, PLS path modelling can also be used despite of a small sample size since PLS path modelling test the separate subparts of the used model by ordinary least squares which means that the complexity of the overall model will barely be influenced by a small sample size according to Fornell and Bookstein (1982, p. 443). Finally, when the number of indicators per latent variable is low or when the number of variables to the number of observations is high, the PLS path modelling is preferred over the covariance-based SEM (Henseler & Sarstedt, 2013, p. 566). The descriptive statistics and the tests for the data characteristics, such as the common factor loadings, heteroscedasticity, of this study are calculated using IBM SPSS 21.

4.6 Quality assessment of the data structure

The data structure will be analysed using the principal component analysis (PCA) whereby factor loadings are assessed and which retains the unique variance of items on the hypothesized components (Petter, Straub, & Rai, 2007, p. 641). The default options for Varimax rotations are applied during the principal component analysis. The individual loadings must be greater than 0.55 (Tabashnick & Fidell, 2007). Based on a fixed number of factors to extract (18), the first factor analysis was executed. An individual loading less than 0.55 means that this item does not measure the same as the other indicators. Therefore, of the indicators with an individual loading less than 0.5, the lowest individual loading is removed. Thereafter, the PCA analysis is executed repeatedly until all factor loadings scored above 0.55. As you can see in Appendix G, after removing 16 indicators, each individual loading of the remaining 57 indicators scores higher than 0.55. Furthermore, all communalities score above 0.6 and on average the communalities score even 0.830 (Appendix H.)

Thereafter, in order to check the reliability and the validity of the latent indicators of the latent factor, the model is run in SmartPLS (Bootstrapping 5000). The reliability of the indicator is assessed by means of the outer loadings of each individual factor. Each indicator must have a minimum loading of 0.7 to be accepted according to Hulland (1999), since this means that 'there is no more shared variance between the construct and its measure that error variance' (Hulland, 1999, p. 198). As you can see in Table 4, all individual outer loadings score above 0.7 and can therefore be seen as reliable.

Moreover, in order to assess the internal consistency of the constructs, the composite reliability and Cronbach's Alpha are analysed. According to Bagozzi and Yi (1988, p. 82), values for composite reliability should be at least 0.7. As you can see in table 4, all values for composite reliability score at least above the threshold of 0.7. Also, all values for Cronbach's alpha are above 0.7 and can therefore be seen as reliable.

Table 4 - Reliability and Validity Measures

	Indicator	Outer Loading	Composite Reliability	Cronbach's Alpha	Convergent Validity (AVE)
Innovation Potential	Innovation Potential 1	0.919	0.933	0.892	0.822
	Innovation Potential 2	0.916			
	Innovation Potential 3	0.884			
Growth Opportunity	Growth Opportunity 1	0.892	0.896	0.768	0.811
	Growth Opportunity 4	0.909			
Profitability	Profitability 2	0.86	0.903	0.871	0.703
	Profitability 3	0.7			
	Profitability 4	0.886			
	Profitability 5	0.916			
Support	Support 1	0.828	0.897	0.828	0.743
	Support 2	0.842			
	Support 3	0.913			
Reliability	Reliability 1	0.906	0.929	0.902	0.766
	Reliability 2	0.924			
	Reliability 3	0.815			
	Reliability 4	0.852			
Involvement	Involvement 1	0.906	0.939	0.904	0.838
	Involvement 2	0.935			
	Involvement 3	0.904			
Relational Behavior	Relational Behavior 5	0.944	0.937	0.865	0.881
	Relational Behavior 5	0.933			
	Contact Accessibility 1	0.884	0.916	0.863	0.784

Contact Accessibility	Contact Accessibility 2	0.903			
	Contact Accessibility 3	0.87			
Billing/Delivery	Billing/Delivery 1	0.924	0.926	0.879	0.807
	Billing/Delivery 2	0.94			
	Billing/Delivery 3	0.827			
Order	Order 1	0.834	0.902	0.837	0.754
	Order 2	0.892			
	Order 3	0.877			
Operative Excellence	Operative Excellence 1	0.943	0.939	0.869	0.884
	Operative Excellence 2	0.938			
Supplier Satisfaction	Supplier Satisfaction 1	0.833	0.923	0.89	0.751
	Supplier Satisfaction 2	0.886			
	Supplier Satisfaction 3	0.873			
	Supplier Satisfaction 4	0.874			
Preferred Customer Status	Preferred Customer Status 1	0.824	0.899	0.85	0.69
	Preferred Customer Status 2	0.887			
	Preferred Customer Status 3	0.803			
	Preferred Customer Status 5	0.806			
Preferential Treatment	Preferential Treatment 1	0.848	0.918	0.88	0.736
	Preferential Treatment 2	0.835			
	Preferential Treatment 3	0.859			
	Preferential Treatment 4	0.889			
Technological Uncertainty	Technological Uncertainty 1	0.861	0.935	0.908	0.783
	Technological Uncertainty 2	0.896			
	Technological Uncertainty 3	0.882			
	Technological Uncertainty 4	0.9			
Demand Uncertainty	Demand Uncertainty 1	0.977	0.955	0.912	0.914
	Demand Uncertainty 2	0.935			
Competition Uncertainty	Competition Uncertainty 1	0.976	0.924	0.855	0.858
	Competition Uncertainty 2	0.874			
Dependency	Dependency 1	0.883	0.906	0.87	0.661
	Dependency 2	0.787			
	Dependency 3	0.817			
	Dependency 4	0.879			
	Dependency 5	0.7			

Thereafter, in order to ensure that the construct measures what they intend to measure, the validity of the constructs will be assessed. To evaluate the validity of constructs, two types of validity will be executed, namely convergent validity and discriminant validity

(Henseler, Ringle, & Sarstedt, 2015, p. 115). The convergent validity assesses whether the measures of the concerning constructs are related which is done by evaluating the average variance extracted (AVE). According to (Bagozzi & Yi, 1988, p. 82), an AVE higher than 0.5 is seen as acceptable. Table 4 shows that the AVE value of all constructs score at least 0.5 and could therefore be seen as valid.

Furthermore, discriminant validity assesses whether the measures of the constructs are statistically different from the measures of the other constructs (J. Hair, Black, Babin, & Anderson, 2010). Two measures to assess discriminant validity are used; the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT). The HTMT approach, introduced by Henseler et al. (2015, p. 115) in order to check the discriminant validity, states that the HTMT ratio should be below the threshold of 0.85. Table 5 shows that all values of the HTMT ratio are below 0.85 and which therefore supports discriminant validity. The Fornell-Larcker criterion states that discriminant validity is assumed when the square roots of AVE of each latent variable are higher than the correlation coefficient with the other constructs (Fornell & Bookstein, 1982, p. 49). Table 6 shows that all the square roots of the AVE of each latent variable are higher than the correlation coefficients. Therefore, both convergent validity as discriminant validity is well established.

Finally, the model fit is analysed by means of the standardized root mean square residual (SRMR). According to (Henseler et al., 2014, p. 195), the SRMR value should be below 0.10 or even 0.08 in order to reflect a good fit. Since the SRMR value of this research is 0.064, the model fit can be accepted.

Table 5 – HTMT Ratios

Constructs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Billing/Delivery	-																	
2. Competition uncertainty	0.325	-																
3. Contact accessibility	0.374	0.173	-															
4. Demand uncertainty	0.1	0.604	0.143	-														
5. Dependency	0.157	0.308	0.235	0.208	-													
6. Growth opportunity	0.292	0.413	0.489	0.208	0.501	-												
7. Innovation potential	0.256	0.232	0.238	0.116	0.314	0.65	-											
8. Involvement	0.382	0.183	0.472	0.107	0.275	0.649	0.607	-										
9. Operative excellence	0.503	0.278	0.423	0.025	0.236	0.411	0.233	0.514	-									
10. Order	0.536	0.224	0.069	0.106	0.215	0.391	0.202	0.467	0.658	-								
11. Preferred customer status	0.238	0.127	0.319	0.143	0.588	0.497	0.387	0.314	0.194	0.184	-							
12. Preferential treatment	0.243	0.22	0.38	0.231	0.512	0.342	0.374	0.316	0.076	0.179	0.822							
13. Profitability	0.334	0.278	0.416	0.075	0.384	0.673	0.436	0.54	0.267	0.275	0.41	0.351	-					
14. Relational behavior	0.441	0.117	0.597	0.187	0.253	0.54	0.387	0.482	0.43	0.491	0.39	0.357	0.514	-				
15. Reliability	0.409	0.3	0.673	0.314	0.259	0.478	0.329	0.397	0.292	0.451	0.302	0.377	0.43	0.487	-			
16. Supplier satisfaction	0.382	0.288	0.577	0.274	0.264	0.439	0.268	0.432	0.308	0.492	0.448	0.464	0.377	0.448	0.696	-		
17. Support	0.4	0.308	0.648	0.168	0.25	0.661	0.541	0.651	0.511	0.421	0.346	0.319	0.595	0.586	0.64	0.542	-	
18. Technological uncertainty	0.253	0.381	0.331	0.424	0.182	0.382	0.29	0.296	0.355	0.282	0.261	0.221	0.171	0.207	0.423	0.395	0.374	-

HTMT scores for the relationship between the constructs on both axes.

Table 6 – Mean, Standard Deviations & the correlations of the constructs

Constructs	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Billing/Delivery	3.81	0.95	**0.898**																	
2. Competition uncertainty	3.66	0.82	0.301	**0.926**																
3. Contact accessibility	4.14	0.80	0.324	0.139	**0.885**															
4. Demand uncertainty	3.93	0.73	0.085	0.491	0.134	**0.956**														
5. Dependency	3.22	0.93	0.139	0.257	0.212	0.185	**0.813**													
6. Growth opportunity	3.93	0.80	0.239	0.339	0.398	0.16	0.411	**0.901**												
7. Innovation potential	3.53	0.97	0.224	0.189	0.211	0.101	0.274	0.541	**0.907**											
8. Involvement	3.52	1.09	0.336	0.161	0.422	0.098	0.251	0.543	0.551	**0.915**										
9. Operative excellence	3.74	0.89	0.441	0.243	0.367	-0.004	0.208	0.334	0.204	0.452	**0.94**									
10. Order	3.88	0.72	0.459	0.196	0.454	0.101	0.175	0.312	0.174	0.405	0.564	**0.868**								
11. Preferred customer status	4.06	0.79	0.206	0.122	0.274	0.134	0.512	0.4	0.339	0.276	0.167	0.15	**0.831**							
12. Preferential treatment	4.17	0.79	0.213	0.197	0.325	0.206	0.457	0.28	0.331	0.284	0.065	0.124	0.712	**0.858**						
13. Profitability	3.40	0.88	0.273	0.266	0.382	0.046	0.35	0.574	0.368	0.502	0.232	0.25	0.348	0.317	**0.838**					
14. Relational behavior	3.92	0.72	0.385	0.108	0.513	0.175	0.225	0.442	0.343	0.436	0.372	0.416	0.335	0.311	0.446	**0.939**				
15. Reliability	4.19	0.81	0.368	0.277	0.602	0.283	0.231	0.42	0.302	0.376	0.274	0.388	0.278	0.337	0.438	0.459	**0.875**			
16. Supplier satisfaction	4.61	0.58	0.34	0.264	0.519	0.251	0.235	0.371	0.25	0.402	0.282	0.423	0.398	0.407	0.404	0.4	0.624	**0.867**		
17. Support	3.76	0.87	0.344	0.258	0.547	0.146	0.215	0.524	0.459	0.553	0.433	0.349	0.295	0.276	0.509	0.502	0.581	0.485	**0.862**	
18. Technological uncertainty	4.00	0.76	0.221	0.312	0.303	0.377	0.159	0.321	0.262	0.26	0.31	0.254	0.239	0.2	0.165	0.189	0.401	0.371	0.327	**0.885**

M = mean; SD = standard deviation; The off-diagonal elements are the correlations between the constructs;
the bold elements on the diagonal represent the squared roots of AVE.

5. Results

5.1. R^2 values of the endogenous variables

The hypothesized model is calculated by using the SmartPLS 3.0 whereby the model is bootstrapped with 5.000 subsamples and tested on a significance level of 0.05 with a one-tailed test type. A one-tailed test is chosen since the coefficients are expected to have either a positive or a negative sign as stated in the hypotheses (Kock, 2015, p. 1). A two-tailed, on the other hand, is being recommended if no assumptions are made about the sign of the coefficient according to Kock (2015, p. 1).

In order to research the antecedents of supplier satisfaction and the moderating effects of the external environment, a SmartPLS analysis is executed. The most important outcomes of the PLS path model are the level of significance of the path coefficients and the R^2 values of the endogenous variables which indicates the proportion of variance explained in the endogenous latent variable by the explaining latent variables (J. F. Hair, Ringle, & Sarstedt, 2011, p. 147). Hereby are the R^2 values above 0.25, 0.50 and 0.75 considered as respectively weak, moderate and substantial.

In this research, the endogenous variables are Growth Opportunities, Relational Behaviour, Operative Excellence, Supplier Satisfaction, Preferred Customer Status and Preferential Treatment. As you can see in figure 5, the endogenous variables Growth Opportunities, Operative Excellence, Preferred Customer Status, Relational Behavior and Supplier Satisfaction can be considered as weak as the values of R^2 score 0.29, 0.37, 0.40, 0.33 and 0.25 respectively. However, the endogenous variable Preferential Treatment scores 0.51 and can, therefore, be considered as moderate. Subsequently, the path coefficients are evaluated on both strength and significance and these results will be represented in figure 6 and table 7.

5.2. 2 out of 4 first-tier antecedents significantly influencing supplier satisfaction: profitability and relational behavior

The results show that 2 out of 4 first-tier antecedents significantly influences suppliers satisfaction; profitability and relational behaviour (H1b: $t = 2.620$; $\beta = 0.209$; $F^2 = 0.035$)(H1c: $t = 2.323$; $\beta = 0.210$; $F^2 = 0.041$). Growth opportunities (H1a: $t = 0.968$; $\beta = 0.101$; $F^2 = 0.008$) and operative excellence (H1d: $t = 1.419$; $\beta = 0.111$; $F^2 = 0.014$), however, are not found to have a significant influence on supplier satisfaction.

5.3. Billing/delivery influencing operative excellence significantly

Hypothesis 2a, Billing/delivery influencing operative excellence, and hypothesis 2b Order influencing operative excellence, are on the other hand both found to have a significant impact at an alpha-level of 0.01 (H2a: $t = 2.643$; $\beta = 0.214$; $F^2 = 0.056$) (H2b: $t = 4.834$; $\beta = 0.417$; $F^2 = 0.189$).

5.4. Demand uncertainty and dependency influencing the tendency to be assigned as a preferred customer

Furthermore, both technological uncertainty and competition uncertainty moderating the influence of supplier satisfaction on the tendency to assign a customer as preferred positively. Nonetheless, these relationships are not found to be significant (H3: $t = 0.834$; $\beta = 0.064$; $F^2 = 0.006$) (H5: $t = 1.453$; $\beta = 0.145$; $F^2 = 0.022$). However, demand uncertainty negatively moderating the influence of supplier satisfaction on the tendency to assign a customer as preferred negatively, is found to be significant (H4: $t = 1.919$; $\beta = -0.202$; $F^2 = 0.036$).

Hypothesis 6a, dependency influencing supplier satisfaction, is not found to be significant (H6a: $t = 0.674$; $\beta = 0.050$; $F^2 = 0.003$). On the other hand, dependency influencing the tendency to assign a firm as a preferred customer as formulated in hypothesis 6b, is supporter at an alpha level of 0.01 (H6b: $t = 6.110$; $\beta = 0.472$; $F^2 = 0.323$).

5.5. Supplier satisfaction influencing the tendency to assign a customer as preferred and consequently provide preferential treatment

Finally, hypotheses 7 states that supplier satisfaction is influencing the tendency to assign a customer as preferred. Consequently, a preferred customer status influencing the chance of receiving preferential treatment is hypothesized in hypothesis 8. Both relationships are found to be significant at an alpha level of 0.01 (H7: $t = 3.061$; $\beta = 0.263$; $F^2 = 0.077$) (H8: $t = 16.560$; $\beta = 0.712$; $F^2 = 1.031$).

5.6 buyer status overrules all other antecedents of supplier satisfaction

The quantitative data used for this study is, as mentioned above, collected from the indirect procurement department of a global supplier within the FMCG industry. In so-

called informal ‘mini interviews’ before the start of this study with several buyers from the case company, the buyers stated that the well-known name and status of the firm has been a huge advantage for them. These buyers, who have worked for several other firms and who were therefore capable of comparing the differences between these companies, stated that the well-known name and high status of the company is often a huge advantage for them in the supply management process. Therefore, the construct of buyer status has also been analysed and taken into account in the questionnaire that was sent to the suppliers. In order to analyse buyer status, the measures of Torelli, Leslie, Stoner, and Puente (2014) were used (Appendix I)

The results of the questionnaire firstly show that the buyer status of the buying firm was, indeed, significantly high since the mean of the construct buyer status scored 4.52 out of 5. Secondly, the construct was added to the model as the fifth first tier antecedent of supplier satisfaction. This model was consequently executed in SmartPLS (bootstrapping 5000) where after the results showed that all first-tier antecedents of supplier satisfaction are not found to be significant, except for buyer status (Appendix J). In other words, buyer status overruled all other antecedents of supplier satisfaction. Furthermore, also the R^2 value of the construct supplier satisfaction has highly increased from 0.249 to 0.507 by adding buyer status as a first-tier antecedent of supplier satisfaction. Also, the path coefficient of buyer status is relatively high, which indicates a strong influence of buyer status on the level of supplier satisfaction. Hence, it can be concluded that buyer status plays a significant role within the level of supplier satisfaction and, consequently, in achieving a preferred customer status.

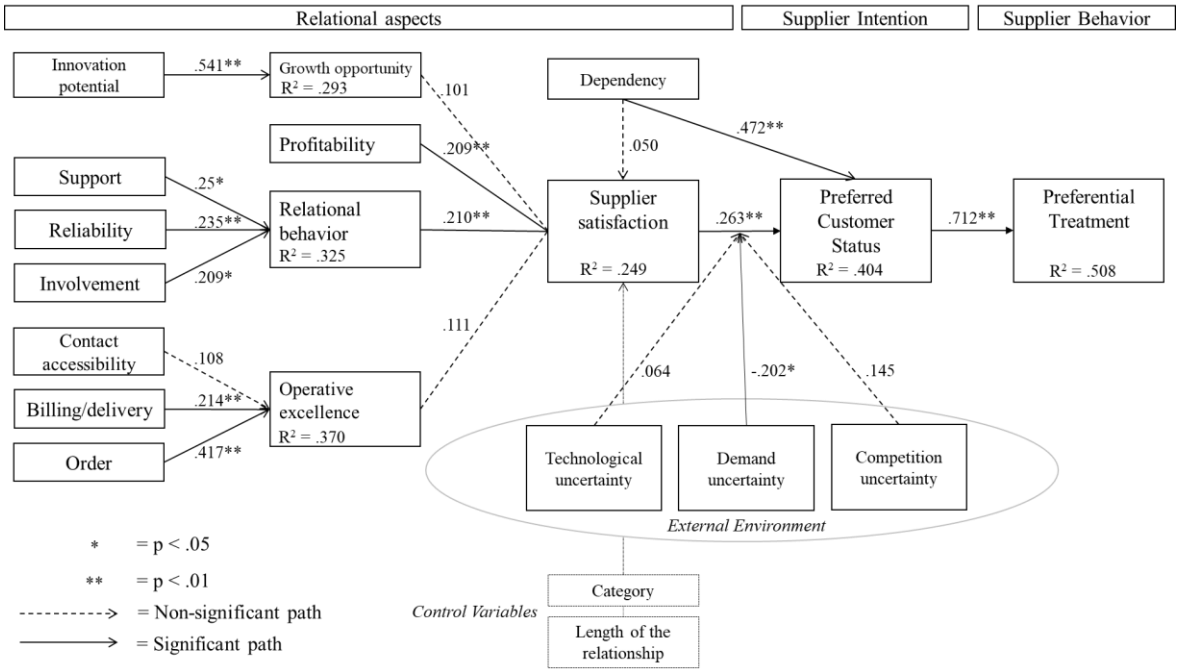

Figure 6 - Results of the PLS-PM of the researched model

Table 7 - Bootstrap and effect statistic of the research model

Paths	β	SE	t	P value	F^2
H1a Growth Opportunity > SS	0.101	0.104	0.968	0.167	0.008
H1b Profitability > SS	0.209	0.080	2.620	0.004	0.035
H1c Relational Behavior > SS	0.210	0.090	2.323	0.010	0.041
H1d Operative Excellence > SS	0.111	0.078	1.419	0.078	0.014
H2a Billing/Delivery > OE	0.214	0.081	2.634	0.004	0.056
H2b Order > OE	0.417	0.086	4.834	0.000	0.189
H3 Supplier Satisfaction > PC	0.263	0.086	3.061	0.001	0.077
H4a Dependency > SS	0.050	0.074	0.674	0.250	0.003
H4b Dependency > PC	0.472	0.077	6.110	0.000	0.323
H5 Moderating effect Technological uncertainty > SS	0.064	0.076	0.834	0.202	0.006
H6 Moderating effect Demand uncertainty > SS	-0.202	0.105	1.919	0.028	0.036
H7 Moderating effect Competition uncertainty > SS	0.145	0.100	1.453	0.073	0.022
H8 Preferred Customer Status > PT	0.712	0.043	16.560	0.000	1.031

6. Discussion and implications

6.1. Discussion of the results

The aim of this research was to replicate the study of Vos et al. (2016) in a new context (namely the FMCG industry) focused on indirect procurement and to further extend the research of Vos et al. (2016) by adding new unexplored factors influencing supplier satisfaction. The results show that, in contrast to the study of Vos et al. (2016), both growth opportunity and operative excellence do not significantly influence the level of supplier satisfaction. This could indicate that the relationship between these antecedents and supplier satisfaction, is influenced by a moderating variable such as the demand uncertainty of the market the supplier is operating in. The other antecedents profitability and relational behaviour, however, both significantly influencing supplier satisfaction and are therefore in line with the expectations and results of (Vos et al., 2016)

In so-called informal 'mini interviews' with several buyers from the buying firm a possible and logic explanation, in line with the already discussed change in market structure as mentioned by Lavie (2007, p. 1187) and Hüttinger et al. (2012, p. 3), was given for the results indicating that growth opportunities do not significantly influence the level of supplier satisfaction. Since the supply base of firms is decreasing, a reduction in suppliers reshaped the market structure to an oligopolistic market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). Furthermore, as Hüttinger et al. (2012, p. 3) mentioned, the traditional purchasing philosophy has changed because suppliers are limited in the availability of resources. Growth opportunity refers to the suppliers' ability to grow together with the buying firm and to generate new potential business opportunities through the relationship (Hüttinger et al., 2014, p. 703)**.** Since suppliers are operating in an oligopolistic market, these suppliers already capture a considerable market share. Besides, since suppliers are limited in the availability of resources, continue growing and generating new business could not be significant to these suppliers. However, the profitability or the relational behaviour could be more valuable which therefore explains that growth opportunities, in contrast to previous research, is not found significant.

Moreover, the aim of this goal was next to replicating the study of Vos et al. (2016), adding new unexplored factors influencing supplier satisfaction. In line with the previous research of Meena and Sarmah (2012, p. 1238) who stated that the purchasing policy, payment/finance policy and the coordination policy, influencing supplier satisfaction, the

results show that ‘Order’ significantly influences operative excellence. Furthermore, Maunu (2002, p. 43) stated that common business processes (such as the delivery of goods and services) are affected by both a financial factor and a time aspect, which therefore influences supplier satisfaction. In line with this assumption, the results show that also the second-tier construct ‘Billing/delivery’ significantly influences operative excellence. However, as mentioned above, operative excellence subsequently does not significantly influences supplier satisfaction.

Furthermore, in line with the expectations, it is found that supplier satisfaction significantly influences the tendency to assign a customer as preferred. Consequently, it is found that a preferred customer status significantly influences preferential treatment. This shows once more the importance of satisfied suppliers in order to achieve a competitive advantage.

Finally, the main goal of this research is to investigate contextual factors to the dyadic exchange relationship between the buyer and supplier influencing the tendency to assign a customer as preferred. Firstly, the results show that dependency does not significantly influence supplier satisfaction. This is in contrast to the results of Caniëls et al. (2017, p. 343) who found that balanced and asymmetric dependence positively influence supplier satisfaction. However, dependency directly influences the chance to achieve a preferred customer status is found to be significant. From this can be concluded that despite the level of satisfaction of the supplier, a customer can still be assigned as preferred, and so receive preferential treatment, if the supplier is dependent on their customer. This is in line with Scheer et al. (2015, p. 700) who defines dependence based on the RDT as ’an actor’s need to continue its relationship with an exchange partner in order to achieve its desired goals’. Besides, as Flynn et al. (2010, p. 59) states, the structures and processes of an organization are shaped by the environment the organization is operating in. Hence, organizations should, in order to maximize their performance, match their processes and structures based on the environment according to the contingency theory. Hence, it can be concluded that a supplier assigns a customer as preferred on which it is dependent, in order to continue the relationship and so achieve its desired goals and maximize performance.

Secondly, the moderating effect of environmental uncertainties on the relationship between supplier satisfaction and achieving a preferred customer status is researched. The results show that both the positive moderating effect of technological and competition

uncertainty influencing the relationship between supplier satisfaction and achieving a preferred customer status, is not found to be significant. A possible explanation for this could be that since the data sample mainly consists of suppliers providing transportation or HR-related services, new disrupting technologies are less significant in these markets which could, therefore, influence the results.

The results show that demand uncertainty, nonetheless, does indeed negatively moderate the influence of supplier satisfaction on achieving a preferred customer status and is in line with the expectations. Since demand uncertainty and fluctuations in customers' requirements influence the whole supply chain it has therefore a significant impact on the profitability of firms (Raju & Roy, 2000). Hence, it is expected that suppliers operating in an uncertain market in terms of demand, are less likely to assign one customer as preferred over other customer. Although a supplier can be highly satisfied with a certain supplier, the tendency to assign that customer as preferred is less strong. Since, based on the resource dependency theory, it would be too risky to assign only one or a few customer(s) as preferred because suppliers operating in an uncertain market in terms of demand, are likely to be in the position to be dependent on other customers as well. Maintaining strong relationships with other customers too is therefore crucial to ensure future business. This is in line with Caniëls et al. (2017, p. 2) who stated that, based on the resource-dependency theory of Pfeffer and Salancik (1978), an organization can be described as inter-connected systems in need for resources in order to survive which consequently generates power-dynamics and dependency between actors.

6.2. Implications and future research directions

The practical implications of this research lie in the field of supplier satisfaction as means to achieve a competitive advantage. The findings of this research namely show again the importance of supplier satisfaction since supplier satisfaction positively influences the tendency to assign a customer as preferred and, subsequently, provide preferential treatment to the buying firm. Since the supply base of firms is decreasing, the market structure has changed to an oligopolistic supplier market (Lavie, 2007, p. 1187; Wagner & Bode, 2011). Besides, because non-core activities are outsourced more often, buying firms are becoming more dependent on their suppliers (Rahmoun & Debabi, 2012, p. 106; Schiele, 2012, p. 1178). Hence, the strategic importance of purchasing and supply management has increased due to these developments and, therefore, companies must be aware of, and do their best to, satisfy their suppliers in order to achieve a competitive advantage.

Furthermore, the theoretical implications of this research lie in the results showing that factors external to the dyadic exchange relationship between the buyer and supplier influence the chance of becoming a preferred customer. Firstly, the possible explanation given for the results showing that profitability did not significantly influences supplier satisfaction as mentioned above, retrieved from the so-called 'mini interviews', was that since the market structure has changed in the last decades the remaining suppliers already capture such a high market share that growing further is less valuable than the profitability. This is in line with Lavie (2007, p. 1187) who stated the market has changed to an oligopolistic supplier market. Also, since firms are competing for the best resources from their suppliers and it is not self-evident that firms collaborating with their suppliers achieve competitive advantage since there are 'other sharks in the water' (Pulles et al., 2016, p. 1). This means that in certain markets, growth opportunities do not influence supplier satisfaction if suppliers are limited in the availability of resources. Profitability, on the other hand, is more significant in these markets. Hence, the market the supplier is operating in is crucial in the significance of antecedents of suppliers satisfaction. Secondly, both the negative moderating influence of demand uncertainty, as the direct influence of dependency on the tendency to assign a customer as preferred, are found to be significant. Both show that the context in which the supplier is operating is very significant in becoming a preferred customer and should be taken into account as well. Since not all aspects of environmental uncertainty are found to be significant, future research should focus on other contextual factors, such as other environmental uncertainties, markets structures or organizational inter-dependencies, influencing the dyadic exchange buyer-supplier relationship and so the chance of becoming a preferred customer. Moreover, although it was not the intention of this research, the conducted data resulted in another interesting finding. In the tested model only 2 out of 4 antecedents of supplier satisfaction were found to significantly influencing supplier satisfaction. After the construct buyer status was added to the model, none of the other constructs was significantly influencing supplier satisfaction anymore. Only buyer status was found to be significant. Hence, it can be concluded that buyer status plays a significant role in the buyer-supplier relationship, in the level of supplier satisfaction and, consequently, in order to become a preferred customer. Therefore, future research should include, and provide a deeper explanation of, the status of the buying firm and the influence on the buyer-supplier relationship.

6.3. Limitations of this study

This study also has its limitations. Firstly, only the top 25 most important suppliers of the concerning countries within Central- and Western Europa of two different categories of indirect procurement were contacted. Most important is defined in terms of annual spend which therefore indicates a non-response bias since suppliers with a smaller annual spend were not included in this research. Furthermore, also a non-response bias of unsatisfied suppliers could have an impact since, although the questionnaire explicitly mentioned that the answers would not be revealed to the buying firm and could therefore not be used as a marketing tool, it could still be that unsatisfied supplier did not fill in the questionnaire. Besides, the independent sample T-test results showed that, since 3 out of the 69 answers are significant different, non-response bias might have an impact on the results and, hence, might influence the generalization of the results. Secondly, although the sample size exceeded the generally accepted threshold of a minimum of one hundred respondents, the sample size is still too low to test such a complicated model including many relationships. Besides, since only two specific categories of indirect procurement were included, suppliers offering logistics services counted for 61.2% of the total respondents. It could therefore hardly be generalized to an entire population and to totally different categories of (in)direct procurement. Thirdly, the questionnaire might not fit the context of the research since the model of Vos et al. (2016) and so the corresponding survey was designed for a production- or industry setting. As mentioned above, suppliers offering logistics services (61.2%) and marketing services (14.4%) were the most occurring e-classification of the included suppliers. There were therefore comments on the technical focus of the survey and that questions were not always applicable to the certain product or service that the supplier provided. Hence, this might bias the rest of the questions of the questionnaire.

7. Bibliography

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Appendix

Appendix A. Questionnaire items for order process and billing delivery

Order process (Essig & Amann, 2009)	
12	How satisfied are you with company X's ordering procedure (at your company)?
13	How satisfied are you with the time schedule of company X's orders?
14	How satisfied are you with the adherence to arrangements by company X?
15	How satisfied are you with your bargaining position during negotiations with company X?
16	How satisfied are you with the adherence to long-term contracts by company X?
Billing delivery (Essig & Amann, 2009)	
17	How satisfied are you with the payment habits of company X?
19	How satisfied are you with the payment procedures?
20	How satisfied are you with the given delivery deadlines?
	How satisfied are you with the receiving procedure at company X (inspections)?

Appendix B. Questionnaire items for Technological Uncertainty

Technological uncertainty (Gelderman et al., 2016; based on Bstieler, 2005)
The technology in your market is changing rapidly
Technology changes bring new opportunities in your industry
Technological breakthroughs have led to new products or services in your industry
There have been a large number of technological developments in your industry

Appendix C. Questionnaire items for Demand & Competition Uncertainty

Demand uncertainty (Yu et al., 2017)
Customer's demand is changing
There are a number of changes taking place in customer's preferences
Competition uncertainty (Yu et al., 2017)
The level of competitive activity is changing (e.g. number or strength of competitor is increasing)
There are a number of changes taking place in competitor's sales and promotional strategies

Appendix D. Questionnaire items for Dependency

Supplier's dependency (Caniels et al., 2017)

In this contractual relationship, our company is very dependent on this client
To achieve our business goals, our company has to maintain this relationship to the client
Our company would face great challenges if the client did not continue the contractual relationship

Appendix E. Questionnaire items for preferential treatment and profitability

Preferential treatment (Pulles et al., 2016; Schiele et al., 2011)	
Our firm…	
PT1…	Allocates our best employees (e.g., most experienced, trained, intelligent) to the relationship with this customer.
PT2…	Shares our best ideas (e.g., newest, most innovative, with this customer
PT3…	Allocates more financial recourses (e.g., capital, cash) to the relationship with this customer.
PT4…	Grants this customer the bust utilization of our physical resources (e.g. equipment capacity, scare materials).
PT5…	Shares more of our capabilities (e.g., skills, know-how, expertise) with this customer.
Profitability (Hald et al., 2009; Ramsay & Wagner, 2009	
The relationship with this customer…	
P1…	Helps us to achieve good profits.
P2…	Allows us to gain high margins.
P3…	Has a positive influence on the profitability of our firm.

Appendix F. Non-response bias test results

	Respondents group	N	Mean	Std. Deviation	Std. Error Mean	T-value
Innovation potential 1	<25%	35	3.89	0.963	0.163	0.494
	>75%	35	3.77	0.973	0.164	
Innovation potential 2	<25%	35	3.69	1.105	0.187	0.452
	>75%	35	3.57	1.008	0.170	
Innovation potential 3	<25%	35	3.57	0.948	0.160	-0.768
	>75%	35	3.74	0.919	0.155	
Growth Opportunity 1	<25%	35	3.43	1.145	0.194	-1.250
	>75%	35	3.74	0.950	0.161	
Growth Opportunity 2	<25%	35	3.89	0.993	0.168	-0.889
	>75%	35	4.09	0.887	0.150	
Growth Opportunity 3	<25%	35	3.91	0.818	0.138	-0.264
	>75%	35	3.97	0.985	0.166	
Growth Opportunity 4	<25%	35	3.60	0.914	0.154	-2.440
	>75%	35	4.09	0.742	0.126	
Profitability 1	<25%	35	3.51	1.095	0.185	-0.975
	>75%	35	3.74	0.852	0.144	
Profitability 2	<25%	35	3.23	1.190	0.201	-1.191
	>75%	35	3.54	1.010	0.171	
Profitability 3	<25%	35	2.63	1.114	0.188	-1.594
	>75%	35	3.06	1.136	0.192	
Profitability 4	<25%	35	3.31	1.183	0.200	-1.693
	>75%	35	3.74	0.919	0.155	

Profitability 5	<25%	35	3.63	1.165	0.197	-0.450
	>75%	35	3.74	0.950	0.161	
Support 1	<25%	35	3.51	1.147	0.194	-1.384
	>75%	35	3.86	0.912	0.154	
Support 2	<25%	35	3.89	0.963	0.163	-0.380
	>75%	35	3.97	0.923	0.156	
Support 3	<25%	35	3.54	1.039	0.176	-0.805
	>75%	35	3.74	1.039	0.176	
Reliability 1	<25%	35	3.91	1.011	0.171	-0.494
	>75%	35	4.03	0.923	0.156	
Reliability 2	<25%	35	3.86	1.141	0.193	-0.721
	>75%	35	4.03	0.822	0.139	
Reliability 3	<25%	35	4.26	0.980	0.166	0.542
	>75%	35	4.14	0.772	0.131	
Reliability 4	<25%	35	4.31	0.867	0.147	0.437
	>75%	35	4.23	0.770	0.130	
Involvement 1	<25%	35	3.49	1.173	0.198	-1.359
	>75%	35	3.83	0.923	0.156	
Involvement 2	<25%	35	3.37	1.308	0.221	-0.811
	>75%	35	3.60	1.035	0.175	
Involvement 3	<25%	35	3.71	1.126	0.190	-0.342
	>75%	35	3.80	0.964	0.163	
Relational Behavior	<25%	35	4.00	0.939	0.159	0.813
	>75%	35	3.83	0.822	0.139	
Relational Behavior	<25%	35	4.03	0.923	0.156	0.285
	>75%	35	3.97	0.747	0.126	
Relational Behavior	<25%	35	3.83	1.043	0.176	-0.523
	>75%	35	3.94	0.765	0.129	
Relational Behavior	<25%	35	3.54	1.094	0.185	-1.073
	>75%	35	3.80	0.901	0.152	
Relational Behavior	<25%	35	3.69	1.078	0.182	-1.051
	>75%	35	3.91	0.702	0.119	
Relational Behavior	<25%	35	3.60	1.063	0.180	-1.475
	>75%	35	3.94	0.873	0.147	
Contact Accessibility 1	<25%	35	4.20	0.868	0.147	-0.140
	>75%	35	4.23	0.843	0.143	
Contact Accessibility 2	<25%	35	4.34	0.765	0.129	0.747
	>75%	35	4.20	0.833	0.141	
Contact Accessibility 3	<25%	35	4.09	0.853	0.144	-0.136
	>75%	35	4.11	0.900	0.152	
Operative Excellence 1	<25%	35	3.46	1.094	0.185	-1.093
	>75%	35	3.74	1.094	0.185	
Operative Excellence 2	<25%	35	3.37	1.262	0.213	-1.502
	>75%	35	3.77	0.942	0.159	
Operative Excellence 3	<25%	35	3.89	1.022	0.173	-0.874
	>75%	35	4.09	0.887	0.150	
Operative Excellence 4	<25%	35	3.89	1.022	0.173	-0.368
	>75%	35	3.97	0.923	0.156	
Order Process 1	<25%	35	4.00	1.029	0.174	-0.560
	>75%	35	4.11	0.631	0.107	
Order Process 2	<25%	35	3.80	1.158	0.196	-0.575
	>75%	35	3.94	0.906	0.153	
Order Process 3	<25%	35	3.97	0.857	0.145	-1.304
	>75%	35	4.20	0.584	0.099	
Order Process 4	<25%	35	3.51	0.981	0.166	-2.213
	>75%	35	3.94	0.591	0.100	
Order Process 5	<25%	35	3.97	1.014	0.171	-1.346
	>75%	35	4.26	0.741	0.125	
Billing Delivery 1	<25%	35	3.83	1.098	0.186	-0.565
	>75%	35	3.97	1.014	0.171	
Billing Delivery 2	<25%	35	3.80	1.052	0.178	-0.591
	>75%	35	3.94	0.968	0.164	
Billing Delivery 3	<25%	35	3.80	0.901	0.152	-1.487
	>75%	35	4.11	0.867	0.147	
Supplier Satisfaction 1	<25%	35	4.31	0.932	0.158	-0.150
	>75%	35	4.34	0.639	0.108	
Supplier Satisfaction 2	<25%	35	4.77	0.490	0.083	1.649

	>75%	35	4.54	0.657	0.111	
Supplier Satisfaction 3	<25%	35	4.74	0.443	0.075	0.908
	>75%	35	4.63	0.598	0.101	
Supplier Satisfaction 4	<25%	35	4.63	0.690	0.117	0.000
	>75%	35	4.63	0.646	0.109	
Preferred Customer	<25%	35	4.06	0.938	0.158	-0.270
Status 1	>75%	35	4.11	0.832	0.141	
Preferred Customer	<25%	35	4.29	0.987	0.167	0.415
Status 2	>75%	35	4.20	0.719	0.122	
Preferred Customer	<25%	35	4.34	1.083	0.183	0.600
Status 3	>75%	35	4.20	0.901	0.152	
Preferred Customer	<25%	35	4.11	0.993	0.168	0.731
Status 4	>75%	35	3.94	0.968	0.164	
Preferred Customer	<25%	35	3.94	0.873	0.147	1.275
Status 5	>75%	35	3.66	0.998	0.169	
Preferential treatment 1	<25%	35	4.40	0.812	0.137	1.987
	>75%	35	3.97	0.985	0.166	
Preferential treatment 2	<25%	35	4.14	1.004	0.170	0.978
	>75%	35	3.91	0.951	0.161	
Preferential treatment 3	<25%	35	4.40	0.736	0.124	1.690
	>75%	35	4.09	0.818	0.138	
Preferential treatment 4	<25%	35	4.34	0.802	0.136	0.883
	>75%	35	4.17	0.822	0.139	
Dependency 1	<25%	35	2.63	1.215	0.205	-2.322
	>75%	35	3.29	1.152	0.195	
Dependency 2	<25%	35	3.71	1.152	0.195	-1.152
	>75%	35	4.00	0.907	0.153	
Dependency 3	<25%	35	3.43	1.092	0.185	-1.342
	>75%	35	3.74	0.852	0.144	
Dependency 4	<25%	35	3.00	1.283	0.217	-1.320
	>75%	35	3.37	1.060	0.179	
Dependency 5	<25%	35	2.74	1.094	0.185	-0.550
	>75%	35	2.89	1.078	0.182	
Technological	<25%	35	3.83	0.954	0.161	-1.577
Uncertainty 1	>75%	35	4.14	0.692	0.117	
Technological	<25%	35	4.23	0.598	0.101	0.393
Uncertainty 2	>75%	35	4.17	0.618	0.104	
Technological	<25%	35	4.03	0.891	0.151	-0.141
Uncertainty 3	>75%	35	4.06	0.802	0.136	
Technological	<25%	35	3.91	0.887	0.150	-0.274
Uncertainty 4	>75%	35	3.97	0.857	0.145	
Demand Uncertainty 1	<25%	35	3.91	0.781	0.132	-0.679
	>75%	35	4.03	0.618	0.104	
Demand Uncertainty 2	<25%	35	3.83	0.954	0.161	-0.882
	>75%	35	4.00	0.642	0.108	
Competition	<25%	35	3.66	0.838	0.142	-1.145
Uncertainty 1	>75%	35	3.89	0.832	0.141	
Competition	<25%	35	3.69	0.867	0.147	-1.512
Uncertainty 2	>75%	35	3.97	0.707	0.119	

Appendix G. Factor loadings

Rotated Component Matrix[a]

	Component																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
InnovationPotential 1	0.108	0.016	0.203	0.097	0.063	0.812	0.102	0.019	0.013	0.260	0.056	0.099	0.038	0.141	0.049	-0.010	0.112	0.009
InnovationPotential 2	0.121	0.109	0.088	0.048	0.068	0.863	0.027	0.039	0.085	0.120	0.038	0.111	0.068	0.028	0.128	-0.014	0.056	0.020
InnovationPotential 3	0.078	0.161	0.072	0.111	-0.030	0.801	0.159	0.110	0.016	0.173	-0.049	0.034	-0.020	0.067	0.105	0.073	0.123	-0.026
GrowthOpportunity 1	0.043	0.098	0.245	0.050	0.139	0.324	-0.004	0.222	-0.009	0.034	0.357	0.128	0.059	0.065	0.080	-0.068	0.617	-0.026
GrowthOpportunity 4	0.134	0.151	0.229	0.139	0.066	0.288	0.053	-0.014	0.161	0.249	0.045	0.111	0.133	0.192	0.146	0.071	0.676	0.007
Profitability 2	0.152	0.098	0.740	0.088	0.062	0.197	0.054	0.159	-0.008	0.198	0.143	0.105	0.077	0.147	0.088	0.059	0.127	-0.085
Profitability 3	0.008	0.038	0.766	0.052	-0.156	0.260	0.053	0.173	-0.050	-0.046	0.063	0.117	0.029	0.176	0.120	0.046	-0.102	-0.011
Profitability 4	-0.028	0.232	0.831	0.051	0.143	-0.025	0.053	0.023	0.070	0.206	0.085	0.049	0.044	-0.054	0.063	-0.051	0.124	0.085
Profitability 5	-0.023	0.104	0.730	0.225	0.261	0.057	0.110	-0.046	0.031	0.211	0.060	0.034	0.022	0.165	0.119	0.053	0.201	0.030
Support 1	0.066	0.073	0.219	0.105	0.039	0.304	-0.035	0.070	0.047	0.338	0.314	0.094	-0.014	0.005	0.591	0.199	-0.038	0.095
Support 2	0.168	0.000	0.210	0.445	0.183	0.139	-0.004	0.094	0.002	0.128	0.111	0.044	0.138	0.100	0.621	-0.012	0.206	-0.034
Support 3	0.106	0.022	0.160	0.110	0.133	0.168	0.125	0.108	0.116	0.164	0.200	0.078	0.086	0.221	0.738	0.154	0.072	0.006
Reliability 1	0.249	0.053	0.241	0.617	0.183	0.030	0.127	0.092	0.087	0.084	0.210	0.076	0.081	0.223	0.265	0.049	0.143	-0.098
Reliability 2	0.159	0.031	0.179	0.727	0.166	0.057	0.095	0.121	0.109	0.022	0.176	0.003	0.077	0.221	0.283	0.054	0.148	-0.065
Reliability 3	0.142	0.130	0.036	0.797	0.247	0.089	0.052	0.061	0.065	0.006	0.237	-0.006	0.148	-0.011	-0.010	-0.031	-0.066	0.084
Reliability 4	0.069	0.049	0.038	0.798	0.265	0.137	0.089	0.164	0.140	0.113	0.159	0.033	0.107	0.004	-0.002	0.024	-0.002	0.018
Involvement 1	0.121	0.087	0.219	0.082	0.064	0.203	0.047	0.167	0.034	0.789	0.102	0.081	0.102	-0.022	0.166	0.158	0.055	-0.139
Involvement 2	0.081	0.058	0.289	0.061	0.088	0.250	0.093	0.062	0.024	0.738	0.080	0.038	0.195	0.187	0.126	0.088	0.055	-0.021
Involvement 3	0.093	0.063	0.076	0.071	0.154	0.350	0.110	0.096	-0.005	0.723	0.183	0.028	0.162	0.123	0.092	0.087	0.097	0.154
RelationalBehavior 5	0.031	0.052	0.184	0.120	0.164	0.134	0.103	0.173	0.084	0.139	0.155	0.094	0.087	0.778	0.133	0.148	0.084	0.107
RelationalBehavior 6	0.023	0.048	0.189	0.133	0.084	0.144	0.094	0.081	-0.001	0.086	0.259	0.106	0.210	0.774	0.116	0.052	0.071	-0.083
ContactAccessibility 1	0.152	0.092	0.127	0.237	0.195	-0.027	0.013	0.082	-0.031	0.248	0.697	0.022	0.135	0.124	0.114	0.034	0.112	-0.081
ContactAccessibility 2	0.120	0.036	0.056	0.259	0.200	0.035	0.169	0.082	0.032	0.103	0.760	0.104	0.175	0.071	0.189	0.033	0.030	-0.008
ContactAccessibility 3	0.059	0.032	0.137	0.216	0.035	0.036	0.156	0.057	0.046	0.019	0.772	-0.014	0.162	0.236	0.087	0.122	0.063	0.038
OperativeExcellence 1	0.253	0.073	0.013	0.032	0.034	0.095	-0.052	0.283	-0.049	0.218	0.096	0.054	0.325	0.064	0.138	0.686	-0.021	0.033
OperativeExcellence 2	0.123	0.151	0.051	0.029	0.032	-0.031	-0.089	0.173	0.004	0.220	0.152	0.072	0.309	0.237	0.144	0.721	0.016	-0.104
OrderProcess 1	-0.012	0.087	0.027	0.090	0.187	0.053	0.150	0.149	-0.030	0.174	0.120	0.015	0.764	0.024	0.152	0.084	0.111	0.014
OrderProcess 2	0.100	0.006	0.101	0.177	0.076	-0.037	-0.094	0.138	0.060	0.182	0.103	0.009	0.812	0.133	-0.082	0.149	0.037	-0.108
OrderProcess 3	0.146	0.052	0.023	0.092	0.186	0.098	-0.031	0.241	0.057	-0.014	0.208	0.019	0.740	0.128	0.067	0.168	-0.025	0.136
BillingDelivery 1	0.053	-0.006	0.074	0.108	0.058	0.070	0.026	0.894	0.008	0.081	0.023	0.038	0.175	0.017	0.057	0.092	0.046	0.078
BillingDelivery 2	0.054	0.051	0.055	0.099	0.037	0.039	0.080	0.908	0.066	0.076	0.044	0.057	0.153	0.023	0.078	0.138	-0.013	0.005
BillingDelivery 3	0.117	0.013	0.152	0.121	0.216	0.083	0.065	0.676	0.083	0.096	0.177	0.022	0.128	0.293	0.012	0.038	0.105	-0.110
SupplierSatisfaction 1	0.226	-0.069	0.160	0.309	0.559	0.106	0.009	0.061	0.057	0.227	0.304	0.214	0.046	0.046	0.222	0.197	0.065	0.132
SupplierSatisfaction 2	0.185	0.040	0.084	0.244	0.819	0.020	0.205	0.046	0.107	0.054	0.019	0.123	0.062	0.055	0.041	0.022	0.013	-0.008
SupplierSatisfaction 3	0.037	0.066	0.038	0.139	0.812	0.023	0.081	0.143	0.026	0.086	0.155	0.185	0.187	0.086	0.070	-0.031	0.062	-0.048
SupplierSatisfaction 4	0.104	0.150	0.072	0.270	0.778	0.052	0.157	0.069	0.115	0.036	0.121	-0.038	0.172	0.090	0.059	0.018	0.043	-0.025

PC_Status 1	0.181	0.227	0.176	0.308	0.133	0.198	0.226	-0.027	-0.048	0.092	0.108	0.653	-0.005	0.013	0.015	0.027	-0.035	0.153
PC_Status 2	0.033	0.203	-0.012	0.056	0.113	0.078	0.324	0.035	0.001	0.097	-0.088	0.810	0.028	0.071	0.042	0.076	0.080	-0.065
PC_Status 3	-0.035	0.170	0.080	-0.151	0.071	0.005	0.384	0.083	0.044	0.108	0.053	0.688	0.016	0.059	0.112	-0.019	0.185	0.047
PC_Status 5	0.175	0.252	0.257	-0.062	0.147	0.169	0.262	0.092	0.019	-0.213	0.171	0.614	0.045	0.130	0.025	0.025	-0.075	-0.082
PrefTreatment 1	-0.071	0.080	0.098	0.139	0.071	0.297	0.701	0.048	-0.023	0.006	0.177	0.359	-0.110	0.004	-0.092	0.074	-0.137	0.023
PrefTreatment 2	0.060	0.180	0.247	0.072	0.090	0.169	0.717	-0.055	0.122	0.079	0.100	0.230	-0.029	0.039	0.192	0.085	-0.127	0.040
PrefTreatment 3	0.100	0.210	-0.028	0.127	0.186	-0.001	0.766	0.097	0.128	0.067	0.110	0.203	0.093	0.099	-0.035	-0.081	0.167	-0.031
PrefTreatment 4	0.123	0.227	0.018	0.046	0.195	0.011	0.745	0.121	0.034	0.077	0.014	0.337	0.045	0.084	0.051	-0.177	0.101	-0.039
Dependence 1	0.025	0.784	0.211	0.059	0.023	0.061	0.194	0.063	0.087	0.129	0.054	0.233	-0.060	0.063	0.077	0.035	-0.105	0.042
Dependence 2	0.024	0.734	0.020	-0.101	0.194	0.062	0.164	-0.028	0.051	0.040	0.117	0.110	0.104	0.044	0.070	0.080	0.031	-0.390
Dependence 3	0.046	0.806	0.010	0.190	0.135	0.077	0.031	-0.010	0.060	0.101	-0.011	0.152	-0.003	-0.071	-0.108	0.038	0.122	-0.092
Dependence 4	0.003	0.809	0.197	0.091	-0.039	0.129	0.250	0.007	0.080	-0.041	0.065	0.051	0.073	0.057	-0.022	0.138	0.128	0.157
Dependence 5	0.105	0.673	0.081	-0.052	-0.069	0.064	0.027	0.078	0.104	-0.047	-0.050	0.142	0.137	0.073	0.149	-0.139	-0.008	0.472
TechUncertainty 1	0.855	0.088	0.034	0.009	0.019	0.075	-0.028	0.159	0.190	0.118	-0.002	0.016	0.019	-0.051	0.086	0.117	-0.080	-0.118
TechUncertainty 2	0.820	-0.024	0.019	0.124	0.137	0.143	0.016	-0.021	0.137	0.132	0.111	0.076	0.066	0.023	0.011	0.022	0.110	0.080
TechUncertainty 3	0.820	0.009	0.009	0.212	0.118	0.079	0.118	0.003	0.102	0.111	0.065	0.017	0.010	0.120	0.015	0.058	-0.016	0.091
TechUncertainty 4	0.861	0.070	0.032	0.085	0.081	0.026	0.062	0.078	0.156	-0.120	0.101	0.073	0.123	-0.015	0.093	0.047	0.099	-0.033
DemandUncertainty 1	0.193	0.082	-0.098	0.148	0.110	-0.020	0.014	-0.040	0.825	0.103	0.059	0.127	0.034	0.184	-0.032	-0.201	-0.167	-0.051
DemandUncertainty 2	0.244	0.071	-0.066	0.115	0.046	0.011	0.041	0.008	0.867	0.063	-0.008	0.039	-0.004	0.099	0.036	-0.157	0.018	-0.008
CompUncertainty 1	0.075	0.087	0.217	0.061	0.120	0.044	0.142	0.212	0.672	-0.071	-0.040	-0.045	0.033	-0.139	0.047	0.343	0.293	0.194
CompUncertainty 2	0.194	0.136	0.133	0.012	0.051	0.145	0.102	0.095	0.743	-0.097	0.040	-0.147	0.040	-0.145	0.118	0.279	0.133	-0.022

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 13 iterations.

Appendix H. Communalities

Communalities		
	Initial	Extraction
InnovationPotential 1	1.000	0.854
InnovationPotential 2	1.000	0.849
InnovationPotential 3	1.000	0.800
GrowthOpportunity 1	1.000	0.793
GrowthOpportunity 4	1.000	0.843
Profitability 2	1.000	0.791
Profitability 3	1.000	0.797
Profitability 4	1.000	0.863
Profitability 5	1.000	0.816
Support 1	1.000	0.791
Support 2	1.000	0.821
Support 3	1.000	0.838
Reliability 1	1.000	0.786
Reliability 2	1.000	0.848
Reliability 3	1.000	0.843
Reliability 4	1.000	0.840
Involvement 1	1.000	0.878
Involvement 2	1.000	0.834
Involvement 3	1.000	0.839
RelationalBehavior 5	1.000	0.868
RelationalBehavior 6	1.000	0.857
ContactAccessibility 1	1.000	0.766
ContactAccessibility 2	1.000	0.836
ContactAccessibility 3	1.000	0.808
OperativeExcellence 1	1.000	0.827
OperativeExcellence 2	1.000	0.861
OrderProcess 1	1.000	0.772
OrderProcess 2	1.000	0.853
OrderProcess 3	1.000	0.799
BillingDelivery 1	1.000	0.888
BillingDelivery 2	1.000	0.916
BillingDelivery 3	1.000	0.741
SupplierSatisfaction 1	1.000	0.812
SupplierSatisfaction 2	1.000	0.857
SupplierSatisfaction 3	1.000	0.835
SupplierSatisfaction 4	1.000	0.823
PC_Status 1	1.000	0.794
PC_Status 2	1.000	0.868
PC_Status 3	1.000	0.762
PC_Status 5	1.000	0.775
PrefTreatment 1	1.000	0.834
PrefTreatment 2	1.000	0.805
PrefTreatment 3	1.000	0.831
PrefTreatment 4	1.000	0.852
Dependence 1	1.000	0.818
Dependence 2	1.000	0.826
Dependence 3	1.000	0.792
Dependence 4	1.000	0.866
Dependence 5	1.000	0.813
TechUncertainty 1	1.000	0.866
TechUncertainty 2	1.000	0.807
TechUncertainty 3	1.000	0.805
TechUncertainty 4	1.000	0.863
DemandUncertainty 1	1.000	0.908
DemandUncertainty 2	1.000	0.879
CompUncertainty 1	1.000	0.869
CompUncertainty 2	1.000	0.834

Extraction Method: Principal Component Analysis.
Average: 0.830

Appendix I. Questionnaire items for buyer status

Buyer status (Torelli et al., 2014)	
According to us …	
1…	… BuyerXY has a high-status.
2…	… Buyer XY is admired by others.
3…	… BuyerXY has a high prestige.
4…	… BuyerXY is highly regarded by others.

Appendix J. Model including Buyer Status