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Master Degree Project in Logistics And Transportation Management

Antecedents of Preferred Customer Status

In the context of the Automotive Industry

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.....

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ABSTRACT

Resources in any form are inherently scarce, which could be intensified further by global events or the maturity of the associated markets. In such situations, suppliers are faced with the decision on how to allocate resources to their buyers. Thus, buyers who can achieve and maintain the position as preferred customers a have higher chance of being successful in their field. This study, therefore, aimed to explore and scientifically demonstrate which factors or so-called antecedents lead to suppliers grant the preferred customer to a certain buyer.

Quantitative analysis performed on 166 responses collected by online survey revealed the important role of growth opportunity, supplier dependency, supplier satisfaction, and cultural compatibility in directly influencing the preferred customer status given by a supplier to its buyer, while other actions or characteristics of buyers still can indirectly increase the chance of this status being awarded.

Keywords: preferred customer status, customer attractiveness, supplier satisfaction, buyersupplier relationship, social exchange theory, resource-based view

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GLOSSARY

Abbreviation	Description
AVE	Average variance extracted
CB-SEM	Covariance-based Structural Equation Model
ERBV	Extended resource-based view
HTMT	Hetorotrait-monotrait ratio
LM	Linear regression model
MAE	Mean absolute error
MICOM	Measurement invariance of composite models
PCA	Principal component analysis
PLS	Partial least square
PLS-SEM	Partial least square structural equation model
RBV	Resource-based view
RMSE	Root mean square error
SEM	Structural equation model
SET	Social exchange theory
SRM	Supplier relationship manager
SRMR	Standardised root mean square residual
VIF	Variance inflation factor

1 INTRODUCTION

This chapter introduces the research background, the necessity and the purpose of the research undertaken in this thesis. Stemmed from that, the research question was then raised to summarise what this thesis is set out to accomplish and to act as a compass helping the authors navigate through the process of selecting relevant literature and methodology.

The topic of buyer-seller relations has captured the interest of scholars (Brokaw & Davisson, 1978). On this topic, a conventional perspective, which is also called the classical view of marketing, is that suppliers compete for buyers and strive to be attractive to their buyers to sell products and services (Schiele et al., 2012; Vos et al., 2016). The literature adopting this view aim to understand "how customers buy" (Brokaw & Davisson, 1978). An opposite approach, which is called "reverse marketing", assumes the perspective of buyers competing for capable suppliers (Vos et al., 2016). Only recently, "reverse marketing" has received attention from scholars (Baxter, R., 2012, Hüttinger et al., 2012). One notable concept in "reverse marketing" is the concept of preferred customer status. "A firm has preferred customer status with a supplier, if the supplier offers the buyer preferential resource allocation" (Steinle & Schiele, 2008, p. 11).

This thesis will explore the topic of buyer-seller relation, more specifically on preferred customer status. The chosen context of this thesis is the automotive industry. The reason why this context is chosen is that the automotive industry is diverse when it comes to materials that automotive manufacturers purchase from the suppliers, which makes the industry a fitting context for researchers to study supplier-buyer attributes (Hüttinger et al., 2014). Moreover, Hüttinger et al. (2014) suggested that the findings of the research on the automotive industry can be generalised to the other industries that share similar attributes such as semiconductors, aircraft, and consumer goods, etc. In the next section, the background of the automotive industry and notable recent trends in this industry will be discussed in detail.

1.1 Background on the automotive industry

The automotive industry was one of the industries that were affected the most by the 2008 financial crisis (Oh, 2014). Within just one year, there was a sharp decrease of 10 million vehicles in global production (ibid). However, not all the automotive markets were affected the

same since emerging markets e.g., China and Brazil, were not hit as hard as North America and European markets and even experienced a steady increase in production in 2008 (ibid). This different effect of the crisis on North America and European markets and the emerging markets is due to two main reasons: first, the trend of the supply chain globalisation and outsourcing, and second, the model of making vehicle purchase easier with easy consumer credit (ibid). The sign of the crisis was as early as in the early 2000s when the growth of the North American and European markets stagnated and production capacity was excessive. The no money down payment with zero interest helped the manufacturers to increase sales, however, this model made the automobile markets in North America and Europe vulnerable and susceptible to economic cycles (Oh, 2014). Since the automotive industry crisis, actors in the sector have taken caution with decisions of increasing capacity and employing skilled workers (Dharmani et al., 2015).

One general trend in the automotive sector is the consolidation with mergers and acquisitions at the manufacturer and supplier level (Ostermann et al., 2016; Business Sweden, 2020). In the period 2015-2016, the sector witnessed a peak in the number of mergers and acquisitions (Ostermann et al., 2016). Due to major changes in the sector and strong competition from emerging markets such as China, some suppliers are not able to adapt to the changes, which, in turn, leads to strong consolidation and that some small businesses are pushed out of the sector (Business Sweden, 2020). This trend will continue for a foreseeable future (Ostermann et al., 2016), however, its magnitude is dependent on the roll-out plan of vehicle electrification transformation (Business Sweden, 2020). A consequence of this trend is the decreasing number of suppliers and that the remaining suppliers are the ones with financial strength (ibid).

Furthermore, manufacturers are more dependent on their suppliers, especially for innovation (Trautrims et al., 2017). In the automotive sector, the manufacturers lack the capacity to set up and manufacture electric powertrain (Business Sweden, 2020). As vehicle electrification is an emerging trend in the sector, the role of direct suppliers becomes more strategically important (ibid). Gradually, the line between manufacturers and suppliers becomes blurred as strong direct suppliers with technical advancement and increasing capacity have the potential to become manufacturers themselves. One example that helps illustrate the increased dependency of the manufacturers on their suppliers is the shortage of semiconductors in 2021. This

phenomenon is due to the high market concentration of manufacturers, together with the rapid growth of the electric vehicle market and the COVID-19 pandemic (Williams, 2021; Shead, 2021; Miller et al., 2021). As a result, semiconductor suppliers prioritise the buyers from the server industry, which affects all major manufacturers in the automotive industry with closed plants and reduced production (ibid).

1.2 Problem description

In the last ten years, there have been several major events that led to supply chain disruption in the automotive industry, for example, the 2011 tsunami in Japan that led to Toyota's supply chain network disruption resulting from parts shortage from Japanese suppliers (Kim et al., 2014). Recently, due to the COVID-19 pandemic, a new challenge emerges, which causes significant disruptions in the upstream supply chain (Nikolopoulos et al., 2021). In times like these, suppliers face a decision on which buyers receive the scarce remaining materials or which buyers receive the materials after the slow production recovery (Schiele et al., 2012). As mentioned above, the reduced number of suppliers has been a trend in the automotive market. In an oligopolistic market, suppliers do not treat their customers equally in terms of resource allocation (Schiele et al., 2012). Moreover, actors in the automotive sector have been cautious in increasing capacity and employing skilled workers (Dharmani et al., 2015). In other words, suppliers face the problem of limited resources. As a result, suppliers are selective with their decision to serve which buyers and to what extent (Schiele et al., 2012). Additionally, as mentioned above, in the automotive manufacturers are increasingly dependent on their suppliers, which leads to the increased power of the suppliers in the relationships.

These mentioned phenomena together further stress the relevance of "reverse marketing" perspective and particularly the importance of being a preferred customer status. To the buying firms, one notable benefit of being preferred customer is preferential resource allocation (Steinle & Schiele, 2008). Supply shortage, however, is not the only time that being a preferred customer yields great results for the buying firms. Besides supply shortage, in the case of new and changing requirements or price and delivery uncertainty, the buying firms that consider the needs and preferences of the suppliers during purchasing policy and strategy establishment are likely to succeed (Brokaw & Davisson, 1978). As mentioned in the previous section, the automotive manufacturers are increasingly dependent on their suppliers. Also, the suppliers are

an essential source of innovations for the automakers (Business Sweden, 2020) and innovations are of paramount importance for the automakers (Townsend & Calantone, 2013). Hence it is essential for the manufacturers to acquire the preferred customer status to enjoy its benefits, one of which is to gain access to the suppliers' innovation (Ellis et al., 2012). This calls for a framework or guidelines for buying firms to achieve and maintain preferred customer status. Although there exists research studying preferred customer status and its antecedents, their findings vary. For example, while Baxter (2012)'s research finds out that supplier satisfaction does not impact preferred customer treatment, Vos et al. (2016)'s finding contradicts this. Hence, new research studying the antecedents of preferred customer status will enrich the literature on the topic of preferred customer status and can be a source of reference for succeeding research.

1.3 Purpose of the thesis

This study focuses on preferred customer status in the context of the automotive industry. The purpose of this thesis is twofold. First, the antecedents of preferred customer status in the context of the automotive industry are explored. This is achieved by reviewing the literature on the antecedents of preferred customer status, then choosing possible antecedents and testing them and their relationship with preferred customer status. In particular, the model of Vos et al. (2016) is replicated and extended with two new antecedents: supplier dependency and interorganisational cultural compatibility. Supplier dependency is understood as the need of a supplier to maintain the relationship with a buying firm to accomplish its objectives (Scheer et al., 2015). Inter-organisational cultural compatibility refers to the degree that partnering firms share similarities in terms of cultural attributes (Meirovich, 2010). To acquire the dataset for this study, a survey was designed and sent to the suppliers of an automotive manufacturer. Although this company is originally Swedish based, it has factories in different continents and its suppliers are diverse in terms of the origin country. Hence, the scope of this study is not limited to the Swedish automotive industry only but can be considered the global automotive industry. Additionally, the relationships between the antecedents are explored further, with mediation effects are examined. Also, after the initial analysis, the model is assessed to look for areas for improvement and an alternative model is proposed.

Second, the authors of this thesis discuss the theoretical implications of the findings of the research. Besides, this thesis will provide managerial implications, especially for buying firms in the automotive industry. Based on the existing literature on the measures to achieve and maintain preferred customer status and the results of the mentioned analysis, the buying firms can make decisions on whether they should strive to become preferred customers and compose an action plan to become one.

Therefore, the research question of this study is formulated as follows:

> What are the antecedents of preferred customer status in the automotive industry?

2 LITERATURE REVIEW

Associated concepts were outlined, including the definition of firm resources to provide readers the holistic view on what could be the resource that firms own and subject to scarcity, psychological and economic theories that explain the mechanism of preferred customer status, findings on benefits of obtaining this status, antecedents argued by former research, and finally relevant strategies that buying companies can employ. The order in which these concepts were presented was purely based on the authors' natural train of thought on how this topic should be developed.

2.1 What are firm resources?

In essence, all companies rely on various types of resources to achieve efficiency and effectiveness in their business activities, ultimately leading to the companies' success (Barney, 2001; IIRC, 2013). Lots of efforts have been made to define and categorise firm resources, including the effort by the International Integrated Reporting Council (IIRC). IIRC which was formed in 2010 is a global association of regulators, corporations, accounting professionals, investors, standard establishers, and non-governmental organisations (IIRC, 2013). IIRC aimed to create guidelines for companies on how to realise and to communicate the value creation over their core resources over time (ibid). According to IIRC, firm resources consist of financial, manufactured, intellectual, human, social and relationship, and natural (ibid).

Financial resources refer to funds that are available for use in goods production or service provision, and funds that are obtained through financing activities, generated by operations or investments (IIRC, 2013).

Manufactured resources are manufactured physical items that are available for use in goods production or service provision including buildings, equipment, and infrastructure (IIRC, 2013).

Intellectual resources are knowledge-based intangible assets, namely intellectual property, such as licences, copyrights, patents, software, and corporate operating principles such as procedures, protocols, tacit knowledge, systems (IIRC, 2013).

Human resources include people's competencies, their drives to innovate and to improve processes, their loyalties, and commitments, their support in implementing corporate common values and strategies, and their ability to lead, manage and cooperate (IIRC, 2013).

Social and relationship resources refer to the relationships within and between groups of stakeholders, municipalities, and other networks, which allow the possibility to share information to enhance individual and collective welfare (IIRC, 2013). Resources under this category include shared norms and values, common behaviours, the trust and willingness from stakeholders, brand reputation, and the corporate legitimacy to operate (ibid).

Natural resources are all renewable and non-renewable environmental supplies that are used in goods production or service provision, and therefore, are critical for the past, current, or future prosperity of an organisation (IIRC, 2013). Natural resources include but are not limited to land, water, air, forests, minerals, biodiversity, and ecosystem health.

2.2 Resource-based view (RBV)

The name of the theory has reflected its approach which is to suggest viewing firms from the resource perspective rather than from the product perspective (Wernerfelt, 1984). Resources and products are two sides of a firm's operation, in which most products require the input of several resources and most resources can be ingredients of several products (ibid). Therefore, by recognizing and identifying firms' own resource profile, optimal product-market activities can be discovered, enabling firms to strategize their operation to improve the efficiency and effectiveness of firm resources (ibid).

According to resource-based view, competitive advantage is defined as the combination of the value and the rarity of a firm's resources and resource interlinkage (Lavie, 2006). The traditional RBV school argues that competitive advantage is derived from a firm's internal resources (Wernerfelt, 1984). The concept of competitive advantage is relative, which means that competitive advantage is derived from only differentiating or superior resources in comparison with competitors' resources (Peteraf, 1993). Scholars have been used RBV to explain competitive advantages of firms in different industries, including the automotive industry (Pulles et al., 2016b). Recently, among the literature, a new school emerges, which is regarded as extended resource-based view (ERBV), maintains that beside internal resources,

external resources can also lead to competitive advantages of a firm (ibid). Adopting traditional RBV's proposition that competitive advantage is relative concept, the ERBV supporter argued that if from the same suppliers, a firm receives better resources than the competitors, these resources will be more likely to lead to a competitive advantage (ibid).

2.3 Social exchange theory (SET)

2.3.1 Definition

According to Homans (1958), SET could be traced as one of the oldest theories seeking an explanation for social behaviours. Not stopping at unfolding the mechanism behind interactions between individuals, this theory had been applied broadly by scholars to elaborate business-to-business exchange relationships (Lambe et al., 2001).

Despite SET's wide application, there had been a lack of comprehensive and in-depth portrayal of the theory's foundations and roots, of which the understanding would enable further usages and implications (Lambe et al., 2001). For that reason, Lambe et al. (2001) in their publication stated that SET posited (1) the involvement of social and/or economic benefits in an exchange relationship, (2) that over time these benefits will be compared with those of other alternative relationships by the entities in the relationship to determine the dependency of the entities on the relationship, (3) the interconnection between the positive benefits and the increase in trust of each other as well as the commitments to the relationship, and (4) that the positive benefits would also induce good-faith interacting behaviours and rewards in return.

2.3.2 Conceptualisation of relationship evaluation

In alignment with the second foundation of SET, how the comparison is carried out was conceptualised into two concepts: (1) comparison level - CL and (2) comparison level for the alternative - CL_{alt} (Thibaut & Kelley, 1959). While CL is the benefit standard that one feels satisfied in a relationship alone, CL_{alt} indicates the benefits available from the best possible alternative relationship (ibid). Consequently, if CL exceeded CL_{alt}, the current relationship is likely to be maintained, otherwise, the relationship switch may happen (ibid).

In more recent literature, a new concept which is expectation level - E, was also added in addition to CL and CL_{alt} as an effort to provide a holistic conceptual picture of how the

relationship can progress over time. E represents the benefit level that one expects to receive when engaging or initiating a new relationship (Schiele et al., 2012). This insertion has completed the circle of exchange relationship with three relational stages: E for relationship initiation (Schiele et al., 2012), CL for relationship satisfaction, and CL_{alt} for relationship stability (West et al., 2007).

2.4 The concept of preferred customer status

2.4.1 Definitions of customer attractiveness, supplier satisfaction, and preferred customer status from SET perspective

Schiele et al. (2012) argued that the three core concepts of SET can be interpreted into three statuses of a buyer-supplier relationship. Customer attractiveness is rooted from E - Expectation level, defined as the supplier's perception towards a relationship that promises to be fruitful with a customer (Schiele et al., 2012). In another word, the customer is seen as attractive to this supplier, making this supplier willing to engage in this new relationship. Supplier satisfaction is then based on CL – Comparison level and is a relationship condition when the outcomes produced by this relationship exceeds the supplier's own standard (Schiele et al., 2012). Finally, preferred customer status is tied to CL_{alt} – Comparison level for alternative (ibid). Similar to the definition of CL_{alt} , preferred customer status is awarded by a supplier to a customer if the relationship between the supplier and the customer is more satisfied than with other alternative customers (ibid). Consequently, the awarded customer could receive privileged resource allocation and preferential treatment, especially when there is an occurrence of operations bottlenecks and constraints (ibid).

2.4.2 The circularity of customer attractiveness, supplier satisfaction, preferred customer status

The thresholds for buyers to achieve each status of the relationship with suppliers are argued to be constantly changed, and to interact with each other which either creates a tighter condition to achieve a status or lowering the bar for entering (Schiele et al., 2012). Figure 2.1 summarises the matching between SET and circle of the buyer-supplier relationship as well as how each relational status interacts.

Figure 2.1 The cycle of the buyer – supplier relationship (Schiele et al, 2012, p. 1180)



At first, to initiate a relationship, the buyer shall be evaluated as adequately attractive to the supplier (Schiele et al., 2012). Once the relationship is established and business transactions have occurred, the supplier would validate the satisfaction of the relationship (ibid). Since at this step, the supplier has choices to suspend the relationship or to put in fewer efforts, it is crucial that buyers be aware of their suppliers' satisfaction levels (ibid). Likewise, based on the validation, the supplier can decide to continue the relationship with regular emphasis or award the buyer in this relationship preferred customer status (ibid). This act of awarding preferred customer status may impose additional expectations for new relationships and raise higher status in the relationship circle (ibid). Similarly, the other scenario in which the threshold to gain customer attractiveness deteriorates is also possible (ibid). In such a case, customers who are classified as ordinary or unsatisfied could become relatively more attractive and even have a chance to obtain preferred customer status (ibid).

2.5 Benefits and risks associated with preferred customer status for buying firms

The definition of preferred customer status by Steinle & Schiele (2008) denotes the main benefits of being rewarded preferred customer status to buying firms, which is preferential

resource allocation. Because of the scarcity of suppliers' resources, the problem of resource allocation arises (Pulles et al., 2019), which leads to suppliers prioritizing resources for one buying firm at the expense of another (Hunt & Davis, 2008; Castellucci & Ertug, 2010; Mitsuhashi & Greve, 2009). For example, in the case of production capacity constraints, a privileged customer might be allocated production capacity or products (manufactured resources) while others might not, or a supplier might allocate its best employees (human resources) to joint development projects with its preferred customer (Steinle & Schiele, 2008). The notion of preferential resource allocation being one benefit of preferred customer status is supported with the results of research by Vos et al. (2016), Praas (2016), and Goossen (2019). The results of Bew (2007) indicate that 75% of the suppliers provide their "rare" products or services. According to the extended resource-based view, if from the same suppliers, a firm receives better resources than the competitors, these resources will be more likely to lead to a competitive advantage (Pulles et al., 2016b). Therefore, receiving preferential resource allocation from a supplier can lead to a buying firm creating a competitive advantage (ibid). This postulation is supported by empirical evidence from the research of Pulles et al., 2016b. On the other hand, a buying firm that fail to compete for best resources from its suppliers may not be able to differentiate itself from its competitors, which leads to diminishing competitive advantage (Pulles et al., 2016b).

Since suppliers often possess domain knowledge on production and this knowledge can be beneficial to a buying firm's innovation process, suppliers can be considered a source of innovation for the buyer (Steenstra et al., 2020). Being preferred customer can help buying firms to enjoy the suppliers' innovations as they are the first ones in line to receive the innovations from the suppliers (Schiele, 2012). According to the survey conducted by Bew (2007), 82% of the suppliers granted access to production innovations and new technologies first to their preferred customers. This aligns with the result of Schiele et al. (2011)'s research, in which preferred customer status can improve the conditions of collaborative innovation. This is because being an "interesting" customer helps buying firms to acquire suppliers' attention and loyalty (Schiele et al., 2011). This leads to an open knowledge and information exchange, which is the basis of inter-organisational innovative capabilities (ibid). Moreover, preferred customers may enjoy customised products (ibid). Conversely, suppliers may not be willing to adapt their products to non-preferred customers (ibid).

Another benefit derived from preferred customer status is the economic benefit, which can be in the form of lower prices and reduced cost. Regarding price reduction, Bew (2007) finds out that 87% of the suppliers surveyed provide better prices to their preferred customers. Similarly, Schiele et al. (2011)'s research reveals a positive effect of preferred customer status on supplier benevolent pricing and Nollet et al. (2012) argued that preferred customers are offered one of the lowest prices and suppliers are more receptive to negotiate further with them. Moreover, being a preferred customer contributes to the reduction of both acquisition costs (inventory management costs, transportation costs, product inspection costs, order handling costs) and operational costs (Nollet et al., 2012). Preferred customers can enjoy savings of 2% to 4% resulting from cost reduction opportunities offered by their suppliers (Bew, 2007).

Additionally, being preferred customer can help a buying firm to gain operational benefits and enhance its performance. For example, a supplier can maintain safety stocks or place its warehouses near its preferred customer's sites (Nollet et al., 2012). A supplier is also willing to share suggestion on quality improvements or offer solutions to solve problems to the preferred customer (ibid). The study of Christiansen & Maltz (2002) offers empirical support as this study's finding indicates that the benefits of being "interesting" customers include short lead-time, improved competencies, improved supply chain visibility, decreased inventory, increased responsiveness, decreased inactive time in production, and process improvement.

Although being rewarded preferred customer status brings about several benefits to buying firms, it is not to say that it is without risks. Preferred customer status can be gained through a system of long-term contracts and a track record of loyalty, however, long-term loyalty for a supplier can lead to supplier's opportunism (Williamson, 1991). Suppliers acknowledge that buyers want to maintain goodwill to receive preferential treatment and that buyers switching suppliers will damage the established goodwill (ibid). Thus, there is a risk that suppliers take advantage of this switching cost by increasing the prices (ibid). Moreover, long-term contracts lack flexibility, which can be a problem with the uncertainty of demand and supply (ibid). In other words, a customer will find it difficult to go beyond the contract for additional products or services when its supplier faces production constraints and cannot meet the demand in short notice (ibid).

2.6 Antecedents of preferred customer status in the existing literature:

Before 2012, the literature on preferred customer was in infancy phase, with only six papers that cover antecedents of preferential treatment (Hüttinger, et al., 2012). This changes in 2012 with the publish of the Volume 41, Issue 8 of Industrial Marketing Management focusing on preferred customer status. Hüttinger, et al. (2012)'s paper is the first one to systematically and extensively review the existing literature on the antecedents of customer attractiveness, supplier satisfaction, and preferred customer status. In this paper, Hüttinger et al. (2012) grouped the antecedents of preferred customer status into four main groups, namely economic value, relational quality, instruments of interaction, and strategic compatibility.

Table 2.1 Summary of the literature on the antecedents of preferred customer status (Self aggregated by the authors)

Author (year)	Method	Literature type	Industry	Antecedents
Hüttinger	Literature review	Article	-	• Economic value (profitability, low cost to serve, opportunities, etc.)
(2012)				• Relational quality (loyalty, trust, commitment, fairness, satisfaction, strong bonds, etc.)
				• Instruments of interaction (early involvement, supplier development, schedule sharing, communication and feedback, crisis management, coordinated processes, etc.)
				• Strategic compatibility (strategic fit, shared future, cluster membership, proximity)
Baxter (2012)	Interview and survey	Article	Diverse	Supplier commitment
(2012)				Customer attractiveness
(Ellis, et	Survey	Article	Automotive	• Length of relationships
al., 2012)				• Share of sales
				• Supplier new product development involvement
				Relational reliability
Hüttinger, et	World café focus group and survey	Article	Automotive	Growth opportunity
al. (2014)				• Reliability
(Bemelmans,	Interview	Article	Construction	• Yearly sales
et al., 2015)				Attractiveness and satisfaction

				Recent relationship developments
				Relationship specific investments
				Preferential resource and treatment
				• Innovation/ improvement suggestions
Vos, et al. (2016)	Survey	Article	Automotive (direct	• Supplier satisfaction:
			purchase) and Chemical (indirect purchase)	- Growth opportunity, Profitability, Relational behaviour, and Operative excellence as first-tier antecedents of Supplier satisfaction
				- Innovation potential, Supplier support, Supplier involvement, Reliability, and Contact accessibility as second-tier antecedents of Supplier satisfaction
Praas (2016)	Survey	Master thesis	Education	Supplier satisfaction
				Public procurement quality
Goossen	Survey	Master thesis	Fast-moving consumer goods	• Supplier satisfaction:
(2017)				- Growth opportunity, Profitability, Relational behaviour, and Operative excellence as first-tier antecedents of Supplier satisfaction
				- Innovation potential, Supplier support, Supplier involvement, Reliability, Billing/ delivery, Order, and Contact accessibility as second-tier antecedents of Supplier satisfaction
				• Dependency
Thibideau (2018)	Survey	Ph.D dissertation	Automotive	Customer non-coercive power

The summary of papers on the topic of antecedents of preferred customer status from 2012 can be viewed in Table 2.1. Hüttinger et al. (2014)'s paper provides the foundation for the following empirical research on the antecedents of preferred customer status as its model was replicated and revised in several succeeding literature. In this paper, Hüttinger et al. (2014) conducted world café¹ focus group discussions among buyers of an automaker to gain insights into the antecedents of three constructs, namely customer attractiveness, supplier satisfaction, and preferred customer status. Based on these insights, Hüttinger et al. (2014) built a conceptual

¹ World café is one type of focus group method and in this method, participants are divided into small groups sitting at different tables discussing different topics of the research problem (Hüttinger, et al., 2014). Each table has one moderator to make sure the discussion stay on the topic (ibid). After 30 - 45 minutes, participants will change tables and this iteration continues until each participant has been to every table and in the discussion of every topic (ibid).

model of the drivers of those three constructs. This model included eight possible antecedents, which are (1) growth opportunity, (2) relational behaviour, (3) operative excellence, (4) innovation potential, (5) support for suppliers, (6) supplier involvement, (7) buyer's reliability, and (8) buyer's contact accessibility. The definitions of these antecedents are shown in Table 2.2. After the eight possible antecedents were identified, hypotheses were formed and tested quantitatively. A survey was sent to direct material suppliers of an automaker and following PLS analyses were conducted. As can be seen from Figure 2.2 showing the results of the research, growth opportunity and reliability are found to have a significant influence on the inclination of suppliers to assign preferred customer status, while the other six are not (Hüttinger et al., 2014).

Antecedents identified	Definition
Contact accessibility	The degree of the availability of an employee in the buying
	firm who is thoroughly involved in the exchange processes and
	represents the buying firm's readiness to strengthen the
	relationship
Growth opportunity	The degree of the supplier's growth with the buying firm and
	business opportunities creation due to the relationship with this
	buying firm
Innovation potential	The opportunities enjoyed by the supplier to deliver
	innovations resulting from the innovative capabilities and the
	participation in shared innovation activities of the buying firm
Operative excellence	The degree to which the operational activities of the buying
	firms are conducted efficiently and make it easy for the
	supplier to conduct business
Relational behaviour	The behaviour of the buyer towards the supplier concerning
	the relational exchange and covering multiple dimensions of
	the exchange practice e.g., reciprocity, flexibility, and
Daliability	The degree of the buying firm's consistent exting and
Reliability	The degree of the buying firm's consistent actions and
Support for suppliars	The buying firm's aid to aggist the supplier to onhones its
Support for suppliers	The buying fifth s and to assist the supplier to enhance its
Suppliar involvement	The degree of the supplier's direct participation in the buying
Supplier involvement	firm's product development
	mm s product development

Table 2.2 Definition of antecedents identified by Hüttinger et al. (2014)



Vos et al. (2016) replicated, extended, and revised Hüttinger et al. (2014)'s model. Based on the argument that supplier satisfaction is a needed condition for gaining preferred customer status (Hüttinger et al., 2012), Vos et al. (2016) hypothesized that supplier satisfaction influences the suppliers' intention to assign preferred customer status and found out that former indeed significantly impacts the latter. Furthermore, Vos et al. (2016) posited that satisfaction accounts for both economic and non-economic factors and that profitability is a key factor to the supplier's perception of the relationship with the buying firm. Vos et al. (2016) then contended that profitability as a possible antecedent is not included in Hüttinger, et al. (2014)'s model and thus added profitability as the ninth antecedent to the model. Also, Vos et al. (2016) separated preferred customer status and preferential treatment as two different constructs, reasoning that the former is the intention, and the latter is the behaviour, and that receiving preferred customer status does not mean that the buying firm receives better treatment from the supplier. As a result, Vos et al. (2016) included preferential treatment in their model as a possible consequence of preferred customer status. Vos et al. (2016) collected the data from two sources: the data of direct purchase is from the research of Hüttinger et al. (2014)'s research, the data of indirect purchase is collected from a survey sent to the suppliers of a chemical company. Next, two datasets were analysed separately and then the results were compared. Realizing rooms for improvement of the hypothesized model, Vos, et al. (2016)

made several modifications. The alternative model of direct purchase can be viewed in Figure 2.3. The nine antecedents are grouped into two groups, namely first tier and second tier antecedents of supplier satisfaction. The former group includes economic factors (growth opportunity and profitability) and non-economic factors (relational behaviour and operative excellence). The second group consists of the remaining five antecedents, namely innovation potential, support of suppliers, reliability, supplier involvement, and contact accessibility. Compared to Hüttinger et al. (2014)'s model, Vos et al. (2016)'s model demonstrates improvement in the way that it shows the interrelation of the nine antecedents. All four first-tier antecedents are found to have a significant impact on supplier satisfaction. Moreover, supplier satisfaction is found to significantly affect preferred customer status while preferred customer status significantly impacts preferential treatment.



Figure 2.3 Model of Vos, et al. (2016, p. 4620)

2.7 Possible antecedents of preferred customer status

In this section, two possible new antecedents of preferred customer status, i.e., supplier dependency and inter-organisational cultural compatibility, are discussed in detail. Moreover, literature linking these new antecedents with preferred customer status are reviewed.

2.7.1 Supplier dependency

2.7.1.1 Supplier-buyer dependence:

According to Caniëls et al. (2018), among researchers, there is a common notion that interdependence between a supplier and a buyer is of great importance when studying the supplier-buyer relationship. Dependence here can be defined as a party's need to maintain the relationship with an exchange party to accomplish its objectives (Scheer et al., 2015). In the supplier-buyer relationship, two types of dependency are distinguished: unbalanced dependence and balanced dependence (Caniëls et al., 2018). The former, which is also known as asymmetrical dependence, refers to the situation in which one party is highly dependent on the other while the opposite direction is not the case (ibid). In the case of unbalanced dependence or symmetrical dependence, is defined as the situation in which both parties have a similar level of dependence on each other, either a low or high level of dependence (ibid). Figure 2.4 displays the supplier-buyer dependence with the white area representing the balanced dependence.



Figure 2.4 Supplier-buyer dependence (Caniëls et al., 2018, p.345)

Supplier dependence

Several papers on the topic of supplier-buyer dependence argue that balanced dependence is superior and that in the case of unbalanced dependence, the relationship is less fruitful and the dominant party is likely to abuse its power (ibid). The benefits of balanced dependency include mitigation of uncertain business outcomes, better conflict handling, knowledge sharing encouragement, and relationship stability improvement (Caniëls et al., 2018; Muthusamy & White, 2006). In particular, balanced dependency with both parties highly dependent on each other can foster cooperation (Gulati & Sytch, 2007). In contrast, relationships in which one party is dominant over the other are usually assumed to be unstable and conflictual (Caniëls et al., 2018). In such relationships, it is commonly believed that the dependent party will bear negative outcomes (ibid). If the views of the dominant party are coerced into the dependent party, it will slow down and hinder the practice of knowledge sharing (Kwon & Suh, 2004). Besides, Mentzer et al. (2000) suggested that both the dominant party and the dependent party are more likely to trust each other less and become less committed in the relationship. Similarly, Griffith et al. (2017) maintained that the dominant party is less likely to cooperate than the other and that a dependent supplier in an asymmetrical relationship tends to decrease the dependence level to prevent being exploited by the dominant buyer. Nevertheless, not all literature agrees that asymmetrical dependence will lead to negative outcomes. Caniëls et al., 2018 contended that in real life, not all asymmetric relationships lead to conflicts and dependent suppliers do not always aim to become less dependent and vulnerable to buyer's exploitation. Also, buyers do not always exploit its dominant position even if they can (Gaski, 1984). Geyskens et al. (1996) found out that asymmetrical dependence does not have a negative impact on commitment.

2.7.1.2 Supplier dependency as a new possible antecedent of supplier satisfaction and preferred customer status

According to the results of Caniëls et al. (2018) 's study, both symmetrical and asymmetrical dependency between supplier and buyer leads to supplier satisfaction. Surprisingly, this research's findings suggest asymmetrical dependence even leads to a greater degree of supplier satisfaction compared to mutual dependence (Caniëls et al., 2018). Although a buyer's position exploitation (for example coercive power) can lead to supplier dissatisfaction, unexercised power can foster supplier satisfaction (Gaski, 1984). In other words, if a dominant buyer does

not exploit its dominant position for its own gains, the dependent supplier may become satisfied with the relationship. Real-life examples of this are the cases of Ikea and Toyota, both of which are big firms (Caniëls et al., 2018). Many of their suppliers are smaller firms and dependent on them, but because Ikea and Toyota do not exercise power, they have a satisfied supplier base (ibid). Furthermore, Vos (2017) asserted that in the case of a dominant buying firm, even if the buyer enjoys greater relative value from the relationship, supplier satisfaction is still exceeded because of the perceived absolute benefits the supplier receives.

Based on the argument that although supplier satisfaction is not met, a supplier still awards one buying firm the preferred customer status due to the supplier's dependency on the buying firm, Goossen (2019) tested the impact of supplier dependency on preferred customer status. The results of Goossen (2019)'s study reveal that supplier's dependency on a buying firm indeed positively affects the supplier's decision to award that buying firm preferred customer status. Besides, the results do not support the hypothesis that supplier's dependency has a positive impact on supplier satisfaction (Goossen, 2019). However, it is worth mentioning that the study of Goossen (2019) is set in the context of indirect purchase in the fast-moving consumer goods industry. To the knowledge of the authors of this thesis, there has not yet been an empirical study that examines the correlation between supplier dependency and preferred customer status in the context of the automotive industry. Thus, in the context of the automotive industry, supplier dependency is considered a new possible antecedent of both preferred customer status and supplier satisfaction.

2.7.2 Organisational culture and supplier-buyer relationship

2.7.2.1 Organisational culture

Across the literature, the definition of organisational culture varies. Schein (1996, p. 236) defines it as "the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about and reacts to its various environments". According to this definition, organisational culture is collective and influences members' perceptions, thought, and behaviours. In literature, organisational culture is regarded as an important driver of organisational effectiveness (Hartnell et al., 2011) and can provide firms competitive advantage (Barney, 1986).

For organisational culture classification, the competing values framework, which was first developed by Quinn and Rohrbaugh (1983), is commonly used and referenced taxonomy in the literature (Ostroff et al., 2012). According to this framework, based on focus and structure, organisational culture is classified into four types, namely clan, adhocracy, market, and hierarchy culture (Quinn & Rohrbaugh, 1983). The characteristics of these four types and the basis on which they are classified are summarised in Figure 2.5. An organisation with a clan culture (also known as group culture) is internally focused and flexible structurally. This organisation's main belief is that its trust and investment in its members will result in open communication and members' commitment (Hartnell et al., 2011). The core values of this culture include closeness, connection, collaboration, and support (Kimberly & Quinn, 1984). Next, an organisation with the adhocracy culture (also called development culture) is externally focused and flexible structurally. The core values of this organisation are autonomy, growth, inspiration, and detail orientation (Kimberly & Quinn, 1984). As a result, this culture encourages creativity, flexibility, and risk-taking (ibid). Third, market culture, which is sometimes referred to as rational culture, belongs to an organisation that has an external orientation and stability-and-controlling-oriented structure. The core belief of this organisation is that clear objectives and rewards help drive members to excel and meet expectations (Hartnell et al., 2011). This type of organisation has a set of values including accomplishment, competitiveness, and competence (Kimberly & Quinn, 1984). Lastly, hierarchy culture belongs to an organisation that has an internal focus and stability-and-control-oriented structure. The organisation with this type of culture has a fundamental belief that its members will perform well with clearly specified roles and formally defined processes (Kimberly & Quinn, 1984). As a result, consistency, formalisation, and regular and organised procedure become core values of organisations with this culture type. It is notable that although there are four types of organisational culture classified by the competing values framework, an organisation is not limited to one type of culture and in fact can show characteristics of several cultures (Patyal et al., 2020).

Figure 2.5 Competing Values Framework (Adapted from Lindquist (2010, p. 139) and Lindquist and Marcy (2016, p. 171))



2.7.2.2 Inter-organisational cultural compatibility

Inter-organisational cultural compatibility has been recognised as the key driver to enhance supply chain performance in the literature on supply chain management (Cadden et al., 2013). Cultural compatibility, which is also called cultural fit or cultural congruence, refers to the degree that partnering firms share similarities in terms of cultural attributes (Meirovich, 2010). These attributes can be fundamental values, business principles, subjective norms, beliefs, or visions (Buono et al., 1985; Meirovich, 2010). In the literature on inter-organisational culture, it is commonly believed that conflicting cultures can have negative outcomes whereas compatible cultures can result in positive outcomes (Nguyen et al., 2020). The benefits of cultural compatibility include efficiency and increased performance (Meirovich, 2010); synergies in joint practices (Patyal et al., 2020); trust fostering (Nguyen et al., 2020); supply chain integration and successful supply chain management (Lambert et al., 1998). A real-life example of a buying firm taking advantage of cultural compatibility is Volkswagen Brazil (Marx et al., 1997). As a result of its initiation of joint cultural platforms, the automaker reduced

conflicts, enhanced flexibility, facilitated communication with its partners and enjoyed a saving cost of 15-25% (ibid; Nguyen et al., 2020). In contrast, cultural differences can negatively impact collaboration in the manufacturing sector (Cadden et al., 2013). In detail, cultural incompatibility can result in relationship failure (Barringer and Harrison, 2000), increased level of conflict, decreased productivity, decreased satisfaction level, and weakened performance (Cadden et al., 2013).

Cadden et al. (2013) built a framework on how partnering firms' cultures and interorganisational fit impact performance outcomes of the supply chain. The framework is illustrated in Figure 2.6. For example, the best scenario is when both supplier and buyer share collaborative cultures, which will result in the optimised performance of the supply chain (Cadden et al., 2013). Interestingly, when both firms both have adversarial culture, which refers to the organisational culture with attributes of inflexibility, internal orientation, defensiveness, rule adherence, the performance of the supply chain is poor despite similar organisational cultures (ibid). Also, Cadden et al. (2013) suggested that in the case of dyadic relationships, similar organisational cultures are better at predicting the outcomes than in the case of supply chain network.

Figure 2.6 Inter-organizational cultural compatibility and supply chain performance (Cadden et al., 2013, p. 96)



2.7.2.3 Inter-organisational cultural compatibility as a new possible antecedent of preferred customer status

Compared to supplier's dependency, there exists less literature that connects interorganisational cultural compatibility with preferred customer status. According to Parkhe (1993), organisational cultural congruence affects the outcomes of buyer-supplier relationships. This is because similar partners are more likely to understand each other than partners that are fundamentally different (Schiele et al., 2015). Besides, the similarity between organisational culture in the supplier-buyer relationship results in the limitation of opportunistic behaviours as well as undesirable behaviours towards to mutual interests (ibid). Interestingly, Wilkinson et al. (2005) compared business relations to mating selection, both of which are the products of negotiation and courting process. Similar to marriage, compatibility in philosophies and goals between firms will facilitate the negotiation process (Wilkinson et al., 2005). Firms are likely to partner with ones that shares with them similar aims, attitudes, environment, and business philosophies (ibid). Furthermore, Schiele (2012) recommended that the congruence between cultural values of suppliers and buyers be included in the criteria set for suppliers to assess whether a certain buyer deserves the preferred customer status.

2.8 Corporate strategies towards preferred customer status

Throughout the literature review, two strategies concerning preferred customer status were found. While one shows step-by-step tactics and involved trade-offs for gaining the status, the other gives guidance on how buying firms could channel those trade-offs strategically and, at the same time, strengthen their supply chain.

2.8.1 Becoming preferred customer status step by step

Aiming to obtain preferred customer status inquires constantly committed effort by the buyers, thus, it is necessary for the buyers to pursue a suitable strategic approach (Nollet et al., 2012). With the theoretical standpoint of SET's primary foundation, Nollet et al. (2012) provided a complete conceptual model of how preferred customer status could be achieved and proposes several tactics for fulfilling this purpose. This model consists of four steps: initial attraction, performance, engagement, and sustainability (ibid) (Figure 2.7).

Figure 2.7 The four steps in the process of becoming a preferred customer (Nollet et al, 2012, p. 1188)



Step 1: Initial attraction

Having the supplier's attention is the first condition on this journey. Buyers must be able to present themselves as valuable partners whose offers surpass the other alternatives' (Nollet et al., 2012). To do so effectively, buyers have to understand what could attract their targeted supplier and which characteristics of a customer this supplier highly appreciates, since each supplier's perception might differ (ibid). Then, they could apply multiple communicating tactics, making sure that the supplier is aware of their attractive features and willing to provide goods or services (ibid).

Step 2: Performance

Next is to satisfy the supplier's expectation, which is gained through the performance of the buyers (Nollet et al., 2012). It is crucial to note that there are two layers in supplier satisfaction: operational and strategic (ibid). The operational layer includes regular activities and subjects such as ordering, payment, profit, volume, while the strategic one implies indirect benefits such as accessibilities to technologies, to a more long-term partnership, to other business of the existing buyers, to similar buyers and markets (ibid). Like the first step, buyers are encouraged to understand what the supplier expects to gain from the relationship and the business

transactions for each layer, and then perform accordingly (ibid). Consistently good performance level could set the stage for more future transactions to happen and for the relationship to strengthen and expand (ibid). On the contrary, poor performance in long term may negatively impact or end the relationship (ibid). In addition to performance, it is also important that buyers nurture a good buyer-supplier relationship embraced by trust, cooperation, integration, and information sharing (Nollet et al., 2012; Noordewier et al., 1990). This conclusion is endorsed by the fact that in the automotive industry, supplier satisfaction is driven more by the relationship itself than the performance (Nollet et al., 2012; Benton & Maloni, 2005).

Step 3: Engagement

This step is critical to achieve preferred customer status, comprises three types of effort: operational excellence, synergic relationship, mutual adaptation (Nollet et al., 2012). For operational excellence, since the supplier as a typical company always strives to ameliorate its competitive position, the buyer should be able to make the supplier recognise that it is contributing considerably to this aspect and, most of all, outperform the others (ibid). A synergic relationship means that the collaboration between two entities will produce a greater outcome than the individual work of one entity. By building a synergic relationship with the supplier, the buyer becomes well situated and irreplaceable in the supplier's pivotal client list (Nollet et al., 2012). Then the buyer could aim for mutual adaptation which requires both buyer and supplier to adapt their existing resources to fit specifically to each other (ibid). The rationale behind this is that if the supplier has made a specific investment in a buyer, it will be costly to reapply to others, leading to the dependency of the supplier on the buyer and creating one more reason for the relationship to go on (ibid). However, for the supplier to willingly make such investment, the buyer must manifest its tailored investment for the supplier as well (ibid). These suggested strategies inquire about cost-related efforts by the buyer and do not ensure reciprocation from the supplier, thus, the buyer must carefully evaluate the trade-off in implementing them (ibid).
Step 4: Sustainability

Since the supplier constantly evaluates its buyers and the outcome of the relationships, the buyer must understand that it might not hold the preferred customer status for long (Nollet et al., 2012; Lindwall et al., 2010). Thus, the buyer has to ensure that it always gets a better assessment by the supplier than other alternatives (Nollet et al., 2012). Besides, the supplier's standard possibly changes over time, the buyer is again encouraged to continuously appraise the supplier's requirement and to do its best to fulfil (ibid). What is different now in this step is that the buyer has had much more closeness to the supplier's decisions, and to together with the supplier create joint objectives and visions (ibid). Another possibility is that the buyer at this step, however, can also decide not to be a preferred customer anymore if it finds the effort to maintain this status too costly and to go back to step 2, which is a well-performing buyer (ibid).

2.8.2 Buyer-supplier relationship development strategies

As companies are more and more relying on cooperation with suppliers, while not all capable suppliers are keen on taking further steps in the relationship with buyers, choosing which supplier to integrate into buyers' operations process becomes an important judgment and decision (Schiele, 2012). A vital cooperative project cannot be successful if involved supplier assigns secondary staff and equipment (ibid). Schiele (2012) proposed a 2x2 preferred customer matrix including the axes "competitiveness of supplier" and "buyer's status with suppliers" (Figure 2.8). The term for each of the four classifications is to address suppliers. Depending on these classifications, buyers were advised to follow different supplier development strategies.

King

The "King" situation happens when a buyer has preferred customer status with a highly competitive supplier (Schiele, 2012). This is an ideal case to integrate this type of supplier into critical processes such as new product development or ones that require steady supply despite external environmental events (ibid). The dedication of the supplier not only minimises failure risk but also yields profitability (ibid). Thus, in return, this classification also suggests the buyer

treating the supplier as king, which shows loyalty comes from both ends of the relationship (ibid).

Figure 2.8 Preferred customer matrix and generic strategies for the buying firm. (Schiele, 2012, p. 48)



Squire

"Squire" is a knight's apprentice who is trained to be a knight himself (Oxford Learner's Dictionaries, 2021). "Squire" occurs when a buyer is the preferred customer of a supplier whose competitiveness is not high in its field (Schiele, 2012). In this case, the buyer can put this supplier in supplier development plans to further improve the supplier's competence, as preparing a squire to be a skilful knight (ibid). Obtaining superior status with a supplier who is interested in the relationship might be easier than striving to become the preferred customer of suppliers who are not (ibid). Empirical findings gave one example in which a buyer helped develop a supplier, eventually leading to the oligopoly breakdown and preferential access to the supplier's resources (ibid).

Black Knight

"Black Knight" suppliers are leaders in their field, but they give the preferred customer status not to a specific buyer but to the buyer's competitors (Schiele, 2012). This poses a threat in which the "Black Knight" suppliers could jeopardise the buyer's business by allocating resources to the competitors (ibid). In such a situation, the buyer should replace these suppliers with those who are interested in placing the buyer as the preferred customer (ibid). "Squire" suppliers can be candidates to fill in such replacements as well (ibid). Another option is that the buyer should effort to gain attention and to be awarded preferred customer status from highly competitive suppliers (ibid).

Quacksalver

Quacksalvers in medieval times sold medicines based on their limited medical knowledge and do not have honest care for their customers (Schiele, 2012). Thus, they frequently change their sales place to stay away from customer's criticism (ibid). "Quacksalver" suppliers are one without a competitive position in their field and without loyalty to a specific buyer (ibid). Therefore, the buyer should avoid giving this supplier important business components and should seek replacement (ibid).

3 HYPOTHESES

Based on the literature review, several antecedents of preferred customer status were found. A hypothesized model constructed in form of a diagram, consisting of the most appropriate antecedents and their path to preferred customer status was suggested. This model is a modified replication of Vos et al. (2016). However, while Vos et al. (2016) focused on supplier satisfaction, this thesis shifted the focus to preferred customer status with supplier satisfaction potentially becoming one of the mediators channelling the relationship between antecedents and preferred customer status.

3.1 Replication and extension

Vos et al. (2016)'s model is replicated in this research with few adjustments. First, a new possible antecedent, inter-organisational cultural compatibility is added to the model. Next, as the result of the study of Goossen (2019) shows that the extent of supplier's dependency on the customer has a positive impact on the inclination to award the preferred customer status, the level of supplier's dependency on the buying firm is included in the model of this research. After collecting and analysing the data, the model will be tested and revised if necessary. The reason that Vos et al. (2016)'s model is chosen to be replicated in this research is that the model shows the interaction of the constructs and all the paths in the model are significant. Figure 3.1 summarised the hypotheses in diagram form.

3.2 First-tier antecedents, profitability, growth opportunity, operative excellence, and relational behaviour, have a positive impact on supplier satisfaction

Vos et al. (2016) grouped the four first-tier antecedents of supplier satisfaction into two groups: economic factors and relational factors. With the replication of the model of Vos et al. (2016), this study expects that the economic factors (growth opportunity and profitability) and the relational factors (operative excellence and relational behaviour) to have a positive impact on supplier satisfaction. Goossen (2019)'s study provides additional empirical support for these relationships. Hence, the hypotheses 1a, 1b, 1c, and 1d are postulated as follows:

Hypothesis 1a: Growth opportunity positively influences supplier satisfaction.

Hypothesis 1b: Profitability positively influences supplier satisfaction.

Hypothesis 1c: Operative excellence positively influences supplier satisfaction.

Hypothesis 1d: Relational behaviour positively influences supplier satisfaction.



Figure 3.1 Hypothesized model

3.3 Supplier satisfaction as a necessary condition of preferred customer status

Supplier satisfaction is considered a necessary condition of preferred customer status (Vos et al., 2016). In other words, a supplier needs to be satisfied from the relationship with a certain buying firm to even consider awarding that buyer preferred customer status. The results of the studies of Vos et al. (2016), Praas (2016), Goossen (2019) all demonstrate the significant correlation between supplier satisfaction and preferred customer status. Thus, the second hypothesis is formulated as follows:

Hypothesis 2: Supplier satisfaction has a positive influence on the inclination to grant preferred customer status.

3.4 Supplier satisfaction as a mediator of the relationship between growth opportunity and preferred customer status

The results of Hüttinger et al. (2014)'s study show that growth opportunity is both the antecedent of supplier satisfaction and preferred customer status. Compared to other first-tier antecedents of supplier satisfaction in this study's model, growth opportunity is the only antecedent found to have a significant correlation with preferred customer status according to the result of Hüttinger et al. (2014)'s study (note: profitability is not included in Hüttinger et al. (2014)'s model). Using the same dataset, Vos et al. (2016) tested the correlation between growth opportunity and supplier satisfaction and supplier satisfaction and preferred customer status. And these two relationships are found to be significant. Therefore, it is evident that supplier satisfaction is a mediator between the relationship of growth opportunity and preferred customer status.

Hypothesis 3: Supplier satisfaction mediates the relationship between growth opportunity and the inclination to grant preferred customer status.

3.5 Inter-organisational cultural compatibility as a new possible antecedent of preferred customer status

According to Parkhe (1993), organisational cultural congruence has a positive effect on the outcomes of buyer-supplier relationships. This is because similar partners are more likely to understand each other than partners that are fundamentally different (Schiele et al., 2015). Besides, the similarity between organisational culture in the supplier-buyer relationship results in the limitation of opportunistic behaviours as well as undesirable behaviours towards to mutual interests (ibid). Empirical evidence shows that inter-organisational cultural compatibility positively affects trust and commitment between suppliers and buyers (Stein, 2003). Moreover, Moody (1992) and Blonska (2010) proposed that trust and commitment are antecedents of preferred customer status. Therefore, it can be inferred that inter-organisational cultural cultural compatibility influences preferred customer status. Additionally, Schiele (2012) suggested that the similarity between cultural values of suppliers and buyers be included in the criteria set for suppliers to assess whether a certain buyer deserves the preferred customer

status. For those reasons, inter-organisational cultural compatibility is included in this study's model and it is expected to positively influence preferred customer status.

Hypothesis 4: Inter-organisational cultural compatibility has a positive effect on supplier's inclination to grant preferred customer status.

3.6 Supplier's dependency as the antecedent of preferred customer status

Caniëls et al. (2018)'s research finds out that asymmetrical and symmetrical dependency in the buyer-supplier relationship will lead to supplier satisfaction with the relationship. In the buyer-supplier relationship, in terms of supplier satisfaction, dependency multitude, instead of dependency's direction, matters (Vos, 2017). This means that it does not matter much who depends on whom, but rather how much one is dependent on the other. Therefore, when the level of dependency of a supplier increases, this supplier is more likely to be satisfied. Surprisingly, Caniëls et al. (2018) find out that asymmetrical dependence even leads to a greater degree of supplier satisfaction compared to mutual dependence. One explanation for this is that dependent suppliers can gain benefits such as guidance and knowledge from dominant buying firms (Caniëls et al., 2018). Hypothesis 5a is postulated as follows:

Hypothesis 5a: Supplier's dependency has a positive impact on supplier satisfaction.

Contrary to the above literature suggesting that supplier dependency results in supplier satisfaction, in his research, Goossen (2019) found out that a supplier's dependency on a buying firm does not necessarily lead to the supplier being satisfied. Instead, his study's results suggest that if a supplier is dependent on a buying firm, the former will be more likely to award the latter preferred customer status even if the former is not satisfied with the relationship (Goossen, 2019). Goossen (2019) maintained that the reason a dependent supplier awards preferred customer status to a buying firm is that the supplier aims to accomplish its objectives and optimise its performance by doing so. Hypothesis 5b is formulated as follows:

Hypothesis 5b: Supplier's dependency has a positive impact on supplier's inclination to grant preferred customer status.

3.7 Preferred customer status leading to preferential treatment

While assigning preferred customer status is the intention of the supplier, preferential treatment refers to the actual action taken by the supplier (Praas, 2016). Although a supplier may award a certain buyer preferred customer status, this intention may not translate to the actual action of the supplier giving the buyer preferential treatment (Vos, 2017). This means that although a buying firm becomes a preferred customer, it may not receive the benefits of the status, which is resource allocation. If this is the case, it may not be worthwhile for buying firms to strive to become preferred customers because it will not generate value for them. Therefore, it is important to test the relationship between the intention (assigning preferred customer status) and the action (providing preferential treatment) to see if the former indeed leads to the latter. The research of Praas (2016) and Vos et al. (2016) provide the empirical evidence that achieving preferred customer status leads to a buying firm enjoying preferential treatment from the supplier. Hence, hypothesis 6 is postulated as follows:

Hypothesis 6: Being assigned preferred customer status positively impacts obtaining preferential treatment.

4 DATA COLLECTION AND METHODOLOGY

The thesis adopted a similar methodology approach to Vos et al. (2016). An online survey was used to collect data for later quantitative analysis. After applying several statistical methods to trim outliers and to validate data quality, partial least square (PLS) which is one type of regression analysis was to be executed to demonstrate if there are significant relationships between antecedents and preferred customer status. A statistical application specialised in PLS named SmartPLS 3.0 enabled this regression analysis.

4.1 Research philosophy and approach: an overview of methodology

The thesis carries the philosophy of positivism approach of which the goal is to scientifically verify hypotheses by practicing empirical research such as observation and experimentation (Collis & Hussey, 2014). The associated method for analysing empirical discovery under this approach accordingly is quantitative since social events are assumingly measurable (ibid). To comprehensively answer the research question, first, the thesis was set out to conduct a thorough literature review to identify what antecedents have been argued to be important in obtaining preferred customer status. These findings were then summarised to help build hypotheses connecting the antecedents as independent variables to preferred customer status as the dependent variable. Finally, a survey was used as a tool to collect primary data which provides numerical values to test the posited hypotheses. Subsequent parts give a detailed description of how the research was done.

The study is an extended version based on earlier research by Hüttinger et al. (2014) and Vos et al. (2016). Therefore, to respect the consistency throughout the thread of research regarding preferred customer status, a similar methodology approach was used with light customisation such as wording used in questionnaire and mathematical tools to detect outliers.

4.2 Survey design

4.2.1 Self-completion questionnaire

The research adopted the self-completion questionnaire, or also called self-administered questionnaire, which is one of the data collecting tools for conducting social survey (Bell et al., 2019). Self-explained by its name, this method allows respondents to fill out their answers on

their own (ibid). Compared to the interview approach, self-completion questionnaire has many advantages. First, it enables quicker execution and larger sample size due to the fact that hundreds or thousands of survey questions can be sent out at once (ibid). Second, it reduces the time of participation (ibid). Furthermore, the respondents will also experience the questionnaire similarly because the absence of interviewers, who might give different order of questions from one interviewee to another or act differently in each interview (ibid). Lastly, the respondents have full authority on when and how they want to respond, thus creating a higher level of convenience for the respondents (ibid).

4.2.2 Questionnaire structure

The survey consisted of two main parts. The first part was to collect background information of the respondents and of the companies they work for, which allows a general impression of the representativeness of the collected response. The second part provided the main data input for the desired variables. The questions under this part applied five-point Likert scale, asking respondents for their opinion on the current relationship with Volvo Group, grading of each question includes "strong disagree", "disagree", "neutral", "agree", "strongly agree". In this second part, there were 60 questions that belong to 14 categories of buyer-supplier relationship matters. These matters are the so-called variables when statistical analysis is to perform. Hereinafter, the question or questionnaire used in this survey if mentioned refers to the questions in the second part of the survey.

The questionnaire was referenced from the research by Hüttinger et al. (2014) and Vos et al. (2016) with the addition of two more sets of questions for the independent variables which are dependency and cultural fit. Questions for these two new variables were formulated based on relevant studies. Appendix 5 summarises the questionnaire and the reference source for each question.

4.2.3 The rationale behind the questionnaire

4.2.3.1 Stated importance versus derived importance

When it comes to identifying important factors from the perspective of a certain targeted group, one often asks which the most suitable techniques are to help make the collected result more actionable. Fontenot et al. (2007) listed two main approaches that could be adopted, one is

stated importance and the other is derived importance. Question type related to stated importance usually liaises with rating, ranking, or dividing weightage among attributes of a specific matter (Fontenot et al., 2007). Meanwhile, for derived importance, the questions are to collect judgment on past or existing events (Grigoroudis, 2003), designed to provide input for dependent (x) and independent (y) variables in regression and correlation analysis which allows showing how much of the impact of the attributes, which enables abilities to predict and explain (ibid). Table 4.1 provides example of how the question of importance can be asked in two approaches to discover what is important to satisfaction of customers towards an art company. This example was compiled from the research of Grigoroudis (2003). There were 4 mains criteria to assess: quality, pricing, service, and personnel. For the stated importance approach in the example, there are two options to directly ask for respondents' opinions on what is important to them. Response data based on these questions can be quickly computed to see the ranking of each criterion. With derived importance question type, there are sets of questions providing values for independent variables like question 1 in the example and questions for values of dependent variables like question 2. Regression and correlation analysis are needed to see how influential each factor to the overall satisfaction.

Each approach has its pros and cons, one's cons are even the other's pros. Stated importance offers simplicity in analysing methods but has limitations in broadening the use of data other than ranking importance of attributes, and answers of this approach may be based more on rational thinking rather than emotional motivation (Fontenot et al., 2007). On the contrary, derived importance provides a more holistic view on the contribution of each attribute to the determined matters but involves complex statistical analysing techniques and often leads to opposite correlation of at least one factor just because this factor is inherent or minimum required (ibid). As probably seen from the given example, the derived importance questions also give an overview on customers' feedback, while for interview or survey with the use of stated importance, another set of questions may need to be developed to evaluate customer satisfaction on provided services or products. This leads to longer time to fulfil one observation which potentially ties to cost and a lower rate of response for the stated importance approach (Fontenot et al., 2007). Fontenot et al. (2007) based on their study and previous literature concluded that the derived importance approach is better fitted and more meaningful for guiding managerial decisions (ibid).

Stated-importance question	Derived importance question

Quality

Pricing

Service

 Table 4.1 Sample questions for two data collecting approaches (Grigoroudis, 2003)

<u>Option 1:</u> How important do you think the following criterion is?

Question	1:	How	satisfied	are	you	with	the
following	cr	iterio	n?				

Satisfied

0

0

0

Very

satisfied

0

0

0

Less

satisfied

0

0

0

	Less important	Important	Very important
Quality	0	0	0
Pricing	0	0	0
Service	0	0	0
Personnel	0	0	0

 Personnel
 O
 O
 Personnel
 O
 O

 Option 2:
 Rank the following criteria by
 Question 2:
 How are you satisfied with the

<u>Option 2:</u> Rank the following criteria by <u>Question 2:</u> How filling from 1 for the most important to 4 for company overall? the least important.

company overall?

Quality	
Pricing	
Service	
Personnel	

Less satisfied	Satisfied	Very satisfied
0	0	0

4.2.3.2 Single items versus multi items

Single items refer to questions that are set to receive one-time evaluations from targeted respondents. Multi items, on the contrary, have at least two sub-questions that still aim for evaluation on the same topic as the big overarching question but have different wordings connecting to varied circumstances or perspectives. Table 4.2 gives several examples of how certain topics could be asked following the categorisation of single-item and multi-item questions. The expected answers are to fit in the format of rating from strongly disagree/ unsatisfied/ unmet to strongly agree/ satisfied/ met. For customer loyalty, instead of asking straightforward the expected period that a client wants to stay with his/her bank, four questions implying the same issue are raised. The same is applied to customer satisfaction. There are two

questions under this issue, reflecting more nuances of satisfaction. By this example, the commonly used term in academic research "construct" representing theoretical concepts which are posited for testing in the concerning research is exemplified. Constructs in the example are customer loyalty and customer satisfaction, as the example research was keen on understanding the relationship of these two concepts. Variables are statistical measurements of constructs. Constructs and variables could refer to the same object in the case of single-item questions, and constructs could overarch variables in multi-item questions where each sub-question is the data input for each variable.

Single-item question	Multi-item question									
1. You would continue to	1. If needed, you will use your bank's other service									
use your bank's service	2. You would recommend your bank to									
for a long time.	acquaintances.									
	3. You would continue to use your bank's service for									
	a long time.									
	4. You still choose your bank if you can make the									
	decision again.									
1. In general, can you	1. In general, can you rate your satisfaction with									
rate your satisfaction	your bank?									
with your bank?	2. How well did you bank meet your expectation?									
	Single-item question 1. You would continue to use your bank's service for a long time. 1. In general, can you rate your satisfaction with your bank?									

Table 4.2 Examples on single-item and multi-item questions (Sarstedt et al., 2009)

Single items are, although, acknowledged to offer more practical benefits such as promoting common statistical methods, briefness in wordings, compact length of questionnaire thus resulting in higher response rate and less effort needed for developing and analysing survey, they are arguably error-prone by nature (Kwon et al., 2005). Thus, multi items have become the underlying standard and have been widely used in academic research (Ryan et al., 1995). Additionally, multi items have been proved to acquire much better reliability and validity than single items with the usage of rigorous testing procedures (Sarstedt et al., 2009).

This section introduces the definition of formative and reflective constructs as they are used in the questionnaire of this thesis.

If a variable X has its value variation associating with the variation of construct Y, and external interferences connected to Y variation can be detected X, then the relationship between X and Y is called reflective, and Y is a reflective construct (Cenfetelli et al., 2009). If construct Y values are a combination of multiple variables which possibly exhibit poor or even no correlation with Y, Y is then categorised as a formative construct (ibid). Both types of constructs are equally common and plausible, while the reflective constructs prevail in psychological and managerial research, the formative ones gain popularity in economics and sociology (ibid).

4.2.3.4 Application to the survey's questionnaire

The questions used in the survey adopted a derived importance approach, multi-items, and had both relative and formative constructs. Although the questions were mostly replicated from earlier research, it is fair to say that they have followed optimal options as argued by previous literature and well fit for the purpose of the study which is not only to find out crucial antecedents but also to infer managerial implications, aiding managers in decision making.

4.3 Choice of analysing method

PLS, abbreviation of partial least square or also often called projection to latent structure, is a statistical method that enables analysis for multi-item questions related research.

PLS analysis offers itself as an alternative option to traditional regression, correlation, covariance methods which attempt to define structural equation modelling (SEM) consisting of independent and dependent variables (Garson, 2016). PLS is argued to be able to the draw connection between one set of independent variables and multiple dependent variables (ibid), as opposed to traditional methods which are more concentrating on one solely dependent variable. Conversely, PLS could also afford more independent variables despite multicollinearity possibility (ibid). Multicollinearity happens when one independent variable is intercorrelated with another at a high level of accuracy (≥ 0.90) in a model regression (Collis

& Hussey, 2014). When this occurrence exists in traditional regressions, intercorrelated variable removal must be implemented before any further analysis since multicollinearity reduces the precision of statistical tests (ibid).

The underlying method of PLS is simplified and illustrated in Figure 4.1. Variables such as Incent1, Incent2, Motive1, Motive2 are required input of PLS, for ease of use, they are called "indicator variables". X construct and Y construct are the latent variables that are created by PLS. Note that both relations of X construct and Incent1, Incent2, and of Y construct and Motive1, Motive2 in this example are reflective. What PLS did was to extract a value series for X that represents values of Incent1 and Incent2 the best and the same applied to Y, values for Y are extracted to best represent Motive1 and Motive2. Correlation between X and Y is identified based on linear regression, more specifically OLS (ordinary least squares) regression (Garson, 2016). While the relation between the latent variables and the indicator variables is subject to the type of construct, whether it is formative or reflective (ibid). For formative construct (ibid). For reflective ones, the basis is the dual covariance between latent variables and indicator variables (ibid).

SmartPLS 3.0 is a statistical application which is specialised in PLS analysis. The thesis uses this application to enable comprehensively analysing collected responses.

Figure 4.1 Underlying method of PLS (Garson, 2016)



Structural equation modelling, also called SEM, refers to a group of methodologies aiming to "represent hypotheses about summary statistics derived from empirical measurements in terms of a smaller number of "structural" parameters defined by a hypothesized underlying model" (Kaplan, 2009, p1). In terms of cause and effects analysis among latent variables, SEM has acquired the standard status among researchers in the field of management and marketing (Hair et al., 2011). Partial least squares structural equation modelling, also known as PLS-SEM, is a branch of SEM and a two-fold approach. PLS-SEM, on the one hand, is predictive in terms of model estimation, and on the other hand, produces causal explanations (Hair et al., 2019). In PLS-SEM models, several variables can be both the consequences of other variables and the antecedents of some other variables (Garson, 2016). PLS-SEM is an alternative approach to traditional SEM (also called covariance-based SEM or CB-SEM) (Garson, 2016). While the aim of PLS-SEM is to optimise the explained variance of the endogenous latent variables, that of CB-SEM is about theory-based covariance matrix replication, of which explained variance is not emphasised (Hair et al., 2011). In comparison with CB-SEM, PLS-SEM is deemed the approach holds greater statistical power, which means in PLS-SEM, significant paths are more likely to be identified if they in fact exist (Sarstedt & Mooi, 2019). Also, PLS-SEM is less reliant on model fit criteria than CB-SEM (Hair et al., 2019). CB-SEM is deemed a more popular approach among researchers, however, in recent years, PLS-SEM has gained momentum and its application in research is more frequent (Hair et al., 2011; Hair et al., 2019). In PLS-SEM, there are two main components (Hair et al., 2011). The first is called inner model, or also called structural model, which displays the paths among latent variables (ibid). In inner model, non-recursive relationships are not allowed, which means the paths can only be oneway (ibid). Also, the variables in the inner model are categorised as exogenous and endogenous variables (ibid). The former is defined as the latent variables explaining the other variables whereas the other refers to the variables explained and having the structural path(s) directing at (ibid). The second component of PLS-SEM is called outer model (ibid). This component includes measurement models, which show one-way predictive relationships between latent variables and their respective indicators (ibid). In outer model, one indicator can only be linked to one and only one latent variable. Hair et al. (2011) summarised the guideline to choose the appropriate SEM approach, which can be viewed in Table 4.3.

	PLS-SEM	CB-SEM						
Research objective	Antecedent identification or key	Theory confirmation, theories						
	constructs prediction.	comparison.						
	Exploratory research or existing							
	theory extension.							
Outer model	If there are formative constructs in	If further specification of error						
	the model.	terms is needed.						
Inner model	Complex model (A great number of	Non-recursive paths in the model						
	constructs and indicators)							
Data characteristics	Small sample size (PLS can work	Large datasets, normal distribution						
	well with large datasets as well) and	of data						
	non-normal distribution of data							
Model evaluation	Latent variable scores are necessary	Global model fit measure is						
		necessary						

Table 4.3 Guidelines to choose the SEM approach (Hair et al., 2011)

This research is conducted with the PLS-SEM approach. The reason why PLS-SEM is chosen instead of CB-SEM is that the research objective is to identify antecedents of preferred customer status and the research can be considered exploratory. Additionally, one formative construct, which is preferential treatment, is included in the model and the inner model is quite complex. Moreover, the sample size is quite small (166 responses). As a result, PLS-SEM appears to be a more appropriate option. Besides, the application of PLS-SEM is common in research in the field of operation management, supply chain management, and organisational management. Since this research is in these fields, it strengthens the rationale of choosing PLS-SEM as the approach.

4.4 Sampling method

Volvo Group offered its support for this thesis on the topic of preferred customer status from the perspective of buying company. Volvo Group is a Swedish automotive manufacturer founded in 1927, headquartered in Gothenburg, Sweden (Volvo Group, 2021). Its products vary from complete trucks, buses to construction equipment and power solutions for industrial appliances, servicing for a wide range of customers and market sectors (ibid). As of 2020, Volvo Group had had approximately 100,000 employees globally, constructed production plants in 18 countries, and presented in 190 markets (ibid). It is claimed that Volvo Group is one of the leading and largest players in its field (ibid). The recent novel Covid-19 pandemic and semi-conductor shortage, as well as the technological race towards electrification, have posed challenges to Volvo Group's supply chain, making it an eligible candidate to offer the view into how preferred customer status functions.

Since the buyer's support for this thesis has been assigned, its suppliers, more specifically its material suppliers become the targeted respondents for the survey. The material suppliers are the suppliers who provide components used or assembled in finished products of Volvo Group. This group of suppliers was targeted because Volvo Group follows lean philosophy in their supply chain and production. Their suppliers' quality of delivery, thus, makes a big impact on the consistency in servicing the market of Volvo Group and, in a negative aspect, potentially causes major disruption.

To avoid multiple evaluations on the buyer-supplier relationship, there is only one contact of a certain supplier receiving this survey. To be able to answer the survey, the survey recipients should have adequate interaction with Volvo Group, therefore, contacts belonging to functions related to sales, key account managing, logistics, chief executive officer were reached out.

Complete anonymity was also promised and ensured to respondents so that they could freely express their opinion without the fear of jeopardizing the relationship with Volvo Group.

4.5 Data collection

Volvo Group has the supplier relationship manager (SRM) function which moderates the communication and relationship in general with suppliers. SRMs have reliable voices with suppliers, therefore, to increase the respondence rate of the survey as well as to inform the legitimacy of the survey, SRM was supporting to send out the survey to intended contacts at suppliers. In summary, 1114 contacts in correspondence with 1114 suppliers were sent the survey to. They had four-week time from 22nd March 2021 to 18th April 2021 to fill out the survey. The survey was first sent on 22nd March, then a reminder was sent out on 13th April, and the number of responses until 18th April had reached 166. With this number, the response rate for this study is 15%. Since the response rate of studies in the automotive industry usually falls into the range from 15% to 25% (Vos, 2017), this study's response rate is considered to

be in the normal range. Also, Hair et al. (2011) provided the calculation of the minimum sample size of PLS-SEM. The accepted minimum sample size is calculated by multiplying the biggest number of indicators measuring one formative construct or the biggest number of paths pointed at one latent variable in the inner model, whichever is larger, by ten times (Hair et al., 2011). Using this calculation, the minimum sample size of this research is 50, which makes the sample size of 166 acceptable. These 166 responses were to be used as the main input for hypotheses testing. Table 4.4 gives some information on the respondents' profiles.

Question	Percentage
1. How long have you been working for your company? In years	
0-10	43.37%
10-20	28.92%
20-30	19.28%
30-40	7.23%
40-50	1.20%
2. How long have you been in the current position? In years	
0-10	63.25%
10-20	30.12%
20-30	5.42%
30-40	1.20%
3. How long have you worked with/assigned to Volvo Group? In years.	
0-10	65.66%
10-20	20.48%
20-30	10.24%
30-40	3.01%
40-50	0.60%
4. Length of relationship between your company and Volvo Group? In years.	
less than 1 year	1.20%
between 1 year and 5 years	20.48%
Between 5 years and 10 years	13.25%
Between 10 years and 20 years	21.69%
More than 20 years	43.37%
5. Annual Turnover of your company (approximately). In EUR.	
less than EUR 10 millions	28.31%
between EUR 10 millions and EUR 100 millions	41.57%
between EUR 100 millions and EUR 1 billion	15.66%
between EUR 1 billion and EUR 5 billions	6.02%
more than EUR 5 billions	8.43%
6. Number of employees of your company (approximately)?	
less than 100 employees	21.08%

Table 4.4 Respondents' profiles

between 100 employees and 1,000 employees	47.59%
between 1,000 employees and 10,000 employees	18.07%
between 10,000 employees and 50,000 employees	6.02%
more than 50,000 employees	7.23%
7. Location	
Western Europe	43.90%
Eastern Europe	19.16%
Asia	12.89%
Southern America	12.20%
Northern America	9.41%
Oceania	1.39%
Africa	1.05%
8. Material Group	
Power Train	20.00%
Vehicles Dynamics	14.64%
Cabin's Interior	13.21%
Cabin's Exterior	11.43%
Metal (Casting, forging)	9.64%
Electric and Electronics	9.29%
Sheet metal (Brackets)	8.57%
Fasteners	1.43%
Vehicles Dynamics	0.71%
Miscellaneous material group	11.07%
9. Position of respondents	
Key account manager	38.62%
Sales representative	15.87%
Logistics manager	9.52%
Logistics coordinator/administrator	7.41%
Customer service officer	6.35%
Planner	5.29%
CEO, Managing Director, Country Director	3.70%
Production manager	3.70%
Miscellaneous positions	9.52%

4.6 Data preparation and data cleaning

As a prerequisite for data analysis, data must be checked for generality, outliers shall be detected and handled with proper treatment, and the quality of data must be assessed for validity and reliability before data become a good source to base the analysis on.

SPSS and SmartPLS 3.0 were used for conducting these steps. SmartPLS 3.0, besides providing the main tool for PLS analysis, offers functions for examining data quality. Data was coded

before being imported to SPSS and SmartPLS 3.0. For instance, the answers of strongly agree, agree, neutral, disagree, strongly disagree are coded as numbers and take the value of 5, 4, 3, 2, 1, respectively.

4.6.1 Non-response bias test

Non-response bias test needed to be done first. Non-response bias happens when subjects in the intended group refuse to provide answers for the survey, creating a possibility for significant difference between those who respond and those who do not (Bell et al., 2019). It becomes a worrying issue if the response rate is lower than 70% (ibid). However, the possibility of non-response bias can be appraised by comparing the attributes of responders and non-responders (ibid). As it is assumed that the late responders can represent the non-responders (Pulles et al., 2016a), what Hüttinger et al. (2014) and Vos et al. (2016) did was to compare the first quartile and the last quartile of response using independent t-test. Independent t-test is a statistical test that identifies if there exists a statistically significant difference between the means (averages) of two data groups (Laerd Statistics, 2021).

The results show a significant difference in the fourth sub-question of supplier satisfaction between the early responding group and the late one with t-value = 2.646 and p-value = 0.01, which is less than the required threshold of 0.05 (Appendix 1). Even though it is not necessary to rule out the variable which receives input from this question, the non-response bias reflected in this case should be kept in mind when it comes to generalisation. Other than that, responses between the two groups for other variables do not pose a significant difference.

4.6.2 Outlier deletion

There are three different types of outliers, univariate, bivariate, and multivariate of which categorisation is based on the number of concerned variables (Hair et al., 2019). Univariate, bivariate, and multivariate outliers respectively refer to values observed in one individual variable, a pair of variables, or a set of more than two variables that fall outside notably outside of the majority of observations (ibid).

If univariate and bivariate outliers can be detected by commonly used techniques, multivariate outlier detection requires more a complex one which is Mahalanobis distance (Hair et al., 2019). This method theoretically treats observations across a set of variables as one whole

observation, measuring the distance from each observation to the mean central point of all observations, then producing one Mahalanobis values for each line of observation (ibid). One more statistical test needs to be done on these newly computed Mahalanobis values to identify outlying distances (ibid). Chi-square test is suggested for this exercise with a conservative threshold of 0.001, any Mahalanobis value which has p-value < 0.001 is considered as an outlier (Tabachnick & Fidell, 2013).

Since the survey provides up to 60 variables, multivariate outlier detection is deemed appropriate and Mahalanobis distance was used to find outliers in this case. Seven outliers were identified and ruled out from the dataset (Appendix 2). No more analysis is done on these deleted cases.

4.6.3 Principal component analysis

In the effort of data mining and predictive modelling, researchers often bring in large scale of potential explanatory or predictive variables (Maitra & Yan, 2008). Thus, selecting variables that are meaningful and dropping out ones that are not becomes an important task in establishing a desired regression model (ibid). PCA – principal component analysis is considered as a traditional statistical approach for this purpose (Bair et al., 2006). The underlying method of PCA is to seek a lower number of linear clusters or so-called latent variables which can represent or summarise the much larger number of initial variables (Maitra & Yan, 2008). PCA's method is similar to PLS's which is explained in the previous section, however, PCA does not pre-assume the relation between indicator variables and latent variables (ibid). Moreover, PCA is able to reduce initial variables to either a predetermined or a self-defined number of latent variables using SPSS (Laerd Statistics, 2021).

Hüttinger et al. (2014) and Vos et al. (2016) in their research also used PCA to eliminate variables that potentially do not contribute to predetermined constructs. In this study, a similar approach is adopted. SPSS is the main tool assisting in implementing PCA. There were 3 adjustments made to the default setting of SPSS. The first adjustment is to fix the number of latent variables computed by PCA to 14, since 14 is also the number of constructs in hypothesized model. A lower or higher number may pose the risk of losing useful variables or keeping irrelated ones. The second adjustment is to apply Varimax for the rotation option which is recommended if the dataset is assumed not highly correlated. And the third one is applying

a threshold of 0.45. Any variables that have PCA computed values lower than 0.45 is eliminated from the dataset and excluded from further test and analysis. This threshold of 0.45 is suggested for sample sizes with more than 150 observations (Hair et al., 2019).

With the applied parameters, two variables which are from the third question of innovation potential and the fifth question of relation behaviour are deleted (Appendix 3 and Appendix 4).

4.7 Data structure quality assessment

4.7.1 Validity and reliability of data

Data structure quality assessment is conducted by running Smart PLS 3 application (bootstrap sample 5000). For reflective constructs and formative constructs, one needs to look at different criteria. For reflective constructs, outer loading is a key criterion, representing the path from a factor to its indicator and indicating the absolute contribution of an indicator to its factor (Garson, 2016). To assess indicator reliability, one needs to examine outer loadings. Outer loadings take values from 0 to 1 (Garson, 2016). The closer they are to 1, the greater the variance of the indicator explained by its factor and the more reliable the latent variable is (ibid). The agreed acceptable value of outer loadings is above 0.7 (ibid). This is because indicator reliability is calculated by squaring outer loadings and an outer loading with the value of 0.708 means that the indicator reliability equals 0.5 (ibid). This, in turn, means that the factor explains half of the variance of the indicator and the level of explained variance equals the level of error variance (ibid). For the level of explained variance exceeding the level of error variance, the indicator reliability should be above 0.5, which means the outer loading should be above 0.7 (ibid). By convention, if outer loading of an indicator is between 0.4 and 0.7, the indicator should be considered being dropped from the model if doing so improves composite reliability (ibid). As can be seen from Table 4.5, none of the 54 indicators of the 13 reflective constructs have outer loadings below 0.7 and are in the acceptable range, therefore, all the indicators of the reflective constructs are considered reliable.

Next, internal consistency reliability is assessed by examining two criteria: composite reliability and Cronbach's alpha. Regarding Cronbach's alpha criterion, the rule of thumb is that the good scale, the acceptable scale, and the scale for exploratory purpose are equal or greater than 0.8, 0.7, and 0.6 respectively (Garson, 2016). Since the Cronbach's alpha of all the

constructs in Table 4.5 is greater than 0.8, they are in the good scale. However, Cronbach's alpha is a conservative criterion of which may underestimate or overestimate reliability (Garson, 2016). Therefore, composite reliability is a preferred criterion to Cronbach's alpha to assess convergent validity among researchers. The threshold for composite reliability is similar to that of Cronbach's alpha, with a good scale, the acceptable scale, and the scale for exploratory purpose are equal or greater than 0.8, 0.7, and 0.6 respectively (Garson, 2016). The values of composite reliability of all the constructs in Table 4.5 all meet the requirement of good scale.

To assess the validity of the constructs, two types of validity are tested, namely convergent validity and discriminant validity. The former tests whether the indicators of a construct are correlated. To assess convergent validity, Average variance extracted (AVE) is examined. AVE demonstrates the average communality of each factor and should be greater than 0.5 in an acceptable range (Garson, 2016). This is because AVE below this threshold means that a factor only explains less than half the variance of its corresponding indicators or in other words, error variance is greater than explained variance (ibid). As can be seen from Table 4.5, AVE of all the constructs takes the value within this acceptable range. As the result, convergent validity is established.

Construct	Indicator	Outer loading	Composite reliability	Cronbach's Alpha	Convergent Validity (AVE)
	Contact accessibility 1	0.919			
Contact accessibility	Contact accessibility 1	0.947	0.956	0.931	0.878
	Contact accessibility 1	0.946			
Cultural compatibility	Cultural compatibility 1	0.813			
	Cultural compatibility 2	0.892			
	Cultural compatibility 3	0.927	0.948	0.934	0.785
	Cultural compatibility 4	0.916			
	Cultural compatibility 5	0.877			
	Supplier dependency 1	0.862			
	Supplier dependency 2	0.752			
Supplier dependency	Supplier dependency 3	0.812	0.906	0.872	0.660
	Supplier dependency 4	0.853			
	Supplier dependency 5	0.776			

Table 4.5 Convergent validity and reliability measure

	Growth opportunity 1	0.860				
Growth opportunity	Growth opportunity 2	0.912	0.908	0.848	0.767	
	Growth opportunity 3	0.855				
Innovation notantial	Innovation potential 1	0.944	0.027	0.967	0.992	
innovation potential	Innovation potential 2	0.935	0.937	0.807	0.882	
	Involvement 1	0.813				
	Involvement 2	0.893				
Involvement	Involvement 3	0.875	0.918	0.888	0.694	
	Involvement 4	0.850				
	Involvement 5	0.722				
	Operative excellence 1	0.860				
	Operative excellence 2	0.802	0.001	0.054	0.004	
Sperative excellence	Operative excellence 3	0.856	0.901	0.854	0.694	
	Operative excellence 4	0.814				
	Preferred customer status 1	0.813				
	Preferred customer status 2	0.884				
Preferred customer status	Preferred customer status 3	0.825	0.914	0.882	0.679	
	Preferred customer status 4	0.785				
	Preferred customer status 5	0.809				
	Profitability 1	0.954				
Profitability	Profitability 2	0.893	0.948	0.919	0.859	
	Profitability 3	0.933				
	Relational behaviour 1	0.826				
	Relational behaviour 2	0.883			0.722	
Relational behaviour	Relational behaviour 3	0.906	0.928	0.903		
	Relational behaviour 4	0.827				
	Relational behaviour 6	0.801				
	Reliability 1	0.907				
	Reliability 2	0.930	0.051	0.021	0.020	
Reliability	Reliability 3	0.877	0.951	0.931	0.828	
	Reliability 4	0.924				
	Supplier satisfaction 1	0.856				
~ ~ ~ ~ ~ ~	Supplier satisfaction 2	0.911	o o / =			
Supplier satisfaction	Supplier satisfaction 3	0.936	0.947	0.925	0.817	
	Supplier satisfaction 4	0.910				
	Support of suppliers 1	0.859				
	Support of suppliers 2	0.889				
Support of suppliers	Support of suppliers 3	0.880	0.928	0.902	0.720	
Support of suppliers	Support of supplians 4	0 0 0 0				
	Support of suppliers 4	0.828				

For discriminant validity assessment, two criteria are examined, namely Fornell-Lacker criterion and the heterotrait-monotrait ratio (HTMT). Discriminant validity tests whether the indicators have the strongest relationships with their reflective construct compared with other constructs in the model (Garson, 2016). The rule for Fornell-Lacker criterion states that discriminant validity is established when the square root of AVE of any factor is higher than its correlation with any other factors (ibid). This means that the variance that any factor shares with its own group of indicators is higher than the variance it shares with any other factors. The data from Table 4.6 indicates that the square root of AVE of any factors is greater than the absolute of the numbers below in the same column (indicating the correlation with other factors), therefore, discriminant validity is assumed according to Fornell-Lacker criterion. Subsequently, HTMT criterion is examined. Garson (2016) argued that Fornell-Lacker criterion has shortcomings in discriminant validity assessment and that HTMT ratio is better at detecting the lack of discriminant validity. Gold et al. (2001) and Teo et al. (2008) suggested the 0.9 cut-off for the value of HTMT for discriminant validity is established while Clark & Watson (1995), Kline (2011) suggested the threshold of 0.85. As Table 4.7 shows that the HTMT values of any pair of factors are below 0.85, discriminant validity is assured.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Contact accessibility	-												
2. Cultural compatibility	0.432	-											
3. Supplier dependency	0.478	0.466	-										
4. Growth opportunity	0.550	0.520	0.704	-									
5. Innovation potential	0.519	0.279	0.547	0.761	-								
6. Involvement	0.513	0.457	0.461	0.635	0.654	-							
7. Operative excellence	0.454	0.484	0.444	0.561	0.509	0.415	-						
8. Preferred customer status	0.480	0.598	0.623	0.672	0.441	0.471	0.462	-					
9. Profitability	0.486	0.353	0.619	0.645	0.594	0.435	0.606	0.363	-				
10. Relational behaviour	0.559	0.660	0.451	0.606	0.555	0.544	0.759	0.425	0.691	-			
11. Reliability	0.342	0.477	0.325	0.531	0.486	0.517	0.675	0.404	0.572	0.767	-		
12. Supplier satisfaction	0.390	0.663	0.558	0.730	0.485	0.478	0.625	0.648	0.652	0.712	0.646	-	
13. Support of suppliers	0.505	0.405	0.563	0.649	0.735	0.652	0.650	0.499	0.650	0.685	0.557	0.549	-

	Table	<i>4.6</i>	For	rnell-	-Lacke	r crit	terion
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Table 4.7 HTMT ratio

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Contact accessibility	0.937												
2. Cultural compatibility	0.401	0.886											
3. Supplier dependency	0.447	0.445	0.812										
4. Growth opportunity	0.491	0.464	0.622	0.876									
5. Innovation potential	0.471	0.255	0.488	0.654	0.939								
6. Involvement	0.470	0.414	0.420	0.553	0.578	0.833							
7. Operative excellence	0.416	0.437	0.400	0.484	0.449	0.368	0.833						
8. Preferred customer status	0.441	0.548	0.571	0.590	0.396	0.426	0.413	0.824					
9. Profitability	0.459	0.335	0.569	0.575	0.536	0.401	0.541	0.342	0.927				
10. Relational behaviour	0.514	0.605	0.422	0.534	0.494	0.490	0.674	0.391	0.637	0.850			
11. Reliability	0.329	0.447	0.321	0.474	0.444	0.474	0.611	0.371	0.539	0.712	0.910		
12. Supplier satisfaction	0.368	0.616	0.521	0.651	0.439	0.435	0.559	0.595	0.614	0.651	0.603	0.904	
13. Support of suppliers	0.467	0.376	0.509	0.569	0.650	0.586	0.578	0.454	0.593	0.622	0.514	0.507	0.848

Data quality assessment for formative variables requires different criteria from that for reflective variables. Because formative variable (e.g., preferential treatment) reflect its indicators (e.g., preferential treatment 1, 2, 3, 4, 5) and indicators are different dimensions of the variable, the correlation among indicators of a formative variable should not be high (Garson, 2016). Accordingly, Cronbach's alpha and composite reliability should not be high (ibid), therefore, should not be used to assess the quality of formative variables. In contrast with reflective constructs, outer weights are the focus of formative constructs, representing the path from an indicator to its factor and indicating the relative contribution of an indicator to its construct (Garson, 2016). Outer weights take either value of 0 or positive value lower than 1 (ibid). If the outer weights are all significant, all the indicators can be kept (Hair, et al., 2011). On the other hand, Garson (2016) argued that even if an indicator has insignificant weight, it should be kept in the model if its loading is high (the threshold suggested by Hair, et al. (2014) is 0.05). Besides, the path loadings of an indicator of formative variables should be significant (Garson, 2016; Hair, et al., 2019). If an indicator does not have loading above 0.5 and its loading is insignificant, it may be considered being dropped from the model (Cenfetelli & Bassellier, 2009). For the only formative variable in the model, preferential treatment, the outer weights of indicators preferential 2, 3, 4 are found to have significant paths while that of other 2 indicators are not found to do so. However, the path loadings of all 5 indicators are above 0.5 and significant, therefore all 5 indicators should remain in the model.

Additionally, in a well-fitting model, high multicollinearity of indicators of a formative variable should not exist (Hair, et al., 2014). To assess multicollinearity, the variance inflation factor (VIF) is used and if VIF exceeds 5, multicollinearity may be an issue (ibid). Garson (2016) suggested a more stringent cut-off of 4. However, researchers have different views when it comes to what to do with a formative variable that displays excessive multicollinearity of its indicator. While Hair, et al. (2014) proposed that the variable is either dropped or organised differently, Garson (2016) disagreed and contended that excessive multicollinearity may not be a problem in a research of sheer prediction purpose. In this model, all the 5 indicators of preferential treatment do not display excessive multicollinearity as their VIF values are all below 4. Thus, multicollinearity is not a problem for the formative factor in this model.

4.7.2 Model quality assessment

First, the model fit criterion is assessed by analysing the standardised root mean square residual – SRMR. SRMR refers to the approximate fit of a model as it represents the average magnitude of the difference between the model-suggested correlation matrix and the observed correlation matrix (Garson, 2016). The lower SRMR's value is, the better fitting the model is (ibid). The rule of thumb for the value of SRMR of a good fitting model is lower than 0.08 (Hu & Bentler, 1998). This model's SRMR takes the value of 0.069, which is lower than 0.08. Because of this, this model is considered a well-fitting one.

Second, regardless of the formative or reflective model, multicollinearity is a potential problem at the structural level (Garson, 2016). Structural multicollinearity happens when multicollinearity among the exogenous latent variables of an endogenous latent variable exists (ibid). VIF coefficients, or also called Inner VIF values in SmartPLS 3.0, refer to a measure to assess structural multicollinearity (ibid). The value of VIF coefficients of a model with good fit should not be above 4.0 (in some cases, a more lenient cut-off of 5.0 is used) (ibid). However, Hair, et al., (2019) maintain that the ideal value of VIF is below 3.0 since the value of VIF above this threshold means possible multicollinearity. Because all of Inner VIF values reported by SmartPLS 3.0 are below 3.0, structural multicollinearity appears to not be a problem for this model.

5 **RESULTS**

The result computed by PLS was discussed in this part, as to examine whether the paths in the hypothesized model were significant. A few of them were not, therefore, a revised model was proposed as an effort to investigate how each antecedent could make contribution to preferred customer status.

5.1 **Results of the hypothesized model**

To test the hypotheses, the data obtained after the data cleaning process is imported into SmartPLS 3.0 application. A complete bootstrapping procedure is run with 5,000 subsamples as Hair et al. (2011) suggested that 5,000 subsamples is the minimum number of bootstrapping. Bootstrapping is a procedure to generate the significance level of PLS coefficients (Garson, 2016). It is worth noting that bootstrapped significance is different from the asymptotic tests of significance that are commonly used in regression and other applications with data of normal distribution (ibid). Bootstrapped significance is usually applied in the case there is no assumption that the data is normally distributed (ibid). Although bootstrapping has the advantage of being able to handle any distribution, the result can only be generalised to the data instead of to the population unless random sampling is implemented (ibid). The chosen test type is one-tailed test with a significant level of 0.05. The one-tailed test is chosen in this research due to the sign of the coefficients² stated in the above hypotheses.

First, the variance of the endogenous variables is analysed. R^2 , which is also known as coefficient of determination, represents the degree (in percentage) of variance of an endogenous variable that is explained by its exogenous variable(s) (Sarstedt & Mooi, 2011). R^2 's value falls in the range from 0 to 1 and the higher the value(s) of R^2 , the better the model fit (ibid). The value of R^2 above 0.19, 0.33, and 0.67 is considered weak, moderate, substantial (Chin, 1998; Höck & Ringle, 2006). On the other hand, Hair, et al. (2011) argued a more stringent approach with 0.25, 0.5, 0.75 as the cut-offs of weak, moderate, and substantial value

² Path coefficient is the output of the regression of an endogenous variable on its exogenous variable, representing the strength of the relationship (Sarstedt et al., 2017). Path coefficients take the value from -1 to +1 (ibid). A path coefficient with the value of β indicates that when the exogenous variable increases by one unit and all other exogenous variables are kept constant, the endogenous variable will increase by β units (ibid).

of R^2 . However, adding exogenous variable(s) is likely to increase the value of R^2 regardless of the strength of the correlation of the newly added variable(s) with the endogenous variable (Garson, 2016). To mitigate this bias, adjusted R^2 is used (ibid). Adjusted R^2 considers the sample size and the complexity of the model, hence it is useful in model comparison or model's explanatory power analysis across datasets (Henseler et al., 2016). As can be seen from Table 5.1, out of 7 endogenous variables in the hypothesized model, only operative excellence has weak R^2 . While R^2 values of growth opportunity, preferred customer status are considered moderate, those of preferential treatment, supplier satisfaction, and relational behaviour appear to be substantial according to the standard suggested by Hair, et al. (2011).

Table 5.1 R square and R square adjusted values of endogenous variables

Endogenous variables	R Square	R Square Adjusted		
Growth opportunity	0.427	0.424		
Operative excellence	0.173	0.168		
Preferred customer status	0.499	0.486		
Preferential treatment	0.507	0.504		
Relational behaviour	0.598	0.590		
Supplier satisfaction	0.581	0.567		

Figure 5.1 Results of hypothesized model



The result of the hypothesized model is summarised in Figure 5.1. The results indicate that while growth opportunity, profitability, and relational behaviour have significant effect on supplier satisfaction, operative excellence is not found to do so. As a result, hypotheses H1a, H1b, and H1d are accepted whereas hypothesis H1c is rejected. Because f^2 values³ of the three significant paths are in the range of 0.02 and 0.15, the effect size of growth opportunity, profitability, and relational behaviour on supplier satisfaction is found to be weak.

	Coefficient β	Standard deviation	Confidence intervals	t statistics	p value	f^2
Cultural compatibility > Preferred customer status	0.223	0.071	[0.112; 0.341]	3.13	0.001	0.060
Supplier dependency > Preferred customer status	0.239	0.082	[0.108; 0.370]	2.90	0.002	0.065
Supplier satisfaction > Preferred customer status	0.197	0.085	[0.050; 0.332]	2.32	0.010	0.034
Growth opportunity > Preferred customer status	0.210	0.081	[0.076; 0.343]	2.58	0.005	0.041
Preferred customer status > Preferential treatment	0.712	0.047	[0.639; 0.791]	15.27	0.000	1.028
Supplier dependency >Supplier satisfaction	0.079	0.072	[-0.037; 0.198]	1.11	0.134	0.008
Growth opportunity > Supplier satisfaction	0.312	0.079	[0.187; 0.437]	3.97	0.000	0.116
Operative excellence > Supplier satisfaction	0.101	0.071	[-0.012; 0.225]	1.42	0.078	0.013
Profitability > Supplier satisfaction	0.153	0.082	[0.015; 0.280]	1.86	0.032	0.026
Relational behaviour > Supplier satisfaction	0.286	0.071	[0.160; 0.399]	4.01	0.000	0.083
Innovation potential > Growth opportunity	0.654	0.047	[0.570; 0.729]	13.85	0.000	0.746
Support of suppliers > Relational behaviour	0.324	0.071	[0.213; 0.443]	4.57	0.000	0.153
Reliability > Relational behaviour	0.520	0.074	[0.391; 0.627]	7.03	0.000	0.464
Supplier involvement > Relational behaviour	0.054	0.063	[-0.045; 0.163]	0.85	0.197	0.004
Contact compatibility > Operative excellence	0.416	0.071	[0.298; 0.537]	5.84	0.000	0.210

Table 5.2 Bootstrap statistics of the hypothesized model

Regarding hypothesis H2, the impact of supplier satisfaction on preferred customer status appears to be significant ($\beta = 0.197$; p = 0.01), which, in turn, indicates that hypothesis H2 is supported. However, the effect size appears to be weak as f² equals 0.034.

 $^{^{3}}$ f² effect size refers to the change in R² when an exogenous variable is left out of the model (Sarstedt et al., 2017). This parameter is used to assess whether the exogenous variable substantially impact the endogenous variable (ibid).

Regarding hypothesis H3, the p value of the indirect effect from growth opportunity to preferred customer status through supplier satisfaction is 0.026 ($\beta = 0.061$), therefore, H3 is accepted, meaning that supplier satisfaction indeed mediates the relationship between growth opportunity and preferred customer status. On the other hand, the direct effect of growth opportunity on preferred customer status is found to be significant ($\beta = 0.208$; p = 0.006, f² = 0.04), which reveals that the mediating effect of supplier satisfaction on the relationship between growth opportunity and preferred customer status is partial. In other words, supplier satisfaction explains partly but not all the effect of growth opportunity on preferred customer status and there is some effect that goes directly from the growth opportunity to preferred customer status.

With regards to hypothesis H4, the results demonstrate the correlation between interorganisational cultural compatibility and preferred customer status ($\beta = 0.224$; p = 0.001), however the effect size is considered weak (f² = 0.06). Hypothesis H4, as a result, is supported by the data.

Concerning hypothesis H5a and H5b, the results are different since supplier dependency on buying firms is found to have a significant impact on preferred customer status ($\beta = 0.239$; p = 0.002, f² = 0.065) but not on supplier satisfaction ($\beta = 0.079$; p = 0.134, f² = 0.008). Therefore, hypothesis H5a is not supported while hypothesis H5b is supported.

Concerning hypothesis 6, from the analysis of the data, preferred customer status is found to positively influence preferential treatment ($\beta = 0.712$; p = 0.000, $f^2 = 1.028$). Accordingly, hypothesis 6 is accepted. Because f^2 is above 0.35, the effect size is considered strong.

5.2 Proposal of the revised model

5.2.1 Model modification

Concerning model testing of SEM, Weston & Gore (2006) suggested six steps i.e., model specification, model identification, model estimation, model evaluation, and model modification. The last step, model modification, may be needed because the hypothesized model rarely is the best-fitting one (ibid). The hypothesized model should be formulated on the basis of theory and then be modified according to the results (Weston & Gore, 2006; Ozkan & Kanat, 2011). During model modification, pursuing fit indices blindly without staying close to

the theory should be avoided and modification should be supported by theory or logical reasons (Ozkan & Kanat, 2011). Ozkan & Kanat (2011) recommended conducting one modification at a time and considering the changes in \mathbb{R}^2 , path loadings, bootstrap t-test results, and model's fit indices. Similarly, Weston and Gore (2006) proposed that the modified model be compared with the original model on three aspects, which are: the change in explained variance, model fit, and the significance of coefficients.

Following the above guidelines, because the results demonstrate room for improvement of the hypothesized model, several changes are made to find a better fitting model. There are three insignificant paths in the original model: from supplier dependency to supplier satisfaction, from operative excellence to supplier satisfaction, from supplier involvement to relational behaviour. First, the path from supplier dependency to supplier satisfaction is dropped. Next, a new path from supplier dependency to growth opportunity is added to the model. This is because Bloom & Perry (2001) maintained that Walmart, despite being a big retailer and leveraging its dominant position sometimes to press its suppliers, provides superior business opportunities concerning market shares than smaller buying firms. As a result, the relationship between supplier dependency and growth opportunities is suspected. Subsequently, the path from operative excellence to supplier satisfaction is replaced with the path from operative excellence to relational behaviour. The reason is that operative excellence and relational behaviour are similar as they both represent professionalism and cooperativeness in supply chain relationships (Nyaga et al., 2010). Moreover, relational behaviour contains multiple dimensions of the exchange practice between a supplier and a buyer, including openness and reciprocity (Vos et al., 2016). These dimensions are present in operative excellence, e.g., providing accurate and timely forecasts that the supplier can rely on which your company can rely on and applying simplified and clear process for the supplier. Hence, it is to say that the supplier's perception of relational behaviour mirrors the buying firm's operative excellence. Finally, the path from supplier involvement to relational behaviour is removed and the path from supplier involvement to innovation potential is added. The reason is that a supplier can contribute to a buying firm's innovations by sharing ideas to improve the products and the production process (Steenstra et al., 2020). Hence, the more a supplier is involved in the product development of a buying firm, the more likely this supplier perceives the buying firm as innovative. Figure 5.2 shows the revised model.

Figure 5.2 Results of the revised model



5.2.2 Comparison between the hypothesized model and the revised model

Table 5.3 shows the main criteria of the correlation paths in the revised model. All the correlation paths, including the added paths, are significant because p-values are all below 0.05, which shows improvement from the original model. This, in turn, is the first sign that the revised model may be acceptable. The average of β and of f² increase, from 0.299 to 0.351 and from 0.203 to 0.232, respectively.

Next, the original model and the revised model are compared in the aspect of explained variance. Table 5.4 displays the R^2 and R^2 adjusted of the endogenous variables of the two models. Because adding exogenous variable(s) is likely to increase the value of R^2 regardless the strength of the correlation of the newly added variable(s) with the endogenous variable (Garson, 2016) and R^2 adjusted is useful in model comparison (Henseler, et al., 2016), R^2 adjusted is chosen instead of R^2 as the measure to compares the model in terms of explanatory power. Weston and Gore (2006) argued that ideally, the explained variance of the revised model should be higher than that of the original model or at least the same. This means that the values of R^2 adjusted in the alternative model should increase or at least not decrease compared to the original model. Looking at Table 5.4, while the values of R^2 adjusted of preferred customer status, preferential treatment, operative excellence, and supplier satisfaction show trivial changes, the value of R^2 adjusted of relational behaviour displays a slight increase.

Notably, R^2 of growth opportunity witnesses a moderate increase, from 0.424 to 0.541. Overall, the average R^2 adjusted increases from 0.457 to 0.462. Thus, it can be concluded that the explanatory power of the revised model increases, especially for the growth opportunity variable, and this is the second indicator that this model may be acceptable.

	Coefficient β	Standard deviation	Confidence intervals	t statistics	p value	f^2
Cultural compatibility > Preferred customer status	0.224	0.072	[0.106; 0.346]	3.14	0.001	0.060
Supplier dependency > Preferred customer status	0.239	0.082	[0.103; 0.372]	2.92	0.002	0.066
Supplier satisfaction > Preferred customer status	0.191	0.085	[0.046; 0.330]	2.25	0.012	0.032
Growth opportunity > Preferred customer status	0.209	0.083	[0.073; 0.345]	2.52	0.006	0.040
Growth opportunity > Supplier Satisfaction	0.362	0.066	[0.258; 0.472]	5.50	0.000	0.191
Preferred customer status > Preferential treatment	0.715	0.046	[0.647; 0.795]	15.60	0.000	1.047
Profitability > Supplier Satisfaction	0.191	0.075	[0.064; 0.310]	2.56	0.005	0.044
Relational behaviour > Supplier Satisfaction	0.337	0.065	[0.224; 0.438]	5.15	0.000	0.147
Supplier dependency > Growth opportunity	0.396	0.062	[0.301; 0.507]	6.37	0.000	0.264
Innovation potential > Growth opportunity	0.461	0.064	[0.344; 0.560]	7.14	0.000	0.357
Supplier involvement > Innovation potential	0.586	0.059	[0.489; 0.680]	9.92	0.000	0.523
Support of suppliers > Relational behaviour	0.244	0.066	[0.136; 0.355]	3.70	0.000	0.102
Reliability > Relational behaviour	0.408	0.078	[0.272; 0.532]	5.24	0.000	0.269
Operative excellence > Relational behaviour	0.288	0.065	[0.187; 0.398]	4.43	0.000	0.120
Contact compatibility > Operative excellence	0.421	0.070	[0.306; 0.533]	6.01	0.000	0.215

Table 5.3 Bootstrap statistics of the revised model

Table 5.4 R square and R square adjusted values of endogenous variables of revised model

Endoganous variables	Original model		Revised model			
	R ²	R ² Adjusted	\mathbb{R}^2	R ² Adjusted		
Growth opportunity	0.427	0.424	0.547	0.541		
Innovation potential	-	-	0.343	0.339		
Operative excellence	0.173	0.168	0.177	0.172		
Preferred customer status	0.499	0.486	0.493	0.480		
Preferential treatment	0.507	0.504	0.511	0.508		
Relational behaviour	0.598	0.590	0.638	0.631		
Supplier satisfaction	0.581	0.567	0.572	0.564		
Average	0.464	0.457	0.469	0.462		

Subsequently, the model fit of both models are compared. There is no substantial change in SRMR with SRMR of both models equals 0.069. Accordingly, with the model modification, the model fit remains the same. In conclusion, although the revised model has more significant paths than the original model, and the explanatory power of the revised model increases, the model fit does not change.

5.2.3 Results of the revised model

Concerning the 3 newly added paths, while the effect size (f²) of operative excellence on relational behaviour is weak, that of supplier dependency on growth opportunity is moderate. Notably, supplier involvement has a large effect on innovation potential with $f^2 = 0.523$. Besides, supplier dependency is found to have a positive impact on growth opportunity and not significant effect on supplier satisfaction. Additionally, growth opportunity positively influences supplier satisfaction. Therefore, it can be concluded that growth opportunity fully mediates the relationship between supplier dependency and supplier satisfaction. On the other hand, supplier dependency and growth opportunity are both found to positively affect preferred customer status, as a result, growth opportunity also mediates the relationship between supplier dependency and preferred customer status. However, because the path from supplier dependency to preferred customer status is significant, the mediating effect of growth opportunity is partial. These mediating effects are reaffirmed with the results generated from SmartPLS 3.0. In detail, the specific indirect effects from supplier dependency > growth opportunity > supplier satisfaction and from supplier dependency > growth opportunity >preferred customer status both have p-value below 0.05 (0.000 and 0.011 respectively). In similar fashion, relational behaviour is found to mediate fully the relationship between operative excellence and supplier satisfaction. This is because while the path from operative excellence to relational behaviour and from relational behaviour to supplier satisfaction are significant, the path from operative excellence to supplier satisfaction is not. This finding is confirmed with the specific indirect effects from operative excellence > relational behaviour > supplier satisfaction having p-value below 0.05.

5.2.4 The revised model's predictive power assessment

PLS-SEM is a twofold approach as it is both explanatory and predictive (Shmueli et al., 2019). In the previous section, the explanatory power of the revised model was assessed. And in this
section, the predictive power of the model is evaluated. One commonly used measure of model predictive relevance is Stone-Geisser Q^2 (Shmueli et al., 2019). This measure is calculated with the blindfolding procedure and only applied to reflective endogenous factors (Garson, 2016). The blindfolding procedure was run in SmartPLS 3.0 with the default omission distance of 7. The omission distance of 7 means that in a certain blinding round, the procedure omits every 7th data point in a certain endogenous factor's indicators (Garson, 2016). These data points are treated as missing values (ibid). Taking into account the remaining data points, the procedure estimates the model's parameters and then uses these parameters to estimate the omitted data points (ibid). The predicted values of the omitted data points then are compared with the actual values of these data points (Garson, 2016). The difference is used to compute the Stone-Geisser Q² (ibid). The Stone-Geisser Q² of a certain endogenous variable above 0 means that the model is predictive of that variable (ibid).

Endogenous variables	Stone-Geisser Q ²
Growth opportunity	0.409
Innovation potential	0.288
Operative excellence	0.115
Preferred customer status	0.325
Supplier satisfaction	0.453
Relational behaviour	0.447

Table 5.5 Stone-Geisser Q^2 of endogenous variables

Stone-Geisser Q^2 in the construct cross-validated redundancy in SmartPLS 3.0 is analysed in this research as it gives evidence to the model fit (ibid) and is recommended in terms of predictive relevance assessment (Sarstedt et al., 2017). Stone-Geisser Q^2 taking the value of 0.02, 0.15, and 0.35 represents small, medium, and high degree of predictive accuracy, respectively (Cohen, 1988). As can be seen from Table 5.5, all the Q^2 of the endogenous variables of the revised model take the value above 0, which means that the model is predictive of all endogenous variables. Moreover, this model is highly predictively relevant when it comes

to the following endogenous variables: supplier satisfaction, relational behaviour, and growth opportunity (Stone-Geisser Q^2 above 0.35). Additionally, the revised model is moderately relevant in predicting preferred customer status and innovation potential (Stone-Geisser Q^2 above 0.15) but the predictive relevance of the variable operative excellence is small.

On the other hand, Sarstedt et al. (2017) argued that Stone-Geisser Q^2 is computed based on single data points instead of on the whole dataset. In the blindfold procedure, the prediction is not based on the holdout samples (ibid). However, for predictive accuracy evaluation, prediction evaluation on the basis of holdout samples is necessary since the predictive ability of new cases is primary in a predictive procedure (ibid). Moreover, overfitting is one potential problem with Stone-Geisser Q^2 (ibid). To overcome these downsides of the blindfold procedure, the PLSpredict procedure was developed (ibid). This procedure is on the ground of hold-out sample and offers the model's out-of-sample prediction assessment (Shmueli et al., 2019). Out-of-sample prediction assessment refers to the model's validity in terms of predicting the outcomes of new cases (ibid). The main concept of PLS predict is setting apart a training sample and a holdout sample to compute model's parameters and to assess predictive power (ibid). First, a training sample, which is one portion of the whole dataset, is used in the model's parameters computation. The remaining portion of the dataset is called the holdout sample (ibid). Second, the prediction of the indicators of endogenous variables is implemented by using the indicators of the exogenous variables in the holdout sample and the model's parameters computed from the training sample (ibid). Whereas the prediction on the training sample cases is called in-sample prediction, that on the holdout sample cases is referred to as out-of-sample sample (ibid). A model is highly predictive if there is a low deviation between the out-of-sample predicted values and the actual values (ibid). In contrast, a model with a high deviation does not possess high predictive power (ibid).

Shmueli et al. (2019) were the first to provide structured guidelines to apply the PLSpredict procedure and interpret its results. As suggested by Shmueli et al. (2019), the procedure was run in SmartPS 3.0 with 10-fold cross-validation and 1 repetition. To assess the predictive power of a model, three metrics i.e., RMSE, MAE, and $Q^2_{predict}$ are recommended (Shmueli et al., 2019). The first step to interpret the results is to evaluate the $Q^2_{predict}$. This metric uses the average of the variables in the training sample as predictors of the ones in the holdout sample

(ibid). Additionally, this step is quite similar to the step of Stone-Geisser Q^2 in the blindfold procedure (ibid). If this metric of an indicator takes the value above 0, the predictive power for that indicator outperforms the naïve standard, which refers to the means of that indicator in the training sample (ibid). As can be seen from Table 5.6, all the Q^2_{predict} of the indicators are above the cut-off of 0, which means that in the revised model, the predictive power for all the indicators outperforms the naïve standard.

The next step is to compare the metric RMSE⁴ or MAE⁵ of PLS-SEM prediction with that of the naïve LM (linear regression model) standard (Shmueli et al., 2019). This standard refers to a benchmark in which the prediction is made by analysing the linear regression of the indicators of endogenous variables on the indicators of the exogenous variables (ibid). Because this benchmark ignores the structural and measurement model, the PLS-SEM prediction, which takes into account the structural and measurement model, should outperform the LM standard (ibid). The lower the value of RMSE (or MAE), the higher the predictive power of the model (ibid). Shmueli et al. (2019) recommended the use of RMSE in the case of symmetrically distributed prediction errors and the use of MAE in the other case. As the results from PLSpredict of the revised model display that the prediction errors are generally distributed symmetrically, RMSE is used to assess the predictive power of this model. One needs to check the RMSE of PLS-SEM to see if it is lower than the RMSE of LM standard. If none of the indicators meet this requirement, the predictive power is lacking (Shmueli et al., 2019). The model's predictive power is low, medium, and high if the minority, the majority, and all of the indicators respectively meet this requirement (ibid). Table 5.6 shows that the majority of the indicators of the endogenous variables in the revised model meet the requirement, therefore, in general, this model's predictive power is medium. Moreover, all the 5 indicators of the main endogenous variable, Preferred customer status, have RMSE above the RMSE of the LM standard. This means that the model is highly predictive of the indicators of the variable Preferred customer status.

⁴ The metric RMSE, also called root mean square error, measures the square root of the mean of the squared differences between the actual values and the predicted values (Shmueli et al., 2019).

⁵ MAE, also called mean absolute error, is the mean of absolute differences between the actual values and the predicted values (Shmueli et al., 2019).

Shmueli et al. (2019) suggested that model comparison in terms of model predictive power is possible and that researchers choose the model with lower RMSE (or MAE). As shown in Table 5.6, out of 26 indicators, the value of RMSE of 16 indicators (innovation potential is not an endogenous variable in the original model, therefore, it is not compared) of the revised model is lower than that of the original model. Thus, it is concluded that the revised model has higher predictive power than the original model.

		T			The original	
Indicators of endogenous		PLS-SEM	LM	PLS-SEM < LM	PLS-SEM	RMSE revised
variables	Q ² predict	RMSE	RMSE	standard RMSE	RMSE	original model
Growth opportunity 1	0.338	0.777	0.909	Yes	0.825	Yes
Growth opportunity 2	0.424	0.739	0.750	Yes	0.779	Yes
Growth opportunity 3	0.305	0.800	0.818	Yes	0.765	No
Innovation potential 1	0.373	0.786	0.751	No	N/A	N/A
Innovation potential 2	0.199	0.899	0.856	No	N/A	N/A
Operative excellence 1	0.075	0.977	0.972	No	0.979	Yes
Operative excellence 2	0.094	0.884	0.968	Yes	0.885	Yes
Operative excellence 3	0.115	0.939	0.883	No	0.936	No
Operative excellence 4	0.169	0.972	0.932	No	0.970	No
Preferred customer status 1	0.339	0.799	0.836	Yes	0.792	No
Preferred customer status 2	0.367	0.717	0.822	Yes	0.734	Yes
Preferred customer status 3	0.135	0.886	1.002	Yes	0.899	Yes
Preferred customer status 4	0.191	0.842	1.008	Yes	0.843	Yes
Preferred customer status 5	0.290	0.802	0.877	Yes	0.804	Yes
Preferential treatment 1	0.148	0.746	0.890	Yes	0.745	No
Preferential treatment 2	0.209	0.784	0.869	Yes	0.792	Yes
Preferential treatment 3	0.227	0.783	0.922	Yes	0.787	Yes
Preferential treatment 4	0.206	0.749	0.803	Yes	0.760	Yes
Preferential treatment 5	0.172	0.804	0.905	Yes	0.805	Yes
Relational behaviour 1	0.384	0.703	0.677	No	0.712	Yes
Relational behaviour 2	0.464	0.643	0.671	Yes	0.637	No
Relational behaviour 3	0.507	0.573	0.661	Yes	0.562	No
Relational behaviour 4	0.435	0.641	0.655	Yes	0.639	No
Relational behaviour 6	0.326	0.721	0.748	Yes	0.734	Yes
Supplier satisfaction 1	0.415	0.710	0.729	Yes	0.715	Yes
Supplier satisfaction 2	0.383	0.704	0.751	Yes	0.719	Yes
Supplier satisfaction 3	0.366	0.659	0.668	Yes	0.674	Yes
Supplier satisfaction 4	0.331	0.662	0.622	No	0.679	Yes

Table 5.6 Out of sample predictive power assessment

5.2.5 Comparison between two groups of suppliers, small and large suppliers

The last step of analysis is to examine whether observed heterogeneity exists, in other words, whether the responding suppliers' characteristics impact the structural paths in the revised inner model. The characteristic tested in this analysis is supplier's size in terms of revenue. This is because according to Krause et al. (1999)'s findings, small suppliers differ from large suppliers when it comes to their perception of the relational outcomes with the buying firms. First, from the dataset, two subgroups are generated and then tested to see whether they have a significant difference regarding the structural paths in the inner model. The first group includes suppliers with annual turnover below 100 millions EURO (110 observations) while the second one contains suppliers with annual turnover above 100 millions EURO (59 observations).

The second step is to conduct a test of measurement invariance with a procedure called measurement invariance of composite models, also known as MICOM (Garson, 2016). The aim of this procedure is to check the consistency of the measurement of outer model across data groups (ibid). Before testing whether structural paths in the inner model differ between subgroups, measurement invariance of outer model is necessary (ibid). This is because if measurement invariance is not established, it means that the measurement of constructs of the structural model is different across subgroups (ibid). And comparison of structural paths between subgroups becomes meaningless because the constructs of the structural model measure different things for different subgroups (ibid) and as a result, are not comparable between subgroups. In SmartPLS 3.0, MICOM is conducted as a part of the Permutation procedure (ibid). In the MICOM section, SmartPLS 3.0 reports two main stages i.e., MICOM 2 (compositional invariance) and MICOM 3 (scalar invariance) (ibid). If the Permutation pvalue reported in MICOM is insignificant, then measurement invariance is established (ibid). If both types of invariance are established, then this is the case of full measurement invariance (ibid). On the other hand, if only compositional invariance is established, then this is only partial measurement (ibid). In this research, both stages MICOM 2 and MICOM 3 reported insignificant p-value for all the latent variables, hence full measurement variance is assumed. With the establishment of measurement invariance, the comparison of structural paths between two subgroups becomes meaningful. The Permutation procedure is also used to compare the

two subgroups on inner model's path coefficient. Since the Permutation p-values are all insignificant (above the cut-off of 0.05), the results demonstrate that there is no significant difference between small suppliers and large suppliers (in terms of turnover) for the structural model. This means that there is no need to draw separate models for small and large suppliers.

6 **DISCUSSION**

Findings were discussed in-depth, meaning of statistical numbers were translated for common understanding. The findings were also compared against previous literature to see whether there is consistency or not.

6.1 Summary of the influential relationships between hypothesized antecedents and preferred customer status

The goal of the study is to replicate the research by Hüttinger et al. (2014) and Vos et al. (2016) with modification regarding the origin of the buyer company which is in Sweden to examine if the previous findings still stay the same despite this different context. Moreover, this study also broadens the scope of these two previous studies as it particularly put the goal of the research on the preferred customer status and discovered how hypothesized antecedents could impact the decision of supplier to award preferred customer status whether through direct or indirect way.

Although the relationship between preferred customer status and preferential treatment is not part of the research question, that this relation is proved to demonstrate one more time the benefits of obtaining preferred customer status, creating motivation for buyers in achieving this status. This finding is also consistent with previous literature.

Regarding the main focus of the research question, empirical findings of this study have shown not only which antecedents have a direct impact on preferred customer status, but also how other antecedents representing various characteristics or actions taken by buyers could impact preferred customer status. The relation between the antecedents and preferred customer status can be categorised as follows:

Antecedent with direct impact (first tier): supplier dependency, growth opportunity, supplier satisfaction, and cultural compatibility, in which the former two also pose an indirect impact on preferred customer status via other direct antecedents such as supplier dependency.

Antecedent with indirect impact through the first-tier antecedents (second tier): innovation potential, profitability, and relational behaviour.

Antecedent with indirect impact through the second-tier antecedents: supplier involvement, reliability, operative excellence, support of suppliers, and contact accessibility.

6.2 Growth opportunity

Growth opportunity has significant relationship with preferred customer status not only directly but also indirectly through supplier satisfaction. This is a new discovery as past literature only proved growth opportunity's significant influences on either supplier satisfaction or preferred customer status, yet not placing them in a triangle like in this study. Thus, ambiguous interpretation can be drawn from previous research on the role of growth opportunity, whether it has to increase supplier satisfaction level to achieve preferred customer status, or it can by itself increase the likelihood of preferred customer being awarded. This study has provided a clear answer to that.

Furthermore, the direct impact of growth opportunity on the preferred customer status is even stronger than its combined effect through supplier satisfaction. In Figure 5.2, coefficient of one construct to another is the number shown on the straight line connecting those two constructs. Coefficient value of growth opportunity to preferred customer status is 0.209. Its coefficient via supplier satisfaction is the product of its coefficient towards supplier satisfaction and the coefficient of supplier satisfaction towards preferred customer status, resulting in a value of (0.362 * 0.191) = 0.069, which is lower than the coefficient of the direct effect. The total effect of growth opportunity is the sum of its direct and indirect effect. Noticing this matter helps clarify further how the antecedents, not only growth opportunity, could orchestrate the buyer-supplier relationship which can be a satisfying one or a preferred one.

Growth opportunity also has supplier dependency and innovation potential which attribute to its value. The study also found that supplier involvement will positively impact innovation potential which is the chance for suppliers to expand product portfolio introduced to the market.

6.3 Supplier dependency

Supplier dependency was backed up by the literature on its influence on growth opportunity and preferred customer status, which has been statistically proven as well in this study. With the same coefficient calculation being applied, the direct effect of supplier dependency is stronger than the indirect effect channelled by growth opportunity, 0.239 vs 0.08 (=0.396 * 0.209). One should also notice that supplier dependency could also contribute to supplier satisfaction via growth opportunity with coefficient value of 0.143 (=0.396 * 0.362).

Although the direct impact of supplier dependency on supplier satisfaction is found to be insignificant in this study, this finding does not debunk the literature supporting the view that supplier dependency has a positive effect on supplier satisfaction. The reason for this is that supplier dependency has an indirect effect on supplier satisfaction through growth opportunity.

Together with growth opportunity, supplier dependency plays important role in achieving preferred customer status. Their direct effects to preferred customer status have slightly higher and comparable coefficient value to those of supplier satisfaction and cultural compatibility, respectively. Additionally, they could pose a compound influence to preferred customer status through supplier satisfaction, at the same time, improving the satisfaction level of the relationship.

6.4 Cultural compatibility

It is worth mentioning that cultural compatibility plays a crucial role in obtaining preferred customer status. This effect is not only demonstrated in this study but also agreed by past literature. Sub-questions for this construct provided a good understanding of this subject (Appendix 5). Based on the study's finding, the interpretation is that companies which share similarities or compatibilities in language, behaviour, and perception from aspects such as social, cultural, economic, political will likely prefer their relationship over others.

6.5 Supplier satisfaction

Supplier satisfaction was argued to be a necessary condition to achieve preferred customer status (Vos et al., 2016). This still stays true as reported from the empirical findings. Although its coefficient is slightly lower than other antecedents of the same tier, its important role toward securing preferred customer status cannot be denied. Buyers delivering unsatisfying performance can risk losing the relationship with suppliers (Nollet et al, 2012), which totally discards the likelihood of becoming preferred customers.

The model in Figure 5.2 offers recommendations on how supplier satisfaction could be acquired. Apart from growth opportunity and supplier dependency as mentioned earlier, profitability and relational behaviour directly impact supplier satisfaction, which is also supported by previous literature. Comparing two direct antecedents of supplier satisfaction, relational behaviour poses a higher impact with coefficient value of 0.337 than profitability of which coefficient is 0.191. Yet, relational behaviour carries much a bigger scope including reliability, operative excellence, support of suppliers, and contact accessibility.

7 CONCLUSION

The conclusion of the study was provided in this section. Managerial implications were also indicated, providing useful insights for practitioners. The contribution of the thesis to the research area was one more time claimed in the theoretical implication.

7.1 The answer to the research question

With the constant emergence of global events that potentially disrupt supply chain and the issue of scarce resources that inherently exist and could turn into major threats at any moment, achieving preferred customer status with its strategic suppliers become a crucial goal of any buyer. This thesis was set out to find the answer to which antecedents lead to the preferred customer status, however, was limited to the context in which the buyer is a Swedish-based automotive company, and suppliers are those supplying components to this company. By utilising findings of previous literature, antecedents were found and constructed into hypothesized model which was an improved version based on the one made by Vos et al. (2016).

Since the thesis aimed to contribute to the thread of preferred customer status topic which was initialised by Hüttinger et al. (2014) and continued Vos et al. (2016), the methodology approach in these two studies was adopted in this study. Survey as a data collecting tool and quantitative analysis were employed.

Growth opportunity, supplier dependency, supplier satisfaction, and cultural compatibility were found to equally impact the suppliers' decision to award the preferred customer status. Meanwhile, other antecedents such as economic-related like profitability, and noneconomic-related like relational behaviour indirectly increase the likelihood of preferred customer status being award through those direct antecedents. Moreover, a strong link between preferred customer status and preferential treatment was also demonstrated, which gives more reasons for buyers to acquire this coveted status.

7.2 Managerial implication

The findings of this study can be utilised in several pragmatic approaches. Firstly, since preferred customer status is found to have a positive impact on preferential treatment. In other

words, the intention, awarding preferred customer status, is translated into the action, preferential treatment. Since being preferred customer indeed yields benefits for buying firms, it is worth striving to become preferred customer status.

Second, since direct antecedents to preferred customer status were identified, they shall get sufficient attention by the buyers to promote them within the companies and the communication, interaction with the suppliers. It is recommended that buying firms first focus on the first-tier antecedents such as supplier satisfaction, growth opportunities, inter-organisational compatibility, and supplier dependence. By implementing proper strategies on these antecedents, buyers increase the chance of being preferred customer status and potentially gain competitive advantage thanks to the exclusive cooperation with competent suppliers. For example, a buying firm should understand its suppliers' organisational culture and promote and enhance the similarities/ fitting between the two organisational cultures or actively help its supplier to exploit new business opportunities.

However, it is not to say that a buying firm should strive to become preferred customer of its every supplier. As presented in the literature review – Corporate strategies towards preferred customer status, every relationship stage that a buying firm wants to reach with its supplier requires adequate attention and investment in some extent from its side. As the actions the buying firm needs to take to become a preferred customer status usually incurs cost or even involve risks, cost-benefit analysis should be conducted before engaging in the actions. Since a buying firm's resources are also scarce, it should prioritise to become a preferred customer of certain strategic suppliers. Not all the suppliers match the buyer's strategy in terms of resources and capabilities, thus, Pulles et al. (2009) suggested that before the step of becoming a preferred customer, the buying firm should conduct supplier segmentation. One example of how this segmentation can be done was also presented in Literature review – Corporate strategies towards preferred customer status. To briefly recap, the buying firm should have its categorisation based on the competitiveness of the suppliers and how favourable its relationship with the suppliers is.

Finally, although profitability significantly impacts supplier satisfaction and consequentially preferred customer status, other non-monetary antecedents apparently made much higher sway whether preferred customer status is awarded. Thus, cost-conscious buyers can still adopt other

means to preferred customers of targeted suppliers. This is positive information to automotive manufacturers since the automotive sector is perceived as the one with low margin (Dhingra, 2021).

7.3 Theoretical implication

Although this study replicates the methodology of previous research, it offered a more holistic view on the relationship among antecedents, supplier satisfaction, and preferred customer status. The antecedents which were suggested to impose influence on these two stages of buyer-supplier relationship by previous literature were considered for both possibilities of direct and indirect impacting preferred customer status. As a result, a better understanding of how individual antecedents create impact and the importance of their roles were manifested. Compared with the research by Hüttinger et al. (2014) in which the relationships between preferred customer status and two antecedents were shown, this study provided causal paths of a greater number of antecedents. As for the research by Vos et al. (2016), since the focus was on the supplier satisfaction, the role of the antecedents towards preferred customer status was reflected insufficiently.

To the best of the knowledge of the authors of this study, this is the first research on preferred customer status to study the effect of inter-organisational cultural compatibility and the mediation effect of supplier satisfaction on the relationship between growth opportunity and preferred customer status. Also, while this study is not the first one to test the effect of supplier dependency, this is first time that supplier dependency is included in the research on preferred customer status in the context of automotive sector. As a result, this study is a valued addition to the growing literature on the topic of preferred customer status. Besides, similar to the findings of the research of Vos et al. (2016), Praas (2016), and Goossen (2019), this research's findings support the causal relationship between supplier satisfaction and preferred customer status and between preferred customer status and preferential treatment and therefore, can be an additional source of empirical support of these relationships. Lastly, as the findings of this study align with SET theory, this further strengthens the fitting of this theory as the theoretical framework of the preferred customer status concept.

8 LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS

Limitations of the thesis were listed, and future research direction was suggested to compensate these limitations.

Limitations are unavoidable in this study. The first limitation relates to the generalisation of the findings. First, although the sample size is acceptable, it is still relatively low, especially for a complex model, which limits the findings' generalisation to the population. Second, non-response bias test failed at one variable, which means that non-response bias cannot be ruled out. This may be a negative signal of generalizing ability of the findings. Third, the respondents' contacts were found through one automotive company, thus, potentially making the result less representative. The majority of suppliers have plants or headquarters situated in Europe, hence, leading to a lack of variety in regions and consequently culture, geopolitics and as such existing dominantly in those regions. To mitigate this limitation, future research is called to develop hypotheses on the findings of this study but bringing more diversity regarding suppliers' background and increasing the representativeness of the findings. Fourth, the context of the study is the automotive industry. Therefore, the findings of this study may be industry-specific, and researcher and practitioners should take caution when applying the findings into the context of other industry that is not similar. Future research is encouraged to take the direction of studying the antecedents of preferred customer status in other industries.

The second limitation links to the social desirability bias. Social desirability bias is defined as the situation in which respondents' answers to the questions are consciously or unconsciously affected by their perceived social desirability (Bell et al., 2019). In other words, respondents are more likely to choose the answers that they deem socially desirable (ibid). Additionally, this bias is found to exist in research on managerial decision-making (ibid). Although the respondents in this research are kept anonymous and encouraged to answer the questions as honestly as possible, the social desirability bias cannot be ruled out.

Third, this research studies preferred customer status in a dyadic relationship. This means that suppliers are asked about one particular buyer but not in comparison with another buyer. Preferred customer status and supplier satisfaction are relative according to the SET theory, which means that alternative options (in this case, buyers) are necessary so that the buyer in the question can be compared with the other buyers. Because of this, in a sense, research in the context of a dyadic relationship can be considered flawed. Therefore, as Hüttinger et al. (2014) contended, future research should move beyond the dyad and explore the preferred customer status in a network context.

Lastly, it is possible that there are antecedents that have not been explored yet in the research on preferred customer status. This is supported by the finding that preferred customer status' R^2 adjusted value is weak. Future research, therefore, is encouraged to seek unexplored antecedents e.g., buyer's dependency, and test their effect on preferred customer status.

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APPENDICES

APPENDIX 1: Non-response bias test

Comparing first quartile and fourth quartile of the dataset, each quartile has 42 lines of input.

Group	Mean Difference	Std. Error Difference	t-value	Sig. (2- tailed)
Preference customer status 1	0.262	0.205	1.280	0.204
Preference customer status 2	0.095	0.188	0.506	0.614
Preference customer status 3	0.167	0.194	0.858	0.393
Preference customer status 4	-0.071	0.209	-0.341	0.734
Preference customer status 5	0.024	0.200	0.119	0.906
Preferential treatment 1	0.119	0.166	0.719	0.474
Preferential treatment 2	0.238	0.185	1.290	0.201
Preferential treatment 3	0.048	0.183	0.260	0.796
Preferential treatment 4	-0.095	0.182	-0.525	0.601
Preferential treatment 5	0.071	0.186	0.384	0.702
Supplier satisfaction 1	0.190	0.192	0.993	0.324
Supplier satisfaction 2	0.214	0.178	1.203	0.232
Supplier satisfaction 3	0.190	0.155	1.227	0.223
Supplier satisfaction 4	0.405	0.153	2.646	0.010
Growth opportunity 1	0.143	0.194	0.738	0.463
Growth opportunity 2	0.286	0.211	1.352	0.180
Growth opportunity 3	0.167	0.202	0.824	0.412
Innovation potential 1	0.095	0.221	0.431	0.667
Innovation potential 2	-0.048	0.218	-0.218	0.828
Innovation potential 3	0.095	0.212	0.449	0.655
Operation excellence 1	0.024	0.227	0.105	0.917
Operation excellence 2	0.190	0.196	0.972	0.334
Operation excellence 3	0.119	0.220	0.541	0.590
Operation excellence 4	0.190	0.240	0.794	0.429
Reliability 1	0.095	0.211	0.452	0.652
Reliability 2	0.095	0.224	0.426	0.671
Reliability 3	0.357	0.221	1.614	0.110
Reliability 4	0.333	0.214	1.560	0.123
Support of suppliers 1	0.190	0.206	0.925	0.358
Support of suppliers 2	0.214	0.212	1.009	0.316
Support of suppliers 3	0.214	0.209	1.024	0.309
Support of suppliers 4	0.095	0.207	0.461	0.646
Support of suppliers 5	0.095	0.201	0.474	0.636
Supplier involvement 1	0.214	0.205	1.048	0.298
Supplier involvement 2	0.190	0.218	0.872	0.386
Supplier involvement 3	0.071	0.211	0.338	0.736
Supplier involvement 4	0.214	0.197	1.090	0.279
Supplier involvement 5	0.000	0.213	0.000	1.000

Contact accessibility 1	-0.071	0.206	-0.347	0.729
Contact accessibility 2	-0.071	0.209	-0.341	0.734
Contact accessibility 3	-0.048	0.206	-0.232	0.817
Relational behaviour 1	-0.048	0.210	-0.226	0.821
Relational behaviour 2	0.262	0.196	1.337	0.185
Relational behaviour 3	0.000	0.192	0.000	1.000
Relational behaviour 4	-0.024	0.207	-0.115	0.909
Relational behaviour 5	0.143	0.209	0.682	0.497
Relational behaviour 6	0.000	0.212	0.000	1.000
Profitability 1	0.095	0.201	0.474	0.637
Profitability 2	0.048	0.211	0.226	0.822
Profitability 3	0.095	0.203	0.469	0.640
Dependence 1	0.119	0.192	0.620	0.537
Dependence 2	-0.190	0.212	-0.900	0.371
Dependence 3	-0.333	0.204	-1.634	0.106
Dependence 4	0.071	0.214	0.334	0.739
Dependence 5	0.024	0.238	0.100	0.921
Cultural compatibility 1	0.286	0.164	1.738	0.086
Cultural compatibility 2	0.286	0.149	1.913	0.059
Cultural compatibility 3	0.214	0.197	1.088	0.280
Cultural compatibility 4	0.238	0.185	1.287	0.202
Cultural compatibility 5	0.190	0.199	0.955	0.342

APPENDIX 2: Mahalanobis distance, multivariate outlier detection

Line	Mahalanobis	n vəlue
no.	distance	p value
72	114.1482	0.000
14	103.1419	0.000
99	103.0793	0.000
58	102.7204	0.000
67	100.146	0.001
48	98.63187	0.001
121	97.96366	0.001
59	97.21306	0.002
61	94.57136	0.002
145	94.368	0.002
52	94.06901	0.003
4	91.61498	0.004
106	91.40839	0.004
2	90.67754	0.005
130	90.26683	0.005
34	88.30777	0.008

107	87.9134	0.009
151	86.93766	0.01
64	86.60248	0.011
36	86.19664	0.012
55	86.04841	0.012
45	83.12723	0.021
78	81.74596	0.027
86	81.1993	0.029
104	81.18765	0.029
47	80.52124	0.033
103	79.84302	0.037
154	78.98384	0.042
57	78.16788	0.048
155	78.07285	0.049
41	77.2836	0.055
143	76.48464	0.063
110	76.40905	0.063
69	75.98487	0.068
146	75.88742	0.068
50	74.67214	0.082
5	74.65201	0.082
147	72.86236	0.106
132	72.35975	0.114
51	72.29686	0.115
33	72.28363	0.115
44	72.04289	0.119
29	71.35581	0.13
30	71.25886	0.132
89	70.96896	0.137
13	70.82164	0.139
16	70.08292	0.153
141	70.04831	0.154
138	69.9737	0.155
40	69.83085	0.158
49	69.77606	0.159
3	69.21407	0.171
125	68.80291	0.179
97	67.5203	0.209
21	67.18742	0.217
79	66.66314	0.23
133	66.49155	0.235

9	66.20166	0.242
76	66.07694	0.246
27	66.02202	0.247
111	65.79399	0.253
18	65.45148	0.263
93	65.35434	0.266
96	65.33665	0.266
159	65.10772	0.273
95	64.02094	0.305
12	63.23794	0.329
128	63.22324	0.33
77	63.16168	0.332
160	63.01009	0.336
142	61.97041	0.371
101	61.84073	0.375
140	61.61335	0.383
85	60.78977	0.411
105	60.3375	0.427
149	60.18545	0.433
42	60.07903	0.436
81	60.03815	0.438
15	59.7361	0.449
119	59.39958	0.461
124	59.31035	0.464
38	58.81387	0.482
75	58.1247	0.508
144	57.66354	0.525
90	57.3084	0.538
165	56.82196	0.556
127	56.54703	0.566
100	56.36981	0.573
156	55.72078	0.597
114	55.5619	0.603
24	55.31982	0.612
70	55.29723	0.613
8	55.0759	0.621
118	54.80847	0.631
43	54.50889	0.642
73	54.50012	0.642
91	54.35705	0.647
54	54.26555	0.65

153	53.18532	0.689
102	52.43436	0.714
157	52.28383	0.72
53	52.1948	0.723
120	52.1445	0.724
19	51.02905	0.76
6	50.90985	0.764
162	50.43334	0.779
82	50.27248	0.784
129	50.1786	0.786
135	49.95345	0.793
7	49.78665	0.798
26	49.26125	0.813
46	48.42928	0.835
39	47.45025	0.86
84	47.19414	0.866
22	46.99695	0.87
109	46.90005	0.872
126	46.71562	0.877
23	46.67882	0.877
62	46.36744	0.884
137	46.26999	0.886
71	46.04224	0.891
10	45.93477	0.893
139	44.92406	0.912
98	43.58341	0.934
32	43.22579	0.939
74	42.01136	0.954
94	41.79213	0.956
148	41.77076	0.956
1	41.71306	0.957
20	41.6008	0.958
123	41.20777	0.962
164	41.18881	0.962
92	39.92546	0.973
88	39.77936	0.974
80	39.20886	0.978
166	39.08476	0.979
87	38.11803	0.984
158	38.04145	0.985
25	37.94575	0.985

37.86671	0.985
37.64764	0.986
37.14967	0.988
36.24325	0.991
36.07075	0.992
35.36224	0.994
35.07126	0.994
34.00156	0.996
33.20112	0.997
33.15421	0.997
32.19644	0.998
31.293	0.999
30.16583	0.999
29.36999	1
28.63918	1
28.31186	1
28.08313	1
26.07865	1
25.44777	1
24.06113	1
23.82171	1
23.32367	1
22.5831	1
17.21692	1
16.01438	1
9.00025	1
9.00025	1
	37.86671 37.64764 37.14967 36.24325 36.07075 35.36224 35.07126 34.00156 33.20112 33.15421 32.19644 31.293 30.16583 29.36999 28.63918 28.31186 28.08313 26.07865 25.44777 24.06113 23.82171 23.32367 22.5831 17.21692 16.01438 9.00025 9.00025

APPENDIX 3: Result for PCA test before removing Innovation potential 3 and Relational behaviour 5

Rotated Component Matrix ^a														
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Preference													0.511	
status 1														
Preference customer status 2		0.585											0.524	
Preference customer status 3		0.542											0.621	

Preference												0.696	
customer													
status 4												0.000	
Preference												0.000	
status 5													
Preferential		0.794											
treatment 1													
Preferential		0.743											
treatment 2													
Preferential		0.728											
treatment 3		0.000				 							
Preferential		0.808											
Preferential		0.841				 							
treatment 5		0.011											
Supplier							0.558						
satisfaction 1													
Supplier							0.622						
satisfaction 2													
Supplier							0.743						
satisfaction 3							0.728						
supplier satisfaction 4							0.728						
Satisfaction 4						 				0.564			
Growth													
opportunity 1										0.544			
Growth										0.566			
opportunity 2													
Growth										0.716			
opportunity 3													
Innovation						 				0.470			
potential 1													
Innovation										0.584			
potential 2													
Innovation													
potential 3													
Operation											0.833		
Operation											0 798		
excellence 2											0.770		
Operation											0.593		
excellence 3													
Operation									0.566				
excellence 4													
Reliability 1			0.737										
Poliobility 2			0.739										
Kellability 2			0.017										
Reliability 3			0.817										
Reliability 4			0.848										
Renaointy 4					0.651								
Support of					0.651								
Support of					0.739	 							
suppliers 2													
Support of					0.751								
suppliers 3													
Support of					0.646								
suppliers 4					0.000								
Support of					0.688								
Supplier S				0.763		 							
involvement 1				0.705									
Supplier				0.854									
involvement 2													
Supplier				0.803									
involvement 3													

Supplier				0.686							
involvement 4				0.461							0.544
Supplier				0.461							0.544
Contact							0.828				
accessibility 1											
Contact							0.847				
accessibility 2							0.828				
accessibility 3							0.828				
Relational									0.599		
behaviour 1											
Relational									0.636		
behaviour 2									0.405		
Relational behaviour 3									0.495		
Relational								0.469			
behaviour 4											
Relational											
behaviour 5									0.400		
Relational									0.480		
Denaviour 0								0.726			
Profitability 1								 0.800			
Profitability 2								0.809			
Profitability 3								 0.394			
Dependence 1						0.547					
Dependence 2						0.590					0.497
Dependence 3						0.726					
Dependence 4						0.799					
Dependence 5						0.793					
Cultural	0.790										
compatibility 1	0.702										
Cultural compatibility 2	0.782										
Cultural	0.822										
compatibility 3											
Cultural	0.804										
Cultural	0.778					ł – –					
compatibility 5	0.770										
Extraction M	ethod:]	Princip	al Com	ponent	Analy	sis.	•	 •	•	 	
Rotation Me	thod: V	arimax	with F	Kaiser N	Vormal	ization.					
a. Rotation co	onverge	ed in 9 i	teratio	ns.							

APPENDIX 4: Result for PCA test after removing Innovation potential 3 and Relational behaviour 5

Rotated Component Matrix ^a														
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Preference customer													0.510	
status 1														

		0.500		1	1							0.501	
Preference		0.580										0.531	
customer													
status 2													
Preference		0.536										0.631	
customer													
status 3													
Preference												0 702	
austomar												0.702	
status 4												0.602	
Preference												0.603	
customer													
status 5													
Preferential		0.793											
treatment 1													
Preferential		0.742											
treatment 2													
Preferential		0.734											
treatment 3													
Desformation		0.808											
Preferential		0.808											
treatment 4		0.041											
Preferential		0.841											
treatment 5													
Supplier								0.553					
satisfaction 1													
Supplier								0.633					
satisfaction 2													
Supplier								0.753					
satisfaction 2								0.755					
								0.726					
Supplier								0.720					
satisfaction 4													
Growth										0.570			
opportunity 1													
										0.570			
Growth										0.570			
opportunity 2													
										0.722			
Growth										0.722			
opportunity 3													
Innovation										0 476			
notential 1										0.170			
Innovation										0.503			
Innovation										0.595			
potential 2									0.025				
Operation									0.835				
excellence 1													
Operation									0.790				
excellence 2													
Operation									0.621				
excellence 3													
Operation											0.515		
excellence 4													
D. R. L. W. A			0.737										
Reliability 1			0.757										
D -1:-1:1:4 0			0.739										
Reliability 2													
Reliability 3			0.819										
Rendomity 5													
Reliability 4			0.848										
Comment C					0.656				 				
Support of					0.030								
suppliers 1					0								
Support of					0.738								
suppliers 2	<u> </u>		<u> </u>				<u> </u>		 	<u> </u>	<u> </u>	<u> </u>	
Support of					0.753				 				
suppliers 3													
Support of					0.648								
suppliers 4													
Support of					0.687								
suppliers 5					0.007								
Suppliers J				0.762					 				
Supplier				0.762									
involvement l				1	1								

involvement 2	Supplier				0.856									
Suppler involvement 1 0.88 1 1 1 1 1 Suppler involvement 4 0.683 0.831 0 0 0.575 Suppler involvement 4 0.451 0.831 0 0 0.575 Suppler involvement 5 0.451 0.831 0 0 0 0.575 Contact accessibility 1 0 0 0.846 0 0 0 0 Contact accessibility 2 0 0 0.846 0 0 0 0 Relational behaviour 1 0 0 0.834 0 0 0.643 0 Relational behaviour 2 0 0 0 0.470 0 0 0 Relational behaviour 3 0 0 0 0.470 0 0 0 0 Relational behaviour 3 0 0 0 0.470 0 0 0 0 0 0 0 0 0 0 0	involvement 2				0.005									
Supplier Image: Contract of the second	Supplier involvement 3				0.805									
involvement 4 Image: Amage: Amag	Supplier				0.683									
Supplier involvement S Image: Su	involvement 4													
involvement 5 Image of the second secon	Supplier				0.451									0.575
Contact 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.831 0.836 0.836 0.836 0.836 0.836 0.833 0.835 0.835 0.835 0.835 0.835 0.835 0.835 0.835 <	involvement 5							0.001						
accessibility 1 0.846 0.958 0.956 0.959 0.951	Contact							0.831						
Contact accessibility 2 0.834 0.834 0.834 0.834 Relational behaviour 1 0.834 0.834 0.598 0.598 Relational behaviour 1 0.598 0.598 0.598 0.598 Relational behaviour 2 0.643 0.643 0.643 0.643 Relational behaviour 4 0.643 0.518 0.518 0.518 Relational behaviour 4 0.470 0.518 0.6456 0.6456 Relational behaviour 4 0.470 0.4566 0.6456 0.6456 Profitability 1 0 0 0.732 0 0.6456 Profitability 2 0 0 0.631 0.601 0 0.652 Profitability 3 0 0 0.553 0 0 0.562 Dependence 1 0 0.720 0 0 0 0 0 Dependence 5 0 0.799 0 0 0 0 0 0 0 Cultural compatibility 1	Contract							0.846						
Contact accessibility 3 Relational behaviour 1 0.834 0.834 0.598 Relational behaviour 2 0.643 0.598 Relational behaviour 2 0.643 0.643 Relational behaviour 3 0.643 0.643 Relational behaviour 4 0.643 0.643 Relational behaviour 4 0.643 0.643 Relational behaviour 4 0.643 0.643 Profitability 1 0.456 0.456 Profitability 2 0.815 0.456 Profitability 3 0.601 0.601 Dependence 1 0.533 0.601 Dependence 2 0.553 0.601 Dependence 3 0.720 0.601 Dependence 4 0.804 0.601 Dependence 5 0.739 0.601 Cultural compatibility 1 0.788 0.601 Cultural compatibility 2 0.805 0.601 Cultural compatibility 3 0.805 0.601 Cultural compatibility 3 0.805 0.601 Cultural compatibility 4 0.805 0.601 Cultural compatibility 5 0.805	accessibility 2							0.040						
accessibility 3 Image: Constraint of the sector of the	Contact							0.834						
Relational behaviour 1 Image: second se	accessibility 3													
behaviour 1 Image: Control of the control	Relational												0.598	
Relational 0.043 0.043 0.0518 0.0518 Relational 0.0470 0.518 0.518 0.518 Relational 0.0470 0.470 0.456 0.456 Relational 0.456 0.456 0.456 0.456 Relational 0.0470 0.456 0.456 0.456 Profitability 1 0 0 0.732 0 0 0.456 Profitability 2 0 0 0.511 0 0.601 0 0 0 Profitability 3 0 0 0.531 0 0 0 0 0 0 0 0.562 Dependence 1 0 0.503 0 0 0 0 0 0.562 Dependence 4 0 0.799 0 0 0 0 0 0 0 0 Cultural 0.788 0 0.799 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td< td=""><td>behaviour 1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	behaviour 1													
Dehaviour 2 Image: Constraint of the second se	Relational												0.643	
Neutonal behaviour 3 Image: Construction of the sector	Belational												0.518	
Belational behaviour 4 Image: Constraint of the second secon	hehaviour 3												0.510	
behaviour 4 I <thi< th=""> <thi< td=""><td>Relational</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.470</td><td></td><td></td><td></td><td> </td></thi<></thi<>	Relational									0.470				
Relational behaviour 6 Image: Marce Ma	behaviour 4													
behaviour 6 Image: Constraint of the sector of the sec	Relational												0.456	
Profitability 1 0 0 0.732 0 0 Profitability 2 0 0 0.815 0 0 Profitability 3 0 0 0.531 0.601 0 0 Dependence 1 0 0.531 0 0 0.601 0 0 Dependence 2 0 0 0.553 0 0 0 0.562 Dependence 3 0 0 0.720 0 0 0 0 0.562 Dependence 4 0 0 0.700 0 0 0 0 0.562 Dependence 5 0 0 0.804 0 <td< td=""><td>behaviour 6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	behaviour 6													
Profitability 2 Image: Sector of the sec	Profitability 1									0.732				
Profitability 3 Image: Constraint of the second	Profitability 2									0.815				
Dependence 1 0.531 0.531 0.601 0.562 Dependence 2 0 0.553 0.553 0.601 0.562 Dependence 3 0 0.720 0 0 0.562 Dependence 4 0 0.804 0 0 0 0 Dependence 5 0 0.799 0 0 0 0 Cultural 0.788 0.789 0 0 0 0 0 Cultural 0.785 0 0 0 0 0 0 0 0 0 Cultural 0.805 0	Profitability 3									0.601				
Dependence 2 0 0.553 0 0.562 Dependence 3 0 0.720 0 0 0 0 Dependence 4 0 0.804 0 0 0 0 0 Dependence 5 0 0 0.799 0 0 0 0 0 Cultural compatibility 1 0.788 0 0 0 0 0 0 0 0 Cultural compatibility 2 0.805 0	Dependence 1						0.531							
Dependence 3 0 0.720 0.804 0 0 0 0 Dependence 4 0 0.804 0	Dependence 2						0.553							0.562
Dependence 4	Dependence 3						0.720							
Dependence 5	Dependence 4						0.804							
Cultural 0.788 Image: Compatibility 1 Image: Compatibility 1 Image: Compatibility 2 Image: Compatibility 2 Image: Compatibility 2 Image: Compatibility 2 Image: Compatibility 3 Image: Compatibility 4 Image: Compatibility 4 Image: Compatibility 4 Image: Compatibility 4 Image: Compatibility 5 Image: Compatite compatite compatibility 5 Image: Compa	Dependence 5						0.799							
Cultural 0.785 Image: Compatibility 2 Image: Compatibility 2 Cultural 0.825 Image: Compatibility 3 Image: Compatibility 3 Cultural 0.805 Image: Compatibility 4 Image: Compatibility 4 Cultural 0.805 Image: Compatibility 4 Image: Compatibility 4 Cultural 0.780 Image: Compatibility 5 Image: Compatibility 5 Extraction Method: Principal Component Analysis. Image: Compatibility 4 Image: Compatibility 5 Extraction Method: Varimax with Kaiser Normalization. Image: Compatibility 4 Image: Compatibility 5 a. Rotation converged in 9 iterations. Image: Compatibility 5 Image: Compatibility 5	Cultural compatibility 1	0.788												
compatibility 2 0.825 0.825 0.805	Cultural	0.785												
Cultural compatibility 3 0.825 Image: Cultural compatibility 4 Image: Cultural compatibility 4 Image: Cultural compatibility 4 Image: Cultural compatibility 5 Image: Cultural component Analysis. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Image: Cultural compatibility 5 Image: Cultural component Analysis. a. Rotation converged in 9 iterations. Image: Cultural component Analysis. Image: Cultural component Analysis. Image: Cultural component Analysis.	compatibility 2													
compatibility 3 0.805	Cultural	0.825												
Cultural compatibility 4 0.805 Image: Cultural compatibility 4 Image: Cultural compatibility 5 Image: Cultural compatibili	compatibility 3													
compatibility 4 0.780 0.780 0.780 compatibility 5 0.780 0.780 0.780 Extraction Method: Principal Component Analysis. 0.780 0.780 Rotation Method: Varimax with Kaiser Normalization. 0.780 0.780 a. Rotation converged in 9 iterations. 0.780 0.780	Cultural	0.805												
Cultural compatibility 5 0.780 Compatibility 5 Image: Cultural component Analysis. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 9 iterations.	compatibility 4	0.780												
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 9 iterations.	compatibility 5	0.780												
Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 9 iterations.	Extraction M	ethod: 1	Principa	al Com	ponent	Analys	sis.							
a. Rotation converged in 9 iterations.	Rotation Method: Varimax with Kaiser Normalization.													
-	a. Rotation co	onverge	d in 9 i	teration	ns.									

APPENDIX 5: Questionnaire

Question	Strongly	y disagree	⇔	Strongly agree					
1. Preferred customer status, Schiele et al. (2011)									
In comparison with other customers in your company's portfolio,									
Volvo Group is your preferred customer.	0	0	0	0	0				
Volvo Group receives more attention and care from your company.	0	0	0	0	0				
Volvo Group gets preferential treatment.	0	0	0	0	0				
your company goes out on a limb for Volvo Group.	0	0	0	0	0				
--	--------------	--------------	----------	-----------	--------				
your company's employees prefer to collaborate with Volvo Group more.	0	0	0	0	0				
2. Preferential treatment, Pulles et al. (2016); Schiel	le et al. (2	011)							
Your company									
dedicates your company's most competent employees to work with Volvo Group	0	0	0	0	0				
communicate your company's best ideas, e.g., latest, most innovative to Volvo Group.	0	0	0	0	0				
dedicates a higher amount of financial recourse for Volvo Group.	0	0	0	0	0				
allocates the best working efficiency of your company's physical resources to Volvo Group.	0	0	0	0	0				
dedicates more of your company's intangible assets, e.g., know-how, expertise, with Volvo Group.	0	0	0	0	0				
3. Supplier satisfaction. Cannon and Perreault (199	9)								
To what extent do the following statements describe your company's relationship with Volvo Group?									
Your company is very generally satisfied with Volvo	0	0	0	0	0				
Group.	Ŭ	Ŭ	0	U	0				
Your company is overall very pleased to be business	0	0	0	0	0				
partner with Volvo Group.									
If your company had to choose again, Volvo Group	0	0	0	0	0				
Is still your company is not momentful shout the decision of									
cooperating with Volvo Group	0	0	0	0	0				
4 Growth opportunity Liu et al (2009)									
The relationship with Volvo Group									
provides your company with a prevalent market					_				
position within your company's field.	0	0	0	0	0				
is very crucial for your company regarding	0	0	\circ	\circ	0				
growth rates.	0	0	0	0	0				
enables your company to explore opportunities	0	0	0	0	0				
in new markets.	Ŭ	Ŭ	Ŭ	Ŭ	0				
5. Innovation potential, Goodale et al. (2011)									
To what extent do the following statements describe y	our comp	any's relati	onship w	ith Volvo	Group?				
In cooperating with Volvo Group, your company	0	0	0	0	0				
developed a great deal of new products.									
In cooperating with Volvo Group, your company	~	~	~	~	\sim				
could introduce to a great deal of new products to	0	0	0	0	0				
The speed of developing and introducing new									
products to market with Volvo Group is very high	0	0	0	0	0				
6. Operative excellence. Hüttinger et al (2014)	1	1	1	1					
Volvo Group									
has always provided accurate and timely	\sim				\sim				
forecasts for future demand.	0	0	0	0	0				

provides your company with forecasts which	0	<u> </u>	\sim		
your company can rely on and use.	0	0	0	0	0
applies simplified and clear internal processes for	0	0	0	0	0
your company			-		
aims for short decision-making processes	0	0	0	0	0
7. Reliability, Gundlach et al. (1995)					
In cooperating with your company, Volvo Group	1	1			
gave an utterly truthful portrait of the business	0	0	0	0	0
when negotiating.				-	-
always bargained from a goodwill perspective.	0	0	0	0	0
never violated agreements in either formal or	0	0	0	0	0
informal form for its benefits.	_	_	_	_	_
never changed facts so as to achieve its goals and	0	0	0	0	0
objectives.		-		-	
8. Support of suppliers, Ghijsen et al. (2010)					
Volvo Group	1	1			
cooperates with your company to improve your	0	0	0	0	0
company's manufacturing processes.	-	-		-	
shares with your company technological advice.	0	0	0	0	0
shares with your company advice on quality	0	0	0	0	0
related issues.	Ū	•	-	•	•
provides sufficient supports to help your			-		-
company solve urgent unexpected delivery and	0	0	0	0	0
capacity related issues					
provides your company's employees with	0	0	0	0	0
necessary trainings and education.		_	_	_	
9. Supplier involvement, Primo and Amundson (200	02), Explo	rative			
To what extent do the following statements describe	your comp	any's relat	tionship v	with this	
customer?	1	1	1	1	
Volvo Group involves your company in designing	0	0	0	0	0
and developing its products.					
Volvo Group let your company take part in early in	0	0	0	0	0
its new product development.					
Your company is highly active in projects of new	0	0	0	0	0
product development at volvo Group.					
It is a very close communication between Volvo	~	~	~	~	~
Group and your company regarding quality related	0	0	0	0	0
matters and design changes.					
Volvo Group invites your company's employees to	~	~	~	~	~
its site(s) to increase your company's awareness of	0	0	0	0	0
now your company's product is used.					
10. Contact accessibility, Walter (2003)					
I nere is a central contact within volvo Group who	•				
moderates activities connected your company	0	0	0	0	0
inside and outside of volvo Group.					
is the one that your company contact for	0	0	0	0	0
questions.					
communicates with volvo Group's employees	0	0	0	0	0
about the requests of your company.					

11. Relational behaviour, Palmatier et al. (2007); Griffith et al. (2006)							
To what extent do the following statements describe your company's relationship with Volvo							
Group?							
Issues are treated by Volvo Group as joint effort		0		\circ	\circ		
rather than one side's responsibilities.	0	U	U	U	0		
Volvo Group is engaged to improvements which							
may create benefits for both parties as a whole	0	0	0	0	0		
instead of for only itself.							
Your company and Volvo Group each yield benefits	0	0	0	\sim	\sim		
fairly from the efforts that each has put in.	0	0	0	0	0		
Your company usually receives fair share on either							
rewards or cost savings from your joint effort with	0	0	0	0	0		
Volvo Group.							
Volvo Group would willingly adjust to assist your							
company if there is occurrence of special problems	0	0	0	0	0		
or needs.							
Volvo Group is flexible in cooperating with your	~	0		0	0		
company.	0	0	0	0	0		
12. Profitability, Hald et al., 2009; Ramsay & Wagner (2009)							
The relationship between your company and Volvo Group							
helps your company to yield good margins.	0	0	0	0	0		
allows your company to get high profits.	0	0	0	0	0		
has a good influence on your company's							
profitability.	0	0	0	0	0		
13. Supplier's dependency, Ghijsen, Semeiin and Ernstson (2010)							
To what extent do the following statements describe your company's relationship with Volvo							
Group?							
Your company's relationship with Volvo Group is				_			
very vital to vour company's success.	0	0	0	0	0		
There are not many firms that gives your company	-	-	-	-	-		
comparable business to that of Volvo Group.	0	0	0	0	0		
Your company's overall cost of changing from							
Volvo Group to another company would be highly	0	0	0	0	0		
cost consuming	Ū	Ū	Ū	Ũ	Ũ		
It would be barsh for your company to substitute							
Volvo Group	0	0	0	0	0		
Your company depends on Volvo Group	0	0	0	0	0		
14 Cultural compatibility Nauven et al. (2020) Sh	ou et al ()	2018)	Ŭ	Ŭ	0		
Your company and Volvo Group	<i>ou ci ui</i> . (2	.010)					
have similar language prevalently used in the	0	0		0	0		
workplace and business context.	0	0	0	0	0		
share common understanding about the same	0	0	<u> </u>	0	0		
concepts.	0	0	0	0	0		
have similar behavioural rules and norms.	0	0	0	0	0		
share matched organizational values and culture.	0	0	0	0	0		
	\sim	•	U U	\cup	0		