Customer segmentation in business-to-business markets

The influence of a firm's market segmentation practices on its overall performance: An analysis of Dutch-located firms operating in metal industries.

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ABSTRACT

Since effective customer segmentation can enhance the overall performance of a business, marketers should put effort in the conceptualization of a well-structured segmentation model. The existing literature provide good guidelines for this and previous research has identified multiple models and variables which can be used while segmenting customers. However, both, the relevance and/or importance of these variables as well as the correct combination or sequence in which these variables should be used has not been researched yet. This study shows, based on the information gathered from five different companies, which previous defined variables in literature should be used by vendors operating in metal industries in order to segment their clients. The underlying assumption being used indicates that better customer segmentation leads to better market orientation and eventually to better overall business performance. Therefore, the company with the highest score on market orientation performance can be considered as most effective regarding customer segmentation practices. The findings show that company size, industry, product and brand-use, size of order, buyer-seller relationships and finally the purchasing function of an organization are the characteristics that should be used by marketers in exactly this sequence and combination in order to be most effective. Besides the investigation in the customer segmentation variables, this research investigated as well whether different segments receive different treatments or not. Findings of the research show that both economical aspects and relational aspects, which are both positively influencing supplier satisfaction, are important determiners in receiving preferred customer status.

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Keywords

Customer segmentation, market orientation, preferred customer, preferential treatment, B2B markets, company performance, benefits, status, segments

1. INTRODUCTION

In literature there appears to be a distinction between two types of market segmentation practices where most emphasis is put on segmenting customer markets rather than industrial markets. The latter can be examined from several distinct theoretical perspectives, that provide different lenses to examine segmentation practices. In this paper I apply two models developed by Wind & Cardozo (1974) and Bonoma & Shapiro (1984) – wherein the focus mainly will be on the latter. Wind & Cardozo (1974, p. 158) propose a model that describes customer segmentation in business-to-business markets – which can be defined as "a decision process that enables a firm to effectively allocate marketing resources to achieve business objectives" (Wind & Thomas, 1994, p. 95), as a two stage, micro-macro approach in which marketers first develop macrosegments and later on microsegments based on the needs of customers, while Bonoma & Shapiro (1984, p. 105) developed a similar model that describes market segmentation practices as a nested approach where marketers work from outside in to effectively divide their buyers into groups. Both models identify several variables or characteristics on which customers can be segmented. However, the relevance and/or importance of these variables is not been researched yet as is the same case for the correct combination or sequence in which they should be used by marketers to effectively divide the customers of a firm into groups. In this paper I will investigate the mentioned gap in research by searching among a handful of businesses operating in metal industries to find the optimal sequence of variables to identify the most effective segmentation practices for businesses operating in industrial markets. In order to measure the effectiveness of these practices, the market orientation performance as defined and elaborated by Jaworski & Kohli (1993) of a business can be used as a tool. The underlying assumption is that the better companies segment their markets, the better their market orientation, and eventually, the better their business performance. Businesses that show a high level of market orientation will therefore perform high quality, effective segmentation practices. By considering the sequence and importance of variables used by marketers of those firms, an appropriate model can be developed. The related research question being answered in this paper is stated as follows: *"How do market segmentation practices influence the level of market orientation, of a firm, in business-to-business markets?"*. Data that makes it possible to answer this question is gathered from a handful of companies. During a visit of approximately one hour I asked the companies' informants several questions in order to map their segmentation activities. These interview questions were established in collaboration with prof. dr. H. Schiele and dr. R.P.A. Loohuis, both working as professors at the University of Twente. After finishing the data collection phase of the research, transcripts have been coded in order to filter and mark useful information with the aim to draw conclusions backed by this empirical evidence, i.e. by observations from practice. Based on these findings in combination with the variables related to the customer segmentation theory as discussed by Wind & Cardozo (1977) and Bonoma & Shapiro (1984), eventually, a model displaying the most effective customer segmentation practices for businesses operating in industrial markets has been developed.

Besides the investigation in variables as described above, research concerning preferred customers is included in this study as well. Companies segmenting their customers can label one or some of them as preferred. This means that businesses offer buyer's labeled as such greater benefits from their resources and capabilities than those not labeled as preferred. By doing research on the influence of having preferred customers – and if so, on the basis of what variable or antecedent they are labeled as such, on the

market orientation will provide useful information to create modules for businesses to improve their overall performance.

2. LITERATURE REVIEW

There is a large amount of literature available about customer segmentation. However, most of this literature focuses on segmenting customer markets rather than industrial markets. The cause for this, as argued by Bonoma & Shapiro (1984), derives from the explanation that segmenting the former is much simpler and easier than segmenting the latter. Despite this fact there are a couple of approaches available on how to effectively segment customers in business-to-business markets that can assist companies in several areas including: market analysis, key markets selection and marketing management. As indicated by Palmer & Miller (2004, p. 780), markets can be segmented using criteria such as product usage (Nakip, 1999), market behavior (Dibb & Simkin, 1994), an understanding of customer needs (Albert, 2003), and a psychographic approach to give insight into motivations, attitudes and values (File & Prince, 1996). In addition to customer and market-based criteria it has also been proposed that segmentation can be based around the variables of the strategy of the firm (Verhallen et al., 1998) or the strategy put in place by competitors (Sollner & Rese, 2001). However, the two models that predominate in literature are the ones developed by Wind & Cardozo (1974) and Bonoma & Shapiro (1984) which provide good guidelines for industrial marketers to effectively segment their customers. By going after segments instead of the whole market, vendors will have a much better chance to deliver value to consumers and to receive maximum rewards due to close attention to consumer needs. In addition, research shows that the concept of preferred customers is integrated in businesses' segmentation activities, which identifies its need for attention in order to create a comprehensive, coherent and complete overview of the related literature. In the following chapter, a systematic review of the mentioned literature on customer segmentation in industrial markets is provided. On top of that, the concept of preferential treatment classes is also elaborated. Furthermore, this chapter focusses on theory about market orientation performance as a measurement tool for the effectiveness of market segmentation practices in companies as well.

2.1 Two-stage approach

Wind & Cardozo (1974, p. 156) propose a two-stage, hierarchical approach to segment industrial markets. The approach provides, due to initial screening of organizations and selection of macrosegments, potentially attractive market opportunities. This is been done based on characteristics of the buying organization and the buying situation. The first stage involves the actual formation of macrosegments and the second stage is about dividing those macrosegments on the basis of so called 'decision-making units' characteristics'. More in debt, a marketer may start using a variety of organizational characteristics to form macrosegments. These characteristics or variables can be used singly or in combination to do so. For this, Wind & Cardozo (1974) identified key variables such as: *the size of the buying firm, the rate of use and application of a particular product, the end market served by the customer and its organizational structure, location and type of purchase (new versus repeat purchase)*. Once marketers have developed a set of appropriate macrosegments, they can continue performing actions described in the next stage; dividing the macrosegments into relevant microsegments, or small groups of companies. These shall be formed on the bases of similarities and/or differences among characteristics of decision-making units within each macrosegment. Variables that might be considered in order to do so contain: *the position in authority and communications*

networks of a firm, personal characteristics such as demographics and personality, perceived importance of a purchase, attitudes towards vendors, decision rules and the relative importance of specific determinants of buying decisions. Wind & Cardozo (1974, p. 158) conclude on their approach by explaining that the art of market segmentation involves choosing the appropriate bases for segmenting markets. In order to do so, marketers have to include in the output of the industrial segmentation model a key dependent variable on which customers should be assigned to segments based on the particular marketing problem the manager wishes to solve. Wind & Cardozo (1974, p. 157) expand this statement by making clear that the output should include besides a key dependent characteristic a set of independent variables as well to make marketers' market segmentation practices as effective and valuable as possible. These descriptors of the segment will help marketers predicting where along the key dependent variable a certain collection of potential customers may lie and provide a greater insight into the key characteristics of the segment (Wind & Cardozo, 1974, p. 157).

2.2 Nested approach

In their research paper on How to Segment Industrial Markets, which builds on previous schemes for segmenting industrial markets, including the principals of the macro-micro model developed by Wind & Cardozo (1974), Bonoma & Shapiro (1984, p. 104) expand their statement about the lack of emphasis in literature on segmenting industrial markets by mentioning and clarifying that the main problem for the sketched situation has to do with identifying relevant segmentation bases and the corresponding variables for customer segmenting in business-to-business markets. In order to reduce this problem industrial marketers face, Bonoma & Shapiro (1984) have identified five general segmentation criteria, arranged as a nested hierarchy. They propose a combination of hard, industry-wide data with soft, customer-specific data in order to incorporate a range of variables into segmentation practice. In practice, these conceptual bases underlie the main variables that are used in business-to-business segmentation: industry sector, product type, and buyer characteristics and will therefore be used as the common thread in this research paper (Palmer & Miller, 2004, p. 779). While segmenting, an industrial marketer should move from the outermost nest, containing general, easily observable characteristics about industries and businesses, towards the innermost nest, consisting of more specific, subtle, hard-to-assess traits. However, it may not be necessary or even desirable for a marketer to make use of every stage. It is possible to skip the irrelevant criteria, but building an industrial marketing segmentation approach on for instance, data of the outermost nest only – which many companies do, is not the most effective way of segmenting markets and leaves possibilities unused. In the next subsections, each of the five criteria will be individually explained which makes the approach as a whole more clear. These segmentation bases are a useful mental construct but not a clean framework of independent units because in the complex reality of industrial markets, criteria are interrelated. The criteria that are identified, arranged from outer nest toward the inner nest are: demographics, operating variables, customer purchasing approaches, situational factors, and personal characteristics.

2.2.1 Demographics

The outermost nest contains the most general criteria and is the area easiest to asses. These criteria are called "demographics". The three variables included – industry, company size and customer location, give a broad description of the company and can be determined without actually visiting the customer. The first described variable is *the industry*. This characteristic is for some companies an important basis to segment their markets on. Especially for those businesses focusing on and delivering to a wide range of industries. Since customers of different industries differ in terms of product and service needs, industrial marketers may wish to subdivide individual industries and create a more detailed scheme representing the several market segments. The second variable is about the *size of the company*. Market segmentation might be affected by company size. For instance, large companies justify and require specialized programs, which makes them not suitable for some (smaller) firms to do business with since they do not have sophisticated resources in order to serve them in a good way. The last variable included in this nest is *customer location* which is an important variable in decisions related to deployment and organization of sales staff. Some companies need to be located on places close to where customers are concentrated. Especially for those who operate in an industry where proximity and continual availability is a requirement this can be vital (Bonoma & Shapiro, 1984, p. 105).

2.2.2 Operating variables

The second nest, which is a bit more complex than the previous one, contains a variety of segmentation criteria identified as "operating variables". Within the demographics base, these variables enable more specific identification of customers, both the existing and potential ones. The operating variables include company technology, product and brand-use status and customer capabilities. By tracking down a *company's technology* which involves either the firm's product or its manufacturing process, it can tell something about companies' requirements for test gear, tooling and components making it to a certain extent possible to identify a customer's buying needs. This information helps determining an appropriate and structured segmentation scheme for industrial marketers. The next variable that is described in this segmentation nest is about *product and brand-use status*. By looking at this variable markets can be relatively easy segmented, because users of a particular product or brand generally have some characteristics in common which makes them distinguishable. It can be useful as well to segment customers by looking at whether they buy from the company or from its competitors. Also the identity of a business' competitors might be worth considering while segmenting industrial markets, since competitors that are known to be weak in certain respects have customers who might be considered as prospective and can therefore form (in potential) a new market segment. The last variable covered in this segmentation base comprises *customer capabilities*. Every company has its own particular needs when it comes to purchasing. For instance, customers who are not capable of performing mandatory quality-control tests on their purchased products probably want to pay the supplier to perform these tests for them. Besides this, segmenting based on this variable covers also the aspect of dividing customers on their financial strength. Segmenting based on this variable creates opportunities to increase a company's market share and, hence, is worth investigating for marketers (Bonoma & Shapiro, 1984, p. 106).

2.2.3 Purchasing approaches

The third and middle-segmentation nest, which is according to Bonoma & Shapiro (1984, p. 107) one of the most neglected but valuable methods of segmenting a business-to-business market is described with the umbrella term 'consumer's purchasing approaches'. The variables covered by this criteria include customers' formal organization of its purchasing function, power structures, nature of its buyer-seller relationships, the purchasing criteria and its general purchasing policies. A firm's purchasing unit's size and operation is to some extent determined by the *purchasing function* which determines to some extent the size

and operation of a company's purchasing unit. The second variable described, contains information on an organization's *power structure*. Purchasing approaches and decisions are often affected by the varying impact of influential business units; the power structure. The next variable is about *buyer-seller relationships*. This variable is very clear and speaks for itself. Based on the fact that suppliers have stronger ties with some customers than others a marketer can perform segmentation practices. The *general purchasing policies* characteristic, which is the next variable being described, is about segmenting customers based on their preference for the way of doing business. Whether the customer requires capital leasing, service contracts, systems purchases rather than individual components and whether they want to do business by applying sealed bidding or negotiating from a market-based price is something that needs to be asked by a vendor's marketer in order to create a segment. The *purchasing criteria* is the last characteristic mentioned and is affected by all the variables included in this nest. In the industrial market, consideration of the criteria used to make purchases and the application for these purchases approximate the benefit segmentation approach. It is, in fact, a matter of segmentation based on whether a customer is seeking for quality, service or price (Bonoma & Shapiro, 1984, p. 107).

2.2.4 Situational factors

The focus of the approach in the former three nests have been on grouping of customer companies. Having done this, Bonoma & Shapiro (1984) now start looking at and considering the role of the purchase situation. In the first instance, this criteria seems to be a duplication of the second nest, the operating variables. However, the included variables of the situational factors segmentation base are temporary and require a more detailed knowledge of the customer. These variables are defined as the urgency of order fulfillment, product application and the size of order. The first mentioned characteristic, the *urgency of order fulfillment* is about dividing customers based on the degree of urgency of product delivery or service. For a vendor's marketer it is for instance worthwhile to make a distinction between customers who use their products for routine-work, for the construction of new buildings or for emergency replacements. In the end this will help them to develop a focused marketing-manufacturing approach. The second variable described in this nest pertains *product application*. Every resource/equipment used by a customer has different requirements depending on e.g. if it is used intermittent or continuous. Therefore this characteristic has a significant impact on the purchase process and purchase criteria influencing the supplier selection as well. The last variable that belongs to the situational factors criterion for segmenting industrial markets is about the *size of order*. Companies might make a distinction between customers based on the order form. Some customers only order items with large unit volumes, while others request for small-quantity, short run items. Marketers can besides this, also differentiate orders in terms of product uses as well as users, which is an important distinction since the users may do business with other suppliers in order to get the same product in case circumstance differ (Bonoma & Shapiro, 1984, p. 108).

2.2.5 Personal characteristics

This is the smallest, innermost nest which contains specific, subtle hard-to-asses variables. Purchasing decisions made by marketers are somehow influenced by their personal believes and experiences, although the choices they make may be constrained by the existing organizational framework of companies as well as their policies and needs. Bonoma & Shapiro (1984, p. 108) state that marketers for industrial goods can segment markets according to the individuals involved in a purchase in terms of

similarities between buyers and sellers, the former's motivation, perceptions of individuals and strategies concerning risk-management.

The hierarchical structure approach, moving from the outer to the inner nests, is easy to use. Marketers can run through the whole set of criteria and identify important factors that otherwise might be neglected and they can balance between reliance on the easily acquired data of the outer nests and the detailed analyses of the inner nests (Bonoma & Shapiro, 1984, p. 109).

2.3 Preferred customer

Schiele et al. (2011) argue as cited by Vos et al. (2016, p. 4613) that buyers should view the supplier as a key source of competitive advantage and innovation and try to achieve preferred customer status. Since privileged access to the best suppliers provides the firm with competitive advantages, a logical consequence is that preferred customers should outperform their competitors (Schiele et al., 2012, p. 1194). This indicates why all buyers should strive to obtain the preferred status. However, it is not the customer who decides on themselves whether or not they receive such a status. It are the suppliers that have the choice to do so. Therefore the question that emerges in this context is about what makes a supplier decide to assign a preferred status to a certain customer and provide them with preferential treatment (Vos et al., 2016, p. 4613). As stated by Schiele et al. (2012, p. 1194) this can be supplier satisfaction. Supplier satisfaction can be explained by the buyer's ability to live up to the expectations of the supplier and the relationship between the buyer and supplier influences this satisfaction as is explained by Forker & Stannack (2000, p. 37). They elaborate that associations will be more effective if the parties involved, i.e. the buyers and suppliers, sense that the value they provide is compensated with equal value received. Such shared understandings comprise the basic assumptions required for any relationship to succeed. This given, the customer should keep in mind that supplier satisfaction is only the outcome of meeting vendors' expectations and that customer attractiveness is necessary for a supplier to initiate or intensify an exchange relationship. When the supplier is more satisfied with particular customers than with others, the former will be awarded preferred customer status and enjoy the associated benefits. Considering this view on preferential treatment, the three constructs, customer attractiveness, supplier satisfaction and preferred customer status, must be analyzed in an integrative manner .(Schiele et al, 2012, p. 1194). A visualization of this process can be found in figure 1 of the appendix. As stated before, the status of the relationship is the influencer of supplier satisfaction. Research done by Hüttinger et al. (2014) supports theoretical assumptions that the relational behavior and atmosphere in buyer-supplier relationships are important antecedents to supplier satisfaction. The results of this study have shown that three antecedents are significantly influencing the supplier satisfaction (in a positive way). Those three antecedents are growth opportunity, reliability and relational behavior (Vos et al., 2016, p. 4614). However, there should be placed a comment here. Findings of the study done by Vos et al. (2016, p. 4621) in addition to the research by Hüttinger et al. (2014) in order to replicate and extend this research and provide a more fine-grained picture of the antecedent and consequences of supplier satisfaction has shown that the relational behavior antecedent should be excluded as an influencer of supplier satisfaction in the event of indirect procurement since the positive impact of this antecedent is only significant in the context of direct procurement. Besides the relational antecedents, Geyskens et al. (1999), Nyaga et al. (2010, p. 105) and some more researchers studying channel relationships argue that satisfaction with a relationship may be in

addition to noneconomic terms, i.e. positive affective response to psychosocial aspects such as good interaction, respect, and willingness to exchange ideas, also be defined in economic terms, i.e. economic rewards arising from the relationship such as increased sales volume and profits. Vos et al. (2016, p. 4621) elaborate on this by suggesting that both economical and relational aspects explain similar variance in supplier satisfaction and should therefore both be considered regarding the concept of preferential treatment classes. Concluding, the antecedents that are influencing the supplier satisfaction and as a result the assessment of a supplier whether or not to assign a customer a preferred status as well, are growth opportunity, reliability, relational behavior and profitability. In case customers are labelled as preferred indicates according to Vos et al. (2016, p. 4613) that these buyers are perceived as attractive by the supplier and that they do satisfy the vendor better than that alternative clients are doing. As a consequence of this satisfaction, a supplier reacts by providing privileged resource allocation to this preferred customer. In other words, suppliers who are very satisfied with a buyer have a higher tendency to give the buying firm preferred status and ultimately treat the client better than its competitors (Vos et al., 2016, p. 4621).

2.4 Market orientation performance

Kohli et al. (1993, p. 477) defined market orientation as the "organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across department, and organizationwide responsiveness to it". An additional research done by them, in which the link between a market orientation and business performance is hypothesized, provides significant evidence that the market orientation of a business is an important determinant of its performance. In other words, as stated by Narver & Slater (1990, p. 32), a firm that increases its market orientation will improve its market performance. This is supported by the underlying assumption that organizations that are market-oriented, i.e. the ones that can better satisfy (potential) customers by tracking and responding to their needs and preferences eventually perform at a higher level. As such, it appears that managers should strive to improve the market orientation of their businesses in their efforts to attain higher business performance (Jaworski & Kohli, 1993, p. 54). Putting the underlying assumption besides the belief about business-to-business market segmentation as stated by Thomas (2012) and supported by both marketing academics and practitioners, some conclusions can be drawn. The belief as stated by Thomas (2012, p. 182) views segmentation practices as activities in which marketers segment a market into groups of customers whose needs – in this case seen as a selection of variables that provide the basis for customers' division into segments – are similar within each group and different between the groups. By shaping different offerings for those various segments, rather than by providing the same offering to the whole market, firms can extract more profit (Thomas, 2012, p. 182). Since market segmentation is about dividing customers into groups based on a selection of variables; the needs, and market orientation performance about satisfying (potential) customers by tracking and responding to those needs, market orientation performance can be used as a tool to measure how effective companies segment their industrial markets. According to the theory explained above, the assumption as displayed in figure 2 can be drawn.
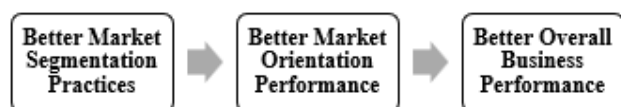
Figure 2. Relation between customer segmentation practices and a firm's performance.

3. METHODOLOGY

This research involved a multiple case study, which is according to Yin (1994) as cited by Vohra (2014, p. 55) a strong base for theory building. He emphasized that using multiple cases strengthens the results by replicating the patterns thereby increasing the robustness of the findings. In this case study, I used several Dutch-located companies operating in metal industries to empirically investigate the importance and combination/sequence of variables used in effective customer segmentation practices in business-to-business markets operating in this industry. However, each of those corporations hold a different position in the market; they hold different seats on the 'metal industry table', i.e. they perform different activities. Two of the companies are in nature 'real' producers of steal, while the third business is only a trader of metals – in particular a trader of steel. Besides that, among the selected businesses are also two producers that make use of metals, generally steel, in their production process. They use steel as raw materials to develop and produce the by the customer desired end-products. Since the firms who meet the last mentioned company description also operate in the metal industry, they are selected as well in order to elaborate on the customer segmentation practices of companies operating in this specific market. Starting from here, I refer in this research paper to the particular companies as company V to Z. Company V and W belong to the first kind of businesses described above. Company X and Z are covered by the last mentioned description of the selected businesses for this research and company Y is the steel trading company. Besides data covered by or included in company policies or similar documents, also processes related to segmentation practices, market orientation and preferred customers, that were not included in the company's policy but unknowingly, without being aware of it, performed or been thought of by the businesses' informants were obtained and interpreted as valid practices. Furthermore, this case study allowed to make use of combined data collections. Transcripts, semi-structured interviews and surveys were used. Each company representative filled in the same survey and was asked the same set of questions during the interview. However, the follow-up questions or probes asked during the last mentioned data collection method to eventually retrieve the required information differed depending on what the interviewee said.

I have chosen to make use of semi-structured interviews for multiple reasons. First of all, this study focused on the importance and right combination of variables used related to segmentation practices which has not been researched yet. The best way to investigate this gap in research was to look at practice and not so much on existing literature. However, the latter could give a detailed description of what segmentation criteria might be used and what activities were involved. Besides information about segmentation practices, also data concerning preferred customer classifications could be derived from existing literature. This certainly helped preparing questions for the interview covering both aspects of my research. In collaboration with prof. dr. H. Schiele, dr. R.P.A. Loohuis and seven other bachelor International Business Administration students of the University of Twente we decided – based upon the literature – about a framework of questions we all should use as a guideline during the interviews. This interview protocol can be found in the appendix. Secondly, semi-structured interviews would be most satisfying to use in terms of being flexible in the use of question and/or word order, clarifying the ambiguities interviewees faced and – where necessary, leaving out questions. This open data collection framework made it possible to create a situation of two-way communication necessary to obtain the desired information during an interview.

3.1 Sampled interviews and surveys

This research focuses on non-financial companies operating in metal industries. Interviews and surveys were carried out at five different businesses (N = 5) whereby in two cases the company's owner was the interviewee and in the remaining situations, an employee working on the sales department was interviewed. All the interviews were conducted with one informant except the interview with company W. There I sat with two sales employees around the table who were both sharing information. In case of this research, non-probability sampling is much more appropriate to use than probability sampling since the characteristics of only one unit of analysis are described at a time. The representatives of the concerning businesses can be considered industry experts since they know a lot about the firm's segmentation practices and her preferred customer model, which makes it appropriate to extensively interview them only. The informants were besides the unit of observations during the interviews, also the ones who filled out the market orientation survey. In total, I collected information during five interviews and via five conducted surveys.

3.2 Data collection

During my research I collected data pertaining three different topics in literature. Those topics – which are already mentioned and explained earlier in this research paper, contain customer segmentation practices, market orientation and preferred customer treatment classes of businesses. Besides the already existing market orientation questions conducted in survey format, I integrated the interview questions in such a way that both customer segmentation and preferred customer questions were asked in order to obtain the needed information from the interviews. Before asking questions related to that, I also asked some general questions (e.g., "What are the activities the company essentially performs?" or "What is the turnover of your business, approximately?"). In the first place to create a more 'relaxed climate' during the interview – these questions are easier to answer by the company delegates than in-dept segmentation and preferred customer questions – that in the end would lead to better, more complete answers to the specific questions related to the aim of this study. Secondary, the answers on those questions could comprise company information that helped creating a more specific overall-picture of the concerning businesses. An overview of all questions asked during the several interviews can be found in the appendix. To measure the businesses' market orientation performance, a survey developed by Jaworski & Kohli (1993, p. 56) consisting of a 32-item scale is used. Ten of these items relate to market intelligence generation, eight to intelligence dissemination and the remaining fourteen to business level responsiveness. Last mentioned category can besides the first division be subdivided in response design – the extent to which an organization's development of plans is in response to market intelligence, and in response implementation which embraces the actual implementation of these developed plans (Jaworski & Kohli, 1993, p. 54). Each item was scored on a 5-point scale, ranging from "strongly disagree" to "strongly agree". An overview of the statements included in the survey can be found in the appendix.

3.3 Study's trustworthiness

Since this study is considered qualitative considering the criteria described by Malhotra et al. (2017, p. 71), it's trustworthiness can be referred to as validity and reliability. However, qualitative research does not subscribe certain instruments with established metrics about validity and reliability. Therefore it is relevant to point out the credibility, transferability, confirmability and dependability of this study's measurements (Guba & Lincoln, 1985, p. 219). In order to do so, several steps have been undertaken. First of all, during this research semi-structured interviews that are obtrusive and verbal in nature have been used. To cope with the risk of social desirability (e.g. giving answers that are in favor of the company but not in line with the actual performed activities and therefore not true) that comes with the obtrusive nature of this data collection method, I structured the interview questions in such a way that the businesses' informants had to answer the same questions several times. They had to answer them in the same context or in relation to other questions about different variables. This indicates that the alternate-form method has been used in order to minimize or eliminate falsehoods shared by informants about segmentation and preferred customer practices which eventually increased the study's reliability. In addition to minimizing the risk of social desirability, I created a setting in which the interviews were conducted whereby the company's informant was separated from his colleagues and, in case the informant was not the manager/director himself, I also separated the informants from them, which allowed the individuals to speak up freely. Second of all, to make sure the information shared by the interviewees was interpreted correct, I made use of follow-up questions and probes. By practicing these 'tools' while conducting interviews in combination with the alternate-form method secured the outputs quality with a limited number of industry experts sharing data. The probes being used differed during every interview depending on the answers given by the companies' informants. Some of these probes were used deliberately, but others appeared to be there while transcribing the interviews. The latter is another relevant activity that contributed to the trustworthiness of this research. Data about segmentation practices and preferential treatment classes, collected via interviews, have been transcribed and coded before the results were analyzed. Regarding the survey, several items were reverse-scored in order to minimize response set bias. This applied to question number 4 and 9 of the intelligence generation and question number 7 and 8 of the intelligence dissemination component. Regarding the statements pertaining business level responsiveness, the reverse-scored items were question number 1, 3, 5 and 7 of the first described component (response design) and question number 3 and 4 of the second subgroup (response implementation) (Kohli et al., 1993, p. 476). These specific questions are denoted with a * in table 1 to 5 of the appendix.

3.4 Data analysis

The qualitative data obtained during the interviews needs to be coded before it can be analyzed. In order to do so the five step analysis of LeCompte (2000) is used. The model identifies the following five steps:

1. Tidying up data
2. Finding items
3. Creating stable sets of items
4. Creating patterns
5. Assembling structures.

Tidying up data during this research was about arranging data in a way that contributed in making a preliminary assessment of the set of data. In this study copies of all the collected data were made and besides that, all data were placed into a file named Audio Interview in order of their dates of creation. Moreover, other files were created based on the type of data. In case of this research, among others the file Elaborations Company Visits was created where the transcriptions of the interviews and the market orientation surveys were assigned to. Next to this, the signed informed consent forms of all the businesses were assigned to a file named Signed Papers Companies. The Elaborations Company Visits file was divided into two different boxes. The

first box is called Interviews and the second one is called Surveys. In these boxes each document is labelled based on the name of the company. To complete the first step in this model, the collected data was constantly compared to the research questions in order to find out if any data was missing.

Finding items by sifting and sorting data sets is the second step taken in the data analysis process. This was done by repeatedly reading through the transcripts of the semi-structured interviews in order to identify all items relevant to the research question. These items can be defined as the specific findings in data sets that are coded and assembled into the results of a research. The search practices to items in the collected data, involved a systematic process of looking for omissions, frequency and declaration. Since the variables or characteristics on which customers can be segmented and put into preferential treatment classes were already described in existing literature, the items were relatively easy to be found.

In line with the description of LeCompte (2012), I organized the items that were found in the previous step into groups and categories by comparing and contrasting and mixing and matching them, with the purpose to create several, different taxonomies divided per company consisting of items that are similar or do have similarities which makes them go together. The items became in case of segmentation practices the practices that can be related to a certain variable or characteristic and the taxonomies were the segmentation bases, the variables itself. In case of the topic preferred customer other items and taxonomies were defined. The items became reasons why customers are selected as preferred and the practices related to how a company treats its customers in a specific preferred treatment class. The taxonomies were the different preferred treatment classes itself (e.g. A, B or C customers). For further analysis Atlas.ti was used, which is a qualitative data analysis & research software in which items can be described as codes and taxonomies as code groups.

During step four of the data analysis process, patterns were created between the collection of taxonomies. This activity involved clumping together the several taxonomies in a meaningful way which is a matter of reassembling taxonomies as such so an eloquent, coherent explanation or description on how a specific company segments its customers and divide them into preferential treatment classes can be recognized. In this part of the process I explicitly was searching for analogies between the items which made it possible to cluster taxonomies or to create a sequence/combination of them describing the segmentation process of a company and whether the different segments receive different treatments or not in step five. In order to create an all-encompassing picture, every sentence out of the five company interview transcripts assigned to a specific item – or code in terms of Atlast.ti, that was closely related to a segmentation practice based on a specific variable has been analyzed.

In the final, structural stage, the formed groups of patterns that are related or linked were assembled and taken together to build an comprehensive explanation which helped to describe the importance and combination of variables used in customer segmentation practices in business-to-business markets and its assigned preferential treatment classes as a whole. In order to create a clear overview of the assembling of structures, I developed for each company a scheme displaying their segmentation practices. These schemes can be found in figure 3 to 7 in the appendix and are provided with additional information in the results part of this paper.

An indication of a businesses' market orientation performance was determined by equally weighting and adding the scores given by the company's informant. As a result, the market orientation score was the unweighted sum of the three components of market intelligence generation, intelligence dissemination and business level responsiveness (Jaworski & Kohli, 1993, pp. 60). The higher the total score on market orientation, the better it's customer segmentation practices are suggested. An overview of the computed scores, both a total sore as well as a score for each of the three components individually, can be found in table 1 to 5 in the appendix.

4. RESULTS
In the following chapter the findings pertaining customer segmentation practices in business-to-business markets and the integration of the preferred customer concept regarding these practices of Dutch-located businesses operating in metal industries are described for each company individually whereby the variables and antecedents described in the literature part of this study are applied. Furthermore, this section contains information on the companies' market orientation performance.

4.1.1 Findings company V
Company V does not have an official document in which their customer segmentation model or preferential treatment classes are established. Despite the fact that these models are not visible, unwittingly they do apply several segmentation activities in order to differentiate between their customers. While doing so, the concerning employees make use of data included in the company's database (e.g. specific location of a customer's headquarter) or data obtained from third parties (e.g. credit-rating services) containing information on the customers financial position. The first variable company V is focusing on in order to divide their customers into different segments is the *customer location*. As mentioned by the businesses' informant, company V delivers mainly products and service to clients located in the Netherlands. However, sometimes they also serve mandators based in foreign countries although we have to place a comment here that in these cases there usually is a link with the company's domestic network. After having made this first distinction, the business classifies its customers based on their solvency. As stated by Bonoma & Shapiro (1984, p. 107) is the aspect of dividing customers on their financial strength a building block of the *customer capabilities* characteristic and can therefore be concluded that company V uses this variable as the second one in their customer segmentation activities. Via the credit-rating service Creditsafe, a customer is or will be assessed before doing business with them. If the client's financial position is considered healthy, there is no problem, but if turns out that a customer has an insufficient or limited amount of capital in possession, it will be treated different. In that case company V creates a payment schedule that needs to be respected by the customer or they need to deliver a bank guarantee first in order to proceed doing business. The third step in the customer segmentation approach of the company is about segmenting based on the *buyer-seller relationships*. The status of this relationship is made up of experiences in doing business with a certain customer from the past. According to the interviewee, a client that grants you the possibility to work on a project based on a positive relationship status is treated different in terms of service than a customer that is always acting annoying and demanding bottom prices. Depending on the market conditions company V decides whether or not they are willing to collaborate on a project with clients out of the last mentioned category where experience from the past has shown that whole projects were nothing but trouble. The final characteristic being used in the companies segmentation approach pertains the *urgency of order fulfillment*. A limited

number of contractors are known for the fact that they request on regular base for products that need to be produced and delivered in a short time span. Therefore, company V segments its customers based on the reputation of regularly requesting for urgency orders into two different categories; the first category representing customers that do frequently requests for a rush orders and the second one representing those who, overall, (almost) never do. For the former category, the company reserves time in its planning and space in its labor capacity. So whenever one of those customers rings the bell, they can (immediately) be served. These clients are preferred by the company since they can get higher prices for projects with high urgency of order fulfillment than for a project being sold for a price as a result of competition. A representation of the customer segmentation activities of company V can be found in figure 3 of the appendix.

The concept of preferred customer is clearly related to the segmentation activities of the company. The company makes a distinction between customer segments in terms of providing service to the clients belonging to a certain segment. Those clients having a positive buyer-seller relationship with company V get offered better and faster service than those companies whose relation with the company is not of such a high level. Since company V deals with direct procurement, this can easily be linked to the relational behavior antecedent of supplier satisfaction as is stated by Vos et al. (2016, p. 4621). Besides whether businesses have strong or weak ties with the company, also market share is an important determiner in awarding a customer with a preferred status yes or no, which indicates preferential treatment on the base of economic aspects as described by Vos et al. (2016, p. 4614). The percentage of company V's total sales, that is represented by a single customer is an indication for the company to decide on whether to give them a preferential treatment in terms of service delivery. Furthermore, company V distinguishes on the price a customer is willing to pay for its products, which has similarities with offering different levels of service to clients based on market share. In this case, the company applies the concept "whoever pays most, gets the best service!" as quoted by the informant.

The company's overall score on market orientation is 113 there where it was possible to obtain a maximum of 160 points. Dividing this score by the 32-item scale means that company V has an average score of 3.5. As can be seen in table 1 of the appendix, the company scored best on the response implementation questions with an average score of 4.14, which indicates that their best market orientation activities pertain the actual implementation of developed plans in response to market intelligence (Jaworski & Kohli, 1993, p. 59).

4.1.2 Findings company W
Company W does in contrast to company V have an official document describing their segmentation practices. However, this document contains information on making a distinction between the kind of project instead of customers. According to the company's informant these project- and customer segmentation activities are two different tendencies, but they are closely related to each other and therefore can their project segmentation model also be used in order to describe their customer segmentation practices. In addition to the recorded practices, the business also applies several segmentation activities that are not described on paper or are performed unwittingly in order to differentiate between their customers. Besides the segmentation model, which can be found in figure 4 of the appendix, company W also has a description of the preferential treatment classes included in their sales plan. The first variable company W makes use of to distinguish between their customers is the *Industry*. The

business' marketers divide their clients into several segments based on the market they are operating in. Company W's segments are named: Non-residential constructions, Industrial constructions and Turnkey projects. Within these customer segments the company creates other small segments based on the kind of project required by the client, but this distinction is made on project level rather than on customer level and therefore can be left out of the customer segmentation analysis of company W since there are no companies operating in only one of these 'project segments'. However, the distinction between the several markets served by company W can be made because customers operating in one of these particular markets will never file an application related to another market. After having segmented the clients based on the industry they are operating in, the company focuses on the *size of order* in combination with the *company size* to make a second distinction between its customers. As stated by the informant, the company does not have large contractors in their database working on small projects, or the other way around. For the last mentioned group of contractors the case is that they do not even make it to company W's customer base if they are too small to work on projects from a certain size. The segments created during this step of the segmentation model are divided in big volume projects, medium volume projects and smaller volume projects. Furthermore the company uses the *buyer-seller relationships* variable pertaining segmenting activities. Based on experiences from collaborations in the past the customers are divided whereby the company makes a distinction between professional structured companies having appropriate employees on their workforce being able to work on complex projects and those companies who have shown that they are not capable of executing certain projects, causing all kind of problems. The last characteristic being used by company W is about the *personal characteristics* of purchase decision makers of customers in order to create another segment. By looking at e.g. contractors doing construction work, the company has discovered a pattern of customers that are usually trying to shift all problems faced on the project location towards company W, even if it can impossibly be a mistake of the company. To map those customers, the business has made a final distinction between those clients having employees on their workforce showing zero tolerance for risk and who are walking away from their responsibilities regarding their jobs.

The concept of preferred customer does have a significant role in the segmenting process of company W. The company divides its clients in three different treatment classes named: A-customers, B-customers and C-customers. A-customers are the returning clients seeking for cooperation at least once a year or those having a contract with the company. Besides that, A-customers do have a positive relation with company W and they do value the service and knowledge offered to them. On the other side of the table the company has its C-customers. These clients are considered more traditional and always seeking for bottom prices, trying to shift problems towards someone else and are not completely being honest. This indicates that company W assigns their customers to different preferential classes based on the relational aspects of supplier satisfaction as is explained by Vos et al. (2016, p. 4614). The differences in treatment between customers assigned to different classes are diverse. The basic principle is that the company puts more effort in project work related to A rated customers rather than to those rated as C. B-customers are somewhere in the middle depending on type of project they are working on. Furthermore, in case a client is labelled as A-customer, not all delivered service is put on the invoice. Besides that, they get preferential treatment in case the company has limited capacity available, but a surplus in requests for products and service. In that case, A-customers will be served

and the companies of other treatment classes not – or only if there is a free spot left. Moreover, company W does consider to deliver products and services related to a project which the company normally does not execute in case a preferred customer requests it, but if it was a C-customer who filed the order, the company would swipe it directly of the table.

The company's overall score on market orientation is 115 out of the possible 160 points that could be obtained. As can be found in table 2 of the appendix, the company scored best on the intelligence generation, response design and implementation questions with an average score of 3.9. Company W scored respectively low on the intelligence dissemination questions with an average score of 2.8, which indicates that there is especially room for market orientation improvement in the section that measures the dissemination of the market intelligence pertaining to current and future customer needs across departments (Kohli et al., 1993, p. 468).

4.1.3 Findings company X
Company X does not rely on an official document wherein they have completely elaborated the customer segmentation model the company is using. However, the first step in their segmentation approach is recorded by them. The steps further taken by them in this approach are performed unwittingly and therefore not described in e.g. a sales plan, which is the same for the division of their customers in preferred treatment classes. The first customer distinction being made by company X is based on the *industry* its clients are operating in. The company serves currently six market sectors whereby they mainly focus on three sectors representing the biggest part of the net sales named: Crane hire, Heavy transport and Construction. The remaining sectors are the Industry, Offshore and Earthmoving. Besides this first distinction, the company also segments its clients based on the time it takes before a payment is received after the moment goods and service are delivered and based on that they created two other segments. One containing customers paying invoices in a short timeframe and one consisting of clients paying invoices on the last day, or just after the payment term. As stated by the informant, they have to segment their clients based on this character in order to survive. The variable that can be linked to this step in the segmentation process of company X as described by Bonoma & Shapiro (1984, p. 5) is called *customer capabilities*. This character covers among others the aspect of segmenting customers by using financial data about them, which the company in this phase of the process is actually doing. Instead of using credit-rating services in order to gather financial data about (potential) customers like company V is doing, company W has gathered information on the payment structure of its clients over the years themselves. The business created a datafile consisting of its customers' payment structure and on the base of this data, they distinguish between their customers and place each of them in one of the the two segments explained above. The third and last variable playing a significant role in the segmentation practices of the company is the *buyer-seller relationships*. The corporation makes a distinction between the buyers of its products and services by considering the current relationship it has with a specific client. The status of this relationship – is it considered good or is it bad – between the company and the customer are established based on experiences in the past as is the same for the customer capabilities character described by Bonoma & Shapiro (1984, p. 5). Except from past experiences, current contact with a client's manager or employees is a determining factor of the relationship status assessment of company X as well. Based on this assessment, the company separates their customers into two different boxes. The first box contains customers assessed as holding a good

relationship with the company. Clients that have been assigned to the second box are considered the opposite. An overview of the segmentation activities of company X can be found in figure 5 of the appendix.

The concept of preferred customer is clearly related to the segmentation practices of company X. Those clients who have a positive relationship with the company are considered as preferred. In case of company X it comes forward that these preferred clients consist of the companies located in the surrounding area of its own headquarter, but especially, it are the clients that are annually responsible for the majority of sales which can be subscribed to the profitability antecedent of supplier satisfaction being an important determiner related to the preferred customer concept (Vos et al., 2016, p. 4621). Company X's main focus is on the last mentioned group of preferred clients which are offered discounts on the products and services delivered by the company in order to keep them satisfied. The company's main goal to achieve by assigning them a percentage discount is to make sure doing business with them will be on continues base, i.e. to ensure they become repeat or return customers and not go along with competitors. The former group of preferred clients mentioned, the customers assigned to the first box, are treated with free service so now and then based on friendship, but isn't a 'real' category they focus on regarding the preferred customer concept.

The company's overall score on market orientation is 96 there were it was possible to obtain a maximum of 160 points. Dividing this score by the 32-item scale means that company X has an average score of 3.0. As can be seen in table 3 of the appendix, there appears to be a remarkable difference between the scores on the responsiveness questions – response design and response implementation and the intelligence generation and dissemination questions. The company scored high on the former mentioned category of questions with an average score of 3.79 which indicates that the action taken in response to intelligence that is generated and disseminated is of a decent level. On the market orientation intelligence questions company X scored below average with a score of 2.36, which indicates that there is especially room for market orientation improvement in the sections where activities related to the collection and assessment of both customer needs/preferences and the forces (i.e., task and macro environments) that influence the development and refinement of those needs, as well as the process and extent of market information exchange within a given organization are performed (Kohli et al., 1993, p. 468).

4.1.4 Findings company Y
Company Y does have an official document they use while segmenting their customers. However, this document can only be used during one phase of the segmentation process since it describes only the step of dividing customers based on the industry they are operating in. In addition to this recorded practice, the business also applies several segmentation activities that are not described on paper and/or are performed unwittingly in order to differentiate between their customers. Furthermore, besides a segmentation model, which can be found in figure 6 of the appendix, company Y has included a description of the preferential treatment classes in their sales plan. In this scheme, the company refers to their preferred customers as 'budget customers' which they offer discounts based on their metal consumption on an annual basis. The first variable company Y is focusing on in their segmentation practices is *company size*. Based on this character the company determines whether or not certain prospective customers are appropriate to serve. According to the informant, the company does not try to lure

customers from competitors known as 'big boys' operating in the metal industry. These kind of customers are too large for them to approach because their volume requirements exceed company Y's own production/product processing capacity. After having made this first distinction about which (prospective) companies to serve, the business classifies its customers based on *the industry* they are operating in. The several industries wherein their clients are being active are recorded in a document called 'overview customer groups'. The created groups that are mainly being served are called Construction, Bodywork, Machine factories, Agriculture, Metalworking and Government institutions. Customers of the company are assigned to one of these groups, but there are exceptions; some clients are assigned to not further defined industries that are responsible for a smaller part of the company's annual revenue. The third step in the customer segmentation approach of the company is about segmenting based on its clients' *product and brand-use*. Company Y has several materials in their catalogue they can deliver and each client has different needs for these products. Based on their greatest need the company assigns them to a different segment. "Is the customer a big steel consumer or does he purchases more stainless steel or aluminum?" is the kind of question company Y's marketers ask themselves in this particular phase of the process. After having made this distinction, the company's focus shift towards the *size of order* in the next step of their segmentation practices. Company Y looks at the order size in terms of a client's annual consumption which is denominated in kilos of a certain metal or in euros. The penultimate variable being used is the *buyer-seller relationships*. The company distinguishes between clients that are considered having positive, close ties with and customers holding a less-positive or negative relationship with. The status of this relationship is made up of experiences in doing business with a certain customer from the past. According to the informant, a client that appreciates the high level of service the firm is offering and who is also willing to pay for that service instead of demanding bottom prices is considered a 'good client' and belongs to the first mentioned category. In case something goes wrong with the products or its delivery (e.g. the products got damaged), those clients are treated different, i.e. they will get compensated in a better manner than those customers that are destroying the market by always demanding bottom prices and whining that there is something wrong with the delivered products. These customers are considered 'bad clients' and are assigned to the other box. The final variable playing a significant role in the customer segmentation process of company Y is the *purchasing function*. Some of the company's clients are affiliated with a certain purchasing association. Those clients join forces and together handle a centralized purchasing approach while other clients purchase just by themselves. Besides this distinction, there are multiple customers who demand for a permanent contact person within company Y, so they can communicate in case of procurement or when facing problems/difficulties always with the same person. Company Y has organized this in a way that most of their clients – and in particular their 'good clients' got assigned to one employee of the business working on both back and front office or two employees communicating on such a high level that they know all the ins and outs of the certain customer. In this case are (almost) all the customers assigned to one or two employees of the firm and based on this division the customers are segmented.

The concept of preferred customer is clearly interwoven in the segmentation practices of the business. Especially in the phases of the process related to the variables product and brand-use and size of order. As stated before, company Y refers to their customers holding a preferred status as their 'budget customers'.

These clients are assigned to a specific 'discount group' based on the size of the company, the amount of a specific material a customer mainly consumes and the market share a particular client takes for his account on annual base. In total company Y created three discount groups namely: General customer, Customer with high level of pipes consumption and reasonable steel, and Customer with high level of steel consumption and reasonable pipes. All three groups consist of six scales, representing an amount of market share a specific customer is responsible for annually, denominated in euros. Once a customer is assigned to one of the six scales in a particular discount group corresponding with his market share and material use, it will indicate the amount of discount the client receives in euros – depending on the product/material (e.g. plates, stainless steel, bright steel, etc.), for every hundred kilogram purchased. The principle company Y applies is: the larger a customer's market share, the higher its discount will be. Therefore, it indicates that the profitability antecedent as described by Vos et al. (2016, p. 4621) is an important determiner in the preferred customer concept of company Y. Besides these recorded preferential treatment classes, the company applies some other activities related to the preferred customer concept. Most of these activities are related to the buyer-seller relationship variable used in the customer segmentation process. The clients having an excellent understanding with the company will be offered better service and the firm will strive to continue meet their needs which can easily be linked to the relational behavior antecedent of supplier satisfaction.

The company's overall score on market orientation is 123 there were it was possible to obtain a maximum of 160 points. Dividing this score by the 32-item scale means that company Y has an average score of 3.84. As can be seen in table 4 of the appendix, the firm does not score below the average of 3.0 on either one of the four question categories pertaining market orientation. This indicates that their overall market orientation performance is of a decent level. However, comparing the scores of all the four categories, the score on the intelligence dissemination (3.38) is more than 0.5 point lower that the average of the other three categories. This indicates that in order to optimize the company's market orientation – which is already of a decent level, company Y's main focus should be on the section that measures the dissemination of the market intelligence pertaining to current and future customer needs across departments (Kohli et al., 1993, p. 468).

4.1.5 Findings company Z
Company Z does have an official document they use while segmenting their customers. However, this document can, similar to company Y, only be used during one phase of the segmentation process since it describes only the step of dividing customers based on the industry they are operating in. In addition to this recorded practice, the business also applies several segmentation activities that are not described on paper and/or are performed unwittingly in order to differentiate between their customers. Furthermore, besides a segmentation model, which can be found in figure 7 of the appendix, company Z has included a description of the preferential treatment classes in their sales plan. In this scheme, the company assigns their customers to one of the four created boxes based on their annual market share. The bigger the client's market share, the higher the percentage discount will be. Box one captures the clients who are entitled to a thirty percent discount, box two those receiving twenty-five percent discount and to the last two boxes are clients assigned that get respectively twenty and ten percent discount. First of all, it is good to make notice of the fact that the customers of company Z are all dealers instead of end-users. The firm starts

the segmentation process by focusing on a combination of two different variables as described by Bonoma & Shapiro (1984). This concerns the variables *industry* and *product and brand-use*. Company Z produces three different types of products namely: blockcutters, pipe grinders and pipe notchers which are being sold in complete different markets. Blockcutters are sold to construction machine dealers and the last two mentioned products are sold to dealers that operate in the metal industry or deliver to punching apparatuses. This indicates that the company makes the first customer division into two segments based on a combination of two characteristics; the industry being served determines which product the company sells and the products being sold determine which industry is served. Furthermore, company Z segments its customers on the *rate of use of a particular product*. This variable is described by Wind & Cardozo (1974, p. 157) and being used by the business in order to distinguish the clients based on their activity regarding the sale of the companies developed products. As stated by the informant, company Z knows exactly which customers are advertising in catalogues or online and those who are showing and promoting the products on trade fairs. In the end these activities will lead towards more sales and therefore the clients who are actively selling the products have a bigger market share in company's Z annual revenue than those who do not. Since this is the case, this segmentation step based on the rate of use of a particular product as defined by Wind and Cardozo, can easily be linked to the variable *size of order* as defined by Bonoma & Shapiro (1984, p. 6). In the last phase of company Z's segmentation practices the focus is on the variable *buyer-seller relationships*. In addition to the previous used variable, the business is checking on their customers as well. They are searching on social media for pictures of clients' boots on fairs and if it turns out that they do not show and promote their products in a decent manner, this has a negative influence on their relationship status. Besides that, the communication with the client is a factor that determines the relationship status as well and is made up of experiences in doing business with the customer from the past. Those clients with whom the company has an intensive cooperation are therefore divided into two different segments. One containing customers holding a negative or less-positive relationship with and the other one consisting of clients holding a positive relationship with.

The concept of preferred customer is clearly interwoven in the segmentation practices of the business. Especially in the second phase of the process related to the size of order characteristic. The customers taking account for a high percentage of company Z's total annual revenue, i.e. those purchasing annually most products, are considered preferred, which captures the fact that profitability is an important determiner for company Z regarding customer satisfaction (Vos et al., 2016, 4621). The firm has created a top-10 ranking representing the ten best clients in terms of market share. All of these clients belong to the first developed discount group rewarded with a thirty percent discount. As stated before, the firm has created four discount groups where customers can be assigned to. The larger a customer's market share, the higher the client will be classified in the discount system. Box A represents the strongly preferred customers, box B the preferred customers, box C the somewhat preferred customers, and so on. The firm is more willing to meet preferred customers' demands and needs and if there are not enough products in stock to serve all clients, the preferred customers will be served and the companies assigned to less preferred treatment classes not. Besides these recorded preferential treatment classes, the company applies some other activities related to the preferred customer concept. Most of these activities are related to the buyer-seller relationship variable used in the customer

segmentation process and can therefore be linked to the relational aspects of customer satisfaction as well..

The company's overall score on market orientation is 97 there where it was possible to obtain a maximum of 160 points. Dividing this score by the 32-item scale means that company Z has an average score of 3.03. As can be seen in table 5 of the appendix, the company scored exactly 3.0 on average on the intelligence generation, intelligence dissemination and response design questions, which indicates that their market orientation activities or neither considered good nor bad since a score of 3.0 is exactly in the middle of the 5-point scale being used to get an indication of the company's market orientation. However, a score of 3.0 indicates that there are clearly opportunities to improve the company's performance.

4.2 Result analysis

The aim of this research is to identify the relevance and/or importance of the in existing literature mentioned variables pertaining customer segmentation as well as the correct combination or sequence in which these variables should be used. The outcome provides guidelines for marketers of businesses operating in metal industries on how to segment their customers in the most effective and efficient way. By elaborating the current segmentation practices and measuring the market orientation performance of company V to Z, an indication of the best segmentation model can be provided. As explained in the literature section of this study, better customer segmentation leads to better market orientation and eventually, to better overall business performance. Therefore, the customer segmentation practices of the company with the highest score on market orientation can be considered as 'the best model' to apply for businesses operating in metal industries. In case of this research it turned out that company Y obtained the highest score on market orientation of all companies participating in this study meaning that their segmentation model can serve as an example for other businesses. With a total score of 123 and an average score of 3.84 for each questioned item in the survey, they outperformed the other companies on market orientation (table 6 appendix). Company Y's customer segmentation model can be found in figure 6 of the appendix. Reviewing this model, it is possible to identify the relevant variables that should be used in customer segmentation practices for companies operating in metal industries. It concerns the following characteristics: *company size, industry, product and brand-use, size of order, buyer-seller relationships* and finally the *purchasing function* of an organization. These variables should be used exactly in this specific sequence and combination in order to effectively segment customers and eventually, improve the business' overall performance.

5. IMPLICATIONS
5.1 Implications and future research direction

Besides the fact that the findings of this study show an optimal segmentation model for marketers to apply, which self-contained already is an practical implication, the study identifies two more implications that can be considered both practical and theoretical. Bonoma & Shapiro (1984) described that marketers should work from the outermost nest towards the innermost nest while segmenting their customers. However, empirical evidence from this research has shown that the most effective segmentation model for businesses does not follow this specific order. This paper extends the existing research by addressing that it is possible to use the variables included in a certain nest interchangeably, meaning that the prescribed sequence of criteria is not the optimal model for marketers to use to segment customers. Only the first steps of the segmentation process turned

out to be similar as in Bonoma & Shapiro's nested approach is described. Following the outcomes of this paper, a marketer should start looking at the demographics and operating variables criteria. Having finished these steps in the segmentation process, marketers should rely on the situational factors criteria instead of the by Bonoma & Shapiro (1984) prescribed purchasing approaches criteria, because the latter has to be used in the final step of the segmentation practices after the variables of the other nests have been used. Secondly, besides indicating that the change of sequence in which the nest and variables should be used differs from existing literature, this research identifies a pattern which can be discovered in table 7 of the appendix. Disregarding the neglectable differences between the scores of company V and W and company X and Z on market orientation (table 6 appendix), this research shows that the higher the company's score on market orientation, the more variables they use in their segmentation process. Therefore can be concluded that the more variables being used, the more optimal its segmentation model is and that therefore marketers should identify as many sensemaking characteristics as possible. However, a comment has to be placed here since this research shows limited information. There is no information gathered about a company that uses a model containing more than six variables like the considered most effective customer segmentation model in this research does. So, for now, there needs to be concluded that the more variables being used, up to six, the more optimal its segmentation model is considered. In future research this limitation should be solved due to expanding the sample size of companies which will probably allow to conclude on the maximum and optimal number of variables being used. In addition, the study has faced another limitation. Due to the slightly different positioning in the market of the participating businesses, the variations in segmentation practices and dealing with the preferred customer concept might – to a certain extent, be explained by this variation. Therefore, future research should assess the exact difference between these companies in order to eliminate the affected information caused by the variance in market positioning. Finally, with only a sample-size of one for each company individually regarding the market orientation survey, the results are vulnerable for bias. Accordingly, future studies should mitigate the bias by increasing the sample-size.

6. ACKNOWLEDGMENTS

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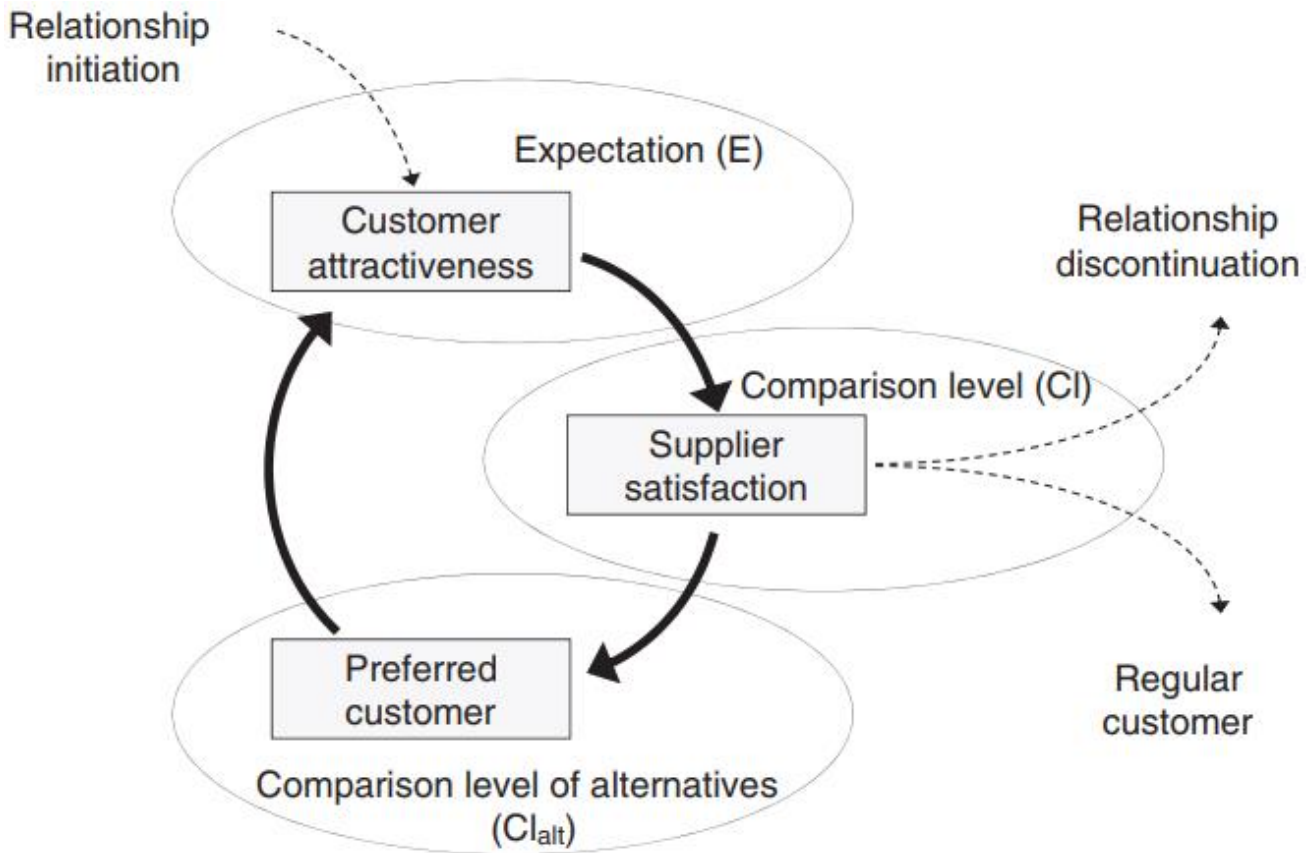## 8. APPENDICES

8.1 Figures and tables

Figure 1. The cycle of preferred customer ship (Schiele et al., 2012, p. 1180)
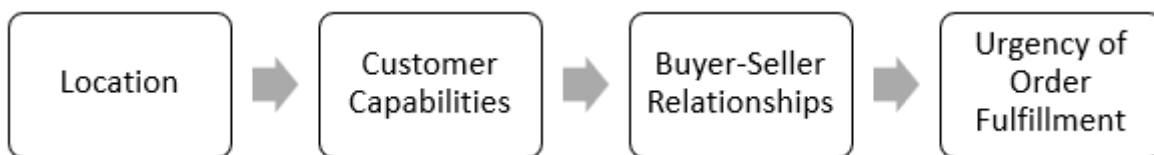

Figure 3. Customer segmentation model company V

Figure 4. Customer segmentation model company W
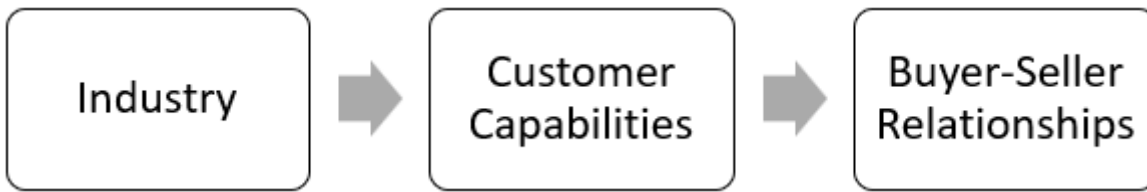
Figure 5. Customer segmentation model company X

Figure 6. Customer segmentation model company Y
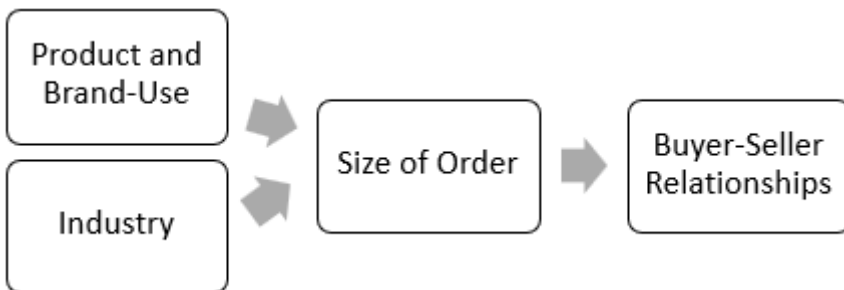
Figure 7. Customer segmentation model company Z

COMPANY V TOTAL SCORE = 113   **Table 1. Market orientation scores company V**

Market Orientation (Intelligence Generation) Question	Score		
1	2		
2	2		
3	3		
4*	2		
5	2		
6	3		
7	5		
8	3		
9*	3		
10	3		
TOTAL	28	AVERAGE	2,8

Market Orientation (Response Design) Question	Score		
1*	5		
2	2		
3*	5		
4	4		
5*	3		
6	5		
7*	5		
TOTAL	29	AVERAGE	4,142857143

Market Orientation (Intelligence Dissemination) Question	Score		
1	4		
2	2		
3	4		
4	1		
5	5		
6	3		
7*	2		
8*	5		
TOTAL	26	AVERAGE	3,25

Market Orientation (Response Implementation) Question	Score		
1	3		
2	3		
3*	3		
4*	4		
5	4		
6	5		
7	5		
TOTAL	30	AVERAGE	3,857142857

COMPANY W TOTAL SCORE = 115   **Table 2. Market orientation scores company W**

Market Orientation (Intelligence Generation) Question	Score		
1	5		
2	4		
3	3		
4*	4		
5	4		
6	3		
7	4		
8	4		
9*	5		
10	3		
TOTAL	39	AVERAGE	3,9

Market Orientation (Response Design) Question	Score		
1*	5		
2	3		
3*	4		
4	4		
5*	4		
6	3		
7*	4		
TOTAL	27	AVERAGE	3,857142857

Market Orientation (Intelligence Dissemination) Question	Score		
1	1		
2	3		
3	3		
4	1		
5	4		
6	2		
7*	4		
8*	4		
TOTAL	22	AVERAGE	2,75

Market Orientation (Response Implementation) Question	Score		
1	3		
2	4		
3*	5		
4*	4		
5	4		
6	4		
7	3		
TOTAL	27	AVERAGE	3,857142857

COMPANY X TOTAL SCORE = 96

Table 3. Market orientation scores company X

Market Orientation (Intelligence Generation) Question	Score		
1	1		
2	4		
3	4		
4*	5		
5	2		
6	1		
7	1		
8	1		
9*	4		
10	3		
TOTAL	26	AVERAGE	2,6

Market Orientation (Response Design) Question	Score		
1*	5		
2	4		
3*	5		
4	4		
5*	3		
6	1		
7*	5		
TOTAL	27	AVERAGE	3,857142857

Market Orientation (Intelligence Dissemination) Question	Score		
1	3		
2	1		
3	2		
4	1		
5	2		
6	3		
7*	3		
8*	2		
TOTAL	17	AVERAGE	2,125

Market Orientation (Response Implementation) Question	Score		
1	1		
2	3		
3*	5		
4*	3		
5	4		
6	5		
7	5		
TOTAL	26	AVERAGE	3,714285714

COMPANY Y TOTAL SCORE = 123

Table 4. Market orientation scores company Y

Market Orientation (Intelligence Generation) Question	Score		
1	4		
2	4		
3	3		
4*	4		
5	4		
6	3		
7	4		
8	4		
9*	4		
10	4		
TOTAL	38	AVERAGE	3,8

Market Orientation (Response Design) Question	Score		
1*	4		
2	4		
3*	5		
4	4		
5*	2		
6	4		
7*	5		
TOTAL	28	AVERAGE	4

Market Orientation (Intelligence Dissemination) Question	Score		
1	2		
2	5		
3	3		
4	3		
5	4		
6	4		
7*	2		
8*	4		
TOTAL	27	AVERAGE	3,375

Market Orientation (Response Implementation) Question	Score		
1	5		
2	4		
3*	5		
4*	2		
5	4		
6	5		
7	5		
TOTAL	30	AVERAGE	4,285714286

COMPANY Z TOTAL SCORE = 97   **Table 5. Market orientation scores company Z**

Market Orientation (Intelligence Generation) Question	Score		
1	3		
2	2		
3	3		
4*	4		
5	2		
6	2		
7	4		
8	4		
9*	4		
10	2		
TOTAL	30	AVERAGE	3

Market Orientation (Response Design) Question	Score		
1*	3		
2	2		
3*	4		
4	4		
5*	2		
6	4		
7*	2		
TOTAL	21	AVERAGE	3

Market Orientation (Intelligence Dissemination) Question	Score		
1	2		
2	4		
3	4		
4	2		
5	2		
6	2		
7*	4		
8*	4		
TOTAL	24	AVERAGE	3

Market Orientation (Response Implementation) Question	Score		
1	2		
2	4		
3*	4		
4*	2		
5	2		
6	4		
7	4		
TOTAL	22	AVERAGE	3,142857143

COMPANY	SCORE (MAX = 160 = 100%)
Company Y	123 *(76.88%)*
Company W	115 *(71.88%)*
Company V	113 *(70.60%)*
Company Z	97 *(60.63%)*
Company X	96 *(60.00%)*

Table 6. Total score company V – Z market orientation ranked from high to low

	Company Y	Company W	Company V	Company Z	Company X
Step 1	Company Size	Industry	Location	Product and Brand-Use + Industry	Industry
Step 2	Industry	Size of Order	Customer Capabilities	Size of Order	Customer Capabilities
Step 3	Product and Brand-Use	Buyer-Seller Relationships	Buyer-Seller Relationships	Buyer-Seller Relationships	Buyer-Seller relationships
Step 4	Size of Order	Personal Characteristics	Urgency of Order Fulfillment		
Step 5	Buyer-Seller Relationships				
Step 6	Purchasing Function Organization				

Table 7. Overview variables being used in customer segmentation practices of company V – Z

8.2 Questionnaire and interview protocol

Questionnaire (Kohli & Jaworski, 1993, p. 65)

Market Orientation – Intelligence Generation

1. In this business unit, we meet with customers at least once a year to find out what products or services they will need in the future.
2. Individuals from our manufacturing department interact directly with customers to learn how to serve them better.
3. In this business unit, we do a lot of in-house market research.
4. We are slow to detect changes in our customers' product preferences.
5. We poll end users at least once a year to assess the quality of our products and services.
6. We often talk with or survey those who can influence our end users' purchases.

7.   We collect industry information through informal means. (e.g. lunch with industry friends, talks with trade partners)
8.   In our business unit, intelligence on our competitors is generated independently by several departments.
9.   We are slow to detect fundamental shifts in our industry. (e.g. competition, technology, regulation).
10. We periodically review the likely effect of changes in our business environment (e.g. regulation) on customers.

Market Orientation – Intelligence Dissemination

1.   A lot of informal "hall talk" in this business unit concerns our competitors' tactics or strategies.
2.   We have interdepartmental meetings at least once a quarter to discuss market trends and developments.
3.   Marketing personnel in our business unit spend time discussing customers' future needs with *other* functional departments.
4.   Our business unit periodically circulates documents (e.g. reports, newsletters) that provide information on our customers.
5.   When something important happens to a major customer or market, the whole business unit knows about it in a short period.
6.   Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.
7.   There is minimal communication between marketing and manufacturing departments concerning market developments.
8.   When one department finds out something important about competitors, it is slow to alert other departments.

Market Orientation – Response Design

1.   It takes us forever to decide how to respond to our competitors' price changes.
2.   Principles of market segmentation drive new product development efforts in this business unit.
3.   For one reason or another we tend to ignore changes in our customers' product or service needs.
4.   We periodically review our product development efforts to ensure that they are in line with what customers want.
5.   Our business plans are driven more by technological advances than by market research.
6.   Several departments get together periodically to plan a response to changes taking place in our business environment.
7.   The product lines we sell depend more on internal politics than real market needs.

Market Orientation – Response Implementation

1.   If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
2.   The activities of the different departments in this business unit are well coordinated.
3.   Customer complaints fall on deaf ears in this business unit.
4.   Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion.
5.   We are quick to respond to significant changes in our competitors' pricing structures.
6.   When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.
7.   When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.

Interview Protocol

General Questions

1. How many employees has the company?
2. What divisions exist within the company?
3. What is the turnover of the company approximately?
4. What are the activities the company essentially performs?
5. How does the company differentiate itself from its competitors? Where is the company's focus within the industry?
6. ….

Segmentation Practices

1. Do you have different target markets?
2. Are you actively using a segmentation strategy?
   a. Which model do you use?
   b. Are you always using the same approach?
   c. Where do you start/end?
   d. Is there a specific sequence of variables that you use when segmenting customers?
3. Based on what variables do you differentiate your market?
4. Which combination of variables do you use to group different customers?
5. Are some variables more important than others?

Possible follow-up segmentation questions

6. Are you using any scientific models to do this or a combination of your own variables?
   a. If yes, which variables do you use in the area of demographics,
   b. If yes, which variables do you use in the area of operating variables
   c. If yes, which variables do you use in the area purchasing variables,
   d. If yes, which variables do you use in the area personal buyer characteristic?
7. If no, do you give preference to certain customers ? and if so based what ? for example how fast they pay or their reliability.

Preferred customer questions

1. Do you have a classification system?
2. Do you assign different status types to customers? (e.g. preferred customer, top-customer, growth-customer, standard-customer, less interesting customer)
3. Which status types do you assign?
4. How does a customer's reputation/status affect your behavior/offer towards him?