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Customer segmentation in services based on characteristics

A study at AstaZero

*Master's Thesis in the Master's Programme
Quality and Operations Management*

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Abstract

Background

For service companies, it is essential to deliver good customer service to stay competitive out in the market. Customer needs are changing over time and there are different needs for different customer groups. Companies of today are in constant need of figuring out new ways to keep their customers loyal and at the same time keep up with their competitors.

Because of different needs and different type of customers it is important for companies to be aware of their different customer groups. A customer segmentation can be done to differentiate customers from each other. By making a customer segmentation, customers can be divided into different groups based on different characteristics and they can be distinguished from each other. This enable companies to easier meet the customer needs and use different marketing strategies for different customers. Where this study focuses on the issue of customer segmentation in services.

Problem description

Customers are of different character and have different needs. Therefore, it is not optimal to have same strategy and marketing for every customer. For a company, it is important to segment their customers and identify the differences between the customer segments to easier meet the customer needs and take care of those customers who are of high importance for the company.

Problem description at the chosen company

AstaZero is a service providing company in the automotive industry, who sees an interest of a segmenting their customers for further development. Because of a high demand on their services and high customer variation it has become difficult for the company to know which customers to prioritize and how the customer groups differ.

Purpose

The purpose with the project was to examine how a service based company can segment their customers based on their different characteristics.

Methodology

For the study, different methods have been used to collect data.

- Literature study – The purpose of the literature study was to collect knowledge about data related to the research questions furthermore, strengthen the report and explain the theory behind customer segmentation.
- Interviews – were held with AstaZeros employees to collect data and get an insight of how the company work. The chosen people who were interviewed had different positions within the company.
- Questionnaire – were sent out to customers to collect data from the customer perspective.

Analysis

The purpose of this study was to investigate how a service company can segment their customers based on characteristics. A segmentation of AstaZero's customers has been done where two main customer segment groups has been founded where differences between the two customer segments has been identified.

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1. Background

This background gives a brief introduction to the purpose and the main subject of the report.

Nowadays a lot of companies include customer service to their range of offerings, and the need for this is yet increasing at a rapid pace (Rowson 2009). To please customers, companies need to find new ways to keep their customers, and at the same time try to keep up with their competitors (Bergman & Klefsjö, 2010). Nevertheless, companies cannot simply rely on its product or service no matter how good it is because nowadays customers demand a high level of customer service (Rowson 2009). Customer service can these days be the one of the decisive factors which makes customers consume a company's product or service (Cohen & Markowitz 2002). However, just because companies provide customer service it does not necessarily imply that costumers will stay (Rowson 2009). The execution of the customer service needs to be performed well which depends upon the company's decision to commit to it by having goals for each customer (Reinartz & Kumar, 2000). This allows companies to be able to serve the right amount of quality to the right customer (Reinartz & Kumar, 2000). If these customer prioritizations lack there is a great chance that companies lose customers that are of great value, and end up with customers which does not generate a high profit (Jonsson & Mattsson, 2005).

These phenomena are common between companies that have a wide diversity of customers. To adapt to the customers, it is important to separate them from each other which is where customer segmentation comes in hand. (Jonsson & Mattsson, 2005)

The purpose of customer segmentation is that it focuses on improving the relations with the customer through actions in identifying which these customers are and how they can be divided into groups. The concept of customer segmentation starts when a company tries to identify old and new customers that share identical or comparable characteristics. (Gale 1994)

Segmenting customers can be a good way to spot customers' needs. The reason why companies would want to segment their customers is because it is a good way for them to identify new customers, this will allow them to be steps ahead of their competitors by creating new products or services to target these customers. By segmenting the market, a company has the possibility to adjust themselves and create new products or services with new strategies into an income from customers that provide them with both high and low revenue. (Gale 1994)

When segmenting customers, it must be done through one or more chosen variables. The decision making of a segmentation variable can be difficult depending on what type of company it is and what they do. It is not possible to generalize the ways of segmenting to all types of customers. (McDonald & Dunbar 2004)

1.1 Problem description

The first part of the problem description elaborates on the problems behind the concept of not having defined customer segments within a company.

1.1.1 General problem description

Customers are of different character and have different needs. Therefore, it is not optimal to have same strategy and marketing for every customer. For a company, it is important to segment their customers and identify the differences between the customer segments to easier meet the customer needs and take care of those customers who are of high importance for the company. According to Batt, (2000 undefined customer segments can lead to wrong prioritization of customers and high revenue losses.

1.1.2 Problem description at the chosen company

AstaZero is a service providing company in the automotive industry, who sees an interest of a segmenting their customers for further development. Because of a high demand on their services and high customer variation it has become difficult for the company to know which customers to prioritize and how the customer groups differ.

AstaZero was founded in 2014 and their core business is to rent a test track where customers such as researchers and automotive industry companies can run fully scaled tests regarding safety issues for upcoming cars and trucks. The company's headquarter is located in Gothenburg, and the test track is located in Borås. When the company was first found the purpose was to just rent out their test-track to companies in the automotive industry. However, since a high customer demand they started to enter new service levels where the company developed into something more. Nowadays the company offers a higher service level beside just renting the track. Customers can choose a service level from just renting the test track to order a fully scaled test including engineers, equipment and report runned by AstaZero. This has resulted in new customers requiring the company's services. Some example of new customers are universities who run research projects where they find interest in testing safety issues. Another customer group is customers who want to rent the track for event purposes.

AstaZero's management sees an interest in segmenting their customers. According to the company's management a customer segmentation would lead to clearer customer groups where the differences between the customer groups are identified which would lead to that the company can in a better way meet the customer demand.

1.2 Purpose

The purpose of the study is to investigate how a service company can segment their customers based on different characteristics.

1.3 Research questions

To achieve the purpose of the study two formed research questions, need to be answered:

RQ 1: How can customers be divided into segments based on a characteristic at AstaZero?

According to Batt (2000) companies need to be aware of those customers who are of high importance for a company. Batt states that companies many times are unaware of those customers who generate the highest profit. By being unaware of these customers who are of high importance for the company can lead to high revenue losses.

The first research question focuses on how customers can be segmented based on a characteristic where the differences between the customer groups can be identified.

RQ 2: Based on the created customer segments is it suitable to prioritize any segment, and what are the advantages and disadvantages with a segment prioritization for AstaZero?

Jonsson & Mattsson (2005) state that customer segmentation can create a prioritization system where a high focus lies on specific customers thus, some customers will be less prioritized. The second research question focuses on this type of issue.

1.4 Delimitations

The content of the report will be limited to the information gathered in total of seven employees at AstaZero and four specific company customers who have been chosen out by the company's management.

The employees are considered having relevant information to fulfill the purpose of the study. The employees are located in two locations, where some of the employees are located at the headquarter in Gothenburg and some are located in the test track outside Borås.

2. Methodology

This chapter explains and elaborates on the methods that has been used for the study and explain the research approach. A detailed explanation of how the collection of data has been conducted and why specific methods has been used in this research.

2.1 Research approach

In figure 1. The research approach is illustrated where the first step in the research approach is to define the problem at the choosen company. This was done through a direct meeting with one of the company's project managers where the problem was described and more detailed information were gathered. When enough knowledge about the company's problem was collected the next step was to choose methodology for the research. The authors choose to make a literature study which is related to the thesis topic.

The data collection for the empirical findings were done through interviews and a questionnaire. When the literature study and data collection were done the next step was to make an analysis based on the empirical data and the literature study. Based on the analysis a discussion and conclusion chapter was written.

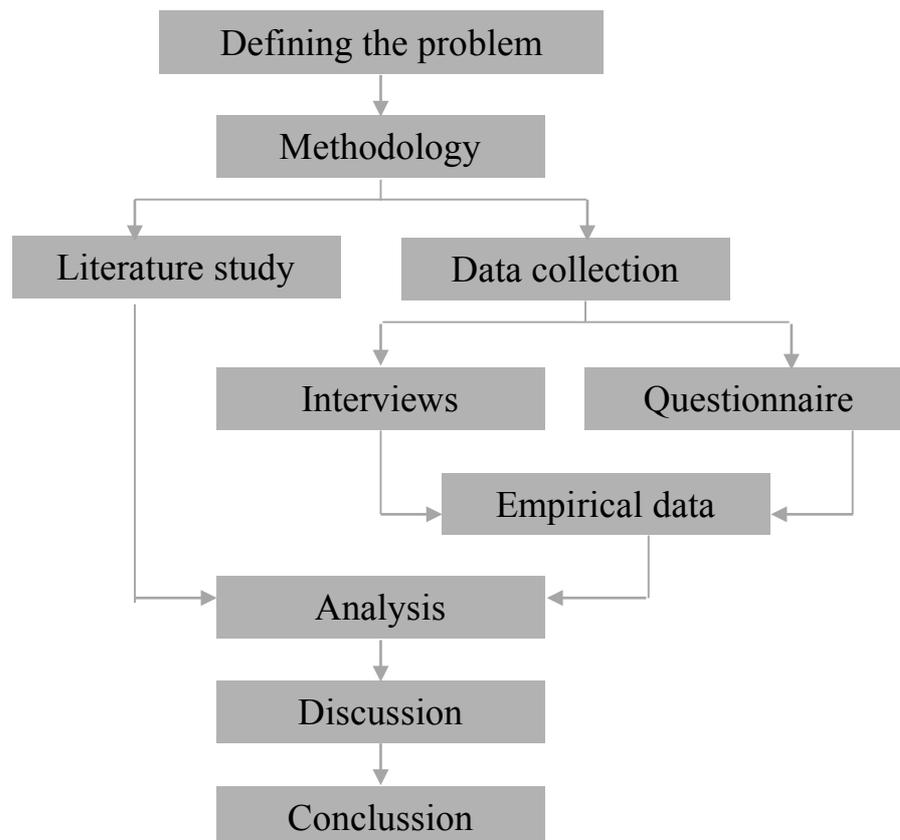


Figure 1. *Work process of the thesis*

2.2 Data collection

Bryman & Bell (2000) state that data has the possibility to be gathered as primary data where it has been assembled for the main purpose of a project or problem. The other is secondary data, which is information that has already been gathered from other sources. The research done in this project is mainly based on primary data where all the information was gathered based on three different methods for this project. This research is based on both qualitative and quantitative data, where the qualitative data has been gathered through literature studies and interviews, and a questionnaire was designed where both qualitative and quantitative data has been gathered. This kind of research is common when one tends to analyse a working environment and its structure.

Bryman & Bell describe a quantitative research as a study based on a collection of statistical data and presents the link between research and theory for it to be transformed into facts. A quantitative study should have as nature to be replicable and well described. (Bryman & Bell, 2011)

Furthermore, in a qualitative study, it is stated that the theory in a research can be divided into empirical and analytical (Wacker 1998). Whether the study is empirical or analytical depends on the studies relation to the real world and theory. Wacker (1998) states that when using deductive methods in a study it becomes an analytic research when one tries to create theories and that the study becomes theoretical when one uses inductive methods to reach theories. From a theoretical point of view formation is the meaning of an analytical conceptual research to reach awareness about common issues through rational creation of relationships among theories and concept where this kind of study shows the outcome of a research that is empirical (Wacker, 1998).

What distinguishes an empirical approach from an analytical one is that an empirical research requires data to develop theories and the analytical applies deduction to do so (Wacker, 1998). The foundation for this research is an empirical study where interviews, literature study and a questionnaire has been done to execute the purpose of the study.

2.3 Literature study

The purpose of this literature study is to collect knowledge about data related to the research questions furthermore, strengthen the report and explain the theory behind customer segmentation. This way of conducting research is prescribed by Bryman & Bell (2011) by using an accurate literature analysis to find the key characteristics and fathom, the character of the research field concerning this thesis.

When the literature study process started, the first step was to get an overviewed understanding about customer segmentation. To get a clear picture what it is, why it is important and based on what grounds companies segment their customers. When enough knowledge was gathered about customer segmentation the next step was to gather information

about how customer segmentation is done at companies and which models that can be used for implementing segments. This structure of literature is also set in the theory part where the reader first gets an overviewed picture to furthermore gain a deeper understanding behind the topic.

Chalmers library database was used to collect relevant literature for this thesis. Example of keywords which have been used are customer segmentation, segmentation in services and implementation of customer segments.

2.4 Interviews

The data from the company has been gathered through interviews carried out with different employees at AstaZero. The interviews were done with employees working at the offices of the company's two locations based in Gothenburg and Borås. The purpose of the interviews was to make a collection of in-house data related to the research questions. Where the selection of people interviewed were decided between the researchers and the company's project manager.

The interviews were held with seven persons from the company. The interview template consisted of 31 open ended questions where the starting questions were more of a general focus to continue to go deeper into the view of those questions which are more relevant to the research. The interview template can be seen in appendix 1.

Every interview took approximately 45–60 min and were done through direct face to face meetings. The interviews were recorded and had to be transcribed direct after by the researchers. Table 1. below shows more detailed information of whom have been interviewed at AstaZero. Furthermore, a table of the company structure can be seen in figure 2.

Because of ethical issues no names are mentioned, as reference the researchers use the respondent's responsibility position in the company instead.

Persons who have been interviewed can be seen in table 1.

<i>Type of interview</i>	<i>Responsibility position</i>	<i>Location</i>
<i>Direct meeting</i>	<i>CEO</i>	<i>Gothenburg headquarter</i>
<i>Direct meeting</i>	<i>CFO</i>	<i>Gothenburg headquarter</i>
<i>Direct meeting</i>	<i>Project manager</i>	<i>Gothenburg headquarter</i>

<i>Direct meeting</i>	<i>Track manager</i>	<i>Borås test track</i>
<i>Direct meeting</i>	<i>Event/quality</i>	<i>Borås test track</i>
<i>Direct meeting</i>	<i>Receptionist</i>	<i>Borås test track</i>
<i>Direct meeting</i>	<i>Analysis & verification</i>	<i>Gothenburg headquarter</i>

Table 1. *Interviewed employees at AstaZero*

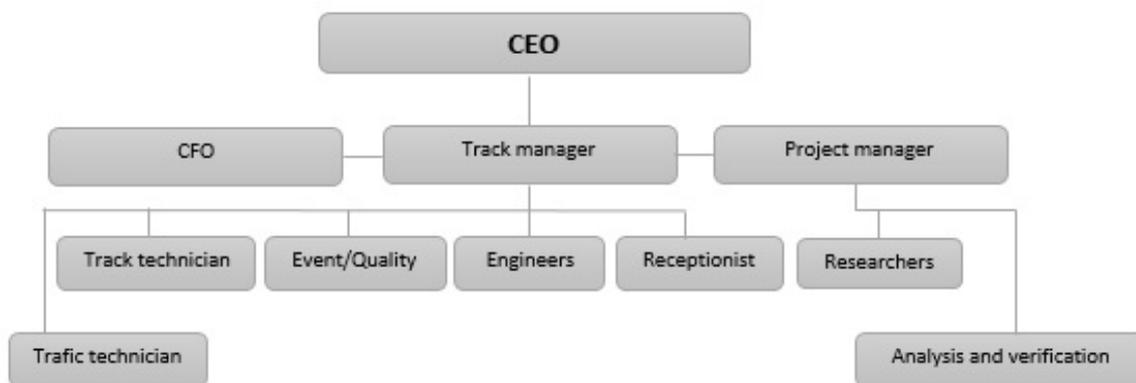


Figure 2. *An illustration of company structure at AstaZero*

2.5 Questionnaire

A questionnaire study was used to collect data from AstaZero’s customers. The purpose with the questionnaire was to get an insight from the customer's perspective which could be useful to strengthen the report.

The questionnaire consists of nine questions; five questions is open ended which is according to Bryman & Bell (2011) a question with no suggestion for an answer. The respondent has the possibility to answer the question in his own way. The other four were based on a likert scale which is according to Bryman & Bell (2011) a scale that can be used in questionnaires to convert quantitative data into qualitative data which can be statistically analysed.

Reason for the chosen method is based on a decision made between the researchers and the company's management. According to AstaZero’s management it was the only way to collect data from their customers. The issue is because AstaZero’s customers need to be anonymous due to policy reasons. Therefore, a questionnaire is the solution, where the respondents can be anonymous and no direct meeting or contact were required. The questionnaire was sent out by AstaZero’s track manager who send it out by email, to four specific chosen customers who

AstaZero have a strong cooperation and long-term contracts with. All the four customers answered the questionnaire which lead to a 100% response rate. These four customers are in the report named by Company A;B;C;D because of policy issues.

The questionnaire was designed in google forms which collected and sorted the answers in a structural way. The questionnaire can be seen in appendix 2.

2.6 Reliability & Validity

Reliability

The significance of reliability in a report is that the gathered data has the possibility to be imitated according to Bryman and Bell (2011). Bryman and Bell (2011) states that examining the company's current condition from data gathered before the projects starting point might not give the project group a proper description of the situation that the company is in. In this project, no similar project has been done before at the chosen company, which gave the researchers an opportunity to create their own picture based on collected data of the companys current situation. In this research, different methods have been used to make the report more reliable.

Validity

Validity in a report is more thorough than reliability because it covers other factors. According to Bryman and Bell (2011) an example can be whether the gathered information is impartial or not and if the deductions that are made are true. In this report, all gathered data comes from sources that the researchers consider as valid. Due to that the interviewed employees have a high influence within the company and work closely to the processes.

3. Literature review

3.1 Customer segmentation

Customers can have different types of characteristics and can be of different importance to a company. For companies to know which customers are of significance, a segmentation of customers need to be done (McDonald & Dunbar, 2012). The theory of segmentation is the process where identifying characteristics of different customers and dividing them into groups. What companies often do when segmenting their customers is to divide them based on how much revenue they contribute to the company based on their purchase volumes (Batt, 2000).

Identifying and classifying customers leads to a better understanding of who the customers are and what type of demand the customers require. Some customer groups can have a high degree of innovation where changes within the customer group over time often occur. For

these type of customers, you need to be aware of the requirement changes to meet the customer demand in the best way which also fulfils the customer needs (Bottcher, Spott, Nauck & Kruse, 2009).

According to Sandström (2003) segmentation has its basis in the concept that consumers who take part of the company's products and services are not proportionally valuable. For companies, customers are of different significance and to be able to stay in the market, companies need to distribute their attention unevenly, meaning that they need to move attention from the non-profit consumers to the ones with higher profit. For a company to continue gaining profit, they need to target a lot of attention to the customers that consume their products or services frequently or in greater volumes to create groups that are fruitful (Sandström, 2003).

When a company has the right knowledge about the customer requirements it will give them the ability to easier divide the customers into segmentation groups. Furthermore, the company can easier find out what satisfies their customers and even surprise them. This kind of information can be used for further improvements into their services or products. These days, customer service is as important for the customers as the actual product or service, and it is important that the companies have this part set. Finally, segmenting customers can simplify the choices of how much and what the company should put emphasis on when it comes to the degree of services that the different groups should get (Buttle, 2009).

Lambert (1990) state the importance of segmenting markets in emerging production industries as well as in service industries. All kinds of organisations need to find a method that fits to categorize the market into different segments to meet the customer demand in best way and increase the revenue for the company. According to Lambert (1990) when an organisation starts the process of segmenting it is recommended to look at the customers from a need-based point of view where the customer with high demand should be prioritised.

A company provides the market with either a service or a product. Because of this it is vital according to (Fang, Palmatier & Steenkamp 2008) for a company to reach the customer service elements to please their customers. Well established service companies have the right skillset and right knowledge to fulfil the demands, expectations and needs of their customers (Mattson, 2004). The concept of customer service can be defined as what a company does to include the purchasers, sellers and other groups that can boost their product or service. A successful customer segmentation within services benefits the company to enhance their relationship with their purchasers and sellers which also contributes to an enhanced competitiveness (Pauline, 2009).

Out in the market there are a huge range of service providing companies with many different types of customers. To be competitive and meet the customer demand in best way, service companies have different strategies of how to target and segment their customers (Anderson, Narus & Narayandas 2009).

3.2 Differences between product vs service

Companies who deliver a product versus companies that deliver a service, face different obstacles when it comes to segmenting their customers and marketing their offerings. When a company makes that conversion from delivering a product to service or the opposite it is important for them to be aware of the differences between a service and a product. (McDonald, & Dunbar, 2012)

It is standard human behaviour that people respond to what they can see and feel. Physical products have the ability to exhibit this and boost sales. Services do not have these possibilities since they can only be experienced and reaction for people occurs at a lower pace. Furthermore, products have the possibility to be measured and compared between other products as for services cannot do so since experience differs from person to person. (Anderson, Narus, Nara Yandas, 2009)

3.2.1 Marketing a product vs service

The main difference between a product and service is that a product is tangible compared with a service which is not. Therefore, services can be harder to sell and promote compared with a product which can be seen and expressed. When it comes to products they are more likely to fulfil the needs of a customer and makes it much easier to sell. But when it comes to selling a service it is more about marketing a relationship between the purchaser and the deliverer of the service. (Anderson, Narus & Narayandas 2009)

Marketing a product is based on the 4 P's of marketing which consists of place, price, promotion and product can be of use. When a company markets a service, additional 3 P's can be of use such as people, physical existence and process. Further differences are that products are marketed and provided with a value since it pleases the need of the customers versus when a company markets a service they provide a relationship with their clients. (Anderson, Narus, Nara Yandas, 2009).

Another difference when marketing a product compared with a service is that the ownership of a product can be shifted between different parties unlike the marketing of services that is promoted as something that cannot be owned or transferred to someone else. (Anderson, Narus, Nara Yandas, 2009)

When marketing a service, it is important to demonstrate what type of service is offered and what the company's core business is. Furthermore, market what kind of benefits the service are providing and how it benefits the buyer. Since services are abstract and cannot be touched it is easier to market a service by presenting a problem and displaying how the problem can be solved with the offered service, where the problem is central and the focus is on how the offering settles the issue. Lovelock & Wirtz (2011)

3.3 Market segmentation

One of the most vital parts of the segmentation process is choosing a foundation for the segment (Wedel & Kamakura, 1999). Meaning that the company or organization need to examine methods to find similarities inside the segments and differences among the various segments. The most important thing with this method is that it needs to provide the organization with segments that are of importance to the market state or issue (McDonald & Dunbar, 2012). To choose the right foundation for the segment it is important to put a great amount of reflection and deduction as well as a lot of knowledge of the market being segmented (Wedel & Kamakura, 1999). Looking at the segmentation process the basis for segmentation has been changed over time. Historically the segmentation groups were mostly segmented based on two foundations which was *business to business (B2B)* or *business to consumer (B2C)*. Compared to nowadays, the segmentation foundations are based on more variables (Melnic, 2016). In practice, it is common that companies or other organizations segment their market by taking advantage of any foundation that can be identifiable, measurable, actionable and stable.

Examples of foundations used mostly for market segmentation can be seen in figure 3. below:

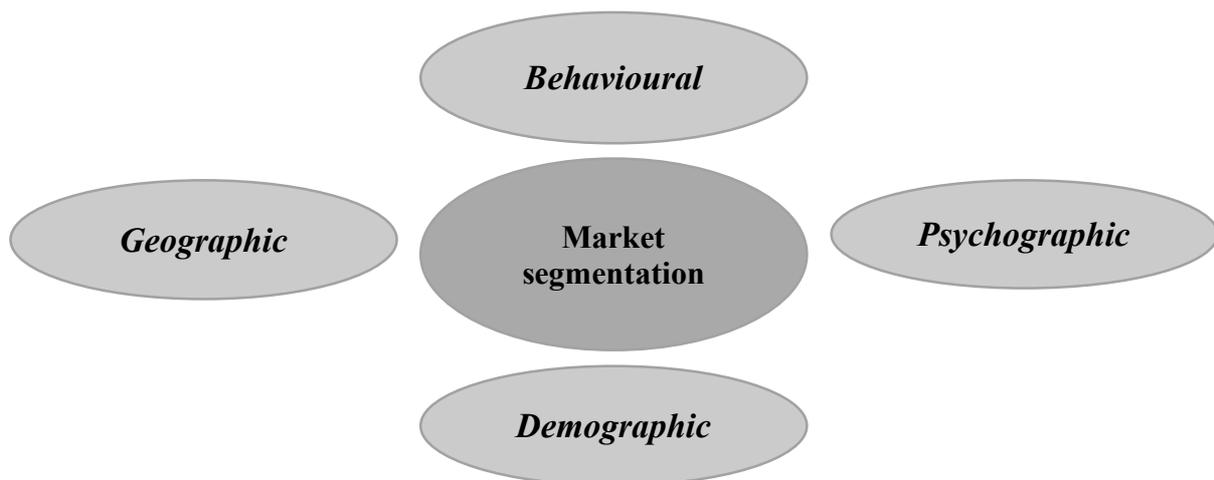


Figure 3. The different foundations for market segmentation

As an addition, it is common that companies or organizations use a single foundation in their analysis when segmenting but it is also possible to merge some foundations into one if it is done meticulously (McDonald & Dunbar, 2012).

3.3.1 Geographic segmentation

Geographic segmentation is based on the criterion of location and region, for example people living in a specific country and even more specific in a city or area (McDonald & Dunbar, 2012).

It is possible to divide the market based on where the customers are positioned. The ability to understand the difference has the possibility to be essential for a business profit and this way of segmenting customers requires companies to adapt their approach according to where the customers are located. (McDonald & Dunbar, 2012)

Geographic segmentation is about segmenting customers into different continents, countries, regions, counties or neighbourhoods. When this is done one has the possibility to get a general opinion of how things work in a specific area. Segmenting customers in this way can be beneficial because it provides a brief analysis of the differences between the customers depending on where they are located, the possibility to determine differences in culture, ability to acknowledge the differences in climate and language. (McDonald & Dunbar, 2012)

However, segmenting customers based on geographical factors might leave out other variables that are of importance such as lifestyle, age and personality. (Wedel & Kamakura, 1999).

An example of the ones using this way of segmenting is global industries (Market segmentation financial performance) that are positioned around the world and serve people. Another big industry that segment their customers through geographic segmentation is the automotive industry depending on the road conditions (Wedel & Kamakura, 1999).

3.3.2 Demographic segmentation

An approach that is very common is to segment customers according to demographic factors. These customers can be categorized by age, gender, religion, income, size of family, education and occupation (McDonald & Dunbar, 2012). A company that knows their customers is more likely to be capable of identify their customers' needs and how they use the company's offerings. Using this approach to segment customers means that the company must divide customers based on age, gender, religion, income, size of family, education and occupation. Nevertheless, the approach of segmenting customers based on demographical factors does not present why customers consume the company's offerings as well as it does not provide companies the consideration of what it is that drives customers to desire a service or which personal traits that might lead to why a customer prefers one brand over another. (Wedel & Kamakura, 1999)

An example of an industry that segments customers based on demographic variables is banking. The world of banking divides its customers based on young couples, families, retired

etc. Other industries that use this type often as well is the tourism industry (Legohérel, P. & Wong)

To segment customers based on demographic in B2B is less time consuming and requires less resources compared with segmentation based on other variables such as for example behaviour segmentation. Hague & Harrison (2017)

However, the result of a demographic segmentation can many times not be useful and optimal for a company, because by segmenting customers based on only size for example do not provide a company with lot of information which is not beneficial. Hague & Harrison (2017)

3.3.3 Psychographic segmentation

When a company segment their customer psychographic the purpose is to understand why customers would want to purchase a company's product or service. The concept of psychographic segmentation is to divide the customers into factors such attitude, lifestyle and beliefs. The idea of segmentation into lifestyles is that a customer's way of living might have an influence on the interests of the company's offering. This per se affects the way companies market their offerings to give the customers an appearance that attracts them (Wedel & Kamakura, 1999). Segmenting customers based on psychographic variable, favours companies by giving them knowledge in knowing why customers buy specific products or services, it gives the companies the ability to tailor a way to market the offering to the customer's personal traits as well as a psychographic segmentation can be used to design profiles of the customers in for the companies to enhance their brand. Although there are a lot of advantages in segmenting customers psychographically, it does not give companies the knowledge in which way the offering is used as well as how frequent (McDonald & Dunbar, 2012). The reason to this is because these factors depend on different situations and cannot be connected to the customer personal characteristics. The data that comes out of psychographic segmentation does not give the information of the customer's personal life (McDonald & Dunbar, 2012).

When it comes to industries that segment their customers based on psychographic variables a typical example is the car manufacturing industry. Car manufacturers tend to aim for a certain type of customer to buy their cars. The car has nowadays become an object that represent which social class one belongs to so it is common for them to segment their customers based on variables that common for the social class that a company targets (Wedel & Kamakura, 1999).

3.3.4 Behavioral segmentation

This is where companies or organizations segment their customers for different reasons such as purchasing behaviour or degree of the consumption behavior, where these type of behaviors need to be identified. This can be done through good relationship and

communication with the customer and well-known patterns and habits of the customers (McDonald & Dunbar, 2012).

Behavioural segmentation means that companies divide their customers based on how they use the company's offering, their knowledge on the offering as well as their opinion on the company's offering. This can be done by identifying which occasions that the company's offering is used, trying to identify factors that causes the user to consume the company's specific offering, which amount the offering is being used as well as identifying which feelings the customers have toward the product or service from negative to positive (Wedel & Kamakura, 1999).

In behavioral segmentation the customers can be divided based on their income salary. This way of segmenting customers is mainly appropriate for companies that develop products or provide services that are expensive or have special characteristics. Segmenting customers based on their income helps the company to understand the customer's value furthermore, the price that is set by the company as well as the number of possible customers a company can attract (McDonald & Dunbar, 2012).

Segmenting customers based on their income is a way of having comparable groups of customers with comparable income. These types of groups can assist a company into identifying and designing their offerings to their needs. When it comes to developing offerings of luxury there is no way of delivering it to all customers. Therefore, it is more applicable to target customers who has an income that is on a certain level. This way of segmenting makes an assessment on the demand and the customers being targeted can get better service (McDonald & Dunbar, 2012).

The negative aspect of behavioural segmentation is that it requires a lot of data and behaviours tend to change with trends as well as the aspects of why costumers consume a company's offering can vary from person to person (Wedel & Kamakura, 1999).

Example of an industry that segment their customers based on behavior variables is restaurants. Resultants often segment their customers based on whether the customers are regulars, whether the customer just want something quick, people that want to eat for a special occasion, lunch etc. (Wedel & Kamakura, 1999).

Studies have shown that compared to the consumer-based market, the B2B market has less behavioural segments. The reason to this is due to the audience not being as big in the B2B market as it is in the consumer market.

According to Hague & Harrison (2017) when B2B companies segment their customers based on behavioural needs the focused variables are mostly:

- Price – Where the business customers have a high focus on the price where the requierements of a low service price are mostly required. Hague & Harrison (2017)

- Quality – Where the business customers focus on the quality and are ready to pay a higher price for the service. Hague & Harrison (2017)
- Partnership focusing customers. These customers build their business on trust with their supplier as an ally. These customers are normally large and the company's offer is of high strategic value. Hague & Harrison (2017)

3.4 Customer prioritization

Nowadays it is common sense that companies should on some level prioritize customers to increase their revenues (Homburg et al, 2008). Yet, for a company to do so they must consider the possibilities that it might have an opposing effect on the good relationship, companies want to have to their customers if a part of them feels that they are prioritized at a lower level (Homburg et al, 2008). The concept of prioritizing customers is that chosen customers will be delivered a special amount of treatment depending on their buying potentials. It is common procedure for companies to develop different levels of serving their customers depending on their customer's significance to the company's revenue (Homburg et al, 2008). According to (Homburg et al, 2008) they argue that dividing the customers in this way will increase the company's profits because the way of marketing the product or service will shift into being more effective when the primary focus is on the customers who contributes more to the company's volume of sale (e.g., Hogan, Lemon, and Libai ,2003). Zeithaml, Rust, and Lemon (2001) state that companies would prefer to please all customers in the best way but it is not practical or profitable to do so since expectations from customers differ.

3.4.1 Negative aspects with customer prioritization

Good customer service contributes to a good relationship between a company and the customer (Liljander & Strandvik 1993). When a customer is satisfied he or she can develop a good relationship with their provider, which can develop and result in loyalty (Oliver, 1989). If a company can hold these customers, it can give them a stable income and revenue over a time where the customers are loyal. Furthermore, by having a good relationship the company can collect relevant information from their customers and even control them to their favour (Storbacka, Strandvik & Grönroos, 1994).

The alternative is customers that are not satisfied with their provider, have the opposite emotion to the company and might lead to a bad relationship that can end. A bad relationship with a customer can lead to bad reputation for the company and can result in losing market shares (Storbacka, Strandvik & Grönroos, 1994). By having customers who are less prioritized, it can lead to dissatisfaction and bad relationship between the service provider and the customer. Researchers are constantly challenging this type of question regarding customer prioritization, where the thoughts differ between researchers. Issues have been questioned if it is suitable to focus too much on those customers who generate the highest profit. According

to Brady (2000); Gerstner and Libai (2006) customer prioritization can lead to dissatisfied customers among those who are less prioritized furthermore, which can lead to negative aspects where company's reputation can be downgraded and lose customers who could generate high revenues for the company on a long-term perspective.

A downside to prioritizing customers to gain more profit is that some customers who identify themselves strongly with the product or service might think that they are entitled to receive better service from the company. This in turn can lead to additional cost for companies to fulfil this type of customers' requirements. When a company chooses to segment their customers, and decide which customers to prioritize it is important for them to do a research whether it is profitable (Butori, 2010). A customer prioritization might appeal as a threat to customers who feel that special connection to a brand and their proximity (Davis & Dacin, 2011).

Along these lines a prioritization of customers might lead to a higher profit but it might also have an opposite effect in additional costs for managing the customers who complain since they do not feel that they get proper treatment due to their high sense of identifying themselves to the product or service. Davis & Dacin (2011) mention in their research that these phenomena can be related to specific situations. One of these situation is that some specific customers might feel that they deserve better treatment from the company when they do not deserve it (Davis & Dacin, 2011). While at some occasion this kind of customers might be an asset for the company, where it has the possibilities to end in high costs to please them. Therefor customers with strong attachment to their product or service might be a liability to the choices in proceeding to group their customers and companies need to consider the fact that extra costs might develop when customers are not pleased with the service they get (Davis & Dacin, 2011). Homburg et al, (2008) states that many companies try to implement customer prioritization models, but the implementation fail many times because it is not implemented properly or is not correctly followed up by the company.

4. Empirical findings

4.1 Company description

AstaZero is a company that has the vehicle markets first full-scale test environment regarding safety issues on the roads. The difference with AstaZero's test track from other competitors is the variety of traffic environments that give the opportunity for car manufacturers to examine and evaluate safety functions for upcoming vehicles and research.

Company's test track makes it possible to do research, advancement in upcoming safety functions as well as being an arena for car companies, suppliers, universities etc. for events.

The name ASTA comes from Active Safety Test Area and Zero initiates the Swedish Parliament's beliefs to one day have road safety with zero casualties and traffic injuries.

The services that AstaZero provides to their clients is:

- A special environment for a car manufacturer to be able to create different types of scenarios for the possibilities to make tests or approve new solutions for traffic safety. The facilities make it possible for the customers to test all safety condition in one location.
- Very competent in creating methods for testing safety and the equipment that involves.
- Test ground cooperation.
- Provides simulation for customers who are in the beginning of their safety projects.
- The company delivers service where the problems and finding a resolution is at the centre of attraction.
- Helps their customers with event as well as demonstrations of the functions.

Beyond the services mentioned above AstaZero provides their customers with assistance in examining and draw conclusions related to the projects. By providing the customers with staff like engineers and technicians who are knowledgeable within the area the company can offer their customers a higher service level.

AstaZero offers their customers:

- The possibility to use their track or parts of it depending on the customers' project.
- Company's knowledge depending on what they need as well-run tests for their customers if necessary.

The Technicians in the company are available there to provide the customers with support and assistance whenever they have projects at AstaZero by:

- Providing the customer with equipment and different methods to do the customers research,
- They develop the equipment that the research requires.

Test environments.

The test-track is 5,7 km and consists of five sections:



Figure 4. AstaZeros test track

Rural road: This part of the track is intended to test different aspects of driving behaviour and is equipped with different obstacles whereas other different distractions with main purpose of making a driver lose attention on the road can be tested.



Figure 5. Rural road

City Area: This part of the track is used to investigate how the cars can interact in a city environment. This part of the track has an environment where the car can be tested on its abilities to avoid colliding with common city distractions such as buses cyclist etc.



Figure 6. City area

High Speed Area: This is a part of the track that makes it possible to test cars in avoiding object and does manoeuvres in high speeds.



Figure 7. High speed area

Multilane Road: On this part of the track customers has the possibility to try out different situations such as different collision test, crossing etc.



Figure 8. Multilane road

Proving Ground Centre: In the company's Proving Ground Centre resides a reception, conference rooms, individual working spaces for visitors and an office space that has the possibility to be hired for both short and long-term projects as well as for the research area.



Figure 9. Proving ground centre

4.2 Customers

The company's main customers are researchers and companies from the automotive industry. CEO states that “companies from the automotive industry are their largest customer group furthermore there are the researchers who has their research projects with their research questions that AstaZero works on how to answer them” According to the company's project manager example of research customers can be universities who make behaviour studies in

how people interacts with a car (when people pass a pedestrian crossing). These types of customers test the technology and not the person. They also test the vehicle dynamics of different reasons like testing different algorithms for how to avoid a collision. These types of customers work with matters that is distanced from the product (principle, ideas, thoughts that become the foundation for products in the future) compared with the car manufacturing customers who are more focusing on the current product.

4.3 Differentiation between customers

There is a distinction between the automotive industry customers and researchers. The main difference according to the company's CEO is that the well-established companies in the automotive industry have a better understanding what to test, how to test, and how to perform it. A comparison can be drawn to the research customers where the degree of support is much higher. Many times, when researchers run tests they are not prepared in same way, unexpected support is required from AstaZero such as equipment or other support because of less knowledge compared with the automotive industry sector. The company's CEO state that *"the research customers just need to get their research question answered and then they are satisfied. The industry customers always have a central-problem that they try to solve by repeating different scenarios on different functions"*

According to the company's track manager the automotive industry/subcontractors are more depended on the capacity provided by AstaZero while research customers are more interested at AstaZero's technology. Research customers try different methods or equipment to be able to test different methods, AstaZero tries to balance their customers but their most frequent customers are still the automotive industry and the subcontractors.

4.4 Demand differentiation

The customer requirements can vary and be of different character. Some customers just want to rent the track for their own needs while some customers want a higher service level, for example time of their engineers, their equipment's, knowledge etc.

According to the company's CFO there is a high demand in just renting the track and run their tests for themselves. This is also confirmed by AstaZero's track manager who says that the automotive industry partners see a higher interest in just renting the track and run their own tests, compared with the researchers where the degree of support is higher.

4.4.1 Track demand

Because of different requirements from customers the demand differentiate on the five track sections. According to the company's CFO the demand varies between the two customer groups. Where a higher demand can be seen from the industrial customers on the rural road section compared with the research customer who are mostly renting the multi lane road section.

4.4.2 Undelivered demand

According to the CEO the company has the expertise and the knowledge to fulfil the customers' needs. Thus, the problem is that when they cannot deliver to the customer a request it is then due to limited access of resources. The CEO feels that they have the capability but not the capacity to do certain things that the customers require. The company's booking manager had a similar opinion but referred mostly to limited possession of equipment required to do certain projects.

The research manager and the track manager have another perspective when it comes to delivering on certain demand which is close to what the CEO mentions. The track manager mentions that for some customers AstaZero might not be the best supplier when it comes to the services that they provide. Often the costs are too high and run test and events at their facilities is expensive as well. The research project manager added that AstaZero has been asked about mile gathering projects when taking the customer's cars and collect data for them as an offer but the customers has felt that it has been too expensive.

4.5 Differences between SME's and Large companies

The large companies that require AstaZero's services are well established in the market and tend to know what they want and their offers are more planned as well as using their track evenly than SME's. According to the CEO, small businesses require more help. The smaller businesses usually want to do the tests themselves but ends up in needing more help. Large companies usually vary from simply wanting asphalt to AstaZero making all the test for them.

AstaZero's Research Project Manager adds that the demand is higher among the larger companies. Additionally, the track is too expensive for the smaller companies, and the smaller companies need more support when they do their projects. AstaZero believes that the larger companies in the future might need more support as well.

4.6 Customer prioritization

AstaZero do not have any clear prioritization system where specific customers are prioritized. The company handles every order by "first in first out" method. Which means that every order is handled separately and there is no customer prioritization in their booking system. According to the track manager, this means that the customers need to take this into consideration because of the high demand Where they need to have good advancement furthermore, book the test track long time before. This has led to that when customers need to run urgent tests sometimes AstaZero has needed to use overcapacity to meet the customer demand and therefore, run tests during the weekends.

According to the company's CFO, when the company was founded the strategy was set to 70% of the track time would be available to the industrial partners whereof, 30% to the researchers.

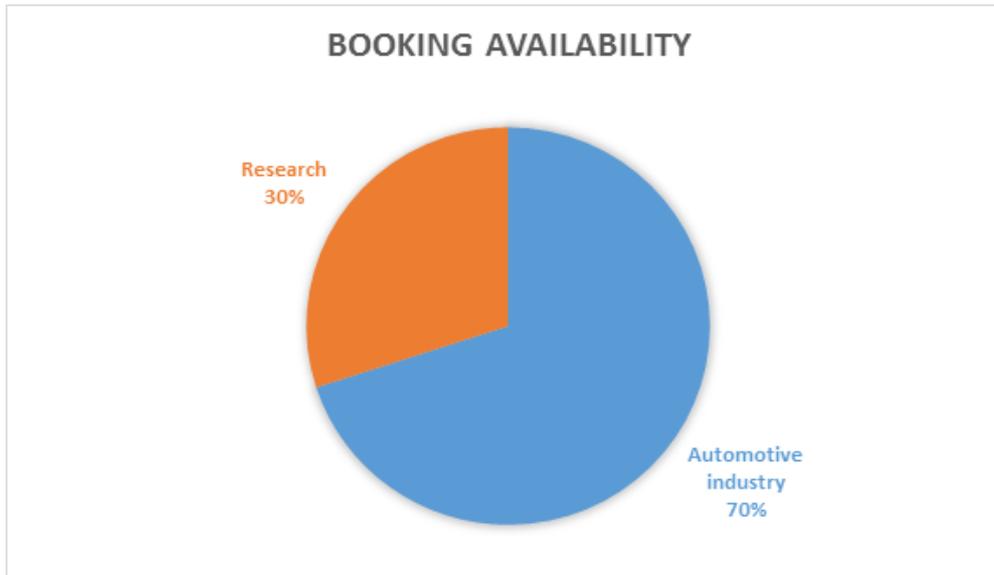


Figure 10. Booking availability for the different customer types

Even if the company does not have any clear prioritization system, based on the interviews within the company there are different opinions regarding question “Do you have customer segments you prioritise before others? If so, why?”. Some employees say that special industry partners such as company A;B;C;D are indirectly prioritized, compared with other specific employees who state that in general automotive industry companies are slightly more prioritized compared with the research customers. Furthermore, some employees state that no customers are prioritized and that the company treats every customer equal no matter if it is a research or an automotive industry customer. The company’s track manager states that “we do not prioritize any customer and we do not move any bookings”.

4.7 Need of process improvements

According to the company’s CEO, AstaZero are in need of more processes but thinks that the company is in more need of utilizing the processes they already have. Important to spread an awareness with the colleagues, especially the people working at the track, to know why the processes exist and how to use them Furthermore the importance of being flexible and aware of working in different ways depending on the customer’s requirements.

Quality and Environmental Manager added that the processes need to be performed accurately. It is hard when you're in a business where it is always about making quick judgments and assuming things from the perspective of the customers and the variety of them. According to the project manager AstaZero has a need of looking through their processes when working with customers. When working with immature customers it is mutual.

4.8 Follow up with customer

According to the CFO the company AstaZero has full control over each order all the way from the person who took the booking and what was utilized to deliver the projects. According the booking manager it is in the role to regular do a follow up on every project in the end of the day but done in an informal manner through a normal conversation. The research project manager continues by adding that there is no standardized follow up of the different projects and that AstaZero asks sometimes out of curiosity.

The CEO has a similar opinion to what is mentioned above but implies that there is a standardized way of following up with the customers. According to him when the customers leave the track after doing their tests AstaZero hands them sheets where they have the possibility to answer questions about how they experienced AstaZero's services.

When asking the track manager who handles the whole facilities is asked about these questions his reply was that " *I feel that AstaZero are not good at following up with their business with the customers. Also, not that good at seeing how satisfied the customers are with the services they provide*".

4.9 Booking process

The booking process from ordered service to until it is served to the customer is done in two ways. The reason to why there are two ways is because there are two types of customers. The recurrent customers that have contracts with AstaZero that just needs to call in and book the track and it is open for them to do their tests and there are new customers that books by sending in a request about what they want to do and AstaZero gives them an offer. The offer is later discussed and the customers sign a contract and later AstaZero performs their project depending on what kind of project it is.

The company's track manager states that " *There are two types of customers. The customers who has contracts with AstaZero that just call in their requests of what they need and later books the track. The second type of customers are the new customers who makes their first booking. This process starts when the new customers send in a request which AstaZero respond to and give the customer an offer. The offer is later discussed and the customer sign a contract which leads to AstaZero executing their project in the way that the customer has ordered*".

4.10 Long term goals

The company's long-term goal is to be a testbed for future research and development within the automotive industry. To be a support to the research and to be a world leading company. Company's CFO states that " *The main focus is on creating a trust between the customers and us. By convincing them that we are capable of performing the projects as they want us to do.*"

According to the company’s CFO the purpose from the beginning was in a long term to establish a company where customers can rely on the competence that AstaZero have. The purpose was not to be a company that just rent a test track to the automotive industry. From a long-term perspective, the goal is to provide a high service level on a more global scale and attract customers from all over the world.

According to project manager the company also strives to use their test-track for a lot more than just for industry customers to just hire it for a certain amount of time. The company want to develop a trust that enables the customers to hand them their project or research and to be confident in them executing full scale tests on a proper level.

4.11 Communication between company and customers

The communication is well established between the automotive industry customers and company. Compared with the research customers where the communication is not established in same degree. Thus, the company’s CEO states that ” AstaZero can become better at speaking the same “language” as their customers.”

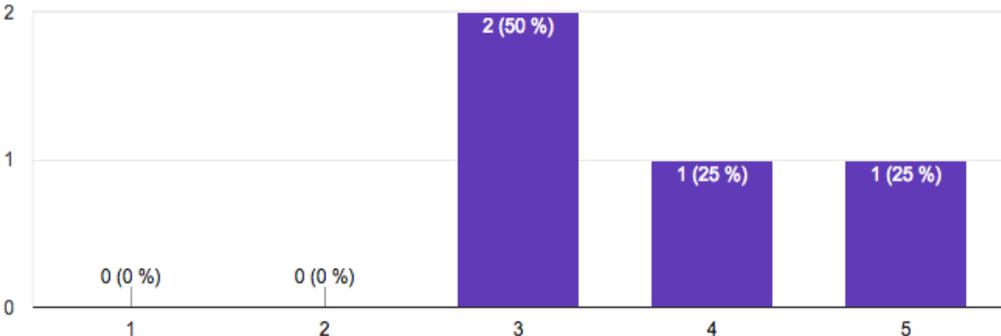
According to the company’s booking manager there are a lot of cases where personal relationships has been created between people in AstaZero and the customers. Which leads to what the Quality and Environmental Manager mentions where a customer can talk to an individual in the company who is not invested in some parts and information goes missing. To prevent this a new or alternative system should exist for information being shared. The Project manager for Analysis and verification projects brings up in adding that in overall the communication works good but there are issues in which they try to work on. According to the project manager it is a lot about roles and responsibilities as well as internally within the customer. People can become stressed which effects the communication negatively.

4.12 Questionnaire results from specific customers

1.

How do communication channels work in terms of handling bookings?

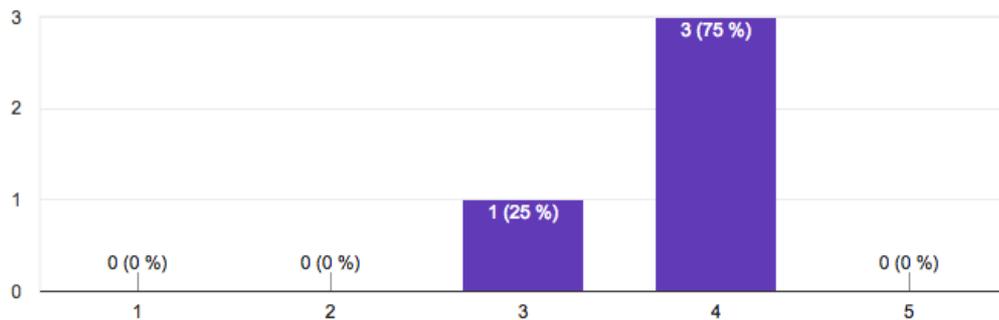
4 svar



2.

When there are requests for equipment, tools, etc. How well does AstaZero meet these customer requests?

4 svar



3.

What improvements do you consider important regarding the communication between you as a customer and AstaZero?

4 svar

What is needed is more frequent meetings between AZ and company A.

Web-based booking system where you have the possibility to make a booking in a calendar form and can easily see which days the track is available.

Transparent booking calendar would have been optimal.

Handling of bookings.

4.

Are there any services that AstaZero can not offer at the moment?

3 svar

No not regarding the track or equipment.

Do not know.

Do not know.

5.

Do you consider having quarterly meetings is enough. Or is there a need for more meetings?

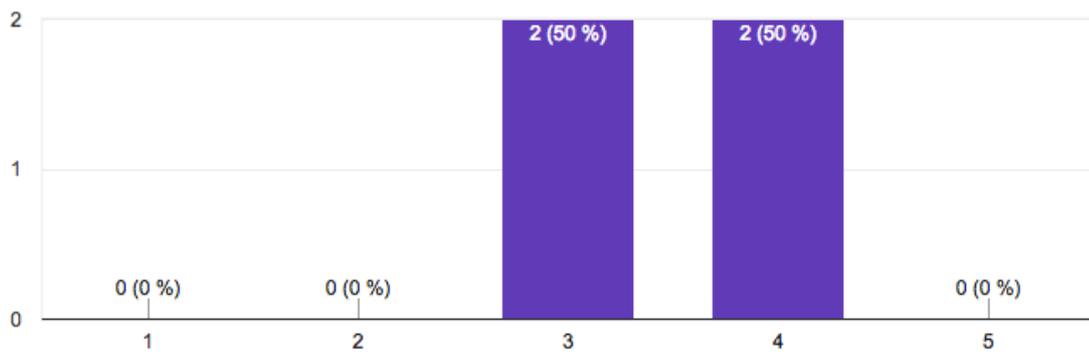
4 svar

It is probably enough.
Do not know.
It is enough quarterly.
It is enough.

6.

Do you experience yourself as a prioritised customer by Asta Zero?

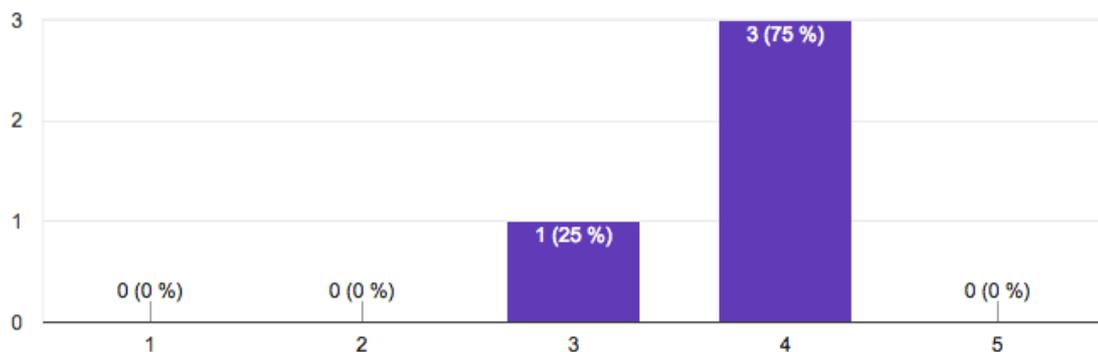
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7.

Do you experience that AstaZero is flexible enough to meet your demand?

4 svar



8.

Do you have any demand that AstaZero can not deliver at the moment?

2 svar

Salt-free and dry tracks.

Do not know

9.

What type of service demand do you most require? Is it just renting track, full test run, events etc?

4 svar

Renting track

Rent tracks.

Rent track.

rent track.

5. Analysis

Based on the empirical findings and the theory framework in the analysis part, the first and the second research question are analysed.

RQ 1: How can customers be divided into segments based on a characteristic at AstaZero?

5.1 Foundation for customer segmentation

As mentioned in the literature study according to (Wedel & Kamakura, 1999) when segmenting customers, it is important to choose right foundation for the segmentation. Where it is possible to find resembles and differences among the segments and create segments that are of importance and can create an ability for the company to meet the customer needs in a better way (McDonald & Dunbar, 2012).

Based on the empirical findings it has been identified that AstaZeros two most important customer groups are the customers from the automotive industry and researchers where the difference between them are values, interests and knowledge. According to (Wedel & Kamakura, 1999) segmenting customers based on interests and values are related to the psychographic segmentation. This type of segmentation gives the information that is necessary for the company to market their offering to their customers that attracts them.

According to McDonald & Dunbar, 2012 segmenting customers psychographically favour companies by supplying them the right knowledge in knowing why customers buy specific products or services, it gives the companies the ability to tailor a way to market the offering to the customer's personal traits as well as a psychographic segmentation can be used to design profiles of the customers in for the companies to enhance their brand.

This type of segmentation would benefit AstaZero so that the company have a clear profile of the automotive industry and the research customers group where the different values, interest and knowledge are known. Furthermore, the company can use the information to set a clearer strategy on how to market and which factors to focus on to meet the customer needs and expectations for the different customer segments.

5.2 Customer segmentation groups

To create customer segments that are of importance for AstaZero, the authors has decided to focus on AstaZero's two main customer groups who are researchers and customers from the automotive industry. According to McDonald & Dunbar (2012) it is important to create segment groups where the group size is not too small therefore the authors have decided to focus on the automotive industry and research customers where a psychographic segmentation is done, furthermore an elaboration on different factors that are related to a psychographic segmentation are mentioned.

5.2.1 Automotive industry segment

The companies that represent the automotive industry segment have a core part in AstaZero's business where long-time contracts are often set between the both parts. This issue leads to that the automotive industry customers require to be more prioritized since they are a customer of a high recurrent degree and where long-time contracts are set.

For the automotive industry segment, they have a high interest in continuously developing their safety systems, and therefore they have a high interest in also using AstaZero's services where they can be runned and tested. For the automotive industry when a new safety function is developed, for them it is important to run tests as soon as possible which can be a problem sometimes because the test track can be fully booked. This issue has led to that the automotive industry customers needing to book the track in time.

5.2.2 Research segment

Customers that represent the research segment are customers that AstaZero normally do not have any close relationship to but are still considered to be very important to AstaZero. These customers differ from the others in the way that they tend to have a project or a research and when the project or research is done they do not have an interest in using AstaZero's services.

Since these customer projects are not normally continuous leads to that the contract length is not so long compared with the automotive customer segments. When a project is finished there, it is not common that research customers return with the same types of projects. The research customer segment finds a high interest in getting support to their research and experience the knowledge and technology that AstaZero has.

5.3 Differentiations between segments

Based on the empirical data similarities and differences has been identified as seen in table 2. Example of differences between customers from the automotive industry and researchers are *behaviour, knowledge, requirements and service level*.

As seen from the answers of the questionnaire, the automotive industry customers have a high demand in just renting the track, compared with the researchers where more support and knowledge is required. Furthermore, the automotive Industry customers have a higher capacity demand compared with the research customers who are more interested in AstaZero’s technology and require more knowledge from AstaZero.

Comparison of the two customer segments		
	Automotive industry segment	Research segment
Service level required	Low degree	High degree
Knowledge degree	High degree	Medium degree
Recurrent customers	High degree	Low degree
Track demand	High degree	Low degree
Relationship to AstaZero	Good established	Not well established
Contract length	Long contract length mostly	Short contract length mostly
Track availability of total cap.	app. 70%	app. 30%
Type of service package and equipment required	Mostly just renting the track and equipment	Higher level of package and equipment required

Table 2. Comparison of the two customer segments

5.4 Customer prioritization

RO 2: Based on the created customer segments is it suitable to prioritize any segment, and what are the advantages and disadvantages with a segment prioritization?

According to Sandström (2003) segmentation has its basis on the concept that consumers who takes part of the company's services are not proportionately valuable. Based on the empirical findings and answers from the questionnaire indicates that the demand from the smaller customers which are in the research segment require a higher service level compared with the customers located in the automotive industry segment. The reason for this is since the customers who belong to the research segment possesses limited knowledge. The larger customers which are located in the automotive industry segment do not require a high grade of assistance from AstaZero besides taking advantage of their track and equipment since it is services that they themselves do not possess.

According to the companys CFO AstaZeros long-term goal is to become world leading and be known for their services where they run fully scaled test projects. To establish that goal, they need to focus and prioritize potential customers who will require a high service level and generate a high possible profit on a long term perspective instead of focusing on those customers that just renting the track. This type of strategy will lead to closer relationships with those customers who require a higher service level from AstaZero. This can be related to Homburg, Droll & Totzek (2008) that says for a company to make an increased profit it has appeared to be logical to prioritize those customers that generates highest revenue. This type of decision making has been questioned by many researchers where it is claimed that customer prioritization can have a significantly negative impact.

This reasoning can be related to what the company's CFO said about the companys purpose where it is to not to be a company that just rent a test track to the automotive industry. From a long-term perspective, the companys goal is to provide a high service level on a more global scale and attract customers from all over the world. If AstaZero would prioritize the automotive industry segment it would create obstacles for further development. Because as it looks now the automotive industry segment are mostly seeing interest in just renting the track.

Compared if the company would prioritize the research segment where a possibility and potential can be seen with a higher degree of service level that is required and limited knowledge possessed by the customers. If AstaZero less prioritize customers from the research customer segment it can lead to customer losses on a long run. For example, by prioritizing new type of research customers can lead to long-term relationships can be established, furthermore where the degree of recurrent and new type of research customers can increase.

6. Discussion

6.1 Customer segmentation at AstaZero

The customer segmentation that has been done in this study shows the differences between the automotive industry segment and the research segment. For AstaZero this can be a basis for future decisions of strategy making and future improvements. According to Jedid-Jah Jonkery, Nanda Piersma & Dirk Van den Poel, (2002) customer segmentation can help companies draw conclusions of how to market for different customer segments. For AstaZero the difference between the two main segments has been identified and can be beneficial for future marketing decisions.

According to Wedel & Kamakura, (1999) it can be difficult to segment customers if there is not a high variation between the customers. From the researcher's point of view the customer segmentation is maybe not the most optimal way of dividing customers for AstaZero. The reason for that is due to the low difference variation between the customers. Which resulted in that the researchers found it very hard to differentiate AstaZeros customers from each other and establish customer segments. Due to that issue the result was, two main customer segment groups. If the variation of customers had been larger and the need differentiations clearer, it had been easier to differentiate customers from each other and find more segments.

Furthermore, in this research the focus has been on those customers who are of high importance for AstaZero due to limited collected information. It is important to be aware that there are more customers for example private customers who have requests to rent the track or other type of company segments who sees an interest in renting the track. Because these types of customers are very infrequent therefore the researchers did not find that these customers should be taken into consideration when segmenting the customers.

6.1.1 Further breakdown of segments

According to Wedel & Kamakura, (1999) it is possible to break down a customer segment into further segments. The two created customer segments in this study are AstaZeros main segments and can be further broken down as illustrated in figure 11. For example, looking at the automotive industry segment which include customers such as car manufacturers, truck manufacturer etc. Compared with the research segment where the researchers are located and universities such as other research stakeholders. All these smaller customer groups within the automotive industry and research segment can be own smaller segments if there is of interest.

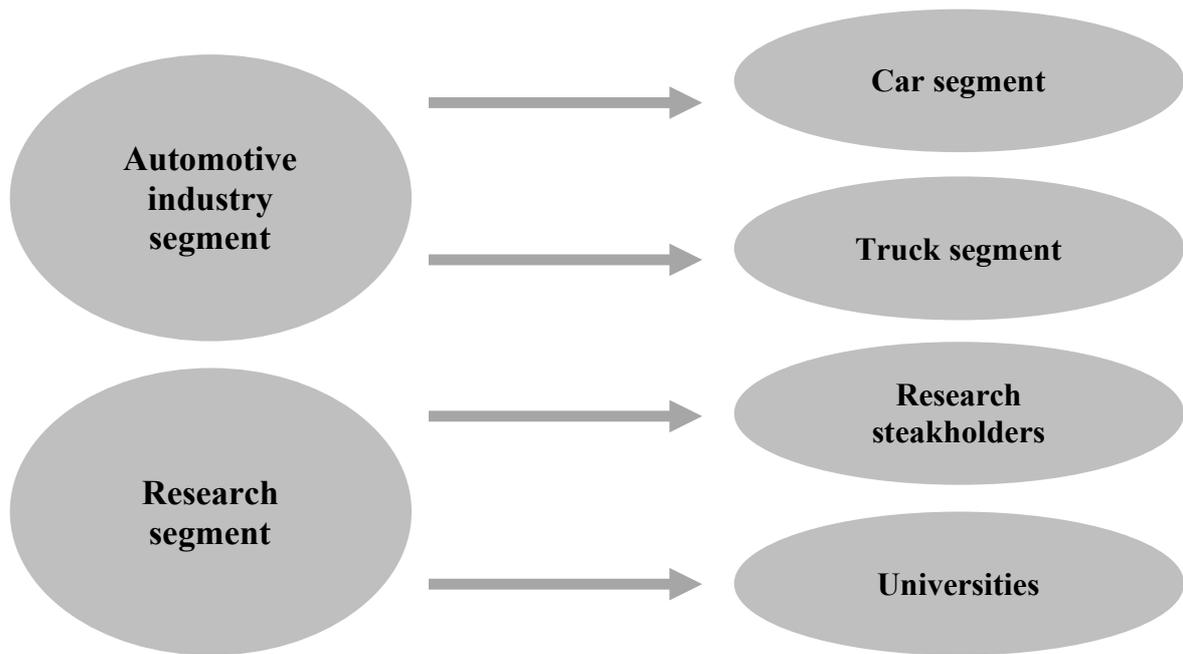


Figure 11. Further break down of customer segments

6.2 Customer prioritization

Due to their quick expansion and a high demand, AstaZero searches for means to improve and further expand. To do so they need to differentiate customers from each other to find improvements. Their strategy has been to handle every order separate and try to meet the customer requirement with no direct prioritization system.

Related to the research question 2 “*Based on the created customer segments is it suitable to prioritize any segment, and what are the advantages and disadvantages with a segment prioritization for AstaZero?*” Looking at their current customers, they have the customers from the automotive industry segment that do not require that much of their capability but are recurrent as well as they have their customers from the research segment that mostly are not recurrent customers in that degree as the automotive industry. The customers from the automotive industry that in one hand provides stable income but request a lower degree of service level from AstaZero compared with the research segment that are not recurrent at same level but in other hand mostly require a higher degree of service level from AstaZero.

Based on the study the researchers think that for AstaZero it is not optimal way to prioritize any customer, because every prioritization contributes with advantages and disadvantages. Especially it is not recommended to have a strategy where only those customers who generate highest profit for the moment should be prioritized, especially if those customers do not require a high degree of AstaZeros services. Because in that case customers that can be of importance for AstaZero on a long term perspective will be excluded. Therefore, it is hard to say which customer segment or customers should be prioritized.

According to the CFO customers from the automotive industry segment are important customers for the company and have a high interest of AstaZero services. According to the CFO the automotive industry customers have a high recurrent degree but are mostly just renting the track. The researchers think that, by prioritizing this type of customers would create many obstacles for further development and fulfilling their purpose of *becoming a world leading company that are known for their services where they run fully scaled test projects*. Instead they will be more seen as a company that just rent their test track for automotive industry customers.

The company should more focus on the question of *"How can AstaZero market and motivate the automotive industry to start requiring a higher level of service and is it even possible"*

The authors think that instead of prioritizing any customer segment, AstaZero need to find a balance where they have a stable income from the automotive industry and on a long term try to find a solution on how to market a higher level of services to the automotive industry segment. Furthermore, focus on the research segment of how to improve and establish better relationship with the research customer segment where they can sell a higher service level and further expand.

6.3 Further improvements

From the questionnaire, it has been identified from the customer perspective that there is a need of an improved booking system. Based on the questionnaire two respondents answered a question number three which was *"What improvements do you consider important regarding the communication between you as a customer and AstaZero?"* as following:

- Respondent 1 – Web based booking system where you have the possibility to make a booking in a calendar form and can easy see which days the track is available.
- Respondent 2 – Transparent booking calendar would have been optimal.

By having a well-established web based booking system, the company would increase their flexibility.

7. Conclusion

7.1 Customer segmentation process

The purpose of this study was to investigate how a service company can segment their customers based on characteristics. A segmentation of AstaZero's customers has been done where two main customer segment groups has been found. As mentioned in the literature study, companies that deliver a product versus companies that deliver a service, face different obstacles when it comes to segment their customers and market their offerings. For example, a product can be seen, measured and compared with other products compared with a service where it can only be experienced and based on reactions from people which occurs at a lower pace. Due to restricted customer availability and data it has become difficult to find segments and differentiating them from each other.

7.2 Importance for AstaZero based on the study

Based on the findings in this research as mentioned in the discussion, the researchers think that for AstaZero it is important to focus on the question *"How can AstaZero market and motivate the automotive industry to start requiring a higher level of service and is it even possible"*. Because if they establish that they will have a customer group which contribute with high revenue and require a high service level. In that case they could focus more on the other customer segments to find improvements and set new goals.

7.3 Proposal for future studies

For further research a recommendation is to focus on the two main customer segments and to further break down these customer groups and make an analysis on a more detailed level. Which can be the next step in the customer segmentation process.

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Appendix

Appendix 1. Interview template for employees at Asta Zero

1. What is your position at AstaZero?
2. What is your work tasks and what are you responsible of at AstaZero?

3. Which personnel is on the test track and what are their work tasks and responsibilities?
4. Who do you see as Asta Zeros customers and which type of customers do you have?
5. In which customer segments would you divide these customers into?
6. What do you think differs between the customers and what type of demand do you see from the different customer segments?
7. Do you see a need of process improvement and identification of processes at the company? Or do you think that the processes are clear and well defined within the company?
8. How would you describe the process starting from the customer until the service are delivered to the customer?
9. How do you communicate with your customers? Is it through mail or telephone?
10. Do you see any kind of variation between the orders and requests for various customer segments?
11. Have you noticed any demand from the customers that you do not deliver in the current situation?
12. Who has the responsibility for the customer orders and requests?
13. Do you have any kind of database where you collect all the different customer orders which you can follow up in a later stage?
14. Are you following up with customers after the service has been delivered to customer? If yes, how?
15. Differs customers geographically i.e. country etc. or do you just collaborate with customers / companies from Sweden. If yes, what distinguishes these customers from each other that is related to the process?
16. What are the differences between orders from large companies compared to SMEs and academia / research? Are there any patterns you have noticed in the demand of these two?
17. From your perspective, what improvements do you think would have been appropriate in the current situation?
18. How would you describe the company's (current state) in terms of definition of customer processes, customer relationships and follow-up with customers?
19. What are the different types of packaging services you offer to customers?
20. What problems do you usually encounter and how you deal with these problems?

21. Do you have a lot of recurrent customers? And who are these customers?
22. What do you do to keep your customers?
23. How many customers do you have on a daily, weekly and monthly basis?
24. How often is the test track available / vacant when there is no customer need?
25. Do you have customer segments you prioritise before others? If so, why?
26. Based on the services offered, have you noticed that new customer segments are interested in your services, if so, which?
27. Do you feel that there are some deficiencies in the services offered in the current situation? In such cases, what?
28. What deficiencies do you see in the processes you have in the current situation?
29. Are the communication channels well established between the company and customers? Does it work properly or are there any deficiencies?
30. Are the communication channels well established between the test track and the headquarter in Gothenburg? Does it work properly or are there any deficiencies?
31. Is every customer order specific and unique ? Or are there orders / bundling of services that are exactly the same whom different customer segments demand and do not differ from each other?

Appendix 2.

Questionnaire related to specific customers for future improvements at Asta Zero

1. How do communication channels work in terms of handling bookings?

Markera endast en oval.

	1	2	3	4	5	
Very bad	<input type="radio"/>	Very good				

2. When there are requests for equipment, tools, etc. How well does AstaZero meet these customer requests?

Markera endast en oval.

	1	2	3	4	5	
Very bad	<input type="radio"/>	Very good				

3. What improvements do you consider important regarding the communication between you as a customer and AstaZero?

4. Are there any services that AstaZero can not offer at the moment?

5. Do you consider having quarterly meetings is enough. Or is there a need for more meetings?

6. Do you experience yourself as a prioritised customer by Asta Zero?

Markera endast en oval.

1 2 3 4 5

Not prioritized at all Always prioritized

7. Do you experience that AstaZero is flexible enough to meet your demand?

Markera endast en oval.

1 2 3 4 5

Not flexible at all Very flexible

8. Do you have any demand that AstaZero can not deliver at the moment?

9. What type of service demand do you most require? Is it just renting track, full test run, events etc?
