Final Thesis

Streamlining the Voice of the Customer

A study exploring Voice of the Customer at Company X

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Abstract

One of the components of customer focus in a company is voice of the customer (VOC). Companies use the VOC for guiding them in producing products and services that help meet customer needs. There exists numerous VOC methods from literature for collecting VOC data, and it often recommends using multiple VOC methods to obtain better insight into consumer use, needs and problems. In addition, the literature recommends companies to have a unified data collection process to effectively collect, integrate and understand the VOC.

In this explorative case study, the authors investigate the VOC methods used by Company X and how VOC data collected from various methods are aggregated and employed at Company X. Company X is a large bus manufacturing company with a global presence and annual revenue of 3.1 billion USD. The study intends to understand if the academic recommendations reflect VOC practices at Company X.

The results from the study find that the criterion for choosing VOC methods at Company X is determined by the complexity of methods. Elaborate methods, such as focus groups and ethnography that help in complementing more commonly used methods, such as interviews and questionnaires, to capture necessary customer information, are not preferred due to being time and resource intensive. Furthermore the need for a structured process to aggregate VOC data from different sources is felt across the organization at Company X. However, the high cost of implementing a VOC process, resource constraints and un-evident benefits of a structured VOC process are found to be the main reasons that work against implementation of a structured process.
Acknowledgements

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1 Introduction

1.1 Background
In order for a company to be successful, understanding the customer needs and being able to interpret those into solutions are important traits for a company. A company that is able to achieve this is said to be a customer focused organization (Best, 2014). The collection of these customer needs, whether by surveys, focus groups or complaint forms are referred to as the voice of the customer (VOC). However it is the collection process and filtering of VOC that many companies struggle with when trying to make sense of the customer’s input, and thereby can end up with a solution that does not completely reflect the customer needs (Carulli et al., 2013; Goffin et al., 2012; Kärkkäinen et al., 2001).

In this paper, the authors will investigate the voice of the customer at a large company that manufacturers buses worldwide. The authors will refer to this company as “Company X” for the remainder of the thesis.

The authors approached the Product Strategy & Planning Manager at Company X (See Appendix A 8.1), after learning that Company X is keen on improving their VOC process, i.e. collecting and filtering the data into functional requirements that truly reflect the customer needs.

According to the Product Strategy & Planning Manager, Company X prides itself in being a customer focused company by incorporating the customer’s needs and desires into their products and even states that one of the main goals of the company is to be “No. 1 in customer satisfaction”, i.e. the company strives to have a clear customer focus and exceed customer expectations.

In order to achieve this goal the Product Strategy & Planning Manager has explicitly stated that a more structured approach across the organization at Company X should help guide the company towards better selecting the right methods for VOC, collating information from their key customers and also ensure that the information gathered is efficiently communicated to different stakeholders in the organization. (See Appendix A 8.1). Furthermore the Product Strategy & Planning Manager has expressed a desire to identify an ideal frequency for gathering the VOC and aggregating the data across the Company X, which has multi-sites worldwide.

1.2 Problem Discussion
According to Best (2014) in order for a company to remain successful, it needs to have strong customer focus. Customer focus involves understanding the customer needs, use situations and tracks customer satisfactions (Best, 2014). In the long run, a company with a strong customer focus will outperform its competition due to higher levels of customer satisfaction and in the short term will realize larger profits (Best, 2014, p.10).
Aksoy et al. (2008) also found in a study of 3600 company quarter observations that companies with high levels of customer satisfactions exhibited higher levels of profitability through shares. In addition Johnson and Gustafsson (2000), cited in Aksoy et al. (2008, p. 107) “find that profits can be increased by building revenues through improvements to customer service, customer satisfaction, and customer retention.”

Best (2014) argues that, for a company to build strong customer focus, there are three independent variables that contribute to customer focus, which are Customer Leadership, Voice of the Customer (VOC) and Customer Metrics (Best, 2014).

Best (2014) goes on to explain that the VOC consists of customer experience, customer solutions, and customer complaints. This is further highlighted by Lee et al. (2014, p.207) where the VOC provides valuable information in many aspects, such as (1) an understanding of customer perception on products and services, (2) finding the attributes of a product that need improvement and (3) can suggest a strategic direction for the company by providing a shared common language. These three aspects can be related back to customer experience, solutions and complaints described by (Best, 2014).

Bharadwaj et al. (2012) also found in a cross-sectional survey that being customer focused company has favorable consequences on hearing the VOC and acting on that information, and in addition a link exists between acting on the VOC and future buyer intentions in the form of competitive advantage.

Lee et al. (2014) explains that customer focused company is able to get feedback from its customers about experience, solutions and complaints by using traditional VOC methods such as interviews, surveys, questionnaires, focus groups, etc. to develop better products. Furthermore, advances in modern communication have enabled companies to access VOC from other sources apart from the traditional methods, e.g. user design tools, community of enthusiasts and forums all via the internet (Bickart et al., 2001; Cooper and Dreher, 2010; Lee et al., 2014).

However, with regards to the quality of information collected using various VOC methods, Goffin et al. (2012) state that it is important that company choose different methods to accurately get customer information. If the company is choosing the questions or forum for discussion when using VOC methods such as customer focus groups or interviews, then they are not actually questioning the customer about their real needs, so in essence the company is receiving superficial VOC data (Goffin et al., 2012).

Even though the sources of information have improved to a great extent, literature still suggests that companies could improve their product development strategy by better understanding of VOC data thereby enabling companies to create products that satisfy customer needs (Carulli et al., 2013; Goffin et al., 2012).
Pyon et al. (2010) argue that the VOC is business critical in identifying problems and opportunities for various parts of the company, and yet companies do not know how to achieve this using the VOC since the data collection process for some methods such as focus groups, ethnography and interviews are time consuming and resource heavy. Companies generally try to understand the causes of problems after they have occurred, which means the companies are not confronting the VOC occurrence pro-actively and quickly.

In addition, Shen et al. (2000) also argue that there is no definitive or deterministic process that can result in effective translation of customer requirements to an innovative product, and therefore suggest that guidelines should be developed as part of the process so that there is an effective approach towards integrating VOC for different circumstances.

In relation to that, Kärkkäinen et al. (2001) discuss the need for a customer focused needs assessment (or VOC) in product development as it is a critical factor in a company’s product development cycle. The authors argue that, if a needs assessment is done in a systematic way, it helps companies determine the present and future requirements of their customers, and also in mapping the competitive landscape. Furthermore, a systematic assessment helps companies to correctly focus development efforts and reduce the need for future design changes. However, Kärkkäinen et al. (2001) present evidence to show that in spite of the importance of VOC, many companies go about the process of understanding customer needs in an unsystematic and unorganized way.

Based on the preceding discussion, it could be debated that the uncertainty surrounding the VOC and relationship to customer satisfaction through new products or solutions is two-fold. First, it could be related to how the company questions the customer through the VOC methods, i.e. which methods are used to collect VOC data? Second, as Kärkkäinen et al. (2001) highlights above the process of gathering the VOC data to transforming into functional requirements is not carried out in an organized way, which means that the VOC data can become fragmented and therefore only certain parts of the customer feedback are gathered and transformed into functional requirements.

Due to the above it becomes more evident that a company, which collects VOC data in order to improve their product or solution, does not necessarily imply that they are a customer focused organization, as mentioned in the beginning of the problem discussion. A reason for this is that the VOC does not only mean customer experience, solutions and complaints as stated by Best (2014), but it covers the entire process of getting customer feedback, aggregating the data and transcribing that data into functional requirements so that a company is able to use it effectively in order to further their solution according to the customer feedback.
1.3 Problem Formulation and Purpose
Based on the problem discussion, two important questions emerge regarding the VOC and its relation to Company X, which are:

1. What methods are used by Company X to collect VOC data?
2. How does Company X aggregate the collected VOC data to create a unified picture?

In order to find answers to these questions, the focus of this case study will be to explore the VOC at Company X in relation to the above questions. By investigating this part of the VOC, the authors intend to be able to shed light on inefficiencies of not having a systematic approach across Company X. Furthermore, the results from the investigation should help in realizing an improved approach to ensure the VOC is transformed into functional requirements that reflect the customer needs.

1.4 Delimitations
The goal of the thesis is not to create a new tool for analyzing VOC, but to suggest a better means of working with VOC in order to better ensure it is reflected in the outcome of the solution or product. In addition, this case study will not investigate the transformation of the aggregated VOC data into functional requirements that is used by the engineering team in order to create services or products.

Furthermore, the input collected will only come from one company, Company X. However, Company X has offices around the world that are currently collecting VOC in different ways, thereby giving us a diverse or widely applicable case of VOC and process surrounding VOC.

1.5 Thesis structure
The remainder of the thesis will be presented in the following structure. First the theory will be presented in order to give the reader a better understanding of VOC. This is followed by the chapter describing the methodology employed in the exploratory case study. That is followed by the empirical findings, based on a questionnaire and interviews, which explains what the authors found out about VOC methods and aggregation process in Company X. The authors then analyze the empirical findings in comparison with the theory with regard to the two exploratory case study questions. This is followed by the Conclusion chapter with a summary of the findings based on the research questions, limitations of the findings, the implications, recommendations and further research.
2 Theory

2.1 Theory Introduction
Yin (2014) discusses the need for theoretical review in a case study in order to improve the external validity of the research design; therefore the theory chapter begins by attempting to give some understanding about what is the VOC and how it differs from common market research. This is followed by a review of the impact of the VOC, which has both positive and negative implications. After that part the review then proceeds onward with the VOC methods, which are used to gather the data from the customers, and also lists some of their strengths and weaknesses. The proceeding subchapter speaks about the challenges of aggregating the VOC data in order to ensure the output most accurately represents the customers’ needs. In the next chapter, a systematic process is discussed for building a VOC program. This is then followed by whether a company can become innovative by using customer driven requirements derived from the voice of the customer. Finally we close the theory chapter with a theory summary that attempts to explain how the theory relates to the questions the authors seek to answer in this case study.

2.2 Voice of the Customer
In short, the voice of the customer is about a company listening to the customer in order to understand their needs; however the voice of the customer has been defined in different ways by different people depending on the information it captures.

In Best (2014) the VOC is an essential component for building a strong customer focused organization, and consists of customer experience, customer solutions, and customer complaints.

According to Griffin and Hauser (1993), voice of the customer is a form of customer input which is used to address business decisions. Furthermore they elaborate that VOC is comprised of a hierarchical set of “customer needs”, where each need is assigned a priority, which indicates its importance to the customer.

Lee et al. (2014) explains that VOC contains contents such as customer benefits, suggestions and ideas for new products or services and customer complaints from previous product experiences.

According to Goodman (2014), VOC consists of systematic information on the experience of the current or existing customers and Goodman (2014) highlights a distinct difference with VOC and Market Research, which is elaborated on further in the following subchapter.

2.2.1 Difference between Voice of the Customer and Market Research
When discussing the voice of the customer, one can easily confuse this with market research; however it is important to understand the difference between the two.
Goodman (2014) argues that the majority of market research is done using surveys and is generally aimed at winning new customers. Hence it must not be confused with VOC which focuses on existing customers. Goodman (2014) further elaborates that the output of market research surveys are considered to be lagging indicators of existing due to the nature and timing of surveys. A survey taken days/weeks/months after a purchase does not reflect true feedback of the customer.

Furthermore Goodman (2014) adds that market research surveys regarding hypothetical products are considered to be highly unreliable since customers do not always know the full potential of product until they try it out. As a result, market research surveys offer a very keyhole view of what customers really want. In order to get a better picture of what customers want, Goodman (2014) recommends that a company uses myriad of sources to get VOC data. These sources typically come from VOC methods, such as interview, surveys, questionnaires, lead user analysis, and focus groups. Refer to Figure 1: A list of commonly used VOC methods.

The disadvantages of using market research for understanding customer needs are echoed by (Kärkkäinen et al., 2001). Kärkkäinen et al. (2001) argue that market research does not help in understanding customer needs in an industrial product setting since much of the methods are aimed for consumer products. By industrial product setting, Kärkkäinen et al. (2001) mean customers who produce their own products/services with the help of purchased products or use these products as parts of their own products.

2.3 What is the Impact of the Voice of the Customer?

According to Cooper et al. (2004), VOC research and market input are vital to the success of new product development process. They argue that companies can produce superior products as result of inspiration (or a technological breakthrough) or by building solid market information into their product development process and projects. They elaborate that a company can build solid market information through excellent voice of customer research, which is able to correctly identify customer needs, problems, benefits sought, and functionality desired (Cooper et al., 2004).

Cooper et al. (2004) conclude that the quality and type of market information that results from VOC is one of the major determinants that separate best from the worst performing companies. They reason that companies are fairly proficient at acquiring and analyzing quantitative information such as market size and expected sales, and competitive information. But they are weak in terms of qualitative information such as customer needs and wants, price sensitivity and reaction to the proposed produce, which is attributed to lack of VOC work. A majority of the businesses are also failing to get the necessary market and voice of customer inputs, resulting in an unclearly defined product before development begins (Cooper et al., 2004).
Other than generating ideas for superior products, the output of VOC research can be used by marketing experts in order to make necessary and targeted interventions with regards to assessing competitive landscape or pricing policies (Aguwa et al., 2012).

Lee et al. (2014) describe three advantages of the VOC, which are:

- Provides more detailed understanding of customer perceptions on products and services.
- Helps to discover attributes about a product or service that customer find important or that need improvement.
- Provide strategic direction for a firm by sharing a common language.

However, as the VOC can be helpful for a company, Lee et al. (2014) also explains that the consequences of the VOC can also be harmful for a company. The consequences include switching brands, filing complaints to the seller and even spreading negative feedback via word of mouth (Lee et al., 2014).

Furthermore Ulwick (2005) attempts to sell the idea that listening to the customer should be silenced as the literal voice of the customer actually sidetracks innovation and is fraught with ambiguity. Instead of customer driven requirements, Ulwick (2005) is for outcome driven requirements. Ulwick (2005) ideas about VOC and innovation are discussed in more detail in 2.6 Developing a Systematic Process for a Successful VOC Program.

2.4 Methods for Gathering Voice of the Customer Data

Different methods are used to acquire VOC in a company. These methods capture data that could be either qualitative or quantitative in nature. According to Aguwa et al. (2012), qualitative VOC will give information about the customers’ needs and wants and quantitative VOC shows the priority of the customer needs and wants. Thus, a VOC analysis will help companies avoid making costly product changes that will later not satisfy customers.

Cooper and Dreher (2010) describe in detail many different sources for generating new product ideas such as through partners and vendors, start-ups, patent mining, internal idea capture system and VOC methods. Out of all of these sources, Cooper and Dreher (2010) mention that VOC methods, seen in figure 1, fare well relative to other approaches such as start-ups, patent mining, internal idea capture etc. They elaborate that VOC methods are rated highly by users in terms of effectiveness in generating new product ideas. They classify different VOC methods into two categories: Classic and Complex methods.

Classic methods are used often and have proven effective, and yet are not expensive or time consuming to implement. Complex methods are used less often and are
considered resource intensive, so higher cost to implement (Rese et al. (2015). Examples of classic methods are Interview, Questionnaire, Customer visit teams, Customer focus groups etc. Examples of complex methods are ethnography, customer segmentation etc.

Goodman (2014) additionally lists and compares different VOC methods in his survey of different VOC methods. Goodman (2014) argues that every VOC source has strengths and weakness associated with it and hence implying that customer voice cannot be effectively captured by any single method. Goodman (2014) concludes that organization which depends on VOC process for product innovation and improvements should draw upon multiple sources of information if they are to get around the weaknesses of individual sources of VOC.

In the table below, various VOC sources are listed along with what is obtained with each method and typical usage scenario. The table has been compiled based on information from (Cooper and Dreher 2010; Creusen et al., 2013; Rese et al., 2015; Goodman 2014).

<table>
<thead>
<tr>
<th>VOC Methods</th>
<th>What is Obtained</th>
<th>When to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>Unique information based on informal chat and targeted questionnaire</td>
<td>When needing detailed information about customer needs from 1 to 2 people</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>A high-level understanding of customer needs or preferences</td>
<td>When needing statistically valid answers about a topic, problem or product</td>
</tr>
<tr>
<td>Complaint Analysis</td>
<td>Problems with current products or solutions.</td>
<td>For fast results, low effort to conduct</td>
</tr>
<tr>
<td>Customer Visit Teams</td>
<td>Detailed information from key purchase influencers</td>
<td>To uncover user problems, needs and wants for new products</td>
</tr>
<tr>
<td>Focus Groups</td>
<td>Unique information from a selected group who is familiar with the product or solution</td>
<td>When needing more unique information about a product or service</td>
</tr>
<tr>
<td><strong>Lead User Analysis</strong></td>
<td>Further insight into a product or solution from an innovative customer</td>
<td>When needing detailed information about certain product or service</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Internal Quality Metrics</strong></td>
<td>Inspection data on defects, call monitoring data and service access data</td>
<td>To identify the cause of a problem and/or effectiveness of a service.</td>
</tr>
<tr>
<td><strong>Segmentation Studies</strong></td>
<td>Results based on demographic data, i.e. grouping customers on based on specific criteria</td>
<td>When targeting a certain group based on certain criteria to understand their preferences or buying behaviors</td>
</tr>
<tr>
<td><strong>Ethnography</strong></td>
<td>“Real” user information as this involves sitting amongst users and observing them</td>
<td>When there is a need to understand how customers interact with a product.</td>
</tr>
<tr>
<td><strong>Customer Brainstorming</strong></td>
<td>A large number of ideas, even wild ideas from sessions or interviews</td>
<td>When trying to propose solutions for identified inefficiencies.</td>
</tr>
<tr>
<td><strong>Community of Enthusiasts</strong></td>
<td>Identifying problems and ideas for new products</td>
<td>When there are identified a group of enthusiasts about a certain product category</td>
</tr>
<tr>
<td><strong>Customer advisory board</strong></td>
<td>New product ideas based on a customer advisory board</td>
<td>For maintaining good customer relations, however not very effective for VOC</td>
</tr>
</tbody>
</table>

Figure 1: A list of commonly used VOC methods
According to Rese et al. (2015) VOC methods have been investigated in regard to their benefits in the new product development phase, and research has confirmed the potential benefits of customer integration in the company’s knowledge base. An example of similar research is by Creusen et al. (2013), where they investigated 25 different consumer research methods used among 88 multinational companies in the Netherlands that produce business to consumer products. Their study concluded that the “interview” VOC method was the most widely used among the 88 companies they investigated. Focus groups and Complaint Analysis were ranked 2nd and 3rd respectively in the Creusen et al. (2013) study. The use of focus group as a one of the preferred methods for collecting VOC has also been found in survey conducted by Mahajan et.al (1992).

2.5 Challenges of Building a Good VOC with Aggregated Data

Even though having myriad of sources is ideal to get the true voice of the customers, Goodman (2014) lists four challenges of implementing a VOC process based on integrated data generated by multiple sources:

1. Gathering and classifying data from different source such that they fit together on combining.
2. Analysis of data to create a unified picture.
3. Quantification of the VOC output.
4. Distribution of the output in a timely manner and compelling others in organization to read and act on the reports.

Goodman (2014) argues that the challenge with the data collection and classification stage comes from the fact that all parties involved in data collection such as IT department, CRM suppliers should ensure that data collected should contain fields that are important to the company, for example, symptom, problem, expectation, reason for dissatisfaction, identity of customer, geographic location etc. Further, VOC output from different sources should be integrated and impact of revenue should be quantified in order to create a unified picture that arrives at a best estimate of common problems faced by different customers.

Carulli et al. (2013) also discuss the process of aggregating data once the VOC has been captured, where the end result should be an aggregated set of customer needs which are derived by analyzing and organizing the captured data. Carulli et al. (2013) mention that the data can be organized by using an affinity diagram, which was developed by Kawakita Jiro in the 1960s, and is also referred to as the KJ method. This method is 4 step process, which can filter the VOC data into logical categories (ideas, issues, solutions and problems), thereby making it possible to understand the problem or solution (Carulli et al., 2013).

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1 https://en.wikipedia.org/wiki/Affinity_diagram
The 4-step process is described by Negoita et al. (2004) and involves (1) listing the ideas based on a central theme such as VOC, (2) grouping the ideas into islands, (3) finding a relation between those groups (islands) by drawing a line, and (4) writing a conclusion based on the findings.

Once the data has been aggregated into a set of well-defined customer needs, then the next step is transforming those needs into functional requirements that can be acted on by the engineering department (Carulli et al., 2013).

2.6 Developing a Systematic Process for a Successful VOC Program

One of the main challenges of building a VOC program is to ensure there exists a process to efficiently organize VOC data such that the customer feedback is fully represented in the functional requirements of future products. Carulli et al. (2013) highlight that an issue with collecting the VOC data is the difficulty in collecting data about the “unspoken” customer needs. They further suggest that once the VOC data has been collected, the data needs to be analyzed and organized into a well-defined set of aggregated customer needs. A way of organizing the data could be based on a procedure by Pahl et al. (2007), cited in Carulli et al. (2013), where a procedure is described for identifying three types of functional requirements from customer needs, which are (1) Basic requirements, (2) technical performance requirements and (3) attractive requirements. All of these should be ranked and arranged in a clear order to be used in the next phase of the product development process.

Clausing (1994) also discusses more of a structured approach, known as Quality Functional Deployment (QFD) which is used to support the process of transforming the VOC data into functional requirements. The data captured from the VOC should be listed as needs, and the list represents the input for a tool used in QFD known as House of Quality (HOC) and is comprised of a matrix, which has the aim of converting market information into product strategies for business. From this list the product functional requirements are derived and constantly verified during the product development process (Clausing 1994; Yamashina et al., 2002). QFD does have some disadvantages, which are not very adaptable to changing demands from the customer, does not work well in larger companies with divisions since QFD requires initiative, teamwork and info sharing, and finally QFD focuses solely on the satisfying the customer, and ignores other factors such as cost, length of product lifecycle and available resources (Lohrey, n.d).

Goodman (2014) explains that VOC processes have different objectives in different companies and different functions within a company. A good VOC process should address the following objectives:

- Should have high dynamic range such that the output produced by the program covers a wide range of functions (R&D, Marketing, Product and business planning).
● Should help a company identify emerging issues.
● Should set priorities to existing and new opportunities.
● Should quantify in a credible manner the financial impact of improving customer experience.
● Should be available in a timely and detailed enough manner to prevent problems by understanding their cause (employee, product design, marketing, delivery etc.).
● Intervene in a timely manner while the problems are happening.
● Improve products and processes over the intermediate and long term.

Goodman (2014) presents the key building blocks a good VOC process that achieves the above listed objectives. The key building blocks are illustrated below in Figure 2: Key Building Blocks of the VOC Process

**Figure 2: Key Building Blocks of the VOC Process**


Goodman (2014) elaborates different building blocks and the actions involved in each of the key building blocks. However, the key takeaway from the elaborate description is summarized below:

● VOC must include data from myriad of sources in order to increase the credibility of the report.
● VOC data from different sources must be integrated and analyzed to create a unified picture.
● Effective CRM tools and other technologies must be used in order to aid data collection, integration and analysis of VOC data.
● There must be a single person/COORDINATOR responsible to ensure that VOC program is running as per above described process and the output is being distributed in a timely and effective manner.
● VOC must identify and prioritize items that are actionable. Actionable items must be incentivized in order to compel actions. Additionally actionable items should be tracked.

2.7 Can a Company use VOC to become more Innovative?

Up until now when discussing VOC, we have been referring to requirements that are given by customer as it relates to their needs. However Ulwick (2002) and Ulwick (2005) suggest that a company should stop listening to the customer since asking them can undermine the innovation process. The reasoning is based on the argument that customers are not qualified to know what solutions are best for them. Ulwick (2005) does not advocate a company to completely shut off the customer; instead he argues that traditional VOC methods for data collection rarely capture the customer requirements, and that there is a need for a new thinking and new methods for data collection.

According to Ulwick (2005), the reason for advocating not listening to the customer completely, is that customers use a different set of metrics for measuring when a job is done or a product meets their requirements. In other words, customers tend to focus on one part of the product that would fit their needs instead of focusing on the entire product. Ulwick (2005) explains that a company should not brainstorm with a customer on a range of ideas, as customers are willing to share their thoughts, but they are not aware of the types of information the company needs to create valuable products.

Instead of a customer driven requirement, Ulwick (2002) and Ulwick (2005) are promoting more of an outcome-driven requirement, where the company should capture the necessary customer information and use it to guide them to create valuable products or services. Ulwick (2005) further mentions that when a company chooses to focus on the job and not the customer, then they are really capable of creating customer value.

Therefore according to Ulwick (2005) for a company to be innovative, they should not listen to the literal voice of the customer that gives information in the form of solutions, specifications, needs and benefits, but instead a company should focus on the outcomes, jobs and constraints that is necessary for successful innovation, hence a VOC that derives outcome driven requirements and not customer driven requirements.

However the view shared by Ulwick is not shared by other authors. According to Lee et al. (2014) the VOC is considered as a resource for innovation. In their research, they mentioned that customer expectations in VOC are key determinants of organizational innovation.
Furthermore, Cooper and Edgett (2008) made a study of the 18 different sources used for new ideas for product innovation, where 8 of the sources in the study were taken from VOC methods. As it turns out the top five sources in the study came from VOC methods where Ethnographic Research ranked the highest in terms of effectiveness.

2.8 Theory Summary

After having gone the main parts of the theory on VOC, it is interesting to note which parts from the theory can be of particular help to the authors in our search to find answers to the following two exploratory questions from the problem formulation.

1. What methods are used by Company X to collect VOC data?
2. How does Company X aggregate the collected VOC data to create a unified picture?

When reflecting back on what is VOC, we found out that it is made up of customer experiences, solutions and complaints. Griffin and Hauser (1993) specified that the VOC is based on customer needs and that those needs should be given a priority based on their importance. Furthermore Goodman (2014) distinguished VOC form winning new customers to existing customers saying that VOC should consist of the latter. Additionally, Goodman (2014) stated that the VOC should consist of a myriad of sources or VOC methods, such as surveys, interviews, focus groups etc.

Regarding the impact of VOC or why should company have a VOC program, Cooper et al. (2004) explain that companies can build solid market research into their product development process by having excellent VOC research, which is able to identify customer needs. Cooper et al. (2014) further explains that the VOC is one of the major determinants that separate best from the worst performing companies. Aguwa et al. (2012) mentions that the output of VOC can enable marketing experts to make better decisions when assessing the competitive landscape or pricing policies. However Lee et al. (2014) warns that the impact of the VOC can also have negative impact on a company, and such is the case if a customer files a complaint and then it spreads by word of mouth, which can results in customers switching brands.

Figure 1: A list of commonly used VOC methods shows that there are “easy to employ” and more “resource heavy” methods that can be used to collect VOC. Each method gives companies access to unique information at different times in companies’ business or product life-cycle. A case study on VOC methods by Creusen et al. (2013) found that the interview method was the most commonly used, and focus groups and complaint analysis ranked 2nd and 3rd respectively. Cooper and Edgett (2008) made a similar study on various methods used in production innovation and they concluded that the resource intensive VOC method ethnographic research ranked highest in their study in terms of effectiveness.
Even though a company can collect the VOC data through a myriad of VOC sources, it still remains a challenge to collate the data in order to transform those into functional requirements that reflect the customer needs. Goodman (2014) highlights four challenges for building a successful VOC, which are: (1) collating the data when coming from different sources, (2) creating a unified picture, (3) ranking by importance, and (4) distributing the VOC analysis in a timely matter.

Goodman (2014) presented the key building blocks of a good VOC process which consisted of 8 key blocks. See Figure 2: Key Building Blocks of the VOC Process. Goodman (2014) findings from the blocks are a good VOC process must contain a myriad of sources, the data must be collated to create a unified picture, CRM tools should be used in aiding in the collection and collating of data, there must be a person responsible for the VOC process and the items found from the customer feedback must be actionable and incentivized in order to compel actions.

To end the theoretical review, a question is posed whether a company can become more innovative by a good VOC process. Ulwick (2005) argues that customer driven requirements limit a company from being innovative as the customer tends to focus on their needs and not the entire product. Ulwick (2005) advocates for outcome driven requirements, where customer feedback is gathered, but only used in order to guide in creating products or services. Despite Ulwick's views on VOC, other authors suggest that VOC is a good resource for innovation.
3 Method

3.1 Research Strategy

3.1.1 Use of case study as research strategy

According to Yin (2014) and Saunders et al. (2009) there exist various types of research strategies, such as Survey, Experiment, Grounded Theory, Ethnography, Archival Analysis and Case Study. Saunders et al. (2009) highlights that the appropriate research strategy will be guided by the research questions and objectives and that none of them are superior or inferior to one another, and Yin (2014) elaborates further that each of the strategies can be exploratory, descriptive or explanatory.

Furthermore Yin (2014) states there are three conditions that should be met when selecting the appropriate research strategy. The first is the form of the research question, the second is the extent of control the researcher has on the actual behavioral events, and the third is the degree of focus on contemporary versus historical events.

When considering the author's research questions in this thesis with the conditions above from Yin (2014), it can be seen that the questions are more exploratory in nature, both being how and what questions. In addition the authors have no control over the behavioral events noted in research, and lastly the research focuses on contemporary events. When the conditions are met as such, then according to Yin (2014, p.9) this corresponds to the case study research strategy.

According to Crowe et al. (2011, p.1), “the case study method is used to generate an in-depth, multifaceted understanding of a complex issue in its real life context”. Morris and Wood (1991) cited in Saunders et al. (2009, p.146) further highlight that “the case study will be of particular interest to you if you wish to gain a rich understanding of the context of the research and the processes being enacted.” Furthermore Saunders et al. (2009) mentions that the case study research strategy has a good ability to generate answers to why, how and what questions, and goes on to explain that the case study strategy is most often used in explanatory and exploratory research.

However there are drawbacks to a case study, such as the need to conduct rigorous research through multiple sources of evidence and the inability to generalize from a single case (Yin, 2014). Saunders et al. (2009) mentions that you will likely need to triangulate multiple sources of data in order to ensure the data is telling you what you think it is telling you.

When taking all of the above factors into consideration mentioned by Yin (2014) and Saunders et al. (2009), the authors have chosen the case study research method for this thesis. More precisely this is an exploratory single-case study, involving non-random group of participants at Company X, that investigates two important parts of the VOC,
the data collection by VOC methods and collating of the data, and thus VOC is the unit of analysis being explored.

After choosing the case study strategy for this thesis, there are three research approaches according to Creswell (2002) to be considered which are Qualitative, Quantitative and Mixed Methods.

3.1.2 Qualitative Research Approach
The qualitative approach follows a more inductive style of research where according to Saunders et al. (2009), the data is collected and the theory is developed as a result of the data analysis. Creswell (2002) goes further to explain that qualitative data analysis inductively builds from particulars into general themes, where the research makes interpretations of the data, or explanation building as Yin (2014) describes. Creswell (2002) mentions that qualitative designs are made up of grounded theory, ethnographies and case studies.

3.1.3 Quantitative Research Approach
As opposed to the inductive qualitative approach, the quantitative approach follows a more deductive style of research where according to Saunders et al. (2009), a theory or hypothesis are developed and then they are tested by using a designed research strategy. Creswell (2002) further states that the quantitative approach is about testing theories by comparing the relationship among the specific variables, and measuring the data, which can be used further in statistical analysis. Furthermore Creswell (2002) adds that this approach usually contains assumptions about testing the theory deductively, building in bias, and thereby controlling the explanation. Creswell (2002) further adds that typical quantitative designs are of the surveys, questionnaires, and experimental type.

3.1.4 Mixed Research Approach
The mixed methods approach is combination of both qualitative and quantitative approaches, where the data is integrated by the use of a research design, e.g. case study, that may involve philosophical and theoretical framework (Creswell, 2002). Saunders et al. (2009) further add that with the mixed methods approach, one can employ interviews in the exploratory stage and questionnaire in the explanatory stage of the research project. However Bryman (2006) found after researching over 200 articles using the mixed methods approach, there is usually a contradiction in the way the mixed method should be designed, i.e. triangulation, facilitation, complementarity, etc. and how the researchers of the articles used them in practice, and concluded that researchers should be more explicit about which multiple methods is conducted and recognize that the outcomes may not be predictable.

Following the statements above from Saunders et al. (2009) and Creswell (2002), the authors have chosen the mixed methods approach combined with the case study strategy for answering the research questions how and what. As Yin (2014) states, it
forces the methods to share the same research questions in order to collect complementary data to be used in the analysis. By choosing the mixed methods approach we attempt to triangulate the data by using a questionnaire and interviews in order to ensure the data are telling us what we think it is telling us (Saunders et al. 2009).

3.2 Data Collection

As previously mentioned the authors have chosen a mixed methods approach for collecting data based on literature from (Creswell, 2014; Robson, 2002; Saunders et al. 2009).

Robson (2002); Saunders et al. (2009) and Yin (2014) all list various methods for collecting data; among them are survey (questionnaires), interviews, observation, and the use of documents. As the authors are conducting this study from a distance and cannot directly observe the VOC at company X, nor do we have access to company documents as the authors are not associated with Company X, the two methods chosen for collecting data are internet-mediated questionnaire and semi-structured interviews.

According to Saunders et al. (2009) the questionnaire is one of the most widely used data collection techniques within survey strategy, and further highlights that since each participant is asked to respond to the same list of questions, it provides an efficient way of collecting responses prior to analyzing the data. Even though the questionnaire is not a good method for exploratory research, it still can be used in a mixed methods approach to provide more than one source of reference (Saunders et al., 2009).

Robson (2002) explains further that an internet based questionnaire has the advantage that it can generate a large amount of data at a low cost, and is often the easiest way of retrieving information about the past history of a larger group of people. The disadvantage is that they typically have a low response rate, there could arise ambiguities in the replies from the respondents as they may not treat the questionnaire seriously (Robson, 2002).

Saunders et al. (2009) explains that the interview is a discussion between two or more people and can be helpful in gathering valid and reliable data that may be relevant for the research questions. Semi-structured interviews according to Robson (2002) has a pre-defined order of questions, however those questions can be re-arranged depending on interviewer’s perception of what is appropriate.

The interview has the advantage in that it gives the interviewer the chance to follow-up on interesting responses and the possibility to investigate underlying motives in a way that a questionnaire cannot (Robson, 2002). The downside to interviews are not very reliable since there is not a standardized process, it’s hard to rule out response bias or even interviewer bias, and they are often time-consuming (Robson, 2002; Saunders et al. 2009).
The authors explain the design of the questionnaire and interview further down in the text, but first want to highlight the validity of data and reliability along with the procedure for obtaining credible data.

3.2.1 Validity and Reliability of Research Design
Yin (2014, p.45) presents four design tests that can be applied to test the research design, which are construct validity, internal validity, external validity and reliability.

In order to improve the construct validity for our investigation Yin (2014) encourages the use of multiple sources of evidence in order to converge the lines of inquiry (triangulation) during the data collection, and therefore the authors have chosen both a questionnaire and interviews as multiple sources of evidence.

The authors have improved on the internal validity of the thesis by selecting respondents for the questionnaire and interviews that are working with the VOC analysis at Company X, and choosing questions that the respondents are familiar with, thereby furthering the chances that the result is accurately capturing how the VOC is used at company X (Robson, 2002; Saunders et al. 2009).

Saunders et al. (2009) explains that the external validity is synonymous with generalizability, and this means whether or not the research findings can be applicable to other research settings. A drawback to the external validity in this thesis is that the authors are only researching one company, being Company X. Furthermore Yin (2014) explains that the type of research questions can help or hinder the external validity, and states that how and why questions generally lend to better external validity as there is more analytic generalization based on those type of questions.

Yin (2014) describes the reliability as the need to document the case study procedures (making a chain of evidence) in collecting the data, in other words, an observer should be able to perform the same investigation, and however the findings can be different. The goal of the reliability according Yin (2014) is to reduce errors and biases in the study, and this can be achieved by the use of case study protocol and database. The authors have not used a case study protocol in this thesis, but have attempted to document the procedures for how the questionnaire and interviews were carried out etc., thereby enabling a later investigator to find the same findings and conclusions when following the procedures (Yin, 2014).

3.2.2 Procedure for obtaining credible data and sampling at Company X
The process for obtaining credible data started by contacting the Product Strategy & Product Planning Manager (PSPP Manager) at Company X. This person described to us the problem description seen from the company’s perspective, which as described in the 1.1 Background, there is no real structure for collecting VOC and collating the data. The PSPP Manager provided the authors with 11 business directors at Company X who deal with the VOC at their respective regional sites worldwide.
The authors were concerned with the limited amount of names available to participate in the questionnaire, especially if all do not respond, therefore when deciding the sample size for a research method, Saunders et al. (2009) describes various types of sample techniques such as simple random, systematic, cluster etc. In addition Saunders et al. (2009, p.223) explains how to select an appropriate technique based on a flowchart in Figure 3.

Figure 3: Selecting a probability sample

From the flowchart in Figure 3, the authors have mapped their way through the flowchart (highlighted in yellow) in order to arrive at a sample technique, which is using cluster sampling. Cluster sampling involves looking at groups in discrete areas prior to sampling, and the groups are termed clusters (Saunders et al., 2009). In this thesis, the clusters are the 11 business directors from the regional sites at Company X.

This technique according to Robson (2002) can be quite handy when the sample frame size is unknown and the population is widely dispersed such as the case of Company X and their VOC. Furthermore Creswell (2002) explains that single-stage cluster sampling is one where the authors have access to names in a population and can sample those respondents directly.

Regarding the sample size, Robson (2002, pp.198-199) explains that in a flexible research design such as a case study, that it is difficult to specify the number of samples, but the idea is that one keeps going until you reach saturation, or when the data has little add or nothing to what you have already learned. In this thesis, the authors also started to notice this saturation after 4-5 interview sessions.

Based on this information the authors contacted the 11 business directors through email introducing ourselves and at the same time giving a short synopsis of the problem description at the company and what we would like to explore.

For the 1st level of credible information the authors prepared a questionnaire for each business director to answer. As Robson (2002) pointed out earlier, the questionnaire is a good method for obtaining large amounts of data at a low cost. Another reason for choosing the questionnaire first is that the business directors would be given same type of questions, which Saunders et al. (2009), pointed out earlier is a quick way of analyzing the results. The idea is that the authors will use these results to find out which business director should be targeted for an interview. The sample size for the questionnaire was 6 out of 11 respondents answered the questionnaire.

For the 2nd level of credible information the authors performed interviews. As Robson (2002) explained earlier, the interview gives the researcher the chance to follow-up on questions or investigate underlying motives that the questionnaire cannot. However not all the interviewees that were selected came from the questionnaire results. The interviewees for this round were chosen by the PSPP Manager as this person also held a stake in trying to get the most valuable information possible, so the authors interviewed 5 of the business directors who responded to the questionnaire, and the Marketing VP at Company X. In total there were 6 interview sessions held.
3.2.3 Questionnaire Design

When designing the questionnaire for Company X, the authors have to consider the internal validity of the questionnaire, meaning that the questions need to be phrased in a way that the respondents, or 11 business directors, are able to decipher what the authors are questioning according to (Foddy 1994, cited in Saunders et al., 2009, p.372). This is further highlighted in figure 4.

![Figure 4](image-url)

**Figure 4: Stages that must occur if a question is to be valid and reliable**


In *Figure 4* Saunders et al. (2009) explains that all 4 stages must be met before the question is valid and reliable. In order to improve the validity and reliability of the questions, the authors first did a pilot study using the PSPP manager at company X, to ensure that he understood the authors’ questions.

Both Saunders et al.(2009) and Creswell (2002) suggest using a survey design software, since it will make it easier to re-write the questions if needed and to publish them. The authors used Google Forms survey design software, since the creation of a survey/questionnaire is fairly straightforward to setup, and it provides the statistics in graphical representation based on the results along with exporting the results to Excel for better analysis of the data.

The order and flow of the questionnaire was also considered by the authors as suggested by Saunders et al. (2009). The questionnaire is split up into 4 different areas: General Questions, Sources of Data, VOC data analysis, and VOC Communication and
Frequency and contains 19 close-ended questions and 7 open-ended questions, so the questionnaire is a mix of questions according to (Saunders et al., 2009). The idea of this questionnaire is to gauge each director on their understanding of the VOC in their respective region.

The General Questions try to get an understanding of the VOC structure in each region. The Sources of Data section then asks about VOC method related questions. The VOC Data Analysis is geared more for understanding how and why the company aggregates multiple sources of VOC data. Finally the VOC Communication and Frequency asks more about whether there is a defined process in place for VOC and how often is the data collected. See Appendix B for the Questionnaire.

Once the authors and the PSPP manager were satisfied with the content of the questionnaire, an email or “cover letter” was created by the PSPP manager explaining the purpose of the questionnaire as outlined by (Saunders et al., 2009). See Appendix B for the cover letter email.

Based on the questionnaire we expect to gain a better understanding for how each region is using the VOC, and what methods they employ and how they collate their data. As company X has stated they lack an overall VOC program, it is both authors expectation the answers will vary from region to region.

As the authors don’t expect to get very in-depth answers as to how are regional offices using VOC, how they select their relevant VOC sources, or what is the frequency of collection, and why they choose their approach for aggregating data, so the plan is then to interview key VOC stakeholders in order to collect complementary or missing information.

### 3.2.4 Interview Design

Interviews can be fastest and most effective way to understand the current VOC process at Company X; however one of the major weaknesses of interviews, as pointed out by Yin (2014), is that the outcome of interviews can be misleading if the questions are poorly articulated and if the answers given by interviewees are biased or reflexive.

In order to overcome this weakness, the authors have formulated their interview questions as seen in Appendix C with the PSPP Manager at Company X by discussing the key building blocks of a good VOC process taken from our theory. The authors conducted 5 semi-structured interviews and 1 unstructured interview, where semi-structured interviews are widely used in flexible qualitative designs (Robson, 2002). The interview questions are open-ended questions which give the interviewee a chance to tell their story. The questions can be seen in Appendix C.

The authors also tried to adhere to the interview principles laid out in Robson (2002, p.274), when interviewing the respondents at Company X, which are:
Listen more than you speak
- Put questions in a straightforward, clear and non-threatening way
- Eliminate cues which lead interviewees to respond in a particular way
- Enjoy it (at least look as though you do)

Four of the interviews took place at Company X’s main headquarters, and two over the telephone.

In order to better prepare for the interview sessions with the business directors at Company X, the authors started first by interviewing the PSPP Manager in a “mock interview”, and thereby practicing our skills before the real interviews, as mentioned in (Robson, 2002).

The expectation from the interview sessions are to gain a better understanding of the VOC program at the company, which should help answer the case study questions and thus make it easier in order draw more definite conclusions in the analysis chapter.

3.3 Data Analysis
The analytic strategy used in this case study will be to compare the empirical data with the theory in relation to the two exploratory questions the authors have chosen.

Since the authors have chosen a mixed methods approach, there are both quantitative and qualitative data. Robson (2002) mentions that in a flexible research design such as a case study, it usually involves qualitative data; however case studies can also result in quantitative data in which it also needs to be explored, and understand what has been found in order for it to be used in the later stages of the data collection (Robson, 2002).

Since the data will be “explored”, the authors will adhere to a more deductive analytical strategy as explained by Saunders et al. (2009), uses the existing theory to shape an approach to analyze the data. Under the deductive based analytical procedure, the authors will use explanation building as specified in (Yin, 2014; Saunders et al, 2009).

Explanation building is a type of pattern matching, and the goal is to analyze the data by building an explanation of the case (Yin, 2014). Normally, explanation building involves testing a hypothesis, which is related to an explanatory case study; however a “hypothesis-generating” approach is more relevant for exploratory case studies (Glaser and Strauss, 1967, cited in Saunders et al., 2009, p.501). It is this type of explanation building the authors will use for analyzing the data against the theoretical framework.

Furthermore the authors have categorized the data under the case study questions research questions, as proposed by Saunders et al. (2009) as a qualitative analysis process.

In addition to explanation building, the authors will make use of logic models as an analysis technique, which Yin (2014) explains involves matching the empirical data to
the theoretical event. In this case study, the authors have made use of Goodman’s model Figure 2: Key Building Blocks of the VOC Process in order to compare and explain the VOC structure at Company X
4 Empirical Findings

In this chapter, the authors have provided the results from the questionnaire and interviews at Company X as they compare with the two exploratory questions.

1. What methods are used by Company X to collect VOC data?
2. How does Company X aggregate the collected VOC data to create a unified picture?

4.1 Main Findings from the Questionnaire

Findings from the questionnaire are listed below. The findings are categorized into two sections based on the two questions this study intends to answer.

All the questions from the Questionnaire can be seen in Appendix B 9.1

4.1.1 What methods are used by Company X to collect VOC data?

9. Which of the following methods are used to capture customer voice? (Choose one or more)

![Figure 5: Question 9](image)

- From question 9 in the Questionnaire, Distributors and Dealers ranked highest
- Customer visit and Employee input ranked 2nd respectively
- Customer surveys came in 4th
Customer survey/interviews and customer contacts or customer clinics are identified as the top methods for obtaining VOC. Customer contact and clinics are identified as the most effective methods for collecting VOC data from customers.

11. What are the weaknesses (if any) of the method stated as answer to the previous question?

   - Lack of a consistent process
   - Not organised and feedback is hard to capture and return centrally without adding workload to the market.
   - Needs dedicated teams to structure and carry out interviews
   - Difficulty to capture the whole picture and focus on key issues/patterns to improve
   - Customers often think more based on history and past experience
Figure 8: Question 14

- Requirements from key customers are prioritized over other customers.
- Customer technical recommendations are highly valued as a source of VOC since it is assumed that customers know what they need for their operations.

4.1.2 How does Company X aggregate the collected VOC data to create a unified picture?

Figure 9: Question 2

- All respondents acknowledge agree on common objectives of a good VOC program, i.e. effective collection and collation of various VOC sources and creation of a unified picture.
- 4 out of 6 respondents answered that there was no specific VOC program in their region.
3. How often are VOC input collected in your area?

- There is no defined frequency for collecting customer requirement. Across different regions it is either collected with different frequency: Annual, bi-annual, monthly and as required without any structure.

5. It is a dedicated role?

- All 6 respondents identified different people as person responsible for integrating data from different sources. Market managers commonly identified as main responsible for VOC program in a particular region.
- All respondents acknowledge that VOC responsibility within the company across various regions is not a dedicated role.
4 out of 6 respondents acknowledged that there is no formal process to integrate all sources of VOC data.

5 out of 6 respondents acknowledged lack of analytical tools/techniques to filter down customer feedback from different sources or lack of knowledge of existence of such tools.
20. What do you think are the main challenges when it comes to integrating VOC data from different sources?

6 responses

- it should be handled by 1 dedicated person following strict procedures on agreed topics
- Experienced people with support of accepted methodology and set of criterias
- Resources locally and the ability for teams to genuinely use and include the information in central/product planning.
- Needs dedicated teams to structure and carry out the activity
- consistency and aggregation
- We need a more formal and systematic process. We need to "avoid" the Sales function filter.

Figure 14: Question 20

22. Is there a process to review actions taken on previous VoC inputs?

6 responses

- Yes: 33.3%
- No: 16.7%
- Maybe: 16.7%
- We act in all markets on service meeting inputs and comments.
- Sometimes, as part of the market Business Review for markets where REX is done
- Yes but very recent April 2017

Figure 15: Question 22

- 2 out 6 were not aware of a process to review actions taken on previous VOC inputs.
25. Are customer feedback on product & services communicated to right stakeholders in your organization?

40% Yes
60% No

 Majority of the respondents believe that feedback on products and services are communicated to right stakeholders in the organization.

26. Who is responsible to engage right stakeholders in your organization to handle customer feedback (choose one or more)

5 responses

- Sales & Marketing: 4 (80%)
- RnD representative: 0 (0%)
- Technical support: 0 (0%)
- Network Development and competencies: 1 (20%)

 Sales and Marketing department is identified as the main responsible to engage the right stakeholders and in some cases it is up to individuals to develop the correct network within the organization.
4.2 Main Findings from the Interviews

The list below summarizes the main findings from interviews. The list is divided in three sections, the first two based on research questions this study intends to answer and an additional section that captures the recommendations for a good VOC process.

The meeting minutes from the interviews can be found in Appendix C 10.

4.2.1 What methods are used by Company X to collect VOC data?

- Trust and personal relationship are important for customers. Hence most preferred method is informal talk.
- Customer typically gets annoyed if there are more than two methods to collect customer requirement. Additionally, Administrative overhead, time, cost and high resource requirements are seen as main reasons for not adopting more methods to collect VOC.
- Customer surveys, interviews and contacts are found to be inadequate to capture all information necessary to listen to all customer needs and wants. One of the interviewees was very specific that the customer needs for “soft products or services” or new product or service offerings that can complement main products are not collected at all.
- Ethnographic research and lead user analysis could help company fill gaps of existing methods.

4.2.2 How does Company X aggregate the collected VOC data to create a unified picture?

- The requirements collected from customers are generally captive with Sales and Marketing representatives. Since there is no pre-defined protocol to communicate these requirements to right stakeholders, it is generally communicated through meetings or presentations as and when the opportunity arises.
- Requirements are mostly collected towards fulfilling mid to long term requirements with no focus on future products or services.
- Customer satisfaction/brand surveys used to quantify customer VOC actions taken.
- The VOC collected from customers are presented to top management. However there is no clear evidence that shows the information is being communicated to all necessary departments.
- Disadvantages of a structured process
  - Monotony associated with filling in similar forms.
  - It would result in the need for more resources in order adhere to the process.
Structured process is generally perceived as waste of time if the added value is not evident.

4.2.3 Recommendations for a good VOC process

- It would help if there are pre-defined set of questions that can be used by sales/marketing representatives when interacting with customers.
- Reports from customer meetings are too long and generally considered waste of time. Instead, an easy interface (maybe on iPad) to enter customer thoughts/comments in a central database would certainly help in recording the outcome of customer meetings.
- In order for the VOC program to be effective, accountability is important. There should be a dedicated person driving the customer requirement collection process. It has been recommended that the product planning department should be the main driver for activities related to VOC collation and management.
- Financial incentives are not important. It does not make so much of a difference considered the nature of the task, i.e. person successfully collects customer requirements and creates a unified picture.
- It is important the person responsible for creating a unified picture holds a communication session twice a year that shows the key findings from different VOC sources. That would people involved understand the need for such a process.
- Information regarding key customers, customer trends and requirements should be communicated at least once or twice a year.
- Information should be easily accessible, i.e. there should be central storage area where information from various regions/clusters is collated. Information can be saved in the form of PowerPoint presentation instead introducing administrative heavy tools.
5 Analysis

The empirical findings will be analyzed against the theory in an effort to identify the gaps in Company X’s VOC process, and thereby suggest a better approach / process in relation to the VOC.

5.1 What methods are used by Company X to collect VOC data?

As described in theory in section 2.2, 2.3 & 2.4, it is important for a company to use a myriad of sources to obtain accurately the needs and wants of its customers. It was found in the findings that Company X mainly depends on classic methods of obtaining VOC, i.e. interviews/surveys, customer contacts, customer clinics or focus groups.

In addition, the questionnaire and interview findings showed that although dealers and distributors came out as the most used VOC methods, customer contact, surveys and focus groups/clinics were regarded as being more effective VOC method for better understanding of customer.

Findings from the interview also showed that methods, which are time and resource intensive, are not generally adopted within the company if the method’s effectiveness is not evident and proven.

With regard to customer contacts/interviews, as one of the top choices of VOC methods, one of the interviewees cited “having personal contact and trust” with the customer as an important factor that influences getting the right requirement from the customer. Given the exploratory nature of the study, it is not possible to conclusively say if “having personal contact and trust” is the most critical factor when choosing to use customer contract/interview as top methods of choice. However, it is reasonable to suggest that “personal contact and trust” with the customer could be one of the main reasons for choosing this method of obtaining VOC.

As pointed out by Cooper et al. (2010), although ethnographic research is rated as a highly effective method that provides great insights into customer needs, behavior, problems and opportunities, it is not very popular because the method is very resource and time intensive. The theoretical finding accurately reflects empirical findings in this regard. As listed in the questionnaire findings, many of the respondents recognize the weakness of top methods of VOC used within the company and additionally, the case study interviews reveal that ethnographic research and lead user analysis could be used as supplementary methods to capture necessary information. However the methods are not in use either due to lack of resources (i.e. human resource, budget etc.) or discontinuation of programs due to various other reasons.

Further, it has been suggested by multiple interviewees that a pre-defined questionnaire to guide customer interview would certainly improve customer interview outcome and help the company obtain better VOC. Here again, theoretical findings (Cooper et al.,
2010) and empirical findings align with each other. Cooper et al. (2010) further recommends that customer interviews should be generally done by a cross functional team consisting of marketing, sales and technical representatives.

5.2 How does Company X aggregate the collected VOC data to create a unified picture?

In the analysis that follows, we have mainly used Goodman’s (2014) model to understand and explore components of a good VOC program. Other authors, such as Cox (2011) and Aguwa et al. (2012) have emphasized on the components of good VOC program, however only Goodman (2014) has presented it in a structured manner which encouraged us to use the model as our main reference. The theory behind developing a good VOC program is described in detail in 2.5 Challenges of Building a Good VOC with Aggregated Data.

In the questionnaire and interview findings, it was listed that there is a need for a better process or structure for collecting and aggregating the VOC. The only part of the findings that adhere to the theory is when it comes to having multiple sources for VOC data. However, there is complete misalignment when it comes to key components of a good VOC program such as integration and analysis to create a unified picture, effective CRM tools and other technologies to aid data collection and analysis, single person coordinator to ensure VOC program is executed as per plan and creation of actionable and trackable items from VOC data.

Starting in section 2.5 Challenges of Building a Good VOC with Aggregated Data, Goodman (2014) highlights four challenges in building a good VOC program:

1. Aggregating data from different VOC sources.
2. Creating a unified picture.
3. Ranking by importance.
4. Distributing the VOC analysis in a timely manner.

5.2.1 Aggregating data from different VOC sources

According to Goodman (2014), collation of VOC data has two important aspects:

1. A need for a central database to store customer input from various sources.
2. Analytical tools to interpret the data collected.

Goodman (2014) and Aguwa et al. (2012) mention that one of the VOC analysis challenges is the lack of an intelligent system that can interpret, analyze and provide conclusive data that empowers leaders to take appropriate action. Aguwa et al. (2012) show that it is important to have analytical tools that looks at changes in knowledge database and detects information using advanced data mining techniques.
The need for a central database to record outcome of customer interviews or clinics was discussed during interviews. The need for a central storage area was acknowledged by all interview participants. However, it must be added that all participants were very particular with regards to tool usage and complexity. A simple tool with minimal administrative overhead was recommended over complex tools with advanced features that adds additional work and generally perceived as unnecessary, i.e. none of interviewees thought it was necessary to use analytical tools or advanced data mining techniques.

5.2.2 Creating a unified picture and ranking by importance

Goodman (2014) argues that, in order to create a unified picture based on customer inputs from various sources, it is necessary to have a well-defined owner for overall VOC effort in order to reduce fragmentation and provide overall guidance on how and what kind of data everyone collects in their area of responsibility. Goodman (2014) adds that structure process and dedicated role for VOC program are important for creating a unified picture based on various customer inputs. Additionally Cooper (2004) argues that companies can build better customer knowledge by having more organized structure for obtaining VOC.

Based on interview and questionnaire responses, it can be observed that Company X does not have a structured process, infrastructure or dedicated owner necessary, for collating data from different sources and various regions, and for creating a unified picture from various regions and sources. This aspect was discussed at length during the interviews and it was suggested by majority of business directors that every business region within Company X should give a short presentation on their top customers describing key parameters and the process of aggregating this should be owned by the Product Planning department.

Griffin and Hauser (1993) highlighted that the VOC is based on customer needs and those needs should be given a priority according to their importance. Additionally, Goodman (2014) argues that it is important that there is a clear profit and revenue impact analysis made on every customer voice collected. This would ensure correct priority and receive right attention from relevant stakeholders. This argument was acknowledged positively by interviewees. The interviewees were very particular that all new features or services requested by customers should have some kind of value-add analysis so that right requirements are picked up by the company for further actions.

As described by Goodman (2014), along with a structured process, it is important to show the benefits of the structured process, otherwise such a process, even if correctly implemented, is at a risk of being incorrectly followed or completely discarded. One of the interviewees questioned the need for a structured process and how that would be better than current approach. The majority of the interviewees argue that a structured
process is monotonous, expensive in terms of time and resources and deemed unnecessary unless the need for it is evident or made evident.

5.2.3 Distributing the VOC analysis in a timely manner
As discussed in theory before in section 2.4, a systematic and timely understanding of customer needs would save company from costly design changes to products or services under development. Regarding distribution of the VOC analysis in a timely manner, the findings point to a need to understand how often the VOC should be collected in the company. Majority of the interviewees agreed that, by collecting VOC once a year, the company risks missing out on changing customer needs. As a first step, a bi-annual VOC analysis reporting was recommended by interviewees.

5.2.4 VOC and Innovation
In section 2.7 Can a Company use VOC to become more Innovative? One of the arguments from Ulwick (2005) is that it is not always good for a company to listen to its customers if the company wants to become more innovative. The findings from the questionnaire indicate that customer technical recommendations are always listened to since the company believes their customers know what they need for their operation. However, interview findings show that the company takes more of a middle ground, i.e. its listens to the customer but at the end of the day the innovative ideas are coming from within the company.

On the other hand Cooper and Edgett (2008) and Lee et al. (2014) both mentions that VOC can be a good source for innovation, such as VOC method ethnographic research. However Company X is not employing the more resource heavy VOC methods, but only using the easier to employ methods.
6 Conclusions

In this case study the authors attempted to explore the methods used by Company X to collect VOC and how the collected VOC data is aggregated, i.e. if there is a process around aggregating VOC data. Based on the analysis, we can conclude the following:

1. Company X only uses classical VOC methods to capture customer voice. The criterion for choosing VOC methods are mostly limited by the complexity of methods, resource and time requirements even though the existing methods do not capture all the necessary information.

2. The current approach towards the overall VOC aggregation effort within Company X is entirely ad hoc or unstructured. Even though, the need for a structured process is felt across the organization, lack of structured approach is mainly attributed to high cost of implementing a VOC process, resource constraints and un-evident benefits of a structured VOC process.

6.1 Limitations of our study and findings

6.1.1 Case Study limitations
Since the authors have not directly observed any of the events discussed in the empirical findings, the analysis has been made strictly with inferences based on the questionnaire and interviews.
In addition the sample size is limited for the questionnaire and interviews, so the authors have focused on the qualitative analysis versus quantitative analysis.

6.1.2 Sample size limitations
The sample frame was 11, however only 6 participated. This is still a very low amount when compared to 30 as the minimum suggested in Saunders et al. (2009), although Robson (2002) mentions that in a flexible research design, there are no set minimums for sampling frame, but instead is decided when a saturation point has been reached or when no more info can be gained by adding samples.

6.1.3 Finding limitations
The empirical findings from the study did not provide enough information to answer the following two questions that we intended to answer:

1. How is Company X handling complaint analysis, which is a VOC method?
It is not clearly understood what impact the complaints have on the company, is there brand loyalty or are customers switching brands when not satisfied with their buses.

2. Does Company X choose the VOC methods based on the type of customer or are they based on the type of product or service?
It is not clear if choice of VOC method has any dependency on customer segmentation or product segmentation in the company.

6.2 Recommendations
Based on both theoretical as well as empirical evidence Company X would benefit from a better structured process is required to efficiently collate and communicate VOC data to relevant stakeholders within the organization.

- It is recommended that Company X should invest in more resource and time intensive methods such as ethnography that are proven to be more effective than classical VOC methods.
- It is recommended that customer clinics and customer interviews are guided using a predefined questionnaire that ensures getting all necessary information from customers.
- It is recommended that the company implements a central database that can be used to collate and better manage outcome of customer interviews, customer clinics and surveys.
- As a future addition, further enhancements could be to use analytical tools and advanced data mining techniques to dig out information that can help the company understand its customers better.
- It is recommended that the overall VOC effort has clear owner who can drive the process and enforce policies that help in collection and collation of VOC data. Interview findings suggest product planning as one of the potential owners of the process.
- It is recommended that VOC process defined has a clear communication cycle or a so called ‘Yearly clock’. Based on interview findings, communication frequency should be bi-annual and communication should include key findings from various regions/departments at Company X.

6.3 Further Research
In this study, the overall effort of VOC in a company has been explored with focus mostly being on criterion for choosing VOC methods and overall approach towards handling VOC data. The findings and analysis led to conclusions that suggested the need for a better structured process for collating and communicating VOC with recommendations for a better process. The recommendations are based on theory as well as suggestions from experts in the field.

A further research proposal would be to verify the validity of these recommendations in real live scenario. This could be done by implementing the recommended process and observing the outcome over the period of the process.
7 References


8 Appendix A

8.1 Meeting minutes with the Product Strategy & Planning Manager at Company X (28/01/2017)

The company needs help in optimizing their customer relation strategy. The goal of the thesis is to define a process that streamlines the methodology to capture the voice of the customer.

Thesis could be extended to investigate:

- New methods to capture the voice of the customer

- Identify optimum periodicity for the document feeding into different planning cycles
  - Currently the company depends on different traditional methodologies to capture the voice of the customer
  - Captive knowledge
    - Sales, dealers and distributors interact with the customer in order to understand the future requirements
  - Customer clinics
    - Standalone workshops are conducted with customers and potential customers in order to get information for future products
  - Market survey
    - External agencies are hired to get detailed information about the market and market requirements
  - Business development
    - Business development teams interact with customers to develop custom solutions to individual customers
Appendix B

9.1 Questionnaire for Company X

9.1.1 General Questions

<table>
<thead>
<tr>
<th>Timestamp</th>
<th>Email Address</th>
<th>1. Which market / cluster site do you represent?</th>
<th>2. Do you have VOC program in your area?</th>
<th>3. How often are VOC input collected in your area?</th>
</tr>
</thead>
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<tr>
<td>4/13/2017 11:12:34</td>
<td>BRI</td>
<td>Yes</td>
<td></td>
<td>don't know</td>
</tr>
<tr>
<td>4/14/2017 13:11:01</td>
<td>MEAC</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/15/2017 15:45:42</td>
<td>Asia Pacific</td>
<td>Yes, have had CSS previously in Australia</td>
<td>CSS was Ill Annual</td>
<td></td>
</tr>
<tr>
<td>4/15/2017 15:49:03</td>
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<td>No</td>
<td>As required. Not in a structured manner</td>
<td></td>
</tr>
<tr>
<td>4/24/2017 16:43:40</td>
<td>MEAC</td>
<td>Yes</td>
<td>Monthly</td>
<td></td>
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<tr>
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<td>Region International</td>
<td>No</td>
<td>Annually</td>
<td></td>
</tr>
</tbody>
</table>

4. Who is the main responsible for VOC program in your area? 5. Is it a dedicated role? 6. Is the VOC program specific to your region or is it based on a company’s global program?

No

Our market managers have run

Marketing and Sales, Dealers and distributors, Business intelligence

Marketing and Sales, Dealers and distributors

The market managers have the connect to the customers

Marketing and Sales

9.1.2 Sources of VOC Data

Marketing and Sales, Dealers and distributors

Customer contact and complaints, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers

Customer contact and complaints, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and complaints, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and visits, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and complaints

Customer contact and visits, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers

Customer focus groups or customer clinics

Customer focus groups or customer clinics

Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers

Customer contact and complaints, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and complaints, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and complaints, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers, Customer focus groups or customer clinics

Customer contact and complaints, Customer feedback and complaints, Customer visits, Segmentation studies, Distributors, Dealers or retailers, Customer focus groups or customer clinics
9.1.3 VOC Data Analysis

15. Do you have a formal process to integrate all sources of VOC data?
   16. Who is responsible for integrating data from different sources?
   17. Are there any artificial tools or techniques used to shorten/filter out customer feedback?

<table>
<thead>
<tr>
<th>Yes</th>
<th>Maybe</th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td>Maybe</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>Not structured</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>The market managers have the connection to the customer</td>
<td>Middle East, MEAC</td>
</tr>
<tr>
<td>No</td>
<td>Product Strategy, sales (Ej SPEED)</td>
<td>Maybe</td>
</tr>
</tbody>
</table>

18. If the answer to above question is No, are there any reasons for not using such tools?
19. What do you think are the main challenges when it comes to integrating VOC data from different sources?

We need to improve it but we also need it to be prioritized
We try to align our global processes. We try not to add extra workload to our teams where the value cannot be proven
Drivers centrally
Consistency and aggregation
We need a more formal and systematic process. We need to avoid the Sales function filter.

9.1.4 VOC Communication and Frequency

20. Are there guidelines to employees/managers to act on the basis of information collected using VOC?
21. Is there a process to review actions taken on previous VOC inputs?
22. Do you use external companies to capture the voice of the customer?

<table>
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<tr>
<th>Yes</th>
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<tr>
<td>No</td>
<td>Yes</td>
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<td>Yes</td>
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<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

23. Are customer feedback on product & services communicated to right stakeholders in your organization?

Customer Satisfaction Survey
Presentation, Employee workshop
As required, Not a prioritised manner
Reports
Report. Presentation

24. Who is responsible to engage right stakeholders in your organization to handle customer feedback (choose one or more)

Sales & Marketing
Middle East, MEAC
Sales & Marketing, competence and network development manager
Sales & Marketing

9.2 Cover Letter Email

[Cover letter content]

Sriharth: Profile
My name is Sriharth Gopal. I'm 29 years old and I have a Bachelor's degree in Telecommunications from 2003 and a Master's degree in wireless communication from 2009 at Lund Technical University. I have over 10 years of technical experience in mobile communications industry along with experience in testing and working within multicultural teams in Sweden, India, China, Turkey and Thailand. My technical experience includes standardization and implementation of telecommunication software on embedded systems. Currently, I'm working with Ericsson at Goteborg, Sweden in a system simulation team responsible for 5G base station algorithms and system design. Additionally, I'm a 2nd year MBA student at Delhi School of Technology in Sweden, and working on my final thesis with Jeffrey Goldstrom.

Best Regards,
[Name]
Product Strategy & Product Planning Manager
Business Region International
Appendix C

The semi-structured interviews that were held are based on the following open-ended questions that aim to provide answers for the case study questions.

1. How are you using the VOC in your region?

2. Which methods are you using in order to collect the data?

3. What is the frequency for collecting the data, how often?

4. How should the data be collected and collated?

10.1 Interview 1

Interview minutes 2017-05-08 9:00-10:00, Regional Director MEAC

Attendees: Regional Director, PSPP Manager, Srikanth and Jeffrey

1. Regarding present day system for collecting customer requirements/VOC

   • Requirements from the customer is collected based on direct contact with the customer through customer clinics, customer satisfaction survey and informal chat. Informal chat was the most preferred way of understanding customers.
   • Other than this company’s representatives, external agencies are sometimes used to collect feedback from customers.
   • There is no defined process to collect customer VOC. There was a mention of process called REX (Retail excellence) which was used to collect customer feedback.
   • The requirements collected are generally captive with sales/marketing representatives. It is communicated to head-quarters through presentations/meetings. There is no pre-defined communication protocol.

2. Regarding need for VOC/customer feedback

   • Inputs are typically collected towards fulfilling mid to long term requirements for vehicle products/services
   • Feedback is generally taken for existing products. No requirements collected for future products.
   • It is not possible for a company to be both factory centric and customer centric. This bus company is mostly a factory centric company and does not involve customers in the design process.

3. Regarding need for more methods to capture customer VOC
• Trust and personal relationship are important for customers. Hence most preferred method is informal talk.
• Customer typically get annoyed if there are more than two methods to collect customer requirement.
• Customer satisfaction/brand surveys used to quantify customer VOC actions taken.

4. Regarding structured process for collecting VOC requirements.
• There have been complaints that products do not reflect customer needs. So, there is certainly a need for a better process than what exists today.
• Disadvantages of a structured process
  o Monotony associated with filling in similar forms
  o Need for more resources overseas in order adhere to the process
  o Could be perceived as waste of time if value add is not evident.
• It would help if there are pre-defined set of questions that can be used by sales/marketing when interacting with customers
• Reports from customer meetings are too long and generally considered waste of time. Instead, an easy interface (maybe on ipad) to enter customer thoughts/comments in a central database would certainly help in recording the outcome of customer meetings.
• In order for the VOC program to be effective, accountability is important. There should a dedicated person driving the customer requirement collection process.
• Financial incentives are not important. It does not make so much of a difference considered the nature of the task, i.e. person successfully collects customer requirements and creates a unified picture.
• All people involved should be convinced the need for such a process. Hence steps should be taken to help believe that it is really needed.
• It is important the person responsible for creating a unified pictures holds a communication session twice a year that shows the key findings from different VOC sources.

10.2 Interview 2
Interview minutes 2017-05-22 16:30-17:30, Marketing VP Headquarters Gothenburg

Attendees: Marketing VP, PSPP Manager, Srikanth and Jeffrey

1. What can you tell us about the VOC at the bus company?
• Process point of view
  ▪ Commercial pre-requisites for a new product is not good enough before new product development begins. By commercial prerequisites, the Marketing VP means who are the customers? how big is the customer base? what are the needs of the customers etc.?

• New features need to be
  ▪ Value based calculation
  ▪ Lifecycle Cost
  ▪ Benefits
  ▪ Product Development doesn’t know about this
    • Why do you want to have it
    • What are you prepared to pay for it
  ▪ Whatever we do should have an “Added value”
  ▪ Product Planning should be judging the added value
  ▪ Product Planning is dependent on the market or clusters
  ▪ Balance between the Product Planning and the Market for what is possible and what isn’t possible

• Anything to do with “Soft” products is not run well in the company, too much attention is on the HW or physical requirements in the company. “Soft” services are not considered until it’s too late

• The focus is on the hard products all the way to the top mgmt in the company

• Not enough resources with competitor comparison, important for benchmarking the market

• The bus manufacturing company could learn more about the customers’ business go to the customer and learn how they are using the product.

• When describing the bus business, you need to understand the business model from the operator point of view
  ▪ For Example, Gothenburg has one business model; city council is deciding how much money they will spend on public transport.
  ▪ They then tender out to the operators (customers)
  ▪ One should understand this to understand the operators in regards lifecycle cost.
  ▪ France is different - purchasing model is different, public transport authority is buying the buses, and operators only run them, so transport authority is customer, which has an implication on the lifecycle cost
  ▪ USA has Federal funding of 80% (New York) affects lifecycle cost.
- All of this can be interpreted as VOC, but it’s really the Voice of the Operation.
- Electric Buses are bringing change for the operators.
- This has an indirect effect on the bus company’s profitability

2. How to collate the VOC from all these customers?
   - Should it be captured once a year?
     - The marketing VP suggests once or twice a year and talk about trends in the business e.g. business models and to also discuss about the the “big 5” customers
     - Currently Product Planning is going to 3 clusters in Q3 and poll general information from them and how different markets are doing, and how do they see the next 3 years.
       - This is a formal process, but doesn’t bring out many details about VOC
     - Marketing sends out info in Sept to all clusters about product launch
     - The Marketing VP prefers a yearly clock for gathering info from customers
     - The Marketing VP feels the bus company is not in touch with the customer.
     - Says that there shouldn’t be a big administrative process
     - Elaborates that if they are not truly listening to the customer then they should just skip a lot of other stupid things they are doing in the company

3. When gathering information, how does that go forward? That information should be actionable
   - Presentations in top mgmt of top 5 customers globally
     - Questions that should be answered according to the Marketing VP
       - What is the business organization?
       - Volumes?
       - Market share?
     - The PSPP Manager doesn’t think the VOC is missing, but it’s sitting in different pockets in the clusters.

4. Should it be captured in a database? What is the best way to collect the customer feedback, through operators?
   - Bring in 5-10 customers and do a customer clinic “focus groups”
   - When the bus company decides to start a project then customer (operators) should be involved.
   - BMS document (Bus Management System) could be used to capture VOC, but there doesn’t exist on single process for capturing VOC.
5. Who should own the commercial prerequisite document for starting a cross-project?
   - The Marketing VP says Product Planning should own this.
   - The PSPP Manager also says this document could be good to capture VOC, ways of operation, business, and what should be delivered when project launched
     - Parallelly there should be a yearly clock which captures key accts.

6. Who should be driving the knowledge of the “soft” product business or services business?
   - The Marketing VP says it’s coming based on the customer needs
     - What is the real operation of the market so to speak

7. For increasing the number of methods, what are the limitations?
   - The Marketing VP says you cannot disturb the customers everyday, but they can be invited for a round table discussion.
   - The Marketing VP feels that the bus company can do more though

8. Is the customer feedback today driving innovation in the company?
   - The Marketing VP says both yes and no, but says he thinks there are customers that are a little conservative. Here he says the bus company should go two ways to really drive innovation.
     - The trend now with EV buses, many customers are afraid of that, new technologies, uncertainty with the batteries etc.
     - Says customers are conservative and they really don’t want to have new technologies, unless they are forced.
     - Says the company is mostly bring about the innovative ideas.

9. How to collate all of this VOC info?
   - There exists a template with a chapter structure for key customers
   - The Marketing VP says that one should start first with a ppt presentation, get that through “teen” and up and running, then later on a more advanced tool can be used
   - Start first with identifying the structure for what is really important
   - There can be a tendency to capture too much info. Focus on the quality.
     - The PSPP Manager comments to the Marketing VP, if you think this is good, would like to start with 5 key customers that make up 25% of the business in order to get feedback from them.

10.3 Interview 3, 4, 5, and 6
These interviews have been recorded by audio, and can be provided upon request.

Interview 3: 2017-05-25 9:30-10:30, Region: BRI

Interview 4: 2017-06-04 09:30-10:30, VP, Region: MEAC
Interview 5: 2017-06-04 17:00-18:00, VP Business Development and Product Management, Region: APAC, Middle East, Africa, CIS

Interview 6: 2017-06-08 17:00-18:00, VP, Region: APAC