

The Impact of Culture and Operational CRM on New Product Development.

Examples from Austrian and Costa Rican SMEs.

Key words: SME, NPD, International Business, Product development, International customers, or partners.

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List of Abbreviations and Symbols

B2B	– Business to Business
CRM	– Customer Relationship Management
ID	– Industrial Design
LTO	– Long Term Orientation vs Short Normative Orientation
NPD	– New Product Development
OCRM	– Operational Customer Relationship Management
PD	– Product Development
RM	– Relationship Marketing
R&D	– Research and Development
UAI	– Uncertainty Avoidance
UCD	– User-Centered-Design
UI	– User Interaction
USA	– United States of America
UX	– User Experience

1. Introductory Chapter

The following chapter presents the background of the subject to create a fundamental understanding for the reader.

1.1 Background and Problem Discussion

The underlying background for the present investigation is the desire to combine the original career of the author (Industrial design) and International Business. When she selected this master's program, the original idea was to explore the impact of an industrial designer in the decision making inside a company - specifically, when developing a new product.

For this reason, and after repeatedly hearing in class that marketing is shifting from a product-centric to a customer-centric approach, it was decided to connect her interest with the enhancement of customer relationships, jumping into the term Customer Relationship Management (CRM). This is a concept that started from different people's ideas back in the 1970s. However, it was not until the year 1983 that Professor Leonard L. Berry introduced the topic as "Relationship Marketing".

For enterprises that are putting customers at the core of their business and combine this with CRM, it is possible to collect valuable data that allows a full view of their customers and interaction with them. In this manner, the consumer can become an essential collaborator during the development of customized products, and the company might increase customer satisfaction, gain customer retention, and eventually, sales growth. (Yim, Anderson, and Swaminathan 2004)

This was the tipping point that became quite interesting because, during previous studies, it was learned about "user-centered-design." Although, today, it is usually related to the design of digital products (UI/UX). It is an interactive design process that was first defined by Donald Norman as an approach to product design in 1986. When it is applied, the design of a product must fulfill the needs of users but also generate a pleasant experience for the user.

According to Karl T. Ulrich and Steven D. Eppinger (2015), the development of a new product represents several challenges that must be tackled from the very beginning. Besides the fact that a significant investment is needed (developing, producing, and marketing) for creating a new solution, one of the major challenges is to satisfy the society or individual needs. Here, the "user-centered-design" process is often applied, in which the designer focuses on solving a problem, always considering the user in every design decision, and CRM seems to be the analog concept for marketers.

Among researchers, it seems to be very popular to study how CRM impacts the development of new products (Amelie Sjöberg and Christopher Wallgren 2013; Ernst et al. 2011; Samaha, Beck, and Palmatier 2014). But now, internationalization comes to the table. In today's business world, if somebody wants to become an entrepreneur, an overwhelming number of requirements need to be fulfilled, and a wide range of activities need to be carried out. Even more when the goal is to reach international markets; where language and cultural barriers

will always persist, and the differences across countries and cultures become visible (Ramaseshan et al. 2006).

On one side, if we talk about culture, there are many ways to define it and interpret it, but for the present work, the one given by Hofstede, G. (1991) is preferred. He defines culture as a "collective programming of the mind that distinguishes the members of a category of people from another. The national culture that belongs to anthropology; in this case, the category is the nation of the company, which can not be managed, changed, understood, or used. On the other hand, organizational culture is part of the corporative identity of a company, which can be created and changed (Hofstede 2012).

In this case, not only the national culture influence but also the organizational culture when talking that the clients that can be other companies or organizations. Therefore, both concepts seem applicable when talking about building relationships with international clients and developing new products. At this point, the author wondered: If Small & Medium Enterprises (SMEs) want to develop a customer-centric focused business, should CRM be part of the organizational culture and core identity? Everyone should understand the importance of customer satisfaction, and if everyone has this in mind and clear, then it is easier to use any CRM tools.

On the other side, it is interesting to see that several people talk about CRM and the positive impact that it has on product development or about the cultural influence in product development. However, it was not possible to find much in the reviewed literature that explores how Culture, CRM, and New Product Development can be connected or talking specifically about SMEs / Start-ups. This strongly caught the author's attention and decided to keep the loop in these companies because, currently, more and more SMEs are seeking to expand into international markets. European SMEs, for example, are more internationally active when compared with their US and Japanese counterparts (Anon 2017). But their international activities are mostly directed to the rest of Europe, while only 13% of European SMEs are active in markets outside the continent. In another perspective, Latin American SMEs are in an early phase of internationalization and also only targeting markets in the American continent (EU-LAC Foundation, CERALE, Institut des Amériques 2017). For this reason, this thesis will study examples from one country in the European continent and other in the American continent: Austria and Costa Rica.

1.2 Problem Statement

This research seeks to understand three aspects:

1. Mainly whether culture impacts positively or negatively on the process of developing a new product in an international Business to Business (B2B) context.
2. Also, whether implementing operational CRM can help in the early stages of product development.
3. And finally, if International Small & Medium Enterprises (SMEs) from the author's country of origin (Costa Rica) from the Vorarlberg region, implement operational CRM or alternative ideas to get closer to their clients and manage their cultural knowledge.

So, the research question that comes out of this is:

What is the impact of culture and operational CRM in New Product Development?

From this main question, it is possible to break down into the two sub-questions.

1. *What is the impact that CRM has on corporate culture, and the NPD process?*
2. *What is the impact of the "national" culture in NPD?*

1.3 Objective Statement

The objectives of the research are set to find an answer to the main question.

Objective 1: Identify whether the corporate culture is affected by implementing CRM in the PD process and how.

Objective 2: Understand the influence that the national culture and Operational CRM could have on NPD.

Objective 3: Identify the positive and negative impact of culture on the development of new products.

1.4 Dissociation

The researcher chose this topic because, as an industrial designer, the researcher finds it fascinating to explore how the abilities that a designer uses to solve users' problems could be implemented into structural or strategic decision-making of a company. Therefore, the researcher believes that the results might bring value to the head of international teams in charge of the Product Development, by bringing some ideas for what is essential to consider in these processes and how CRM could become a relevant tool to satisfy customer and user.

This research generates value to international management and leadership studies because it brings the management of new product development from an organizational point of view within an international context to the forefront. It also builds an understanding of what is essential to consider when the value chain is decentralized and involves international collaboration in product development processes. Positive elements and/or problems that may arise concerning culture and the role of the CRM within this process.

1.5 Outline of the Thesis

Chapter one- Introductory Chapter: Discusses the importance of knowing the customers and building relationships with them. Why is it important to study the influence of culture in the operational CRM and product development processes, that come after to offer the perfect solution to the customer. This chapter presents the problem formulation and objectives of the research.

Chapter two - Theoretical Framework: Presents a theoretical framework of existing literature regarding culture, customer relationship management, and product development.

Chapter three – Methodology Chapter: This chapter explains the methodology as well as the choices that have been made.

Chapter four – Qualitative Analysis, Discussion, and Findings: This chapter will show the findings and discussion answering the research question.

Chapter five -Closing Chapter: Presents the summary and conclusions from the study as well as implications for further studies.

1.6 Limitations

- The study focused on Costa Rican and Vorarlberg Region companies as examples.
- The purpose of the study is purely explorative, at most descriptive- in other words not prescriptive.
- Points of view of a foreigner when looking at companies from Vorarlberg, point of view of a native when looking at companies from Costa Rica.
- This research followed an inductive approach, i.e. it will aim at formulating hypotheses based on the gathered data, at most theories but no empirical verification. (Schulz 2012)
- The global pandemic lived during this period (COVID-19), limited the sample number. For this reason, experts and professionals with experience in CRM and industrial design/product development were also interviewed.
- No models were developed, or hypotheses tested, but a tentative hypothesis was generated that might be of interest to leaders or heads of design departments, R&D, product managers, or even marketing/sales. This because it is aimed at SMEs.

2. Theoretical Framework

This chapter intends to create a foundation for the research by identifying the main pillars of the study, exploring the conceptual meaning of Culture, Customer Relationship Management, and Product Development, and explaining how they are interrelated. Because of the wide variety of content in this chapter, there are guiding questions to provide insight.

2.1 Culture

The definition of culture is taken from Professor Geert Hofstede's (2010) studies. He describes culture as a set of mental programs or patterns of thinking, feeling, acting, and as collective unwritten social rules that distinguish a group from others.

Culture: "...collective programming of the mind that distinguishes the members of a group or category of people from another." (Hofstede, Hofstede, and Minkov 2010)

This entails a person's entire behavior, whether related to thinking patterns, social, environment, but also "unwritten rules" like ordinary and basic things in life (greeting, eating, showing or not, keeping a certain physical distance from others, or hygiene).

Even that culture is often examined at a social or national level, it is also relevant at regional, organizational, and individual levels (Hofstede, G. 1991).

"Culture is often perceived by rational executives as too touchy-feely to consider. In reality, culture is who you are. Culture drives your innovation, differentiation, and customer connection. Create a culture of mistrust and your organization will end up treating customers as cheaters unless proven otherwise. Create a culture of generosity and your customers will feel the love." (Lior Arussy n.d.)

When studying differences in culture among groups and societies, a neutral vantage point, a position of cultural relativism, is necessary. Hofstede cited the French anthropologist Claude Lévi-Strauss (1908–2009):

"Cultural relativism affirms that one culture has no absolute criteria for judging the activities of another culture as "low" or "noble." However, every culture can and should apply such judgment to its activities, because its members are actors as well as observers." ¹

2.1.1 National Culture vs. Corporate Culture

Two types of culture will be explored to understand the impact of culture in international business: national and corporate culture (also known as organizational). As mentioned before, Hofstede (2012) states that culture distinguishes the members of a "category of people" from others. In the case of the national culture, the category would be the nation (international view) and, in the case of the corporate culture is referring to the company (business view).

There is a significant difference between both cultures:

¹ Lévi-Strauss, C., and D. Eribon (1988). De près et de loin. Paris: Editions Odile Jacob.

"National cultures differ mostly at the level of values, while organization cultures differ mostly at the level of the more superficial practices: symbols, heroes, and rituals."- Hofstede (2012)

However, by understanding the concept of culture as a program developed in our consciousness, as shown in Figure: 1, it is possible to comprehend the relation of these two of a person's life.

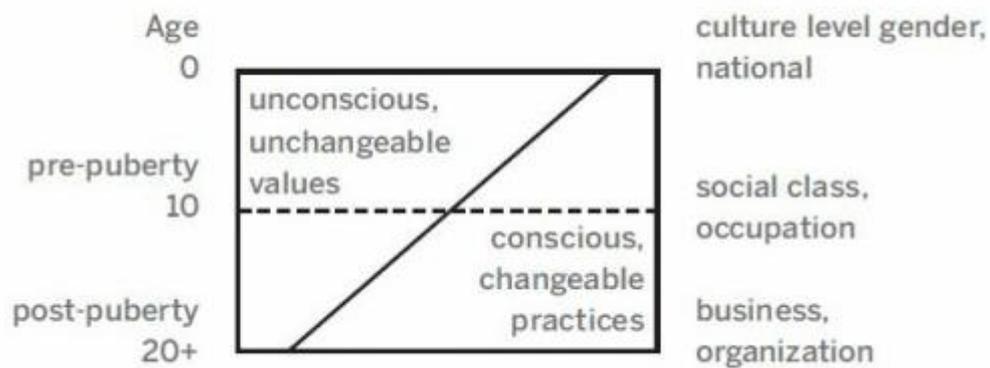


Figure: 1 [Levels of Culture People Acquire and in Which Period]

Source: [<https://www.bbvaopenmind.com/en/articles/national-cultures-organizational-cultures-and-the-role-of-management/>]

On the one hand, the national culture seems to be programmed in our brains from the moment we were born until the age of 10. We absorb everything that we perceived from experiences and education from family, neighbors, and school. So they are quite stable and take generations to be changed. Most of the time is influencing the way that we think, act, and begin to develop fundamental values, social responsibility, and everything that differentiates a Costa Rican from an Austrian, for example.

On the other hand, the corporate/organizational cultures are based on practices learned in the workplace as part of the corporate identity of a company (Olins 1995; Schmidt 1994; Steidl and Emery 1997). This means that top managers can create it and change it, but it does not mean that it is easy to achieve. When companies merge, or there is a change of management (acquisition of companies), the re-definition and transmission of a new culture to the employees represents a big challenge.

Corporate culture can not only be acquired through socialization at the workplace but also from the vision of the company (Hofstede, G. 1991). The primary purpose of the company should be clear for everyone, and the culture must reflect the behavior of the people and their actions to achieve this vision. In summary, corporate culture can include organizational values, visions, norms, working language, systems, symbols, beliefs, and habits (Essays, UK. 2013), and as shown in Figure 1, we are more conscious of it so is possible to change it or reprogram it, which happens every time that we change jobs.

Ben Horowitz², emphasizes in an interview done by Computer History Museum (2019) that within the context of business, culture is not just a series of codes or programming as Hofstede

² Ben Horowitz, the author of "What You Do Is Who You Are: How to Create Your Business Culture"

defines. However, it is the being really small settled things, very kind of amorphous, almost invisible thing that determines corporate culture, in turn determining the way to treat each other, business partners, and customers. For example, if an employee has missed phone calls, he may return it within an hour, a day later, a week, never. If the employees go home at the time, they are supposed to or later.

2.1.2 Hofstede Model

After profound research and analysis of an extensive database of employee value scores collected within IBM between 1967 and 1973, Hofstede exposes four dimensions of national culture (Hofstede, G. 1991). Prof. Hofstede, assisted by other researchers, elaborated the 6-D model of national culture, featuring the following six dimensions that arise from basic issues that society needs to organize itself. Detailed information in Appendix 1.

1. power distance index (from small to large),
2. collectivism vs. individualism,
3. femininity vs. masculinity,
4. Long term orientation vs. short normative orientation (LTO)
5. Uncertainty avoidance (UAI)
6. Indulgence

2.1.3 Role of Culture in Customer Relationships.

There is some research about this topic, but there is one from 2014 by Samaha et al. which explored the role of culture within Relationship Marketing (RM). This is interesting because they use the dimensions from Hofstede to study how they influence relationship building. They even made a diagram explaining how it works and which dimensions may affect relationships.

As shown in Figure: 2, Samaha et al. (2014) research in which way are the "cultural moderators" influencing the relationship building. According to them, two dimensions that directly affect the prioritization of generating customer relationships are (1) Individualism/collectivism measures how self-sufficient and distant people are from others, and (2) masculinity/femininity, which differentiates a society that is more competitive vs a more caring and more consensus-oriented (Hofstede et al. 2010).

It is argued that, compared to individualistic cultures, collectivist cultures can respond more positively to RM efforts because they are more sensitive and responsive to RM norms.

In the case of individualistic cultures (such as the case of the USA, Australia, Canada and England, Spain), individualism measure how self-reliant and distant from others people are, instead of mutually depending on closely tied to others which is collectivism (such as Turkey, Greece, African countries, China and most of South America).

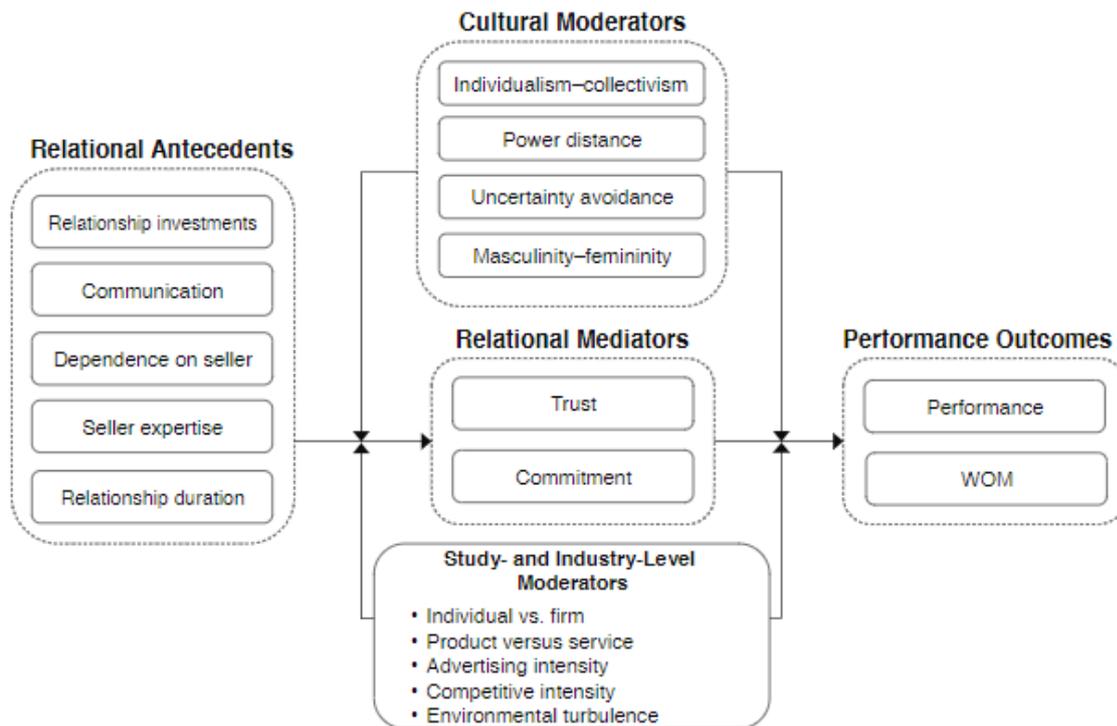


Figure: 2 [International RM framework]

Source: [(Samaha et al. 2014)]

These researchers made two different studies regarding the culture and made an analysis based on 25 countries. In their findings for the United States of America (USA), in terms of the effectiveness of the market, the relationship was in hazing performance, reaching the 13th place in the scale they made. This indicates that this country is less than half as effective in using RM to drive performance as China, for example, which is more collectivistic culture.

The second study was based on the effects of relationship-building strategies based on region and country. The results show that RM strategies will be less effective in cultures resembling that of the USA. The use of communication to build a relationship is a more effective RM strategy in all regions from Asia, which is 29% greater than the United States to Western Europe, which is 6%. However, relationship investments are 19% less effective in countries outside the United States, the only relationship-building strategy in which the US ranking is increasingly above average.

They also mentioned that previous research has typically investigated the effect of a single cultural dimension on a few RM languages, which prevents the development of a holistic perspective of cultures on their purpose, and this approach addresses these research gaps.

2.2 Product Development

Guidance question- What is it, methods, and how are product development and customer-related?

"Product-oriented companies believe that customers choose products with the best quality, performance, design, or features. They are often very innovative and entrepreneurial companies." This was Rogers' opinion in 1962 when, according to him, many of the new companies were following this orientation towards product development (Buttle 2006; Rogers, E. M. 1962). In these companies, it is common the voice of the customer to be lost when important marketing decisions are made. Management makes assumptions about what customers want, and the result is that products are over-specified or over-dimensioned for market requirements, and therefore too expensive for most customers.

Nevertheless, Product Development is the set of activities beginning with the perception of a market opportunity and ending in the production, sale, and delivery of any product (Karl T. Ulrich and Steven D. Eppinger 2015). However, this is in a perspective where the solutions involve only the development and manufacturing of goods. In a B2B context is more, as La Rocca et al. (2016) argue in their study, the main issue within a B2B is the development of a solution. It can sometimes involve goods or digital products, services, or even both. So, in this case, it is more accurate to call it New Solution Development (NSD) instead of New Product Development.

Just like is shown in Figure: 3, the process of creating a new product usually involves different departments in the process, including marketing, design, and production or manufacturing (Anil Mital, Anoop Desai, and Anand Subramanian 2014; Karl T. Ulrich and Steven D. Eppinger 2015). Besides, all the processes work simultaneously in the first stages, not only marketing. Moreover, the consumer is also crucial in this process, just like Anil M., Anoop D., and Anand S. (2014) states: *"Whatever the technologies and resources are utilized and whatever activities are undertaken, it is with the understanding that the customer is the center of attention."* Alternatively, at least it should be in a company customer-driven. Therefore, product development is a joint task between the marketing functions to develop a commercially viable product that satisfies customers with the business vision. The study made by marketing is called the marketing mix, or basic 4Ps which purpose is dual: to achieve the commercial success of a good or service (product) and to satisfy the needs or desires of consumers (market). (Lerma Kirchner, A. E. 2010)

As shown in Figure: 3, marketing takes care of the first phases involving planning and interaction with the customer. Thanks to them, first-hand information is received from the customer. The data collected from customers continues during the concept development stage, which is the first step after getting customer needs. Once customer information has been collected, this information is processed and translated into the form of a request and defines if it is a must or a nice-to-have.

From an engineering point of view, the concept of requirements and specifications of a product tends to be technical and product-specific information. However, in industrial design, more areas are used besides technical requirements. These can include perceptual or semantic requirements, functionality, usability, and whether the material and technical.

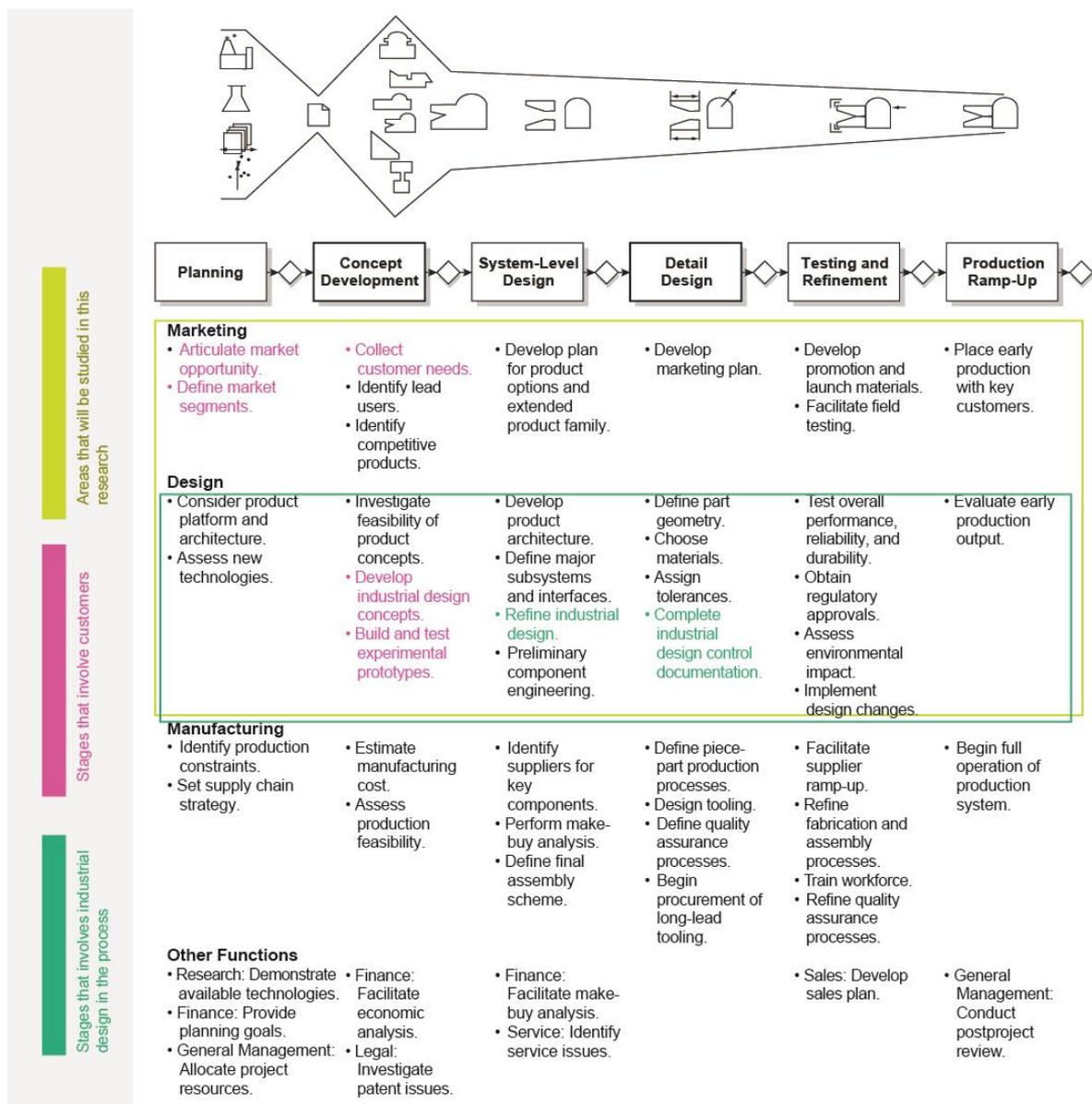


Figure: 3 [The generic product development process. Six phases are shown, including some of the typical tasks and responsibilities of the key business functions for each phase.]

Source:[Karl T. Ulrich and Steven D. Eppinger. 2015. Product Design and Development, Sixth Edition. New York: Mc Graw Hill.]

In summary, from an industrial designer's point of view, the development of product targets to create value to the customer and passes different through stages depending on what must be designed, but three crucial points can be highlighted in these early stages of product development. First, the identification of the need, followed by the creation of requirements and, finally, the management of the requirements to initiate the conceptualization of the product to be designed. The first three boxes in Figure: 4 identify customer needs, establish target specifications (requirements), and generate product concepts.

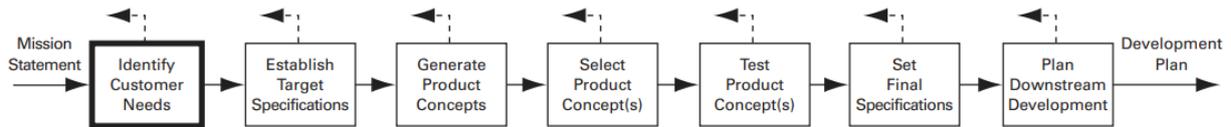


Figure: 4 [The customer-needs activity concerning other concept development activities.]

Source: [Karl T. Ulrich and Steven D. Eppinger. 2015. Product Design and Development, Sixth Edition. New York: Mc Graw Hill.]

First: Identify customer needs

The task of identifying customer needs is an integral part of the product development process, as it is possible to see in Figure: 4 [The customer-needs activity concerning other concept development activities.]. It is, in fact, closely related to opportunity identification, product planning, concept generation, and determining product specifications. The process of identifying customer needs could be described in steps. According to Karl T. Ulrich and Steven D. Eppinger (2015) and Stefan H.Thomke (2007), these methods are, in short words, the following. 1) Gather customer needs data; the most common methods to gather customer needs data are interviews, focus groups, observing the product in use, but honestly, they seem to be a bit old fashion. Could CRM do this? 2) Interpretation of customer needs, 3) forming the critical list of customer needs, 4) prioritize customer needs. These methods for gathering customer needs may determine how innovative the final solution will be.

Second: Methods to create requirements out of the customer needs

This product value matrix could be implemented (Stefan H.Thomke, 2007). Once consumer data is collected, it may well be necessary to re-interpret it as needs. In some cases, customers do not know what they want; they only know what they need; for this reason, product development is important as it makes that translation from the language of the consumer to the language of design. The method explained by Ulrich et al., suggests four steps: 1) Prepare the list of metrics, 2) collect competitive benchmarking information, 3) set ideal and marginally acceptable target values 4) setting the final specifications, which *"...represent the hopes and aspirations of the team, but they are established before the team knows the constraints the product technology will place on what can be achieved."* (Karl T. Ulrich and Steven D. Eppinger 2015)

Third: Customer requirement management for the creation or product concepts

The degree to which a product satisfies customers and how successful it could be in the market depends on the quality of the underlying concept. The concept creation process begins with a set of customer needs and target specifications (Figure: 4.) and results in a set of product concepts from which the design team will make a final selection. This concept creation method presented by Karl T. Ulrich and Steven D. Eppinger (2015) consists of five steps: 1) Clarify the problem: Understand the problem and break it down into simpler sub-problems. 2) Research externally. Collect information from the main users, experts, patents, published literature, and related products. 3) Search internally: Use individual and group methods to retrieve and adapt the knowledge of the team. 4) Systematic exploration: Use classification trees and combination tables to organize team thinking and synthesize solution pieces. 5)

Reflect on the solutions and the process: Identify opportunities for improvement in subsequent iterations or future projects.

Once companies grow and expand into international markets, the management of information generated by customers tends to become more complicated. In the NPD process, it can even be problematic due to the differences in culture (Bijan Aryana and Casper Boks 2012) and the variability of this information; customer needs, behaviors, and attitudes can change any time. Given that B2B audiences look for solutions to problems or offerings that better meet their needs (B2B International n.d.), proper management and sharing of this data could make things easier for the development teams. CRM tools could easily collect data from current customers and future customers and save the data. However, just saving this data is useless; if this information is analyzed and selected, it could help to anticipate the needs of customers and to start with a new product concept. At this stage, the literature offers answers to the first guidance questions. Next, the source for the necessary information for customer-centric product development and the potential role of CRM needs to be discussed, in other words: Could this information come from CRM?

2.2.1 User-Centered Design (UCD)

The term "user-centered design" originated in the United States thanks to Donald A. Norman. Since working at Apple as what he auto-nominated "user experience architect" in 1993, he wanted to cover all the aspects of a user's experience with a system (Pacheco 2019). This term is most commonly used when talking about digital or software design and involves User Experience and User Interface design (UX/UI). However, this is also used for industrial design approaching for employing usability. UCD recognizes that all innovation has to start with an understanding of the user with a real-world problem to be solved (Karen Holtzblatt and Hugh Beyer 2017). Moreover, it places a high value on understanding the customer and user requirements, frequent testing, and iterative design (which is part of every design thinking process).

According to Lior (2013), the main philosophy of UCD is that all the needs and wishes of the end-users, drive the design at each stage of the process. Everything is considered from the beginning of the product life cycle, and the information that is gathered in the early stages is used to define the product's specifications and the product features. This will result in the end-user experience, which can be accepted or rejected by the user. Just to illustrate this simply, if a new pen is designed, the experience of the user includes that the device can fulfill its purpose, which is to leave a mark of ink on a surface (functionality) but also in a comfortable way for the user (usability). If the pen marks easily, usually it is related to being a nice pen, in the opposite way, if it is not marking well, it becomes annoying. This end-user- experience is, in the end, what defines the happiness of the user related to a product.

In addition, there are some models or canvas developed based on the design thinking method, which also involves the business goals in the process—making it simpler to see where and how the value could be created. The following canvas is an example and is divided into nine fields. *"Done with the user-centered approach in mind, the users field was placed at the very heart of it. The left side of the canvas focuses on the users, the right side on the business. Following the logical order of analysis, the canvas enables creating a one-sentence summary in the form of Unique Value Proposition."* (The Rectangles n.d.)

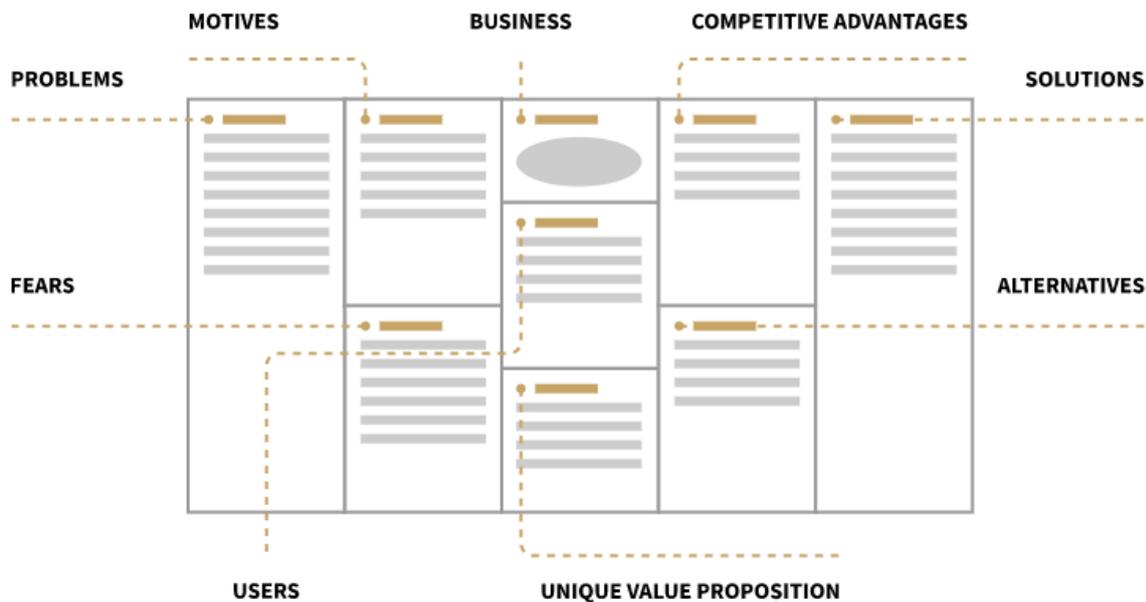


Figure: 5 [Example - User Centered Design canvas]

Source : [<https://ucdc.therectangles.com>]

2.2.2 Product Development inside the Value Chain

The theory of business competitiveness implicitly assumes that "competition of nations" is not based solely on country-specific factors, but heavily influenced by firm-factors. The holistic model of competitiveness presented in Hollensen's book (2019), suggests that the understanding of advantages and competitiveness of a firm in an international context, the understanding and analysis in the macro, meso and micro levels are necessary (Figure: 6).

Meaning that this model suggests a broader analysis as a first stage, which corresponds to the macro level and can be done using Porter's diamond³. The second stage is the meso level by a competitiveness analysis of the industry. And finally, the value chain analysis at the micro-level. These help to get a closer look at the firm core competence. Hollensen says that to succeed in the marketplace, it not only depends on identifying and responding to customer

³ Porter's Diamond: is a model that is designed to help understand the competitive advantage that nations or groups possess due to certain factors available to them, and to explain how governments can act as catalysts to improve a country's position in a globally competitive economic environment.(Chappelow n.d.)

needs but also the firm ability to ensure that the customers perceive higher value and judge the firm higher than its competitors.

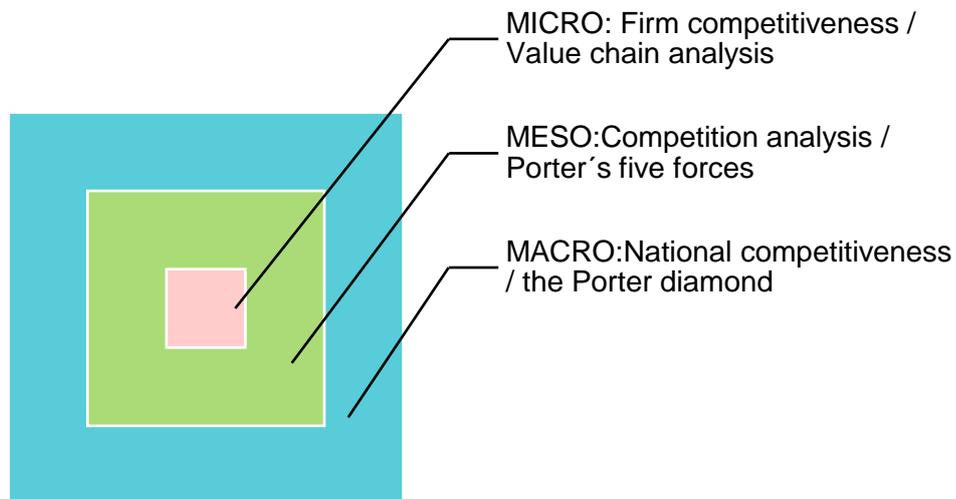


Figure: 6 [Holistic model of competitiveness]

Source: [Hollensen, S. (2019). Marketing Management - A Relationship Approach, 4th Edition. Marketing Management. P.78]

The value of a product or service can be determined when a strategy is being set up because the value is generated in four areas that are not necessarily interconnected. Besides, Hollensen justifies with other references that the competitiveness in a certain lapse of time is possible to generate value in the functions from the value chain and so create a competitive advantage with any aspect of the 4P's Marketing Mix.

In Multinational Organizations and Strategy course held by Prof (FH) Stefanie Chen MBA, the elements of the value chain and how these could be centralized or decentralized depending on the model or strategy that the firm may follow (Figure: 8) were studied. According to Chen, the value chain provides a systematic means of displaying and categorizing activities which requires harmonic contribution to identify opportunities towards competitive strategy exist at

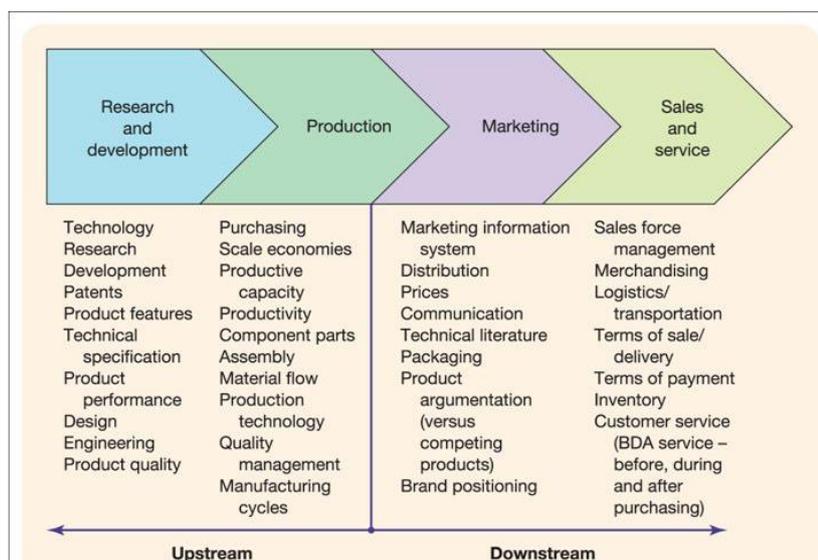


Figure: 7 ["Simplified" version of Value chain]

Source: [Hollensen, S. (2004), p. 17 and 19]

each stage. In the Figure: 7, the simplified value chain, which is the only step relevant for this research, is shown.

From the perspective of an industrial designer, to generate value in the offers that are

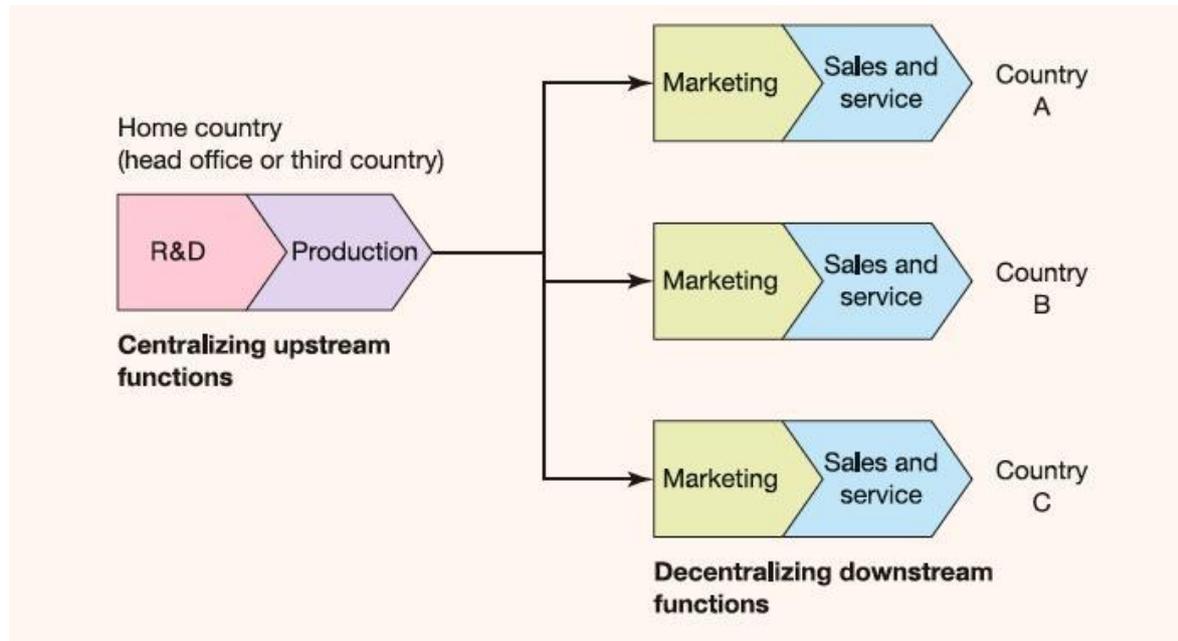


Figure: 8 [centralizing upstream activities and decentralizing the downstream activities.]

Source: [Hollensen, S. (2004), p. 21 and 22]

generated to the clients, it could be used known "Value Proposition Canvas", which is a tool that can help ensure that a product or service is positioned around what the customer values and needs. The Value Proposition Canvas was initially developed by Dr Alexander Osterwalder as a framework to ensure that there is a fit between the product and market. (B2B International n.d.) The canvas is a good tool to implement in conceptualizing or first stages of development, and to understand the customer in a more profound way.

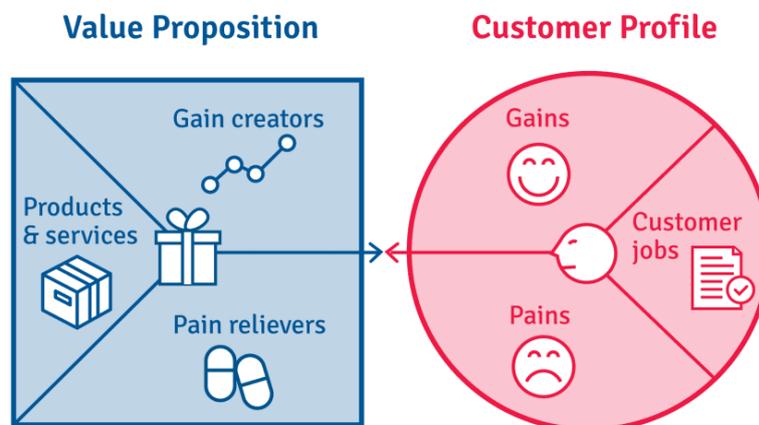


Figure: 9 [Value Proposition Canvas]

Source: [B2B International n.d.]

2.3 Customer Relationship Management

Guidance question- What is Customer Relationship Management?

Before going into detail, it is important to mention that CRM and B2B, besides being essential to success in business and two different modules, they share many similarities. The integration of CRM and B2B will benefit all related parties in business processes, including sales, marketing, customer service, and information support (Zeng Yun E., Wen H. Joseph, and Yen David C. 2003).

Some authors define CRM as a management discipline (Iriana and Buttle 2004) that emerges from the "Relationship Management" theory (Berry, Leonard L. 1983). According to Reinares Lara, P. (2018), due to the transcendence of relationship marketing, this concept has been evolving. Many authors have tried to appropriate its authorship by proposing slight modifications that have only contributed to confusion. For this reason, as in his book, the concept of RM must be clarified. Relationship Marketing is a strategic process that is based on identifying, capturing, and maintaining relationships, both with consumers and with other agents of the company's stakeholders.

And regarding CRM, the first thing to understand is that it is a strategic concept, not a technological one. Its comparison with technological applications is due to the usual simplification of markets for commercial reasons (Reinares Lara, P. 2018). It is a concept that initially started as a philosophy or an idea in the early 1970s. In this time, business units had a manifestation that it would be advisable to become "customer empathic" instead of "product emphatic." Businesses were less complex, as it was merely a one-to-one dealing without requiring any specific process. However, with time, due to the emerging of new strategies and technologies in the global marketplace plus an enormous degree of competition in business, the approach needed to change to proactive rather than reactive. During the third semester of IML master studies, Prof. Tom Fleerackers described CRM as an approach to managing the company's interaction with current and potential customers. The underlying idea behind CRM is to distance from mass marketing and instead go for personalized treatment of each existing and prospective customer. (Laurentius Malter n.d.)

According to literature and experts (Francis Buttle and Stan Maklan 2019; Iriana and Buttle 2004; Reinares Lara, P. 2018), the success of CRM is a product of three key elements: human sources, process, and technology. The technology must be able to gather information from the interaction with the client. The processes must be oriented to satisfy with maximum speed the needs of the clients. And people are a fundamental part of the success or failure of processes because they will be the ones interpreting data, and working with it.

It uses data analysis about customers' history with a company to improve business relationships with customers, specifically focusing on customer retention and ultimately driving sales growth, but this does not depend only on the technology. As James E. Richard (2004) argues, CRM systems are sometimes implemented as a solution for customer relationships. However, CRM by itself is incapable of managing relationships; the people involved must understand very well the customer-centric focus and how to use the data given by these technological solutions.

The implementation of CRM today might provide tons of viable data that could be useful for many purposes. For example: providing products and services that satisfy customer's needs, empower sales teams, improve customer retention, provide a better understanding of the customer, long term relationships and improve the profitability (Payne and Frow 2005; Prachi Juneja n.d.; Yim et al. 2004).

Buttle (2006) and (Cameron Johnson 2020) studied CRM, and they explain that it is possible to think about it at three levels. (1) **Strategic perspective**, which is a top-down perspective on CRM. This one focuses on the development of a customer-centric corporate culture aiming to acquire and to retain profitable customers (Margaret Rouse 2019; Srivastava, Shervani, and Fahey 1999). (2) **The operational perspective** involves all processes that connect business with customers, gain valuable information, and use it. It is supposed to connect marketing, sales, and customer service teams via automation of many functions like scheduling, follow-ups, and contacts. (3) **Analytical perspective** refers to the bottom-up perspective, which focuses on the intelligent mining of customer data for strategic purposes.

Operational CRM seems interesting because it comprises all CRM functionalities that support direct contact with customers—optimizing the dialog between customer and company, as well as the business processes required for this: marketing, sales, and service areas. The operational CRM is designed to improve the routine business operations of these functions, support them, and blend them into one. Meanwhile, it securely stores data on every activity with current customers and prospects.

2.3.1 Operational CRM definition

Guidance question- What is it? How are companies using it? And why?

As stated by Cameron Johnson (2020), operational CRM is "a centralized system that supports the sales, marketing, and customer service functions within a company that stores information on customers, leads, and employees using a shared interface,..." these features enable companies to measure, analyze and tailor the customer journey in real-time.

Daily, it is possible to see constant advances in digitalization for commercialization. It is encouraging companies to make more intelligent, efficient, and effective initiatives to ensure two things: to generate an enjoyable customer journey and thus win an account. Operational CRM is an excellent solution for this because of the automation of the functions that interact with customers. The primary application within OCRM appears in marketing automation and sales force automation.

Cameron (2020) gave a simple example to illustrate how this can work: An automotive dealership's marketing team is targeting customers who want red cars. The sales team instead is pushing blue cars, and the customer service team is helping drivers with yellow cars. In this case, people wasted a lot of time and effort and reflected in companies' expenses. So an operational CRM could be helpful because it can tie these teams and align their goals.

Another situation could be that a company receives many calls or emails from customers asking questions, which should be answered quickly and reliably. In the same company, the marketing and sales team want to promote and explain to the customers all the options that

the company offers. Here an OCRM can help in different ways: will allow customers to log in to an account through website and view details of the services being offered by the company, helping save much time instead of wasting it in responding the calls or emails all the time, especially if the company is composed of a small number of employees.

It would be helpful to see how these three processes in the different departments of the company are, to understand how this works from inside.

Marketing:

Marketing Automation involves key functionalities such as multi-channel capability, campaign management, multimedia product presentations, and solutions for service automation (Laurentius Malter n.d.). This helps marketers to use customer's specific information to determine, analyze, and develop a form of communications that are customer targeted individually, in multilevel, and multi-channel environments (Michael Taylor 2014).

Sales Automation:

CRM, besides dealing with the needs and requirements of existing clients, also helps to acquire new clients (Michael Taylor 2014). It is an excellent tool to control and follow up new possible customers, from automating initial contacts to creating sales meetings. The sales representative then tries to get some business from the qualified leads by making a winning deal. This process is solely handled by the sales force team in the organization. Moreover, it does not stop at the sale. A CRM can automate communication between sales, maintain a follow-up schedule, and track after-sales performance (Cameron Johnson 2020).

Service and Support Automation:

Service Automation deals with managing the organization's service and includes service level management, case or incident management, knowledge management, and call management (Laurentius Malter n.d.). This focuses on managing interactions with customers like contact, direct mail, direct sales, call center, website, blogs, or data aggregation systems. Also, each interaction made with individual customers is collected in the database known as "customer history." (Michael Taylor 2014)

Iriana and Buttle (2004) made an overview of the metrics that are typically involved in measuring the performance of each function. In the following Table 1, the three functions are explained by pointing, which are the Key Performance Indicators (KIPs) to consider in each and each key functionalities.

Perspective of CRM	Metrics or KPI's	Key functionalities
Sales Automation	<ul style="list-style-type: none"> • Sales quota achieved • Close percentage • Customer score • Sales expenses, revenues and lost • Training impact • Cross-sell rate • Number of calls • Number of new customers 	<ul style="list-style-type: none"> • Account management • Lead management • Opportunity management • Contact management • Product configuration • Quotation and proposal generation

Marketing automation.	<ul style="list-style-type: none"> • Response rates • RFM (recency, frequency, monetary value) • Conversion rates • Customer acquisition costs • Average customer interaction costs • Attrition/churn • Share of wallet/share of requirements • Average order size and category involvement 	<ul style="list-style-type: none"> • Multi-channel capability • Campaign programs/planning • Response tracking • Managing customer contacts (Laurentius Malter n.d.) • Campaign management • Event-based (trigger) marketing • Marketing optimization
Service and support automation	<ul style="list-style-type: none"> • Call counts • Call duration • Average hold time • Abandonment rate • Wrap-up time • The average cost per call • Average talk time • Average handle time • Agent utilization • Blocked calls • Service level • Call quality 	<ul style="list-style-type: none"> • Case (incident or issue) management • Customer communications management • Queuing and routing • Service level management

Table 1: [Summary of three main functions of operational CRM]

Source: [(Iriana and Buttle 2004)]

2.3.2 Key Dimensions / Practices of Customer Relationship Management.

Various authors (Ernst et al. 2011; Kuan-Shun Chiu, K., Chen, R., and Lin, R. 2010; Sin, L. Y. M., Tse, A. C. B., and Yim, Frederick H K. 2005) classify CRM practices in two different groups: (1) Internal activities which relate to organizational structure, corporate culture, and knowledge management. And the (2) external activities which involve every interaction with customers like information sharing and customer involvement, which can have an impact in the PD process.

Kuan-Shun Chiu, K. et al. (2010) showed in their research that implementing CRM in innovation programs could bring highly positive results. They studied the main activities of CRM and divided them into five essential practices. Also, (Yim et al. 2004) defined four dimensions referring to similar things. However, as the goal of this research is to study the impact of the national culture in the process of developing a product for the international B2B client when Operational CRM is involved, then the key activities that will be crucial in the research are shown in the last box of Figure: 10.

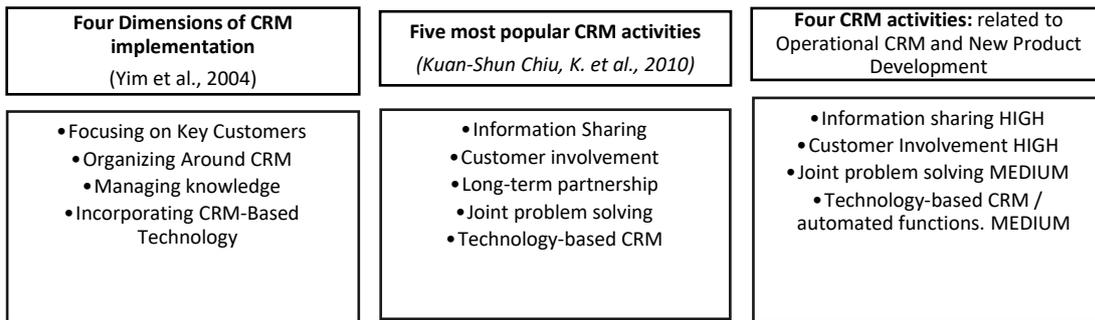


Figure: 10 [Dimensions and activities of CRM implementation]

Source: [(Kuan-Shun Chiu, K. et al. 2010), (Yim et al. 2004)]

Finally, there are many ways to define activities or dimensions of CRM implementation, but only four seems to be essential to reach the objectives of the research:

- (1) *Information Sharing* refers to the exchange of essential and exclusive information between manufacturers and their customers. According to (Kuan-Shun Chiu, K. et al. 2010), the information that is commonly shared could be related to market demand, customer preferences (related to the conceptualization of new products), sales promotion, and new product introduction.
- (2) *Customer involvement*. It is related to a long-term partnership, as it refers to how customers are engaged in the development of new products or services, and this only happens if there is a strong partnership between organizations and their customers (Pedron et al. 2018). This is related to customer participation in the activities of the development or improvement of a product. Meaning, that the customer can be involved in activities such as technical meetings, supply chain annual conferences, and market evaluation conferences. (Kuan-Shun Chiu, K. et al. 2010)
- (3) *Joint problem-solving* refers to the collaboration between manufacturers and customers in solving the problems. It is useful for product innovation and processes innovation, service, and administrative innovation, but not for marketing (Kuan-Shun Chiu, K. et al. 2010).
- (4) *Automated activities / Operational CRM*. Kuan-Shun Chiu, K. et al. called this in 2009 a technology-based CRM, referring to the computer technologies that manufacturers can use to facilitate various CRM activities, resulting in quick responses to customer requests for new product innovation. However, as mentioned before, the loop in this research is only related to marketing, sales, and services automation, which are systems that provide the ability to collect and analyze data of customer patterns. (Yim et al. 2004)

These following two key dimensions were not selected because, even though they are essential in building relationships with customers, they do not connect every variable of the present research.

(5) *Long-term Partnership*. It is a business relationship with trust and commitment between two firms, being very important when making B2B sales.

(6) *Managing knowledge*. This activity enhances customer profitability, information about customers should be gathered through interactions or touchpoints across all functions or areas of the firm (Yim et al. 2004)

2.4 Role of CRM in the New Product Development

Guidance question- Is CRM playing an essential role in new product development?

The development of products (solutions) is a task that is based on the needs and desires of customers, introduces or adds value to the offer. By this, it is possible to increase the level of customer satisfaction (Lerma Kirchner, A. E. 2010). According to Boulding et al. (2005) CRM relates to the creation of strategies, the management of dual creation of value (customer and company), the proper use of data & technology, and the diffusion of this knowledge to the appropriate internal or external stakeholders through the acquisition of customer knowledge. This customer knowledge helps the company to create the propositions that deliver value to the customer and generate useful information for the product development process. And data collection is more accessible when customers trust the organization, which can be done by offering transparency to clients.

With this said, after reading many previous studies about the relation between CRM and NPD, there seems to be a recurrent CRM activity, which could be the key points in this relation. Kuan-Shun Chiu, K., Chen, R., and Lin, R. (2010), as mentioned before, started by classifying CRM mechanisms into internal and external. The internal relates to the interaction inside the company; they focused on the external-oriented CRM programs and the five most popular CRM activities mentioned before in this chapter. Two of them, Information Sharing and Customer Involvement, are directly related to product development, while a third, Long-term Relationship, could be linked to B2B.

Another study done by La Rocca et al. (2016), explores the concept of customer involvement concerning NPD in a B2B context. This study develops the concept of this dimension (Customer Involvement) as a pattern of interactions at the interface of the customer and supplier organizations, which is adequate when thinking in a B2B context.

Another example is the research from Sjöberg, Amelie & Wallgren, Christopher (2013): showed that the usage of CRM impacts positively in product innovation in Scandinavian companies. Ernst et al. (2011) also studied the connection and interrelation between these two processes in B2C and B2B context. They also focused on three different activities or dimensions of CRM. They explored different hypotheses to find out if the implementation of CRM processes and technologies have a positive impact on NPD. Based on the framework from Payne and Frow (2005), they define three CRM processes into the context of NPD: (1)

Customer information management, a key activity of identifying customers and their needs. According to Ernst et al. (2011), this can be accomplished by regularly collecting information of customers, and this knowledge can be used to develop new products that are aligned with what customers require. (2) Customer segment value management, in the context of NPD, involves segmenting customers according to the level of value they provide to the NPD process, which varies across customer segments. Moreover, (3) multi-channel management in terms of communication and channels of distribution. They suggest that in the case of NPD, multi-channel management offers various ways to interact with customers to generate and launch new products and includes the interaction with suppliers. In summary, this study can give an excellent base to say that there is a strong positive impact on NPD, as the correlation between core CRM processes (the ones mentioned before) and NPD was high.

In this way, the previous study by La Rocca et al. 2016) seems to give more current results and focused in a B2B context. By studying only, the key activity or dimension of customer involvement, they were able to demonstrate that sales play a central part in interfacing the supplier and customer organizations. Moreover, posit that NPD in a B2B context is an iterative process consisting of various parallel sub-processes.

2.5 Culture and CRM in NPD

Guidance question- Are the cultural aspects important when developing new products? How is the corporate culture in PD departments regarding the customer-centric approach?

Indeed "...when customers are located in multiple countries, companies must be responsive to local cultures." (Homburg et al. 2005). These researchers examined the concept of customer benefits in B2B markets in an international context and based their analysis on 981 respondents from two countries. The study's findings suggest some crucial messages for managers in charge of the development of new products for international markets. They indicate the importance of understanding the determinants in providing customer benefits and significant observations regarding cultural differences.

Another research done by Bijan Aryana and Casper Boks (2012) detected the relevance of cultural information of clients in two levels of the organization. They first selected the most appropriate NPD theories, for them, related to consumers' culture. Second, they divided them into three levels: environment, firm, and NPD processes. It runs out that the only levels involved in this topic are the firm and the NPD, concluding that the information of culture is only relevant at the very beginning of the NPD process and, in the end, related to the marketing communication and product diffusion. Nevertheless, the present research will focus on the first steps of the process because it is a topic that has been neglected for a long time. There are theories and processes created in academic environments, but there is no real way of knowing if these methods are being followed or not in the real world.

From the point of view of an industrial designer, three key points can be highlighted in these early stages of product development. First, the identification of the need, followed by the creation of requirements, and finally the management of the requirements to initiate the conceptualization of the product to be designed. As mentioned and detailed before in Section 2.2.

CRM & culture

Samaha et al. (2014) argue that international relationships are increasingly critical to business performance. In international relationship marketing (RM) is unclear whether or how this should adapt across cultures. Samaha, S. A., Beck, J. T., & Palmatier, R. W. (2014) suggest after their research that the subsequent studies should investigate how the levels of analysis of different cultural entities interact and influence Relationship Management. For example: How does a Japanese organization with operations in the United States manage the cultures of its employees in two countries with very different cultural profiles, which can be increasingly difficult in changing relationship environments?

Culture in NDP and CRM

Chang, Park, and Chaui (2010), using data from Korean companies, explored the process of how CRM technology translates into business results. The results of this study highlight that the marketing capacity mediates the association between the use of CRM technology and performance. Furthermore, a customer-centric organizational culture and management system facilitates the use of CRM technology.

2.6 Articles summary

Table 2 [Summary of articles] Table 2 illustrates all articles that have been used in the theoretical framework and which theoretical approach they are connected to. It gives an examination of the significant findings from each article, what data collection method was used, sample size, and in which geographical location it was conducted. Finally, it describes the relevance in theory, where domination indicates a high validation of the article and dominance in the field. Emerging theory suggests some validation and purposed theory indicates limited validation of the article. The table serves as a base for state-of-the-art.

Source (year)	Var.	Major findings	Method & sample	Relevance in theory
(Hofstede, G. 1991)	Culture	Dimensions and definitions of national and organizational culture.	Survey in more than 50 countries around the world. IBM	High
(Insights n.d.)	Culture	Description of the countries' cultures according to Hofstede's Model and proven framework based on Geert Hofstede's work.		Medium
(Stephen A. Samaha, Robert W. Palmatier, and Joshua T. Beck, 2014)	Culture	The Role of culture in international relationship marketing. Individualistic and collectivism dimensions influence in the Due to the fact that in relationship marketing (RM) interrelations are social exchanges, culture tends to influence the type of emotional attachment. International understanding is critical in relationships in commercial processes.	Study 1: Meta-Analysis of Modeling Effects of Culture on RM. Using correlation coefficients to report relationships among variables. Study 2: Adopts a country-level approach.	High

(Iriana and Buttle 2004)	CRM	They made an overview of the metrics that are typically involved in measuring the performance of each function.	Literature framework and practitioners.	Medium
(Boulding et al. 2005)	CRM	It provides conclusive evidence regarding the causal effects of CRM activities. Most CRM researchers are interested in assessing causality. And it should suitably address potential heterogeneity in customer behavior. CRM research should focus on the interaction among sub-processes or the interaction among processes, not total CRM systems. It should have the appropriate measures available for the desired insights.	Conceptual framework. Set of nine articles and two essays that advance the science and practice of CRM. Give six recommendations for further research.	Low
(James E. Richard 2004)	CRM in B2B	CRM not as a marketing tool, but as a potential change catalyst and knowledge sharing application. Marketing has the responsibility to understand the potential of CRM systems, not only implement the latest CRM applications, and analytic tools to improve immediate sales and marketing metrics. Is necessary to evaluate the culture of the company and the strategy of the clients at an early stage of the planning process. Since a customer-centric orientation is necessary for the organizational culture for successful CRM implementation, and this is not always easy. The customer interviews in the case study identified that customers do create expectations of CRM implementation. Customers perceived more frequent and productive meetings between customers and suppliers, so they also expected the customer journey to be improved.	Exploratory study: Case of study in ChemCo, to explore issues and relationships between the people, processes, and technology that affect CRM Implementation	Low
(Sin, L. Y. M. et al. 2005)	CRM	+A reliable and valid scale was developed to measure the four dimensions of CRM: key customer focus, CRM organization, knowledge management, and technology-based CRM. +Knowledge responsiveness takes the form of acting on the knowledge generated and disseminated. This includes the selection of target segments, the deliberate elaboration of the marketing mix in such a way as to obtain favorable customer responses, and the meticulous customization of product and service offerings to meet current and anticipated customer needs.	The study was conducted in Hong Kong only. The generalizability of the CRM scale must be tested in other countries. Also, cross-sectional data were used.	High
(Payne and Frow 2005)	CRM	+Conceptual framework for customer relationship management (CRM) that helps broaden the understanding of CRM and its role in enhancing customer value. +The performance evaluation process covers the essential task of ensuring that the organization's strategic objectives in terms of the CRM are being delivered to an appropriate and acceptable and that a basis for future improvements is established. This process can be seen to have two main components: shareholder outcomes, which provide a macro	Conceptual framework. As part of the research, they conducted a workshop with a panel of 34 highly experienced CRM practitioners, all of whom had extensive experience in the CRM and IT sectors.	Medium

		view of the overall relationships that drive performance, and performance monitoring, which provides a more detailed, micro view of key metrics and performance indicators.		
(Yim et al. 2004)	CRM	Managers need to think beyond the technological components of CRM and focus on four key CRM dimensions to enhance customer loyalty and sales growth significantly. In our analysis and discussion, we examine the expanding role of salespeople in successful CRM implementation and outcomes.	Identified the requisite activities for effective CRM implementation. Then their effect on customer satisfaction, retention, and sales growth.	High
(Kumar, Sunder, and Ramaseshan 2011)	CRM Culture	The results of the generalized cross-regional diffusion model indicate that there is untapped market potential in the global CRM market, with varying adoption patterns across regions. The authors also propose a conceptual framework to understand the factors that affect cross-regional learning in GCRM adoption.	Qualitative study: growth of CRM in developing markets such as Asia and South America. Their results quantify the growth of CRM on a global scale using a diffusion modeling framework.	Medium
(Ernst et al. 2011)	CRM NPD	Evidence that CRM has a positive effect on new product performance and further, that this effect is moderated by CRM reward systems but not CRM technology.	Based on cross-functional sample consisting of 115 R&D and 122 Marketing managers from firms spanning multiple industries. The sample was drawn from the top 200 companies in terms of revenue from six industry sectors in Germany.	High
(Kuan-Shun Chiu, K. et al. 2010)	CRM NPD	Generally, firms can increase their innovation capability by ad hoc CRM; the relationship between customer involvement and process innovation; customer involvement and administrative innovation; and long-term partnership and marketing innovation are not significant; and technology-based CRM has positive effects on all five types of innovation.	Empirical study: Computer manufacturers in Taiwan perform various levels of CRM and, consequently, display different levels of effects on each of the five innovation capabilities.	High
(La Rocca et al. 2016)	CRM NPD	They developed a model of customer involvement in the NPD process. Develop the concept of customer involvement as a pattern of interactions at the interface of the customer and supplier organizations. Demonstrate that in a B2B context, sales function plays a central part in interfacing the supplier and customer organizations.		High
Sjöberg, Amelie & Wallgren, Christopher, (2013)	CRM NDP	This research focuses on customer relationship management and what impact it has on product innovation.	Quantitative study to investigate the impact of CRM on product innovation in Scandinavian firms.	High
(Homburg et al. 2005)	NPD culture	Important messages for managers in charge of the development of new products for international markets. The importance of understanding the determinants in providing customer benefits and significant observations regarding cultural differences.	Analyzed the concept of customer benefits in B2B markets in an international context. Sample: 981 respondents from two countries.	Medium
(Anil Mital et al. 2014)	NPD	Precepts of Product design in a step-by-step structured process and focuses on the	Book: Conceptual & processes framework	Medium

		concurrent nature of product design. The connection between initial design and interim and final design, including design review and materials selection.		
(Karl T. Ulrich and Steven D. Eppinger 2015)	NPD	Definitions of product development and a clear process that applies to different types of product or solutions.	Book: Conceptual processes framework &	Medium

Table 2 [Summary of articles]

2.7 Literature Analysis and Discussion

This section analyzes the relevant information previously collected in the theoretical framework. This analysis summarizes essential findings, presents the found gaps, and builds conclusions, always considering the objectives written in Chapter 1.

2.7.1 Organizational culture, CRM, and NPD

The culture of the company is an essential point to consider as it is what the company believes in, its vision and how its employees should behave to reflect that vision to the public. This research will briefly review the impact of the organizational culture regarding NPD processes and CRM.

2.7.1.1 NPD Process, Innovative Culture, and CRM.

Several researchers cited in the theoretical framework, agree that CRM has a positive association in the company's performance by increasing customer loyalty, long-term profit, and developing of new products (Payne and Frow, 2005; Samaha et al. 2014). They see CRM not only as a marketing tool but as a potential knowledge manager by collecting and exchanging data within the company and with customers.

Said, in another way, the operational CRM involves and controls not only the customer and the sales or marketing departments. It involves departments that are part of the creation of value for a customer. Banks, for example, are very keen on using a system like this to keep better track of customers and the service provided to them. Here, a link between the CRM and the department in charge of product development – design or Research and Development (R&D)- was found.

Since operational CRM applies technology solutions to customer-facing functions such as marketing, sales, and customer service, it is possible to generate customer information at all these stages. Many times, this can be done in an automated way, such as automating campaigns and virtual assistants for customer service. However, having a CRM system does not mean that it will do all the work. According to Iriana and Buttle (2004), the success of implementing CRM depends not only on the technology implemented but also on how people handle the information gathered. It is a marketing responsibility to understand the business potential of CRM systems and not only implement the latest CRM applications, data

warehouses and analytics tools to improve immediate sales and marketing metrics (James E. Richard 2004). The team must understand the primary purpose of this implementation, and all departments act according to this. Also, when considering the systems that claim to be CRM software like Salesforce, Microsoft Dynamics, Zoho, it is observed that this directed for the use and implementation of big and multinational companies. However, when the small and medium enterprises start to grow, there is no accessible solution that can handle all this information for them or at least none that is known.

From another perspective, product managers could use CRM for conversation tracking, developing new products, segmenting the market, and even feature validation.

Product manager "leads the strategic side of a product from the development to deployment. They collaborate with leaders in business, from sales to marketing to operations to development." (Gabriela Araujo 2016).

This role is vital concerning customer information management and decision-making regarding new products. When the company chooses a CRM system, whatever it is, the product managers can use the information obtained in the operational CRM as an indicator of what the customers want and decide what to develop—not forgetting the interrelationship with design or R&D departments.

- With this said, **Conclusion 1** shows up: When companies have a customer-centric focus, it is very convenient to implement a CRM system. Nevertheless, it is necessary to use knowledge properly, and this is the job of the staff – marketers, product managers, salespeople-.
- All this is in a customer-centric focused culture. But what about an innovation perspective? Kuan-Shun Chiu, K. et al. (2010) showed in their research that CRM implementation could bring great positive results in innovation programs.
- **Possible interview questions:** Since the present research studies SMEs that require to develop new products for international customers in the B2B context: Is CRM a good option in the process of developing new products? How is it in SMEs? How does this happen in real life in SMEs? What resources do they have? What do companies do to have a better relationship with their B2B customers? How do they generate new products? What process do they follow?

2.7.1.2 CRM y Customer-Centric culture

According to the study made by James E. Richard (2004), the problems and concerns related to the application of CRM were mostly concerned with organizational culture and implementation issues. He says that to successfully implement CRM, it is necessary to evaluate the culture of the company and the customer-strategy at the early stages of the planning process.

It is often believed that acquiring a system or software that will control and store all customer interactions will solve the customer relationship management topic magically. Although, indeed, a company seeking to improve the relationship with customers is already bringing the spotlight on the consumer, only implementing operational CRM will not solve anything. The employees must know how to use the data and the possibilities this data has. Just to give an example, with this data it is even possible to determine patterns, the selection of target

segments, the deliberate elaboration of the marketing mix to obtain favorable customer responses, and the meticulous customization of product and service offerings to meet current and anticipated customer needs (Sin, L. Y. M. et al. 2005). However, the proper use of this knowledge depends on the person interpreting it, not on the technology (Iriana and Buttle 2004).

There is much more behind the customer-centric idea. From another perspective, CRM requires the entire organization and other relevant stakeholders, -like employees, suppliers, and partners- (Boulding et al. 2005), to work on the common task of building and cultivating strong customer relationships (Sin, L. Y. M. et al. 2005). Since everything in an organization is connected in some way, the customers are not alien to this. This means that all the people involved in the company must have the consumer in their minds - corporate culture-. Every decision to be made should involve the question, "how will this decision affect my customers or the company's vision? In this way, decisions such as "waste treatment" can even be a point that generates value to the name of the company. Why? Because if each department has the consumer in mind, the solutions that are created will aim to benefit, indirectly or directly, the consumer. A happy consumer can lead to trust and trust in a possible fruitful relationship. In the end, it is not about "pretending" a good relationship, but about cultivating an idea in the employees to create a "real" relationship. For example, the transparency of a company generates more value for a consumer because it is possible to trust in that brand. According to Sin, L. Y. M. et al. (2005), marketing people should help spread the virtues of being genuinely customer-centric through internal marketing efforts. Besides, proactive sharing of customer knowledge should be instigated to leverage the value of learned customer preferences and needs.

- **Conclusion 2:** It is known in the literature that CRM is not only a system; it is also a base (came from relationship marketing) for customer-centric corporate culture. When companies want to build and keep relationships with clients, this must be known and practice by everyone.
- **Possible interview questions:** To know if this has been applying to the SMEs and if it does. How are SMEs doing? How are SMEs implementing the idea of customer-centric in the company's culture? Are SMEs having a clear idea of the customer-centric vision? Is the customer relationship part of the corporate culture in SMEs? Or not?

2.7.1.3 National Culture of Austrian companies vs. Costa Ricans in building customer relations. From an aesthetic point of view (Further Research).

According to Hofstede, G. (1991), thanks to in-depth research on the subject of culture, it was possible to identify six dimensions for measuring national culture. In this case, it is limited to two countries, one in Central Europe (Austria) and another in Central America (Costa Rica). These countries present similarities in dimensions such as Power distance, or Uncertainty avoidance (maximum difference of 15 points in the score). However, regarding individualism and masculinity dimensions, the countries seem to have a more significant difference. They were Austria's more individualistic and masculine society than Costa Rica. Are these aspects affecting the building of relationships with customers?

Research by Samaha et al. (2014), shows that individualism and masculinity indeed affect how companies prioritize or do not prioritize building relationships with customers. They found

that in cultures with greater individualism, relationships based on social bonding and long-term dependence become more challenging to form, and the beneficial effects of relationships on outcomes are weaker. Their results show that the positive effect of the experience on relationship mediators decreases with greater cultural individualism. The reason for this result is not clear but may derive from the attention to self-reliance in individualistic cultures, which makes the experience less critical for relationship building.

In this case, Costa Rica has a low level of individualism; it is a country that considers itself, like other Latin American countries, to be very collectivist. Moreover, it is very low compared to Austria, which seems to be a very individualistic culture.

- **Conclusion 3:** This is an interesting point to analyze; nevertheless, it will not be evaluated in the research due to the depth that this topic has. It can be done with new whole research based on this. For this reason, it is considered to ask for the opinion of the interviewees regarding this affirmation, but it must not be seeming as a hypothesis to be proved.

2.7.2 Culture-related customer interactions on NPD processes

In the process of developing a new product, there are interactions with both the customer and any third-party collaborator. In both cases, it may be national, international, or simply there is no collaboration for the development of a product. This research will also analyze the influence of culture in the interaction between the company and stakeholders involved in developing customized solutions to B2B clients: customers and international development collaborators.

When talking about a client, it can be involved in the early stages of product development, i.e., in the data collection stages, finding out the client's needs, establishing the specifications, and conceptualizing the final solution. Apart from this, it can be related to the last part of the process, which is related to the support and post-sales customer service.

Regarding international development collaborators, it refers to third parties that take a role in the development process. It could be manufacturers, design, or technical consultants, packaging developers, etc. Based on experience, there will always be communication problems, but what about cultural aspects?

2.7.2.1 Customer Involvement for customized products

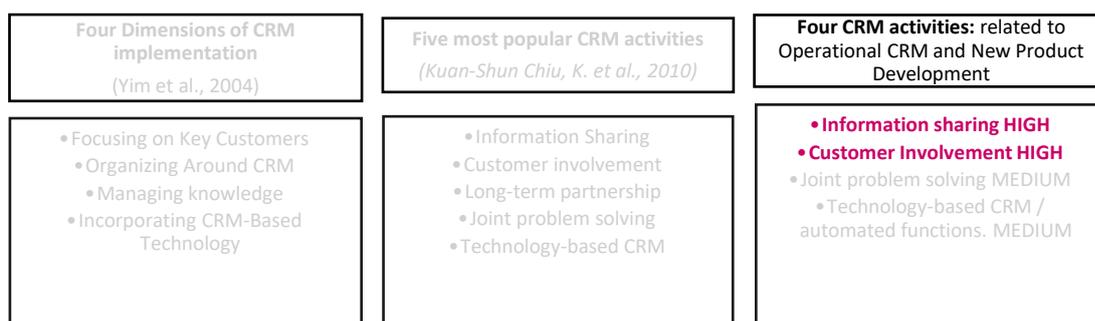


Figure: 11 [-Reference to Figure 10]

Taking into account the interaction that the company has with the client, it is also possible to analyze the national culture of the client. According to literature (Ernst et al. 2011; Kuan-Shun Chiu, K. et al. 2010; Sin, L. Y. M. et al. 2005) and referring to Figure: 10 of the theoretical framework, two external activities of the CRM are of great interest due to their influence in the early stages of product development. These would be the degree of customer involvement and knowledge management in interconnection with other departments involved in a development process, or information sharing. These involve the customer in a sales process and product conceptualization.

"Customer involvement" engages the customer in the in activities such as technical meetings, supply chain annual conferences, and market evaluation conferences Kuan-Shun Chiu, K. et al. (2010). According to Pedron et al. (2018), the engagement of the customer in this process of development can only happen when there is a strong partnership between the firm and its customers. So, this dimension relates to the long-term partnership as well. La Rocca et al. (2016), explore the concept of customer involvement concerning NPD in a B2B context, developing this concept as interactions at the interface of the customer and supplier organizations, which makes total sense when thinking in a B2B context.

- **Conclusion 4:** Customer involvement is an important activity of CRM to implement if the company wants to reach two things: 1) get the proper information to satisfy the client's needs, 2) and build a long-term partnership with maybe key customers. Involving clients in the process can be a good thing if it is appropriately controlled and managed.
- In SMEs, it can be a bit complex, especially in a small team. El Ropero de un Soñador. S.A, i.e., is a familiar small business created around ten years ago. It specializes in the design and development of costumes for different scenic and artistic disciplines, and they got contracts with dance academies and companies where it was necessary to design and sew hundreds of costumes monthly. The team is only 2 to 3 people doing all the processes, management, customer service, product design and development, even delivery. The reputation of the firm grew thanks to the happy clients gained throughout the years. The idea of the founder was always to offer more than what clients want. She always included the clients in the first steps to choose the sketch, concept, even material to ensure customer's happiness and satisfaction. However, this was not easy because they were demanding more than what they can pay for or looking to every single detail, which takes much time, and effort. Working without a clear protocol or rules for customer involvement and information sharing the team is all the time overwhelmed with work because of this reason, and even more, when they had more than one project at the same time. In this type of case, is the operational CRM useful to control and manage customer involvement?
- **Possible interview questions:** How much is the client involved in the SMEs NPD process? How could CRM help? Is it "healthy" to involve the customer in this process? Is operational CRM useful to control and manage customer involvement?
- **Conclusion 5:** Information sharing is an essential part of the development process. This is key to keep every party involved on the same page. Operational CRM could

help to share information from clients to team members and connect the salespeople to clients.

- **Interview questions:** How is the information being shared between development stakeholders?

2.7.3 Cultural Knowledge Management.

As well as the main objective of any client is to achieve the maximization of the profit/value of what they are acquiring (Boulding et al. 2005), the development company also pursues the maximization of revenues, margins, and ultimate value, and this is where the responsibility for new product development (Bijan Aryana and Casper Boks 2012), and CRM comes in (Boulding et al. 2005).

Nonetheless, the customer's culture may generate the need to change the process of creating value in the products or services offered. An underlying premise of CRM is that customers have different needs, and therefore the company must treat them differently (Boulding et al. 2005). It also applies to the culture of the clients since it could influence purchase decisions. Meaning that if a product is sold in other countries, it may be necessary to adapt the features or even the name of the product to suit an audience better, as most of the marketing literature suggests. For this reason, this is something to consider when designing products, for example, the clothing brand Levi's developed Femina jeans with more curved cuts so that they would adapt to the tastes of Brazilian women by being ultra-tight.

Additionally, in Hofstede's research, IML master studies and chats with other professionals, the importance of this cultural knowledge, and how to work according to this, especially in the B2B context, emerge. In relationship marketing, interrelations are social exchanges; culture tends to influence the type of emotional attachment. This is why some researchers like Samaha et al. (2014) supported the idea that international understanding is critical in relationships in commercial processes.

Usually, using an indicator to measure performance in building customer relationships can also be useful. This performance evaluation process aims to ensure that the organization's strategic objectives on customer relationship management are adequately and acceptably met and that a basis for future improvements is established. This is a known fact, so many companies place great importance on developing long-term relationships with their key customers. This can be achieved by using customer satisfaction and customer retention as indicators and having two components, the stakeholder outcomes, which provide a macro view of the overall relationships that drive performance, and performance monitoring, which provides a more detailed and micro view of key performance metrics and indicators. (Payne and Frow 2005). What is it like for SMEs?

Knowing that CRM requires the entire organization to work on the common task of creating value, to build strong customer relationships (Sin, L. Y. M. et al. 2005), it is interesting to analyze the creation of value in the development of new products, considering the customer's culture as the basis. From the industrial design point of view. How culture affects the creation of value in new products?

Additionally, the product manager can use the operational CRM to verify information, segment the market, analyze the conversion tracking data to reach a decision that is viable for the customer and the company. An industrial designer, on the other hand, uses this information filtered and analyzed by the manager about the customers -what they want and what they need- and based on that, conceptualize a new idea or solution or improve the options that already exist. For example, a Costa Rican company generates furniture for national and international companies. That company receives requests from shopping malls, and this often requires the design or redesign of existing products. Other times it is essential to design something from scratch so that it fits the client's needs and expectations. Taking this into consideration, when adding up culture, it is interesting to ask if the company handles this information and if it does, how it uses it.

It is known that this is indispensable when creating relationships with B2B clients since it can determine the success or failure of a sale or even generate long-term partnerships. However, what happens when it comes to generating a customized product. People involved in the creation of a product conceptualization must ask the right questions to understand what the client needs, but understanding the client's culture can help in this process. When it is Business to customer (B2C), usually adapt the products to the local needs, but in the case of B2B it would be necessary to adapt it to what the company requires, being thus necessary to understand not only what the client wants and needs, but its national culture to facilitate the empathy for the client. For example, a potential new client in Taiwan, knowing that this country's score in uncertainty avoidance is low, it may take more coaching work to get the information needed to be on the same page. However, this means more work and possibly investment in resources, and the methods recommended in books are traditional and very useful. Since many people have developed technological tools for operational CRM, automated marketing, sales, and even support, I wonder how far these could help SMEs to gather and interpret this knowledge quickly. The first investment could indeed be expensive, but it could bring value to the company in the long term.

- **Conclusion 6:** Knowledge management and gathering of information are vital to understand the customer and be able to customize product and service offerings to meet current and anticipated customer needs. Since in relationship marketing interrelations are social exchanges, culture tends to influence the type of emotional attachment. International understanding is critical in relationships in commercial processes.
- Dual value (company and client) can be generated by the NPD, and it is achieved by generating a good concept that meets the needs of the customer. The process follows steps like the collection of the consumer's needs, interpretation of these data in specifications, and finally, conceptualization. However, the literature recommends the use of efficient but outdated methods, given that technology and systems exist that allow the management and storage of customer information.
- **Interview questions:** How are SMEs dealing with the cultural aspect of clients? Is it a vital part of building long-term relationships in SMEs? Which methods are the companies using to gather information from international clients (with or without CRM) to develop new solutions? Moreover, how do they manage the cultural aspect of their clients? How much is the customer involved in the development of a product?

According to literature, how can CRM support the development of new products? -from an industrial designer's point of view.

2.7.4 Culture in international cooperation.

It is a fact that culture has a significant impact as it influences the behavior and decision making of both customers and employees. So, what is desired to know is whether culture has a positive or negative impact on the process of developing a new product in an international B2B context.

The process of developing a product involves different departments, including marketing, design, and may even be engineering. Generally, the product manager defines the specifications of a product based on the information provided and collected from the target market. Sales are also responsible for interacting with customers and collecting data to sell existing products or to sell customized products - as it is usually the case in B2B.

This is not a conclusion coming directly from the literature but represents a topic that came up during the research process and will be featured in the interviews. It is also valuable to ask questions about the main culture-related problems (or aspects) in international cooperation related to the NPD processes. When this direct interaction with customers exists, how is this information collected and managed, and is a CRM or some alternative form used? In addition to this, the relationship with the client is a priority. Therefore, it is questionable if CRM is a useful tool for small and medium companies, and if CRM is not used to maintain relationships with customers, then they use it.

Possible Interview questions: Which challenges or problems could the firm when international collaboration in the NPD process? How is this solved in reality? Could CRM help? How are the interactions with clients collected and managed? With or without CRM.

Which are the options to manage this cultural data? Are there any culture-related problems (separated/compared to all the other issues)? Can CRM eliminate these problems (if there are)? Or is the cultural difference, on the other hand, not consciously wanted and thus also a qualitative advantage in the NPD? Is this depending on the field or industry? How could CRM help to support the cultural influence in a positive sense? How can cultural influence be measured? How can it be managed in the NPD (with and without CRM)?

2.8 Chapter Summary

This section will break down the research into two major topics. Each main topic will be used to set up questions to build up an interview in the next chapter. This part will be the base to design the interview.

SUB-TOPIC 1: The influence that organizational culture has on new product development and CRM.

This topic can cover objective 1: Identify whether the corporate culture is affected by implementing CRM in the PD process and how; by analyzing the organizational culture in terms of company and the national culture of the company.

This sub-topic uses the analysis and discussion from section 2.7.1, which interrelates customer-centric focus and CRM implementation, and considers customer involvement as a relevant part in a PD process (Section 2.7.1.1 and 2.7.1.2). Besides, the section 2.7.1.3 analyses the national culture of the company and prioritization on building relationships. However, this particular point will not be evaluated in the present research due to the depth that it has, new whole research could be done based on this

SUB-TOPIC 2: The impact of national culture and operational CRM in NPD processes and international stakeholders.

This sub-topic seeks to cover the objective 2: Understand the influence that the national culture and Operational CRM could have on NPD. And objective 3: Identify the positive and negative impact of culture on the development of new products. This is done by analyzing culture-related customer interactions on NPD processes (Section 2.7.2), customer involvement for customized products and information sharing (Section 2.7.2.1), and the relevance of cultural knowledge management (Section 2.7.3). Finally, culture-related problems with international collaboration (Section 2.7.4), is considered as a gap that will be covered, because the conclusion made did not come directly from the literature; however, it will be featured in the interviews.

2.8.1 Conceptual Framework

This section gives an overview of the main concepts and the definitions for each, for a better understanding of the research paper. These definitions were build based on the literature review of Chapter 2.

Culture:

In this research, two types of culture will be covered:

National Culture must be understood as a programming of the mind that distinguishes people from a country to another. This programming includes values, believes, social responsibility thoughts that are quite stable and take generations to be changed.

Organizational/Corporate Culture is the programming of the mind that distinguishes people from a company to another. It is based on practices learned in the workplace through socialization, and as part of the corporate identity. It includes organizational values, but it also should reflect the vision of the company, and it must be clear for everyone. For this research, the organizational culture will be analyzed and understood as part of a company's value proposition. It is planned to explore how this culture is created and controlled in relation to product development on demand in SMEs.

New Product Development:

Related to the development of new solutions for clients, involving processes of creating a new product involves different departments in the process, including marketing, design, and

manufacturing. In a B2B context, the product could be related to **any solution** that a company can offer to the client, meaning that for instance, a new product could be related to manufactures products, digital products, services, or even a mixture of them.

International Collaboration:

This research must be understood as every international third party involved in the development of products, like manufacturing partners, freelance designers, or developers, or suppliers.

Customer Relationship Management:

In this research, CRM is defined as the way companies interact with their customers to create knowledge about specific preferences. Besides, how companies assist customers and key clients when a problem has occurred, that is related to the host company.

It involves an operational, analytical, and strategic perspective. And therefore, it requires three elements: people, technology, and processes.

Operational CRM:

Operational CRM applies technological solutions to customer-facing functions such as marketing, sales, and customer service. Today, many digital tools allow the automation of these functions, for example, virtual assistants used in customer service.

The operational CRM is a generator of customer-related data, which is then used in the analytical CRM and to guide decision making in the strategic CRM, such as whether to develop a new product, which customers to retain or define another market segment.

Customer Involvement:

Defined as the customer's involvement in creating new or improved products. It applies a similar idea to user-centered-design, involving the consumer during the NPD process. It can provide valuable information about customer experiences in using the product, as well as help the company reducing uncertainties regarding user demand. Learning how to manage and control this can be very difficult, as the company must know its limits well and make it clear to the customer without losing the customer.

3. Methodology Chapter

3.1 Research design

To answer the main question and reach the objectives settled in Chapter 1, the author conducted a qualitative explorative and descriptive research, using an inductive approach.

Qualitative research was selected because its properties let the author deal with a broader type of data, allowing us to find out new and unexpected answers to insights about the motives and goals of the interviewees. The researcher has to make sense of a subjective and socially constructed meaning, expressed about the particular phenomenon being studied (Saunders,

M., Thornhill, A., and Lewis, P. 2015). The investigation has an exploratory character because the goal is to understand what is happening, with enough flexibility to adapt in the process. (Saunders, M. et al. 2015) Finally, descriptive because it describes the phenomenon or population under study.

Approach for theory development

The inductive approach is used because the author started by collecting specific data to explore a phenomenon, then identifying patterns with these observations, then making broader generalizations, and eventually making tentative theories. This results in generating or building a theory that usually is in the form of a conceptual framework. (Saunders, M. et al. (2015).p.145).

Informally known as the “bottom-up approach” because it is generalizing from the specific to the general. Figure: 12. “This means letting the ideas, concepts, and themes emerge from the data from the interview.” (Schulz (2012), 0:02:42 min)

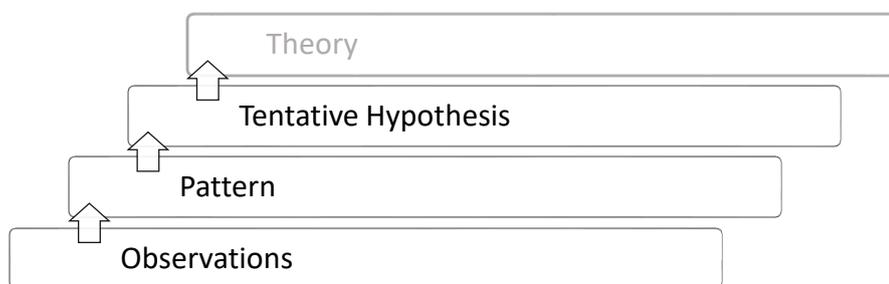


Figure: 12 [Inductive Research Approach process]

Source: [Southampton Education School- video (Schulz, 2012)]

The method used: Grounded Theory

Grounded theory was developed by Glaser and Strauss in 1967; it was developed as a process to analyze, interpret and explain the meanings that social actors construct to make sense of their everyday experiences in specific situations (Saunders, M. et al. (2015).p.193). Usually, it is an inductive approach.

This method is interactive, flexible, and less prescriptive. The analysis is done by continually comparing data to codes and coached the data codes with other codes and data with other data to develop higher levels of abstraction rather than necessarily using actual coding or selective coding (Saunders, M. et al. (2015).p.599).

The researcher collects and analyzes data simultaneously, developing analytical codes as these emerge from the data to reorganize these fragments or data into categories (Saunders, M. et al. (2015).p.193-194); this is known as coding.

Coding procedure

According to Saunders, M. et al. (2015), the three coding stages from Strauss and Corbin could be simplified in two, as shown in Figure: 13. This method from Charmaz will be used in the analysis of the primary data, implementing open coding, and focused coding.

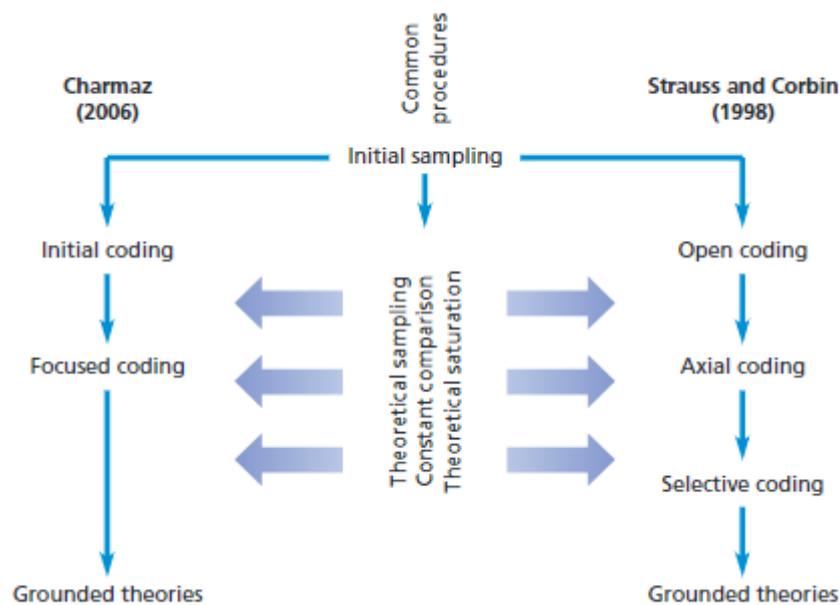


Figure: 13 [Comparison of coding stages]

Source: [Saunders, M. et al. (2015)]

1. **Open coding / initial coding:** in this stage, the author recognizes data into categories. The data collected will be disaggregated into conceptual units and provided with a code or label. The same code will be given to similar units of data. But as the research starts without an explicit existing theory, the result may be the creation of multiple conceptual labels related to the lower level of focus (Saunders, M. et al. (2015), p. 597).
2. **Focused coding:** focused coding involves deciding which of the initial codes will be used to develop the analytic and explanatory focus of the coded data. So, data from various initial codes are re-coded to a smaller number of more focused codes. During initial coding, some of the codes that were developed may appear to have greater analytic potential to help the researcher to explain the data and develop a grounded theory related to the research question. The selection of these codes will lead the researcher to work through all the coded data again to see if they are suitable to begin to develop and more explanatory focus. (Saunders, M. et al. (2015), p. 598)
3. **Axial coding:** the process of recognizing relationships between categories. This refers to the process of looking for relationships between categories of data that have emerged from open coding. It indicates a process of theoretical development into a hierarchal form with the emergence of subcategories.
4. **Selective coding:** integration of categories to produce a theory. After a lengthy period of data collection, which may take several months, the researcher should have developed several principal categories and related subcategories. The intention is to identify one of the principal categories, which becomes known as a central or core category, in order to relate the other categories too this to integrate the research and develop grounding grounded theory (Saunders, M. et al. (2015), p.600).

Another key that aids the development of grounded theory is memo writing. Memos are created throughout a research project to define or make notes about:

- codes being used
- how codes change through the research process
- how codes might be related, leading to the identification of theoretical relationships and the emergence of higher-level codes and categories
- any other ideas that the researcher might find useful to develop the research process and analyses data.

The memos will give a chronological record of the development of the researcher's ideas and the project. This will show how the researcher came up with the grounded theory (Saunders, M. et al. (2015), p.194).

Grounded Theory considers two types of memos to be used in the research process. The initial memoing which occurs during the coding phase to conceptualize incidents. Moreover, the Theoretical, to support the transition between substantive and theoretical codes.

3.2 Data collection

Secondary data collection

First, gather secondary documentary data from general and specialized literature (magazines, books, journals, etc.). This may provide an excellent comparative and contextual background for the investigation as well as for future findings (Saunders, M. et al. 2015), and it is done in Chapter 2.

Primary data collection

Data collection is non-standardized, so questions and procedures may alter and emerge during the research process (Saunders, M. et al. 2015 p.168). Indeed, this was precisely the case; as a result of the analysis done in the previews chapter, some interesting and relevant topics that can answer the main question and give valuable input, showed up. From these topics, some questions were developed and were shaped to fit different types of interviewees aiming to tap into their experiences and expertise.

Besides this, I will collect primary data from SMEs using semi-structured interviews technique. This technique has the advantage of providing an in-depth understanding of a respondent's motives, pattern of reasoning and emotional reactions that is not possible to get when using questionnaires.(R. Murray Thomas & Dale L. Brubaker, 2008)

3.2.1 Interview Design

The ideal would be to conduct personal one-on-one interviews. However, do to the COVID-19 pandemic, mandatory quarantine, and closing of borders, these interviews were conducted not personally, but digitally using zoom.

A semi-structured interview: this technique requires predefined questions that seek to answer the overall research question. In this case, the questions were divided into two sub-topics, and

the questions were built around these two sub-topics. Besides, the questions were adapted to each type of interviewee.

The point of a qualitative interview is to let the respondent explain their own opinion, view, or story regarding the research question. Therefore, open questions were developed to build the interview guideline. In this way, the interviewee will be able to give as wide an answer as he or she wishes. If necessary, it is possible to extend the questions, but always maintaining the thread of the guide and the time limit.

As a result of the analysis done in the previews chapter, some interesting and relevant topics that can answer the main question and give valuable input showed up (Section 1.12.7). From these topics, some questions were developed and were shaped to fit different types of interviewees aiming to tap into their experiences and expertise.

Time per respondent: max 50 min.

Interviewees: The interviewees would be experts in CRM, industrial designers, and CEOs or heads of marketing of four SMEs (two in Austria and two in Costa Rica).

***Note:** These companies are from different economic activities to have a diversified portfolio since this research is not a comparison, and it may provide a more broad overview. Likewise, the product definition within this research is equal to a solution to a client's problem; therefore, it can be product, service, digital solution, or even a mix. Likewise, a google form short questionnaire was made to gather general information of the company's candidates for the interview.

Channel: Due to the COVID-19 situation, the interviews will be held ideally with Zoom, recorded, and transcribed. In some circumstances, the interview was made in a written way, as requested by some experts via emails.

The procedure will be the following: Interview 4 different persons sequentially, it was set an identical question guideline that will be asked to call them at the beginning. But if after the first one, there are already have some insights or the need for a correction, the adjustment was not excluded. It might even be possible to finish interviewing all 4, then analyze the data, and get back to all of them to refine or correct, etc.

Limitations: The limitations of the interview's method are summarized below:

- Only one person doing the research and limited time.
- The first experience in conducting qualitative research of this level, so knowledge needed to be gained in the process, which requires extra effort and time.
- Is the language barrier in this case. None of the interviewees will be interviewed in their native languages.
- Identifying suitable companies during pandemic times because the researcher has a good network in Costa Rica, very little network in Vorarlberg but not possible to reach none personally. Due to quarantine and geographical location, interviews were held online.

3.2.2 Sample Selection

To answer the main question, the author selected the homogeneous purposive sample that directly addresses the research question (Saunders, M. et al. 2015). To do so, convenience sampling (R. Murray Thomas and Dale L. Brubaker 2008) was used by seeking for companies that fulfill the following characteristics:

- SMEs, also extending to start-ups
- companies following a Business-to-Business model
- companies doing international business
- from Costa Rica and from the region of Vorarlberg

Besides, some experts in product design, CRM, or product management were interviewed to bring different perspectives about the research question. These were chosen according to their expertise on product development, CRM and can apply it to solve issues.

In this case, the research started with the idea of interviewing only companies (head of product management, product design, or marketing, even CEOs). However, the events related to COVID-19 made it very complicated to find enough companies, so it was decided to include experts in areas such as CRM, product development, or product management. Besides, some of the experts asked to conduct the interview in written form, so it was decided to conduct the same questions proposed in the guide via email. Additionally, two interviews were conducted in Spanish and translated into English before the analysis. Below in Section 3.2.2.1 and Section 3.2.2.2, it is possible to read the summary of the interviewees.

Note: The author is aware that the quantity of interviewees is not enough to prove any theory. However, their perceptions, opinions, and thoughts are helpful to get an overview of cultural influence in the product development processes and the implementation of Operational CRM into this procedure.

3.2.2.1 Companies

AT1. **Tiger Dental GmbH. – Contact: Julian Winsauer, CEO.** Orthodontic devices producer and distributor from Austria. Focused on offering the best and innovative products to their clients. And try to offer the best customer service regarding the usage of its products. No operational CRM will be implemented soon.

*“We are a niche producer of dental appliances and have very strong connection with a dental practice in order to develop our appliances and also get a good feedback about it.”
(AT1._Interview - TigerDental, Pos. 11)*

AT2. **Stars Media – Contact: Guntram Bechtold, CEO.** Austrian agency develops marketing for online products, which focuses in the implementation of digital business models (SAAS or Software as a Service). No operational CRM.

<https://www.starsmedia.com/>

“We are specialized in performance marketing. We typically help businesses build online business models for their own purpose. So that's what we are doing in an everyday job. We do this by using commercially available advertising channels like Facebook ads, Google AdWords

and so on. And connect these generic advertising solutions with the specific needs of the businesses so that they find the right customers, and that the customers have the expected experience that they want to make.” (AT2._Interview - StarMedia, Pos. 6)

- CR1. **AMPO s.a – Contact: Javier Salazar, Finance Director.** AMPO Ltda. started in 1965 in Costa Rica; specializes in the manufacture of "Manual Office File Cabinets". AMPO is a company committed to sustainable development. They use CRM. <http://www.ampos.com/> Written interview.

“And we distinguish ourselves by the excellent quality of our products and the careful service to our customers. For ten years we have been exporting to Central America, to the main supermarkets in the Central American region and Mexico.” (CR1. Interview - Ampo, Pos. 4-5)

- CR2. **Grupo Vargas GV s.a. – Contact: Diego Salazar.** Grupo Vargas GV S.A. is a 100% Costa Rican company who manufacture wet glue labels for the beer industry, in different finishes such as glue, stapled and fold. No CRM at the moment. <http://www.grupovargas.com/>

“Also we produce folding cartons for medical devices, beer industry and for food, electronic industry. We export 80% of our production to free trade zones and USA (medical devices), Heinekens Brewery’s in Panamá, Ecuador and Haíti and Nicaragua and Costa Rican national Brewery.” (CR2. Interview - Grupo Vargas, Pos. 4)

- CR3. **AIA del Caribe s.a. – Contact: Johana Morris, CEO.** Costa Rican manufacturer of prepared recipes with alternative ingredients from tubers and grains. They distribute products and ingredients for the food industry, specialized in allergic or celiac people. No operational CRM will be implemented soon. <https://www.aiadelcaribe.com/>

“We make them as natural as possible since we know that there are people with different types of intolerances and allergies, and the idea is that those people can benefit from the nutritional properties of both the raw materials, with which they are made, as well as having the possibilities of eating, let's say, normally, because many customers come to me with many restrictions. Things for us are as common as going to the bakery, buying a piece of bread and eating a cake, others can't. Within that, because, let's not only talk about coeliac disease, we talk about many intolerances and allergies. And within the same product we also have what is personalization of the product. For example, a few months ago a customer called and told me that he couldn't eat either rice or corn, which is the basis of everything.” (CR3. Interview - AIA del Caribe, Pos. 12)

3.2.2.2 Experts

- EC1. **Javier A. Ortiz González:** Costa Rican finance Master and a PhD in Economics. He worked for 35 years in banking, the last 11 years at Citibank. And currently is a business consultant and teacher in courses related to finance, strategic planning, operations management, and quantitative methods. With experience in CRM as an important philosophy and tool in the Citibank, where according to him, it's global environment makes it imperative to use this methodology and technological platform. - Conducted in Spanish.

“As a consultant, I advise companies in the use of CRM because the only way to increase the Return on Equity is by meeting the needs of customers, they are the ones who must lead the

development of products and their design must be based on their needs.” (Interview Expert- Javier Ortiz G, Pos. 4-7)

- EC2. **Francis Buttle**. – Australian researcher, formerly full Professor of CRM. Previously full Professor of Marketing, and Relationship Marketing at Manchester Business School and Cranfield School of Management (both UK), and Macquarie Graduate School of Management (Australia).- Written Interview.

“Now retired from academic life, but still consulting. Author of 14 books (including 5 on CRM) and about 150 peer-reviewed journal articles and conference papers.” (EC2. Interview- Francis Buttle, Pos. 10)

- ED1. **Andreas Ebermann**.– German Industrial Designer leader from Schindler Creations, with experience as industrial designer in projects B2B for around 7 years.

“As you know I work at Schindler Creations for like seven years now, almost seven years and we are doing B2B industrial good development for bigger companies also international companies, and I am running projects as a project leader, also like team leading, and in this responsibility in my main of couple of years.” (ED1. Interview_Andreas Ebermann, Pos. 10)

- ED2. **Jorge Madriz & Beatriz Guevara** –Product Manager and Marketing Manager Sylvania Costa Rica. Experts with experience in product development in multinational company Feilo Sylvania group. -Written Interview and conducted in Spanish.

Beatriz Guevara:” I am currently a marketing and BI Manager at Sylvania Lighting. I have almost 10 years of experience as global product manager in the multinational CITI bank, and the national telecommunication company Cabletica.”

Jorge Madriz: “I have been working as product manager for 1 year. Nethertheless, I have almost 5 years’ experience as Industrial Design Engineer in Solano Tenorio (Furniture design) and almost around 8 years as a Research and Development (R&D) leader in Feilo Sylvania. Both of our expertise includes projects to companies as clients and some international background.” (ED2. Interview_Jorge and Beatriz, Pos. 10-11)

3.3 Interview Guideline - Open Questions

Appendix 2 shows a summary of the conclusions and questions built in Chapter 2. This helped as a base to build the following interview guideline.

Besides, the researcher decided to interview first the two experts in CRM, to adjust the questionnaire for the companies, and finally to adjust it for the product development experts, if necessary. This is the resulting general guideline, which was modified for companies and product development experts. These can be found in Appendix 3.

Interview guideline

The introductory/warm-up questions (IQ) are used to build a profile of the interviewees; this will help to have a context of each and will help to interpret the answers. The questions (Q) represent the questions that seek to answer the main tow topics.

Warm-up question: Something that the respondent can answer easily, and not too long. This question will help to understand the companies' views better and give some explanations if needed. (**if applicable)

- IQ1. *To know more about your experience in X area / the company and its international experience.*
- IQ2. *Understand how well the interviewee understands CRM term.*
- IQ3. *How do you think that the idea of customer-centric could be implemented? ***

For Sub-topic 1 -The influence that organizational culture has on new product development and CRM. Purpose: Is to understand the impact that corporate culture has on new product development and CRM. Knowing CRM follows the idea of relationship marketing, which generates the idea of customer-centric. However, is this being implemented? How far is the Customer Involvement for new or customized products because this is part of the culture too.

- Q1. *What is the process that the company follows to design and develop a new product? Workflow? ***
- Q2. *When a customer wants customized services or products to key clients. How is the process? ***
- Q3. *How much effort has been done or should be done to understand the customer's needs?*
- Q4. *How could CRM be implemented in the process of developing new products?*
- Q5. *What are companies doing to have a better relationship with their B2B customer?*

For Sub-topic 2 - The impact of national culture and operational CRM in NPD processes. International customers and stakeholders. Purpose: To understand the influence that the national culture of clients and corporate CRM could have on NPD. Furthermore, identify the positive and negative impact of culture on the development of new products.

- Q6. *How should be managed the cultural knowledge of the clients? Do you think it is important?*
- Q7. *Which methods do you think are useful to gather this information from international clients (with or without CRM) to develop new products?*
- Q8. *How much should be the international customer involved in the development of a product?*
- Q9. *Do you think that marketing, sales, or service automation can help to gather this data?*
- Q10. *Which culture-related problems might appear in the NPD process? How could this have solved? Could CRM help?*

3.4 Chapter Summary

A common mistake in the inductive approach is that the researcher simply go ahead and collect data without examining them to assess which themes are emerging from the data as he or she progresses (Saunders, M. et al. 2015, p.570) . Therefore, it is best to collect the data, analyze it, and develop a conceptual framework to guide the researcher in his work. This is known as the grounded method because the nature of the theory or explanation that emerges as result of the research.

In summary, this research follows an inductive approach and the Grounded Theory method. The secondary data that will be collected thought interviews will be analyzed using Relational Analysis, which identifies concepts and explore relationships between concept, using a direct

quotation to support conclusions (Schulz 2012). The MAXQDA software was used to proceed with coding and analysis.

Having said this, the questions generated for the interview are divided into three groups that enable the collection of different information. On one side, the questions **IQ1-IQ** are warm-up questions of the interview. These helps break the ice and to understand better the interviewees' view, so the researcher knows if is needed to explain a concept or not. Nevertheless, these questions are not independent of the main topic of research.

Q1-Q5 are questions for Sub-topic 1 and will help to go deeper into the influence that organizational culture has on new product development and CRM. So, these questions analyze the following points:

- The development processes in SMEs. With or without CRM.
- Customer-centric in the SME culture. How clear is the customer or product-centric approach in the culture?
- The effort needed to understand clients.
- If there is any difference in NPD processes if CRM is involved

The question **Q6-Q10** seeks to answer Sub-topic 2. And help to understand the influence that the national culture could have on NPD processes, not only of customers but every international collaboration involved in this process. Therefore, identify the positive and negative impacts of culture on the development of new products. To do this will be analyzed:

- Importance of cultural knowledge within development processes.
- Methods used to gather and manage this cultural knowledge. With or without CRM.
- International customer involvement on the NPD processes.
- Problems or challenges during the NPD process with international clients or collaborations.

4. Qualitative Analysis, Discussion, and Findings

In this chapter, the researcher presents and discusses the findings in the conducted interviews, qualitative analysis, and combined them with the insights gained from the literature review.

Based on these results, Chapter 5 provides a summary, conclusions, and further research recommendations.

4.1 Qualitative Analysis

In this chapter, the researcher reflects on the literature research analysis and combines the finding thereof with supporting or opposing statements from the qualitative interviews.

4.1.1 Overarching themes

Following a relational analysis (Section 3.1), some themes were developed to answer the research question and meet the research objectives. After the coding process (Codes Summary can be seen in Appendix 14), the author built the following overarching themes that summarize the results from the interviews and will be discussed in Section 4.2.

Theme 1: CRM and Corporate Culture influence.

- + Company approach (customer or product-centric).
- + Effort to understand client and Customer Involvement in the PD processes.

Theme 2: Relevance of cultural knowledge within Product Development (PD) processes.

Theme 3: Methods used to gather cultural knowledge.

Theme 4: Product Development processes with/without CRM.

Theme 5: Culture-related challenges in PD processes.

4.2 Findings and Discussion

Here the main research question is answered by combining the insights from the qualitative analysis and the literature review.

Research question: *What is the impact of culture and operational CRM, in New Product Development?*

4.2.1 Theme 1: CRM and Corporate culture.

When the interviews with the CRM experts were conducted, it could be noticed that Customer Relationship Management is seen in several ways, not only as a system or software (operational CRM). It seems that over time, the software that aims to interconnect customers with the company has been called CRM; however, it is forgotten that there is the analytical and the strategic factor. As mentioned in Chapter 2, and in Buttle's literature (EC1.), precisely the CRM falls into three levels: the operational, the analysis, and the strategic.

"This data is then used in analytical CRM and to guide decision-making in strategic CRM. For example, data from and about customers, generated by operational CRM can be used to guide decisions about which customers to target for acquisition and retention."

(EC2. Interview- Francis Buttle, Pos. 4)

But in addition to this, it requires three main factors: people, technology, and processes. The human factor was very much present in the interviews not only by the CRM experts but also by companies. By saying this, the customer focus approach is not built by the tool or system in place; it is thanks to the people, and they must know how to interpret feedback, data and

make strategic decisions out of it. Here is where the corporate culture also plays an important role, because it influences the way that everyone inside the company behaves internally and externally, including the way of building relationships with clients or partners.

"[...] for example, you have a culture, which is geared towards customer service, so everyone is having the same mindset about how to interact. [...] But on the other hand, if you do not have the inputs that you need, you will never perform as well as you would if you have a system in place."

(AT1. Interview – TigerDental)

"I don't think that companies use the benefits of the CRM they have, [...] they use it more like an address database [...]"

"[...] it's the job of the entrepreneur to implement the customer focus strategy, and the theorem can be a part of the team, but it's not the tool that is doing the strategy, it's more the person that is going on that, and learns how to interpret feedback."

(AT2. Interview – StarMedia)

"In-state institutions and large companies have the luxury of having support teams of high professional level with a high level of constant training. The small companies do not have the facility of response in the constant professional update, then when the CRM starts, the big companies, by the knowledge that comes from abroad, the CRM started where you can pay for that training and the multinationals that entered the country."

"Two variables were needed: professional technical knowledge and technology."

(EC1. Interview- Javier Ortiz)

Interviewing these experts first raises the question: If the company has CRM, is it necessary to follow a consumer-oriented approach? -considering that SMEs do not have many financial, human resources, and the number of clients may not be as significant-. Consequently, this question is asked to the companies to understand if the CRM as philosophy could influence Corporate Culture in any way. By doing this, it is expected to accomplish the first research objective: Identify whether the corporate culture is affected by implementing CRM in the PD process and how. (Section 1.3).

4.2.1.1 Company Approach (customer or product-centric).

This theme considers corporate culture as small settled and nearly invisible things that determine the way to treat each other, business partners, and customers. Therefore, it talks about the behavior of people within the company regardless of the area of work. It follows an approach to addressing markets that is either consumer-centric or product-centric. According to the interviews, there is no clear definition of this approach in the small or medium-sized companies analyzed; there is more of a mix. For example:

"if I think about customer-centric, I think about our customers who are doctors. Moreover, if I think about being customer-centered for me, it means to really give a benefit to the doctor when he is treating, so [...] making it less complicated for the doctor, to treat the patient and having probably more effective results. But if I think about the product-related part, it's, I think a lot about the patient, which is also kind of a customer."

(AT1. Interview - TigerDental, Pos. 43)

"In this case, we have here an interesting mix between customer and product focus. [...] Sylvania's approach has been to offer its customers business management models based on their needs and, in turn, in its product approach, to innovate and offer solutions that exceed customer expectations."

(ED2. Interview_Jorge and Beatriz, Pos. 17)

So, if we talk about the corporate culture being focused on the product, today it should not refer to the product itself but to the end-user who will determine the success of the product. These interviewed companies do not have a clear definition of the approach. This is because, on the one hand, they include the human factor of both, the consumer and the end-user. And, on the other hand, some refer to customer-centric when talking about personalized solutions and product-centric when referring to mass productions:

"Is both indeed. Because we have so many clients that we develop in mass and personalized."
(CR3. Interview - AIA del Caribe, Pos. 30)

However, this is not entirely true and is not always the case. It does not depend on whether it is mass or personalized, but on the type of industry. When talking about personalized products, the consumer is often seen as the user, but in a B2B context the user can be the customer's consumer. When talking about mass production in B2B the end user can be the company clients (like in the case of raw material) and is not that important to consider the end user. At the end this depends on the industry and so, in both scenarios thinking on the customer and the end-user will ensure client satisfaction. In other words, even if the product is in mass or personalized, whether the user and the customer must be considered and so is not related to a "product" factor, is more related to a human factor.

This is relevant because although the objective of the company is to generate profit, poor user experience can stain and damage the image of the company, and therefore the retention and acquisition of new customers. If customer-centric is part of a culture, it means that every part of the value chain is thinking to generate value to the customer. However, in the product development perspective, both user and customer matter at a different level. Some of the interviewees seem to agree to this:

"[...]to promote the product and to be successful with it, we have to be customer-centric, because even though we like to have the product which will help the patient the most if it is something very unusual for the doctor, and it takes him in, and it does not give him joy in using it, we will not sell it. [...] I mean, it does not make sense to create the product, which is super simple for a doctor to use, but then it does not work the way it needs to."

(AT1. Interview - TigerDental, Pos. 43)

But from the point of view of industrial design, it is not always essential to look at the consumer, since the design focus on the functionality, usability and other aspects that has to be more with the end-user.

"there is a process which is for new and smaller clients and development from scratch. Maybe the best one which comes from user experience and user-centered aspect starts researching the user and its environment, and it needs itself, and with doing interviews and few research and

stuff like this. And of course, like, with the results of this and the requirements that are resulting from those phases need to go into product development.”

(ED1. Interview_Andreas Ebermann, Pos. 43)

In other words, the client's requirements must be considered, but everything is designed not only for pre-sales but also for post-sales, covering the entire life cycle of the product. By doing this, the possibilities open up to generate new business models or new ideas that are memorable for consumers. For example, Apple has a business model, which offers an excellent product and the whole experience once the sale is made. This can be seen a lot in B2C brands, but does this happens with B2B?

By interpreting the answers of the interviewees for the B2B clients' customized products are generated, but it happens in the same way as it is with B2C. The consumer-centric approach ensures that the customer has the best purchasing experience, but once the purchase is made, it comes the "user experience," which is irrelevant whether it is a large, small or medium-sized company. Analyzing the example of the lights explained by Beatriz (ED2), the requirements of the customer are considered, and the end-user of these lights. Either those who drive their car and those who live near the road:

“...the new street near the roundabout of the social guarantees was built up. In this case, the government comes out with a bidding process and has to go with an electromechanical team to determine the requirements that must be met according to that would. [...] They can't just pick any light fixture. It has to be one that allows you to light the streets and sidewalks, 360 degrees, but not so high that it does not light the windows of the house at night. Choose the kind of light, the color of the light, etc. So, this type of advice is Sylvania's niche market when we do B2B. [...] So, we are a model that has a service to customers almost always B2B and a little bit B2C.”

(ED2. Interview_Jorge and Beatriz, Pos. 63-64)

After interpreting the answers of design experts and companies, it is concluded that both consumer and user should have a similar level of importance, but the responsibility of each falls on different departments (marketing/sales for the consumer and design / R&D for the user). So if one wants to define a suitable approach, it could be human-centered as suggested by Guntram (AT2.) and Buttle (EC2.), but including the user in the equation.

“it's not so much about customer-centricity in the business place. But generally, I would say it's more about human centricity. Because a human is more than a customer.” (AT2._Interview - StarMedia, Pos. 118)

“Because the customer-centric approach makes you cold to the inside of the company. You can be World's most customer-centric company like Amazon, have great service, and still be on the inside a tough place to be.” (AT2._Interview - StarMedia, Pos. 118)

“It's interesting that in these COVID-19 days, many companies that have claimed to be customer-focused are now saying that they put customer and employee safety as their highest priority.” (EC2. Interview- Francis Buttle, Pos. 14)

Finally, the following conclusion is generated. The approach that is implemented in a company affects the corporate culture. If this approach is human-centered, i.e. focused on the consumer and the user at the same level, it can be key to retain and acquire new customers.

4.2.1.2 Customer Involvement in the PD Processes.

After asking the companies about their approach, they were asked about their efforts to understand the user and how much the client is involved in PD process. According to the theory in Chapter 2; Customer Involvement is related to customer participation in the activities of the development or improvement of a product, which means, that the customer can be involved in activities such as technical meetings, supply chain annual conferences, and market evaluation conferences (Kuan-Shun Chiu, K. et al. 2010).

The information gathered from the interviews was coded into stages of the Product Development process when the SMEs involve the consumer. Additionally, experts mentioned in which stages they would involve the consumer. As a result, four stages were defined, as is possible to see in Figure: 14 [Overview interviewees and codes – customer involvement]Figure: 14. See Appendix 4 for detailed quotes.

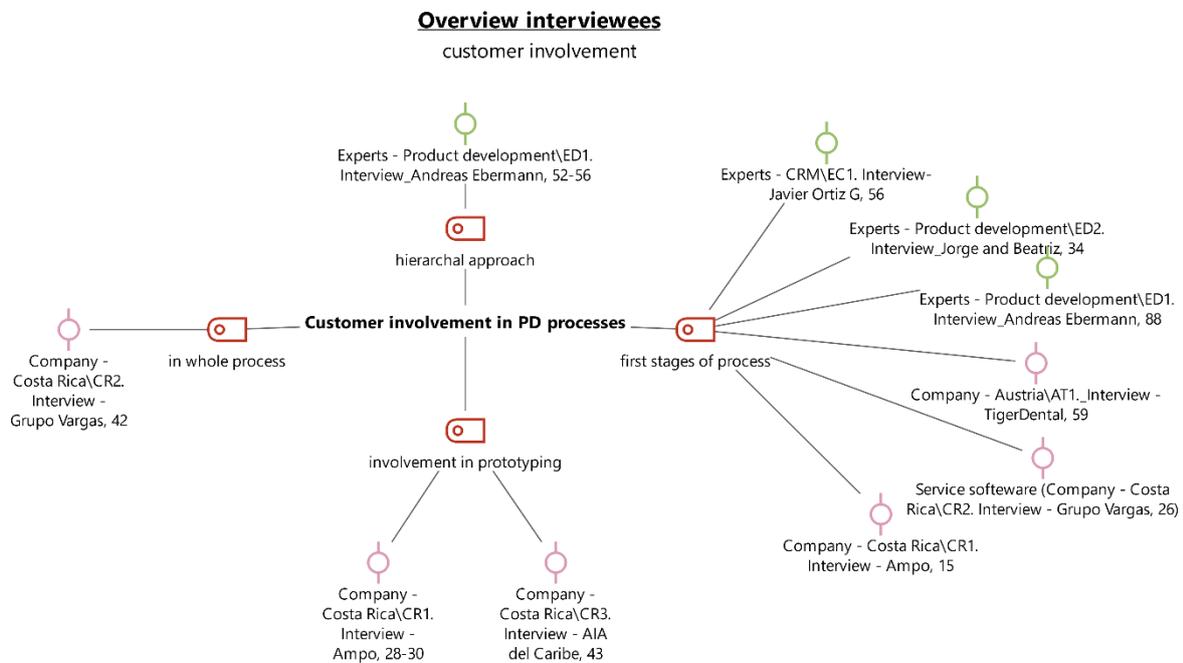


Figure: 14 [Overview interviewees and codes – customer involvement]

Source: [generated with MAXQDA software]

First stages: CR1. CR2 and AT1. These were the SMEs that involve customers in early stages of the process, as is usual. The purpose of doing this is to define if a new concept would be accepted in the market, to determine customer’s needs, and usually, everything started with the first interaction with the client with the sales agent.

“First, the sales agent takes note of the customer's need, uploads it through the CRM platform to the research and development department and to the sales manager. When the prototypes are generated, a focus group is created with some friendly clients and they submit the product to hear the degree of acceptance.” (CR1. Interview - Ampo, Pos. 15)

Prototyping stage: CR1. And CR3. Involve in some way the customer to confirm the prototype. In the case of B2B, as the offer is customizable, a sample or consumer participation in the prototyping stage may be a good idea, considering that it would ensure customer happiness and satisfaction.

“During the generation of prototypes in the R&D level, some samples are sent to the clients so they can give some feedback. [...] The samples are sent by the specialist to explain the technical issues of the design. The company customizes these tests until the product meets the expectations. Once the company accepts the product, it is taken to other companies for additional feedback. If the first company is very large and with only this one, it is worth the production. Then they do not investigate further but produce the product only for this company, given its high volume of sales.” (CR1. Interview - Ampo, Pos. 28-30)

The whole process: Involve customers in the entire process seems not the best in every industry; it depends on the type of solution offered. In this case, the company that involves the customer in the whole process are in the printing field, so it is easier to ensure customer satisfaction when it is more involved: *“Is the principal for us when we have a new product, they need to be in every stage so we can produce and guaranty that the customer will be satisfied.” (CR2. Interview - Grupo Vargas, Pos. 42)*

So as technological solutions that must be tailored to a particular need, especially when it is for another company like in the case of StarMedia: *“So, we cannot give a standard product. Even though we try to standardize modules or components in our offer process, [...]. So, we have at least one or two meetings before we get to sign a deal or be off before we can present a deal an offer. The deal we offer can only be exactly what the client wants. [...] And from there we go forward, then we have like regular meetings, continuous conversation, at least once a month, probably more often. much money we spent on them, how much yeah, these are then more factors that are involved.” (AT2._Interview - StarMedia, Pos. 134-135)*

***Hierarchal approach:** This concept comes from the idea that the board defines how much the customer is involved, even if it has a negative impact. This came up in the analysis based on how political o bureaucratic the company or the culture is.

“...I can tell because many people are involved in this hierarchy know when you work with a company that has like, I don't know, thousands of employees and you have like, it's like a political system more or less. [...]

It's a political thing. And you have the board, and the board is God, and everything the board says needs to be followed. So if the board and this company, which is in the client has as a specific request, then everybody needs to follow in a company and also we as a service agency, providing that so it's very helpful to have the client involved here very in this specific development process, specific industrial design process and the phases we went through before.” (ED1. Interview_Andreas Ebermann, Pos. 52-56)

This is more likely to see in big enterprises because, in SMEs, the people in charge of the products are most of the time, the board itself. Like Julian Winsauer in Tiger Dental, Johana in AIA del Caribe, and Guntram in StarMedia. But when the company grows, then this hierarchal approach becomes a reality.

In conclusion, usually, the consumer does not get so involved in the product development process, only in the early stages or in prototyping to validate information, but in reality, he or

she does not get so involved because many times it delays the process. Therefore, if the consumer is involved, it must be done strategically.

Likewise, the information gathered from interviews analyzed the effort made to understand the users. The following figure shows the classification tree that emerges from the example companies, and an overview of the references are detailed in Appendix 5.

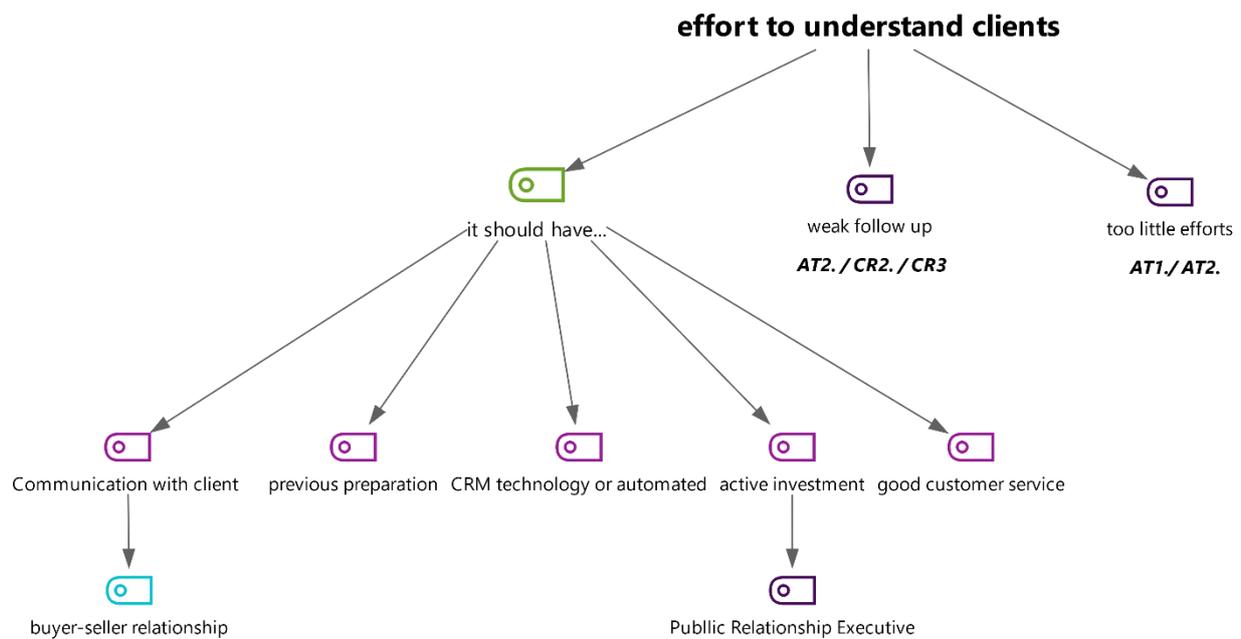


Figure: 15 [Classification tree_ efforts to understand clients by SMEs]

Source: [generated with MAXQDA software]

These are classified into ordinary codes, -that were expected- such as:

- providing good customer service,
- pre-offer or pre-sale preparation,
- and active investment in technology and HR.

The last one is interesting since there is much said that in order to understand the consumer, investment and training are key to achieve it and is linked to the company's culture. CR2. Remarks that not only invest in technology but also have people trained to know what the customers want, for example, the medical devices industry because they require a highly strong quality system. ED2. Suggests that technical updating and training programs that can be carried out with B2B customers to have a vanguard market. And EC2. Train to be customer-focused, and business rules and rewards systems recognize the critical value that customers bring.

The code "communication with the client" is the most frequently mentioned because these SMEs consider it essential to maintain good relation with the client, to understand better what he or she wants -which defines the "nice to have's"- and needs -which defines the "must have's"- . To get this proper communication, both companies and experts mention factors that are key to consider.

1. First, it is essential to invest in the sales team and adequate training since they are the first contact within the company. The first impression always counts.

“The CRM is involved from the moment the sales agent puts the new opportunity into the system.” - (CR1. Interview - Ampo, Pos. 19)

“Our sales have improved by applying this method of customer focus, have their deliver on time, quickly manage our improvement opportunities and very low defects.” - (CR2. Interview - Grupo Vargas, Pos. 13)

“At that moment, the Sales Executive who is already very well trained, he not only expects to arrive at the office that right there with his tablet activates the recording within the CRM platform and everything the customer says or is saved in audio or written form. And they're all the information is taken, that is to say, the client's need, for example, [...] he needs a collector that is different from the one we propose, so the question we ask ourselves is if we can offer this particular client a collector that meets those new requested specifications.” - (EC1. Interview- Javier Ortiz G, Pos. 17)

2. Another factor to consider is to clarify the information gathered from the client. As mentioned before, this could be done when the customer is involved in the first or prototyping stages.

“[...] our R&D department intervenes in order to modify and/or develop luminaires with the specifications and needs that were established in the previous step.” - (ED2. Interview_Jorge and Beatriz, Pos. 35)

3. In early stages, more effort to understand is required, and sometimes a developer, designer or engineer could help to elaborate the right questions and get the information needed

“...basically, if it is to be customized for a client, he tells us what he wants. Usually, they already know what they want, so we give them a technical sheet, and they fill it out, and we develop the product under that technical sheet. Then the relevant tests are done, and a sample is presented to the client.” - (CR3. Interview - AIA del Caribe, Pos. 34)

An interesting thing to notice (Figure: 14) is that both Austrian companies interviewed mentioned that the efforts made are very little. On the opposite, Costa Rica mentioned several things they do to maintain a client relationship. This could be because:

1. Either the Costa Rican companies said what they know they should do, although not necessarily what they do. And the Austrians were honest.
2. Or according to the theory, it is possible that cultures with a high level of the community give more importance to building relationships and maintaining good communication. This could be related to the theory mentioned in Chapter 2 (Section Role of Culture in Customer Relationships.2.1.3), that collectivistic cultures like Costa Rican or Latin countries tend to build relationships with customers easier than individualistic culture like in the case of Austria.

Whatever the case, it seems it is an interesting topic to investigate further in future research.

4.2.2 Theme 2: Relevance or cultural knowledge within PD processes.

With Theme 2 and Theme 3 it is expected to accomplish the second objective and thus understand the influence that the national culture of clients and operational CRM could have on NPD.

In literature, the importance of culture in business is evident whether when dealing with international clients, markets, governments, and partners. However, sometimes this knowledge seems to be an only individual responsibility instead of team information that must be stored and used when needed. This raises the question, how is this cultural knowledge managed? In Chapter 2 (Section 2.3.2), it was mentioned that managing knowledge is one of the main activities of CRM that enhances customer profitability and gathers information about customers through interactions or touch points across all functions or areas of the firm (Yim et al. 2004). So, is the culture part of this knowledge that is relevant to have? Especially in PD processes?

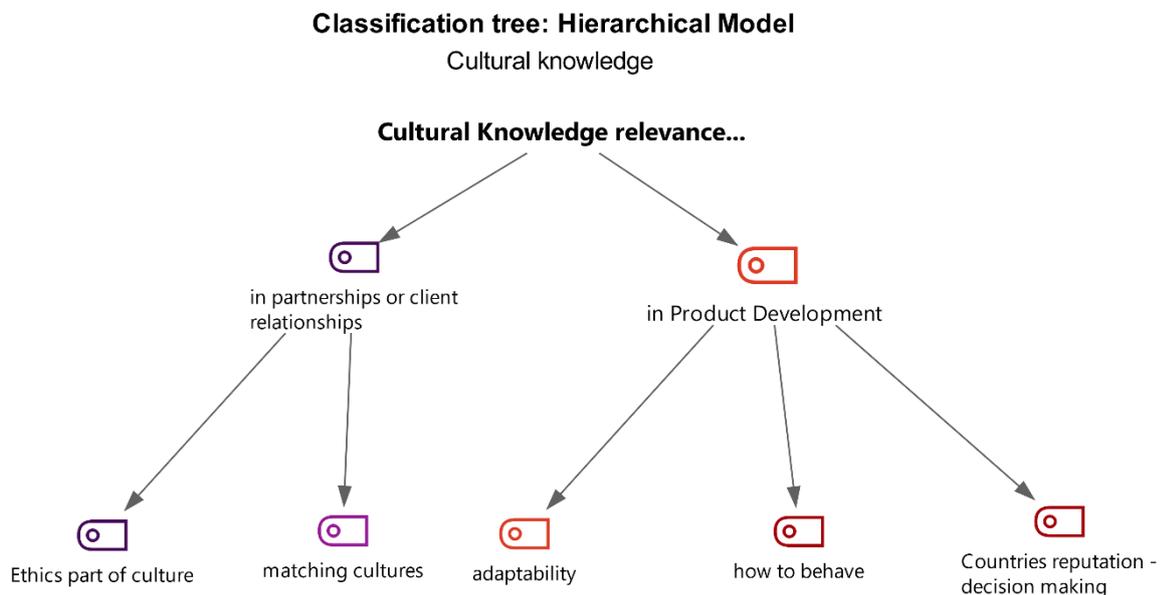


Figure: 16 [Classification tree - cultural knowledge relevance]

Source: [generated with MAXQDA software]

Figure: 16 shows two areas where cultural knowledge is used: in building relationships with stakeholders and customers, and in PD. The results show interesting data to consider as a leader or head of PD, small enterprises, or startups that would like to collaborate with international partners to develop their solutions.

On one side, companies are looking to create links or relationships with their customers and/or partners that last for a long time.

“The relationships that firms participate in can be many and diverse, carried out for different purposes, with different partners, and have different levels of importance..” (EC2. Francis Buttle, Pos. 26)

To maintain or build good relationships in an international and B2B context, two aspects must be considered: The national culture needs to be considered, as well as the third parties' corporate culture (clients or partners). The reason is that these two cultures define if a firm will get along with a new development partner or distributor and if it is possible to build a long-term relationship with a client.

For example, the R&D team should know the customers' culture to meet their requirements, which in this case, being B2B, also includes things from their own corporate cultures, such as environmental responsibility or ethics. AT2. talked explicitly about how such cultural elements affect decisions.

"... our company attracts pretty much people that are in the field of biological products. Because we take ethics seriously, it is important for them because they also work in ways that are, let's say, kind of more advanced. [...] So, for example, we don't actively work with certain clients we don't work with for example, gambling companies, we don't work with these companies." (AT2. Interview - StarMedia, Pos. 130)

It was discussed that after bad experiences, ethics becomes a "must-have" for both customers and partners, thus becoming more selective for whom they work with and helping to focus the business on the market niche they want and specialize in. In the end, there are not benefits to generate products that product providers do not want to.

"When we started the company, we didn't turn down any clients; we took everyone. This ended up badly, often, or not barely. But if we had to deliver products that we didn't want, and we had to go, miles that we were not open to go and it was a bad experience. So now we started to more and more turndown clients." (AT2._Interview - StarMedia, Pos. 139)

Which leads to the next point in this category, the "cultural match." According to the interviews, firms choose whom they interact with and how. However, it is not a secret that it is easier to work with similar cultures. Johanson & Vahlne recognized this with the known Uppsala Model...

"The culture of the Central American companies, despite being different in vocabulary, idiomatic phrases, has been compensated by the friendly treatment and service and simply not talking about political issues. I think our cultures are very similar, and that is why it can make things easier." (CR1. Interview - Ampo, Pos. 21)

...or on the opposite side when the differences are too big, like the hierarchal cultures that seem to be more complex to manage in Austrian SMEs.

"In those countries, we have, for example, Germany, where we have direct contact with the developer, and we are working. I'm able to have the screen share with him, and I'm able to work with him directly until we solve the problem with South Korea, we have a different approach where alot of work has to be undergone certain stages of confirmation within our partner company." (AT1._Interview - TigerDental, Pos. 99)

Therefore, it is possible to say that cultural knowledge is relevant to make strategic decisions and build relationships rather with key clients or international partners.

On the other side, the relevance of cultural knowledge within product development is also discussed, which is divided into three in main tree categories (the quotes are in Appendix 6):

- **Adaptability** (Expected code), which refers to the ability to adapt to different cultural requirements even if the product was adapted from a standard version.
- **The behavior of designers or R&D members with partners** (Expected code). Know what to do and not to do, especially when the cultures are too different as mentioned before. Even some research has been done on this:

“IMP researchers have focused on two major streams of activity-related research: the structure and cost-effectiveness of activity links and the behavioral characteristics that enable relationships to survive.” (EC2. Interview- Francis Buttle, Pos. 34)

- *And last but not least, **decision making**. An interesting aspect that was noticed in the interviews is that companies show some preferences for some cultures. Moreover, the comments made were related to the “reputation” that the country or the culture has. These facts may affect the decisions to choose, for example, a manufacturer partner.

“Back then, the production of this product that we are partnering on was very sophisticated in South Korea, [...]. Nowadays, we can also have those products produced in Europe, but back then, the quality of the product, and it's until today is breathtaking.” (AT1._Interview - TigerDental, Pos. 135)

4.2.3 Theme 3: Methods used to gather cultural knowledge.

In order to define the role of operational CRM in gathering cultural knowledge, this theme tried to identify the methods that the experts and companies use or propose to use for this purpose. Expected topics like learning from the experience came up:

- like personal learning...

“All the subjects and norms of culture, including food and others that help to create a very interesting commercial relationship knowing the culture, then if there is a cultural process. I also read a lot of China I prepared myself for the culture...” (EC1. Interview- Javier Ortiz G, Pos. 49)

- company’s experience...

“...78 years in the market, we know by our experience how is the process in the brewery’s and in medical devices.” (CR2. Interview - Grupo Vargas, Pos. 36)

- ...and previous studies

“So for us the knowledge on the cultural differences goes as far as our previous studies of those countries before we even are when we started with the partners, but then having also our own experiences with the partners, and especially for Asia, we see that we have, for example, very different hierarchies.” (AT1._Interview - TigerDental, Pos. 99)

Some other methods were not expected, like get information from measuring numbers in production and sales to define or assume aspects of a culture (related to wishes and preferences), which is quite useful when making sales or marketing decisions but also in identifying a trend and new business opportunities. For example, in this case:

“It has a lot to do with the cultural situation of the region you are working in. So, all the information you can acquire that defines the particularities of each country, better. And where do you see it? First of all, in history, in the numbers. Because that way you discover that there are more popular

products in some places compared to others. For example, Costa Rica has many more advances in the displacement of clean technologies, so people buy more LEDs. That doesn't happen in the Caribbean and Nicaragua for example. The thinking of others is still a little behind and still a lot of savers are sold. So, if you have to push for the whole portfolio to be LED, without a conversion campaign, you are going out of business. Because for some reason, they're still buying these energy-saving bulbs."

(ED2. Interview_Jorge and Beatriz, Pos. 51)

Now, Operational CRM is apparently not a way to go for everyone. It could be only if it is modified or made for this purpose, according to Francis Buttle EC2.:

"Yes, operational CRM in which there is interaction with prospects and customers can be used to capture cultural information. However, most, maybe all, CRM systems would need to have database modifications to enable this data to be collected, stored, and analyzed. Very few systems have tabs or fields dedicated to cultural information."

(EC2. Interview- Francis Buttle, Pos. 54)

However, on another perspective (EC1.) it could be used if the people enter the data to the system. As mentioned, several times before, people are a key factor in making the CRM work or any other system. Operational CRMs by themselves do not solve anything; it needs human analysis and decision making. So, if culture is a relevant topic in the companies, it should also be included when adding customers' data into these systems.

"The CRM allows the sales agent to enter customer information; therefore, it is clear the pending requests, knowledge of the culture. All this information is entered day by day through the designed CRM platform."

(CR1. Interview - Ampo, Pos. 32)

Alternative methods to the CRM were defined as apps or specialized tools that can be found with an accessible price or for free and do what is necessary for managing customer interactions within the company but not gather cultural information; this must be on the human side. Or specialized automated tools that help in a particular industry, for example, in Grupo Vargas (CR2):

"[...] special software to attend technical specs, some of them are born and raised in our company, we also have an app its call "autogestion" so the customer sends arts, purchase order and any documents such as specs. And they can see the status of their orders until is ready for shipment." (CR2. Interview - Grupo Vargas, Pos. 44-46)

CE2. explains that this system gathers all the information to develop prototypes following customer needs. Before that, an internal design is created, schedule updates to facilitate the customer to track the update and see if it is accepted to manufacture it. But again, they only refer to customers' requirements and needs, but cultural knowledge seems to be not a priority.

4.2.4 Theme 4: Product Development processes with/without CRM.

This theme was built based on analyzing if CRM would be implemented into the New Product Development process. Some positive aspects and some challenges were identified in both scenarios, using the system in this process or not. In this section, this will be discussed, and the detailed quotes can be found in Appendix 7-8.

Before going into the sub-themes, it is important to remember the “information sharing” and “knowledge management” two main activities presented in Chapter (Section 2 2.3.2), which will play an important role in this discussion. According to Kuan-Shun Chiu, K. et al. (2010), the information that is commonly shared inside a firm could be related to market demand, customer preferences (related to the conceptualization of new products), sales promotion, and new product introduction. And knowledge management is an activity that gathers customer’s information through interactions across the areas of the firm (Yim et al. 2004).

4.2.4.1 Product Development Process with CRM

From the interviews, some examples and descriptions of processes implementing CRM were taken. These explanations describe how and why this is a tool that could be useful for the process. Some are companies that are planning to implement it, like AT1 and CR3. Others are experts with past experiences, mainly with big and multinational companies EC1., EC2., and ED2.

As is possible to see in Figure: 17 [Classification tree: PD process with CRM]Figure: 17, the positive aspects that came from the interviews were narrowed into five codes, while the challenges only were reduced into two.

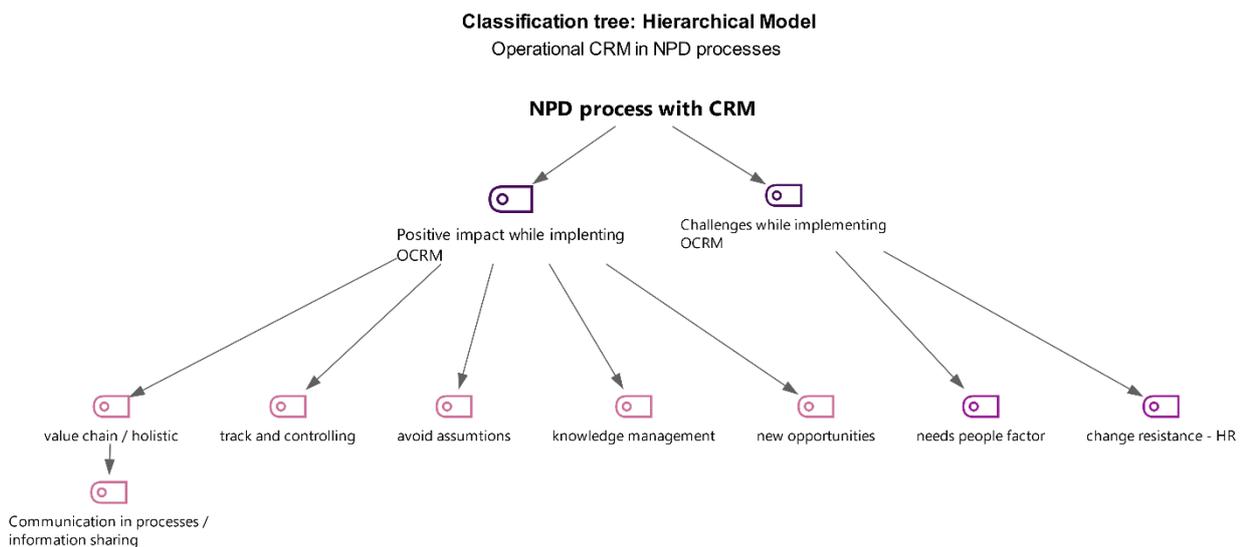


Figure: 17 [Classification tree: PD process with CRM]

Source: [generated with MAXQDA]

The Positive Impact of Implementing CRM

In regard to the positive aspects, expected topics were identified that are present in theory and do not represent a surprise, such as:

- the detection of new opportunities,
- knowledge management,
- track and control of the processes and client,
- and information sharing, which seems to have a relation with a holistic value chain vision, and this will be explained furthermore.

Regarding knowledge management, the interviewees only support the definition provided by Yim et al. (2004) by saying how important it is to gather customer information and that this remains inside the firm's activities. Nevertheless, it was discussed about gathering cultural knowledge that could be relevant in product development. Then they suggest that CRM could be a useful tool to keep this knowledge inside the firm, even if it is as a database of customer's information that includes cultural knowledge, but available for the departments and third parties involved in product development:

"[...] if now you involve me in the CRM I would say yes because tomorrow maybe [...] I'm in another area or I'm not in the company then it becomes important that the organization, not me Javier Ortiz, the organization knows the company of China it's culture and relevant aspects of; but that already allows the classic formats." (EC1. Interview- Javier Ortiz G, Pos. 53)

"First the sales agent takes note of the customer's need, uploads it through the CRM platform to the research and development department and to the sales manager. When the prototypes are generated, a focus group [...] to hear the degree of acceptance. Then this department issues a report and prototypes, it is presented to the board of directors and if they like the idea it is approved. This means that the production phase begins." (CR1. Interview - Ampo, Pos. 15)

The author did not fully expect additional two codes:

- avoid assumptions
- "holistic" value chain

Avoid assumptions is concerning the implicit requirements or needs that are related to culture (as said before, national or corporate culture). Every personalized design in B2B international context begins with the technical and perceptual requirements given explicitly by the client and the implicit requirements that, in this case relates with culture. Implicit because this is not always discussed with clients only if there is something highly important to avoid, for example, the use of color or an ingredient that should not be used:

"I was told not to offer that product [...] because that product is consumed only by animals, nothing else." (CR3. Interview - AIA del Caribe, Pos. 58)

So based on the interviews, two aspects of "avoid assumptions" are build-up:

1. The design begins with cultural and technical needs known:

"When you design a product, you shouldn't design it with only the technical specifications of a product in mind. If it is not the other way around when you design a product, it is because you know the customer's technical and cultural needs. So if you design the product, you already clearly understand the culture because if you do market research to make products to China, first to assess the needs and requirements."

(EC1. Interview- Javier Ortiz G, Pos. 58)

2. Assumptions regarding culture could be very risky, as the example the almost bankrupt of Euro Disney after opening in France.

“Why? Why a world-famous Disney because it almost bankrupted? [...] Culture theme [...] they sell everything from food and drinks, but nothing in the stores, the Europeans did not identify with those cartoons. It’s a cultural issue; the Americans ignored and imposed their American Culture on products to be sold in another continent.”

(EC1. Interview- Javier Ortiz G, Pos. 58-64)

Finally, the code “holistic values chain.” It is called “holistic” because thanks to the implementation of CRM, information sharing could enhance the creation of value by connecting various areas or departments to boost customer satisfaction. At the same time, all the areas that participate in the value chain (Figure: 18) create value for this purpose. If the activities or areas are not acting in harmony, the result is a conflict and can bring the called “bottlenecks”⁴, most likely in the upstream side of the value chain. Here is when the information sharing becomes vital as the expert EC1 suggests.

“...the platform seeks to involve all elements and resources, as well as people who are within the organization, so that these people according to the processes to be developed can be efficient in terms of process service you have, your responsibility and not cause what is known in industrial engineering “bottlenecks.” .”(EC1. Javier Ortiz G, Pos. 11)

Also, as seen during the Multinational Organization and Strategies course, the value chain provides a systematic means of this plan and categorizes activities that provide opportunities for a positive contribution towards competitive strategy at every stage. Also, to create competitiveness in the market is vital to evaluate the competitor value proposition and the interviewee EC2. mentioned that precisely this is important for the understanding of clients.

“Many companies claim to be customer-centric, but few are. To be truly customer-centric requires an intimate understanding of customer preferences and requirements and an intimate understanding of competitors' value propositions.”

(EC2. Francis Buttle)

“Especially for the products and solutions that are developed in the production plant in Costa Rica, the implementation of a CRM in the development process is critical and essential because by controlling the creation value chain, the CRM allows obtaining information that enriches the investigation of the needs, expectations, and scope that our products have in the market. “

(ED2. Interview_ Jorge and Beatriz, Pos. 29-30)

In Figure: 18, it is mentioned the areas that the interviewees pointed out. Many mentioned that customer information management falls mostly on the downstream processes of the value

⁴“... are those processes that a person does and takes more time than it should, then the person who is the predecessor of him keeps on passing his processes, and that person cannot respond to the speed of the predecessor, this generates bottlenecks.” (EC1. Javier Ortiz G, Pos. 11)

chain (marketing, sales, and customer service). Some mixed the areas, and only one mentioned the role of CRM in the upstream processes.

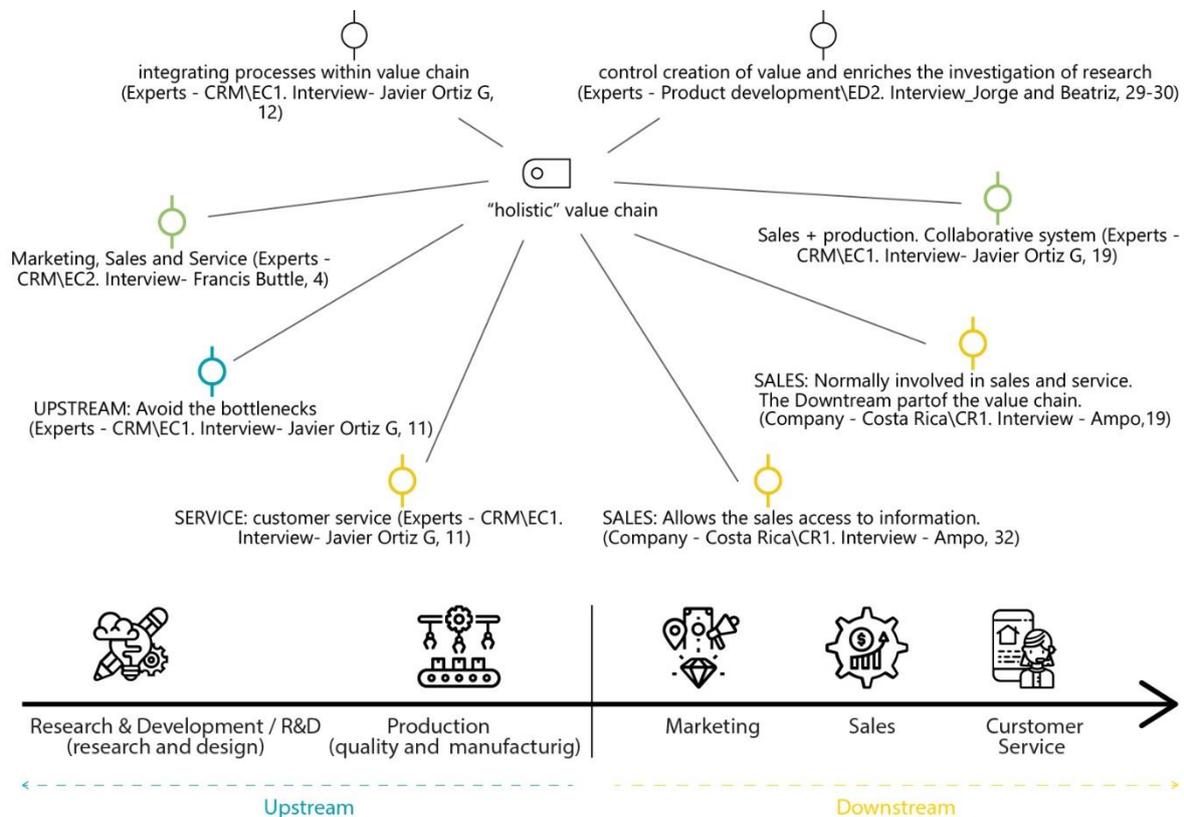


Figure: 18 [value chain code analysis]

Source: [generated with MAXQDA and own source]

For those cases where the downstream area of service was mentioned. They talk about the feedback that the operational CRM could bring. In summary, there is always room for improvement with feedback: "... *only implement the CRM once you're done with developing the product, so it can be that there can be like feedback. [...] For it I think that maybe for example, if you have products or portfolios and you receive feedback a maybe that also gives you an input of what could be the next what you can develop in the next you know yes but what.*" (AT2_ Interview - StarMedia, Pos. 20)

In other cases that talked about upstream processes, possibly some industrial engineers will think differently, and if it is planned to study more about this, they will be the right ones to interview. For the moment, it is concluded that implementing CRM in the NPD process can contribute to value creation, thanks to the support of information sharing in the areas involved.

Challenges with CRM

On the other hand, three challenges were identified:

- Firstly, the negative reaction that the employees can have against the implementation of a CRM, because thanks to this management tool, there are more controls.

“So I think that also encompasses the general culture of being tied to processes of change. Implementing a CRM tries to understand that the barrier within an organization implies understanding that the barrier of the psychological shock of the human resource to accept that new philosophy. Already in automatic is a problem, and the employee is the main resource in charge of boycotting or sabotaging the system. They are the first to complain and say that it does not work “ (EC1. Interview- Javier Ortiz G, Pos. 23)

- Secondly, the fact that CRM is not a solution itself; it needs well-trained people to use it properly and interpret data.

“The system then will not tell you how what to do. I mean, that's something that people often think oh, then I have a system in place for this piece. Moreover, now it tells me everything is wrong.” (AT2. Interview - StarMedia, Pos. 156)

- Finally, OCRM is not collecting cultural information unless that is programmed to do so.

“CRM has very little role in creating cultural knowledge until interactions begin with first clients, and notes can be recorded in CRM systems and shared internally.” (EC2. Interview- Francis Buttle, Pos. 52)

4.2.4.2 PD process without CRM

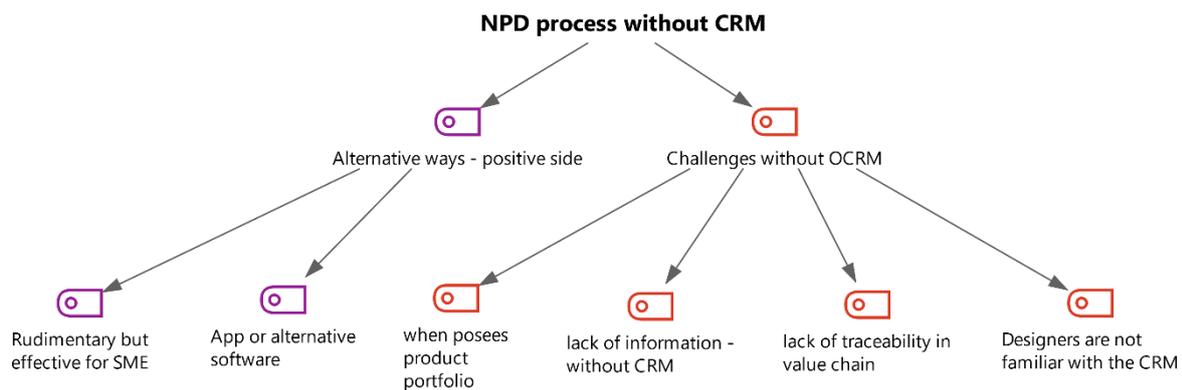


Figure: 19 [classification tree - NPD without OCRM]

Source: [generated with MAXQDA and own source]

The figure above shows an overview of the codes concluded from the analysis, including the positive aspects and challenges. The positive aspects were two; the first one is referring to the classic methods that could be implemented to get in touch with clients instead of an expensive CRM system in place. However, this only could work when it is a small firm or start-up where the clients are lower than 100, maybe, and it is possible to keep in touch with them by email, telephone, or other classic method. Even some of the interviewees think that OCRM becomes useful when companies get a large number of customers, and as SME is not easy to personalize the service to every client. However, it is not the case in every SME. Some interviewees had a different opinion about this, but the author agrees with the opinion of AT2. who mentions that implementing a CRM is only necessary when the clients are unreachable like at least 500 clients under that number is not necessary.

Second, it could be using an alternative app or software to do what CRM can do, or at least part of it. There are plenty of tools online, free, or cheaper than any other CRM known. Furthermore, integrating different tools could be a solution for an SME, because possibly it is not necessary to invest a significant amount of money at first.

Challenges

There were four challenges identified in the analysis. The first one is seen when the firm has an own product portfolio (likely related to B2C); the lack of constant and updated feedback extends the process and makes the firm increase efforts to understand clients.

"...it also depends a lot on the niche market, but in general, when you're opening up to mass markets, you're going to lose much connection with your target audience if you don't retain." (ED2. Interview_Jorge and Beatriz, Pos. 60)

The second challenge identified is the lack of information about the clients in a PD process, which represents a high risk of uncertainty while working without OCRM in these processes.

"If the product is new. Then the CRM will give the very basic to be able to fulfill a customer. That's the idea, if you don't have it, you can do it, but you are assuming a lot. You are, therefore, taking many more risks, and you are falling into great uncertainty because it is not easy to make decisions without this clear information. Then you have more uncertainty because you can't preach so much about your projection, acceptance, or market behavior of the product." (ED2. Interview_Jorge and Beatriz, Pos. 44)

Possibly it depends on the particular niche when the project's complexity gets bigger and involves more departments to fulfill it—for example, technological projects, lightning, engines, etc. The only problem with these results is that they come from almost the same interviewee. At least in the case of lack of information.

"In our case, product development without the implementation of CRM as a product management model would not be possible. Because the approach with the client is so narrow and the complexities of the lighting projects are so big, we work with the clients in achieving that our products in their ranges and specifications can fulfill their needs or in their defect; we develop from adaptations to new products to be able to satisfy the need of lighting of these." (ED2. Interview_Jorge and Beatriz, Pos. 39)

Without CRM in place, it becomes almost impossible to keep track of customer's information, and the third challenge appears, the lack of traceability. It becomes quite challenging to trace processes and value chain, but it should also be considered that the people who gave this opinion, are people who have experience in companies with a large number of customers.

"... the main cultural problem that can appear in the NPD process is governance [...] and traceability that must exist in the value chain, in addition to the lack or laxity of documentation or in the establishment of the stages.

By virtue of the above, the CRM becomes a vital tool for filling such potential "gaps" in the development chain because it allows clear and comprehensive documentation of the NPD processes." (ED2. Interview_Jorge and Beatriz, Pos. 66-67)

" Five years ago, we didn't have this platform, and it was impossible to keep track, to know the customer, his culture in a physical file because it was impossible to be updated minute by minute." (CR1. Interview - Ampo, Pos. 34)

After all, not everyone is familiar with the CRM tools and what they can do with it. Especially developers, engineers, or designers do not need to know in a daily routine, but this management tool could be a great complement to their job.

“... as I don't work with this, because I'm more on the development side than on the sales side, I don't actually know what this program is, like what could also be functionality in terms of collecting information.” (ED1. Interview_Andreas Ebermann, Pos. 80)

4.2.5 Theme 5: Culture-related challenges in PD processes.

During the analysis of the interviews, several culture-related topics were found to be more problematic or challenging when working with international collaboration during PD processes. When classifying the codes, two main categories are identified, which are related to trust-building problems and significant cultural differences.

Within the category of building trust, there are several issues identified. Starting, from the fact that building relationships is not only with clients but also build a long-term partnership.

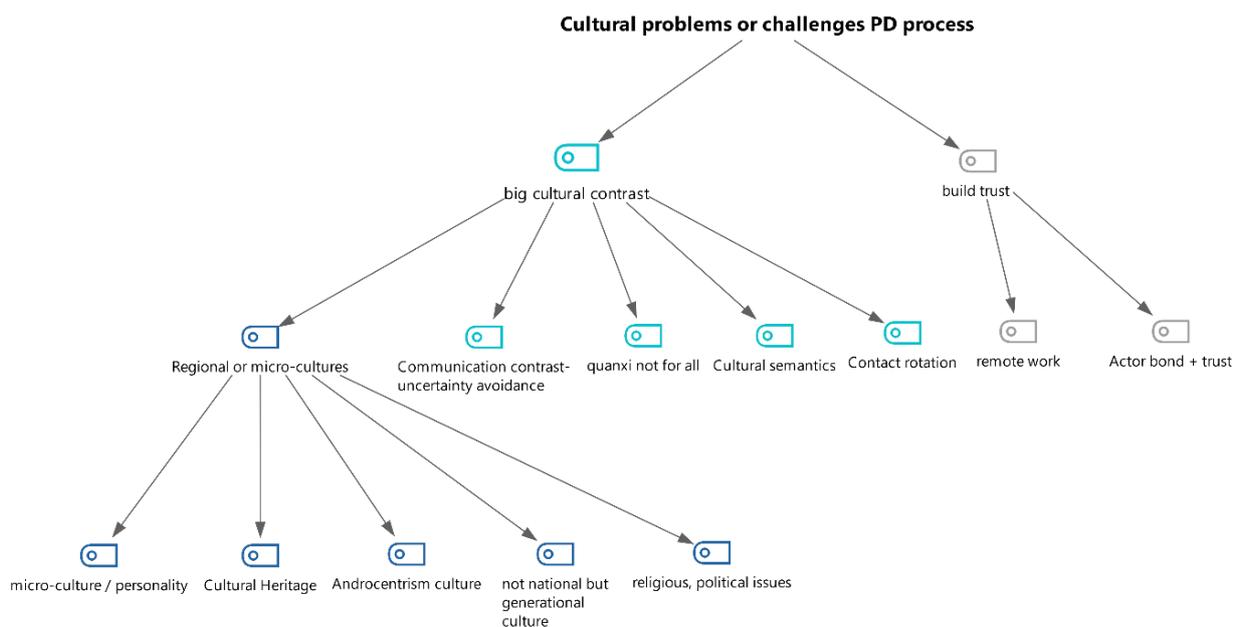


Figure: 20 [Classification tree - cultural challenges in NPD]

Source: [generated with MAXQDA software]

Nevertheless, the point that matters most for this research and thus contributes to the ultimate goal of identifying the negative impact of culture in the development of new products, is to talk more in-depth about the second category "big cultural contrast" which is represented by the color blue in Figure: 20.

Among the issues discussed during the interviews, one stands out. The code mentioned as "regional or micro-cultures" brings with it cultural issues that are often a minority but bring a significant impact on this process. For example, in defining what a product should look like

and what materials to use rather than not to use, it falls within the themes of cultural heritage, religion and politics, and even the code of cultural semantics⁵.

"[...]there could be products that could be produced that due to lack of knowledge of the culture are not adapted or simply not used due to religious, political, etc. issues."

(CR1. Interview - Ampo, Pos. 36)

"Then you had to understand; just like the customer, when he saw the product with a certain ingredient, he said that it was necessary to model or target the segment. Then, as soon as it is packaged, for example, even the colors have a lot to do with it. In some countries, it is important to see what is not consumed and what is. The cultural part is always important when you are developing a product."

(CR3. Interview - AIA del Caribe, Pos. 47)

The author refers to cultural semantics to the way of perception that people have about something according to their culture. An example is the one mentioned above about ingredients in the food industry. *"In Costa Rica, it also happened, in my grandparents' time bananas were not seen as food because that was what was given to the animals."* (CR3. Interview - AIA del Caribe, Pos. 58) The perception of concepts varies between cultures and affects the way of selling and designing in a particular market.

A clear example is an ecological or green trend. The author comes from a country that tries to develop a green life as much as possible; it is interesting to see that despite this, the production of eco-friendly products is not as common as in European countries. In Central American countries, ecological products are perceived as expensive and even luxurious, whereas in Europe, despite their high price, there is a larger market for these products than in Central America. It brings the reader to the next point, cultural heritage, political or religious issues. In the conversation with the financial manager of AMPO (CR1), he talked about the problem or challenge they have in getting raw material for the production of their organic products apparently to particular ingredients they need in a specific Guatemalan region. In countries like Guatemala, this cultural heritage is very protected, and therefore, the policies or laws are in favor of their protection. So the extraction of this raw material becomes a little more complicated, and of course, it affects the process of the development of their products.

"An important population in Guatemala is indigenous and to say that products are derived from plants of which they as indigenous use them as medicinal products, but with a religious connotation, makes that not all the plants can be used to produce the disinfectant products because an indigenous population would not buy them. The problem with that is that it is not easily understood which areas are sacred, cemeteries, or places forbidden to collect plants. This is a cultural issue that does not occur in all of Latin America. However, it is possible to find and culture." (CR1. Interview - Ampo, Pos. 38)

Another interesting issue was that only one woman was interviewed for the CEO position. Johana from AIA del Caribe does refer to cultural issues related to androcentrism⁶. She is the

⁵ "Semiotics is the study of signs, and **semantics** is the study of their **meaning**. In product **semantics**, these linguistic concepts are used to describe **design**. Applied to **design**, the product is the sign, and it concerns how designers encode **meaning** into their products, and how they communicate with the user." -(Sunde n.d.)

⁶ Androcentric culture: culture centered on, emphasizing, or dominated by males or masculine interests, thereby culturally marginalizing femininity. [www.dictionary.com]

only one who mentioned that in certain cultures, being a woman, no matter what position or rank she holds in a company, can affect how to deal with other companies or cultures of this nature.

"I also learned in Arab countries; they are more likely to do business with men, not so much with women. They need to do business with men. [...], but one finds that problem even in Costa Rica. I was recently making some repairs in the plant, and I had that situation with the contractor. I was the one who was paying, and I was the one who designed the place and approved the design. And he would come and when I talked to him, - yes, yes, yes-. Then he would go and ask someone else. And I, something is not right here. I hesitated and let the first and second time go by. The third time I confronted him, I pointed out that I am the one who pays, the one who approves here is me. Therefore, I told him that if he was not willing to work with me, then he can't get my money, it's that simple." (CR3. Interview - AIA del Caribe, Pos. 52)

This issue affects the human factor in every process. If there are women within a development team who have to deal with manufacturing partners in such a culture, it may require more effort from the female team members to work with them.

"You have to demonstrate a lot, and the worst thing is that you have to demonstrate twice as much as you can do. And the culture is interesting because I was working with American companies, and the relationship I had with the Americans was greater than in the "tico" market." (CR3. Interview - AIA del Caribe, Pos. 54)

Concerning the challenges in the design and development process working together with foreign partners, there are several cultural issues to consider. Beginning from the miscommunication problems caused by issues rooted in the culture such as Guanxi and avoiding uncertainty (dimension from Hofstede's model). This miscommunication can delay the PD process, generate errors more frequently, and more costs. And according to the interviews, the main causes are:

- Because of indirect communication/uncertainty avoidance, Guanxi and avoiding uncertainty could be shocking within cultures that are more direct in speaking as Germany or Austria compared to Asian cultures such as Japan and China.

"[...] in our culture, if you are developing a product and you are collaborating on it with your partner, your partner will tell you the things that are possible and the things that are not possible. That's the first step. And then, in the second step, you directly followed. He will tell you why it's impossible. You have an issue, and you have a clear statement, why isn't it possible? Why can you can you? With Asia, we had the problem of non-clarification. So things weren't working. Things just didn't work out." (Company - Austria\AT1_ Interview - TigerDental: 113)

*"[...] in the cooperation between us and engineers and developers. Because communication what I said before, but also the way you communicate. I'm much more polite.[...] Like the board of those companies, there's kind of particular types of people, and so on the German side of the board can say something like this shit, f**. The Japanese side would never do that. That's more like not that direct way. It's also even within Europe you have this if you're talking to a Swiss guy, for example, I don't know how long you've been here, how long you will stay. But Germans are much more direct than, for example, Swiss guidance, same thing. (Experts - Product development\ED1. Interview_Andreas Ebermann: 100 - 100)*

- By the hierarchy that exists within the company,

“...they have a different hierarchy. So it's not like that you call directly to the engineer who's doing it communicating to the manager. And also, he cannot decide directly if this can be done, but they can take like, the request, and then they communicate internally. Okay, after we made a decision based on the hierarchy, they communicate back. No, it's no decisions made directly. It's always like in their backside based on a very, very different even we're sometimes developing very similar products; the development process is always different a little bit.” (ED1. Interview_Andreas Ebermann, Pos. 56)

- and the constant rotation of the contact person in the partner company.

“ Of course, you always work with different persons. And that's, I mean, it always has an effect on your work, ...” (Experts - Product development\ED1. Interview_Andreas Ebermann: 60)

“... it was really interesting to see our Korean partners; we tend to have switched positions every one or two years. So, as a result, in the company I've been working with, for five years, I've been working with three different guys from. Well, that makes things complicated.” (Company - Austria\AT1_Interview - TigerDental: 105)

“But if you're talking about product development, you're talking about a very complex and big thing, you know, and it's getting frustrating, [...] you're having multiple faces, where things will fail, where things will not work. “ (Company - Austria\AT1_Interview - TigerDental: 131)

5. Summary and Outlook

The closing chapter rounds up and condenses the main ideas of this work. It reflects about the findings, the perception of the author, and the summary on the subject. This final chapter includes a conclusion, summary, and further research recommendations.

5.1 Conclusions

This section focuses on the interpretation of the results. The research was designed to answer the main research question by accomplishing three main objectives.

Objective 1: Identify if and how the corporate culture is affected by implementing CRM in the PD process.

Theme1 called “CRM and corporate culture” was made to reach this goal, by analyzing two codes that came out from the interviews: (1) the company’s focus or approach (customer-centric or product-centric) and (2) customer involvement in the PD process, and thus answer the question: What are the effect that CRM has in corporate culture and NPD process?

The corporate culture is only affected if the people in the team know the philosophy behind a CRM. CRM and Relationship Marketing brings along the understanding that the consumer is highly important at the core of a company. Therefore, a consumer-centric approach affects the way a customer should be treated and prioritized. According to the results and the analysis carried out, the best approach a culture or a company can have is towards the human. Involve both the consumer and the end-user under the spotlight, meaning that the efforts will be

focused on satisfying customer needs and the end-user⁷ of the solution (which defines how good a service, or a product is).

The reason for this is that the focus on the consumer integrates more than the entire shopping experience, but when the interviewees talked about the product's approach, they focused on the human part involved in the process, i.e., the end-user. Therefore, for these SMEs, both human parts involved in the purchase and use of a product or service are very relevant, and it is concluded that in this aspect, a human-centered approach would be ideal, i.e. focused on the consumer and the end-user at the same level, it can be key to retain and acquire new customers. CRM in this aspect plays an important role in value creation, which will be discussed later.

This approach, on the other hand, does not influence how much the consumer will be involved during the PD process. Usually, the consumer does not get so involved in the product development process, only in the early stages or in prototyping to verify the information. But the client does not get so involved because it could delay the process. Therefore, if the consumer is involved, it depends on the industry and must be done strategically. Nevertheless, depending on the specifications set, the participation must increase to clear some doubts in the manufacturing process. It is just necessary to define when is a good time to involve the customer that does not interfere with the process.

Finally, it is concluded that, in order to generate a good relationship with customers, the effort made to understand them can be a determining factor. As this SMEs and experts suggest, a better understanding of what the client wants and needs -that defines the "nice to have's" and the "must have's." To do so, it is recommended to invest actively in training or technology to help. And to increase effort to understand the client in the first stages of the PD process, in consequence, also training sales team since they are the first contact and interaction with a client and consider involve the designer or project leader.

Objective 2: Understand the influence that the national culture and Operational CRM could have on NPD.

To determine the influence of national culture in NDP, the analysis done in Chapter 4, tried to understand the impact of the national culture in new product development. To do this, the relevance of cultural knowledge in the PD (Theme 2) and which methods are used to gather this information (Theme 3) were analyzed. It can be concluded that cultural knowledge is relevant to make strategic decisions and build relationships rather with key clients or international partners.

To maintain or build good relationships in an international and B2B context, both cultures should be considered: national culture and the corporate culture of clients and partners. The reason is that these two cultures can define if a company will get along with a new development partner or distributor. And if it is possible, to build a long-term relationship with a client. Therefore, it is possible to say that cultural knowledge is relevant to make strategic decisions and build relationships rather with key clients or international partners.

⁷ End user is the same in B2C and B2B. It is not referring to the clients of our customer, rather to the people that will consume or use the solution.

An interesting observation is that everyone mentions how important culture is to enter international markets, and it is seen as something obvious to consider, however managing cultural knowledge is not happening. How something that is that important is not considered? It is possible to notice in this research that culture really affects many areas of the organization, and it can even affect the value creation of an offer.

It is also interesting to see how experts mention concepts like Guanxi, and others generally known about Asian cultures, because of the connection the Austrian companies have with the with Asian manufacturers. Here the big cultural differences (culture-contrast) is a factor that is seen as important to consider with Asian partners. Nonetheless, in different areas, like in Central America, South America, Scandinavia, Baltics, Central Europe, Eastern/Western Europe, North America, Asia etc. If it is planned to reach customers in similar areas (Uppsala model), the culture cannot be taken for granted. Yes, culture in the same area are similar, but not identical, the cultural semantics will always remain and vary from country to country and even from person to person.

Cultural knowledge within product development is also relevant because it allows adapting the solution to different clients or markets, can guide the developers and designers on how to behave or not with foreign partners or particular contact, and, last but not least, decision-taking. An interesting aspect that was noticed in the interviews is that companies show some preferences for some cultures. Moreover, the comments made were related to the “reputation” that the country or the culture has. These facts may affect the decisions to choose, for example, a manufacturer partner.

Theme 3: Methods used to gather cultural knowledge.

As expected, the results show that these SMEs and experts learn about culture with experiences, rather personal, from the company and previous studies.

However, the Operational CRM apparently is not a way to go for everyone. Firstly, it is not used by any of the examples to gather cultural data. Second, Operational CRMs by themselves do not solve anything; it needs human analysis and decision making. So, if culture is a relevant topic in the companies, it should also be included when adding customers' data into these systems. However, it could be an option only if it is modified or made for this purpose.

Regardless of this, there are other methods used or can be used to gather cultural knowledge, but not necessarily keep it inside the company as a CRM could do. An unexpected method is interpreting culture via sales or production numbers of foreign markets. Even though only one interviewee mentions this, it is an interesting topic to point out because this reflects how important the human factor is. This is not done by a CRM software; they are people's interpretation of data and getting assumed aspects of a culture (related to wishes and preferences). However, in the end, these are just assumptions.

Additionally, alternative methods to the CRM were defined as apps or specialized tools that can be found with an accessible price or for free and do what is necessary for managing customer interactions within the company but not gather cultural information; this must be on the human side.

However, gather and save internally cultural knowledge seems not to be a priority.

Furthermore, Theme 4 analyses what the impact of CRM into the NPD process is. The analysis is done in Chapter 4 to study the positive and negative aspects of applying CRM within a PD process or not.

The opinions regarding the implementation or not of CRM into PD processes were divided into two sides: the ones that know about the CRM, and the design/product experts. It is interesting to notice that when talking about this process, including CRM, most of the interviewees who agreed to implement it in this process already had some knowledge about it and how to use it.

Among the positive aspects of implementing CRM within the PD, the author points out the “holistic” value chain view. The author called it "holistic" in the sense that one of the main CRM activities is information sharing, which could enhance the creation of value and boost customer satisfaction by connecting various areas or departments. At the same time, all the areas that participate in the value chain, create value for this purpose, and if the activities or areas are not acting in harmony, the result is a conflict and can bring the called “bottlenecks” (most likely in the upstream side of the value chain).

All parts involved in the process of developing a product must know how to interpret, analyze, and work with the knowledge of customers that the system generates. In other words, the operational CRM that a company has involves and controls not only the customer and the sales or marketing departments. It involves departments that create value for a customer.

The rest of the positive aspects and issues or challenges are described in the following table:

	Positive aspects	Challenges
With OCRM in NPD	<ul style="list-style-type: none"> • OCRM facilitates the detection of new opportunities, • knowledge management, • tracking and controlling of the processes and clients, • and, information sharing, which seems to have a relation with a “holistic” value chain vision. • Avoid assumptions 	<ul style="list-style-type: none"> • The negative reaction of employees, by the feeling of being controlled or tracked thanks to the OCRM. • OCRM is not a solution itself; it needs well-trained people to use it properly and interpret data. It is not clear in some cases. • OCRM is not collecting cultural information unless that is programmed to do so.
Without OCRM in NPD	<ul style="list-style-type: none"> • There are plenty of alternative tools, apps, and software that can adjust better to an SME’s requirements. • (Ex. Slack for internal communication, Pipedrive for sales, Magento, Zoho, etc.) 	<ul style="list-style-type: none"> • When there is a product portfolio • Lack of information from clients • Lack of traceability • Developers and designers are not familiar with these tools because they never deal with them.

Table 3 [Positive aspects and challenges of implementing or not OCRM in a PD process]

Objective 3: Identify the positive and negative impact of culture on the development of new products.

During the qualitative analysis, several culture-related challenges were found to be more problematic or challenging when working with international development partners. The most common issues identified were related to (1) trust-building and (2) big cultural contrast.

Building trust with clients is vital, as said before, but with partners is more or less like an investment. A good long-term partnership means lower costs while looking for a right manufacturing partner, less time, and possibly avoid misunderstandings. However, this was put aside because the objective seeks to find out about the cultural impact.

The second big issue, "big cultural contrast," brings miscommunication problems caused by issues rooted in the culture such as Guangxi / avoiding uncertainty, power distance (dimension from Hofstede's model), and the "cultural semantics". And miscommunication can delay the PD process, generate errors more frequently, and more costs.

Semantics in linguistics is the study of the meaning of signs, but in this study, "cultural semantics" concerns to the meaning that is given to objects, acts, or words in different cultures. Representing a big issue in PD firstly when the client's culture is very different, and second when is required constant communication with the foreign developer partners because it can be a long period of back and forward just to try to understand each other. Avoiding misunderstandings is key to perform proactively and adequately, but it is not easy when one culture speaks low context (directly, Germany) vs. one that speaks in high context (very indirect, Japan).

Next to the uncertainty avoidance, the power distance could also be an issue because the hierarchy that exists within a company with "power distance" (Appendix 1) is the process that could take more time. Besides, it is possible that the contact person in the partner company rotates, making all the information and relationship built before useless.

Finally, two topics were minor in the interviews but still represent interesting observations. (1) Androcentrism cultures might also represent an issue when feminine team members have to deal with manufacturers or dealers with these cultures. From all the interviewees, CR3 is the only woman in a CEO position. This issue can affect not only the PD process but also the human factor, because it may require more effort from the female team members to work with them. Moreover, (2) topics related to religion, politics, or cultural heritage, which could bring a significant impact on this process due to the restrictions that can be found in different parts of the process, like acquiring raw material, or using certain techniques that might be protected by a government like in the case of Guatemala (example said in chapter 4).

5.2 Summary

This research was planned and designed to answer the main research question by accomplishing three main objectives: (1) Identify if and how the corporate culture is affected by implementing CRM in the PD process. (2) Understand the influence that the national culture and OCRM could have on NPD. And (3) identify the positive and negative impacts of culture on the development of new products.

This wanted to be achieved by doing qualitative research using as example SMEs from Austria and Costa Rica. Due to the COVID-19 pandemic, the quantity of interviewees is not enough to prove any theory. However, their perceptions, opinions, and thoughts are helpful to get an overview of cultural influence in the product development processes and the implementation of Operational CRM into this procedure. The researcher interviewed five SMEs in different

areas (printing labels, medical devices, food industry, and digital solutions), two experts in CRM, and two in product development and design.

Furthermore, after analyzing and discussing the secondary and primary data collected for the research, the information was divided into five main themes that seek to reach each objective.

- From Theme 1, it was concluded that the approach that is implemented in a company might influence the corporate culture. If this approach is human-centered, i.e. focused on the consumer and the user at the same level, it can be key to retain and acquire new customers.
- Theme 2 and 3 contribute to answering the question: What is the impact of the national culture in new product development? And it is concluded that to create a good relationship with customers, there must be an active investment in training and technology to increase effort to understand clients – like considering involving more the designer or project leader. Additionally, that CRM can help to this, however, is not the only solution available.
- Furthermore, Theme 4 analyses what the impact of CRM into the NPD process is. The analysis is done in Chapter to study the positive and negative aspects of applying CRM within a PD process or not. Both possibilities bring cons and pros.
- Theme 5 identified cultural-related challenges that can happen with international collaborators or partners⁸. The two main issues identified is the miscommunication caused by the language barrier or big contrast in culture. And the trust-building

In summary, the results say that Customer Relationship Management is based on the idea of cultivating a good relationship with the customer. To do so, every software known as CRM is supposed to help firms to get closer to the client. There is also the understanding that these tools will help to have an overview of a project regarding a specific client and the departments involved, which indeed helps the PD process. Especially when the product is complex and involves more departments, people, and especially if dealing with international collaboration, however, it is important to consider that in SMEs, there is not necessarily a clear differentiation between the Design or Development team.

The implementation of OCRM is useful when companies get a large number of customers (>100 depends), and it is not easy to personalize the service to every client. Although not every SME uses it, it is interesting though to see that some interviewees identified this CRM as an effective tool to use during the development of a product or service. Depending on the software used, it could be implemented or not.

5.3 Further Research

This section outlines the ideas of the work necessary to develop the knowledge about this topic in the future.

1. Cultures when building relationships

⁸ International collaboration: in this research must be understood as every international third party involved in the development of products. Like manufacturing partners, freelance designers or developers or suppliers.

This research covered only the cultural aspects that are relevant in the PD processes. However, a particular topic emerged in Chapter 2 (2.7.1.3) that considered in further researches. In the qualitative analysis, both Austrian companies interviewed mentioned that the efforts made are minimal compared to those in Costa Rica, who mentioned things they do to keep a good relationship with a client. It was assumed that it could be for multiple reasons but can be confirming the theory that cultures with a high level of the community may give more importance to building relationships and maintaining good communication. It could be related to the research done by Samaha et al. (2014), which shows that individualism and masculinity affect how companies prioritize or do not prioritize building relationships with customers. It was discussed Austrian and Costa Rican cultures, which present similarities in dimensions such as uncertainty avoidance. However, regarding individualism and masculinity dimensions, the countries seem to be very different. Does this mean that relationships are less important in Austrian companies?

Whatever the case, it seems it is an interesting topic to investigate further in future research.

2. Androcentrism

However, this code comes only from one interviewee being the only CEO woman interviewed. However, for further research, it would be interesting to study more in-depth because it could instead be a personal perception issue, or it could be a more prominent topic. Regardless the author finds it interesting to study more in detail if this is still an issue in 2020.

3. Cultural semantics: The factor that influences de understanding of cultural knowledge.

This is a topic that seems interesting to study afterward because it is something that will always be present. However, it seems to be more related to psychological research than business. For example, the cultural influence that could have the interviewer and can influence the way to interview or interpret data.

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Appendix 1 –Cultural Dimensions: Austria and Costa Rica, according to Hofstede's model.

The following table shows a brief explanation of the six dimensions of the model and shows how Costa Rica and Austria are rated in the 6-D model. The information gathered here is gathered from the book of Prof. (Hofstede, G. 1991) and (Insights n.d.)

	Costa Rica	Austria
<p>Power Distance This dimension deals with the fact that all individuals in societies are not equal. It is defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally.</p> <p>High score: significant power distance.</p> <p>Low score: small power distance.</p>	<p>Score:35. Costa Rica has the lowest on this dimension in the region of Latin America. To the surprise of many, especially in Latin America, where many countries have had a military rule, Costa Rica abolished their army in 1948. Their president, Oscar Arias (1986-90, 2006-10), received the Nobel Peace Prize in 1987 for his effort to end civil wars in Central America. Costa Ricans, the "Ticos," are famous for their excellent human rights record. As they are very much focused on equality and consensus, there is less distance between blue-collar and white-collar workers.</p>	<p>Score: 11. Austria scores very low on this dimension, which means that the following characterizes the Austrian style: Being independent, a hierarchy for convenience only, equal rights, superiors accessible, coaching leader, management facilitates and empowers. Power is decentralized, and managers count on the experience of their team members. Employees expect to be consulted. Control is disliked. Communication is direct and participative.</p>
<p>Collectivism vs. Individualism Measures the degree of interdependence that society maintains among its members.</p> <p>High score: Means individualism. In Individualist societies, people are supposed to look after themselves and their direct family only.</p> <p>Low score: Collectivism. In Collectivist societies, people belong to 'in groups' that take care of them in exchange for loyalty.</p>	<p>Score:15. Costa Rica is like all the other Latin American countries, a collectivistic society. In collectivistic countries, trust, loyalty, personal relations, and networking is essential. Family, and especially mothers, are very sacred in Costa Rica. To get straight to the point is regarded as rude, and no hard selling is being done. Helping somebody out of a difficult situation will never be forgotten. As relationships matter very much, much time is spent on building up trust.</p>	<p>Score: 55. Austria, with a, is an Individualist society. This means there is a high preference for a loosely-knit social framework in which individuals are expected to take care of themselves and their immediate families only. In Individualist societies offense causes guilt and a loss of self-esteem, the employer/employee relationship is a contract based on mutual advantage, hiring and promotion decisions are supposed to be based on merit only, management is the management of individuals.</p>
<p>Feminity vs. Masculinity High score (Masculine): Indicating that the society will be driven by competition, achievement, and success, with success being defined by the winner / best in the field – a value system that starts in school and continues throughout organizational life.</p>	<p>Score: 21 on Masculinity, it is considered the most Feminine society in Latin America. Ticos are very afraid of any kind of personal criticism (together with their collectivistic values). There is a very high acceptance for women in business. Suffrage for women was introduced in 1948, and half of the country's university students are female. Costa Rica wants to become the first carbon-neutral country in the world by 2021.</p>	<p>Score: 79. Austria is a Masculine society – highly success-oriented and driven. In Masculine countries, people "live in order to work," managers are expected to be decisive, the emphasis is on equity, competition, and performance. Conflicts are resolved by fighting them out. A clear example of this dimension is seen around election time, with ferocious, no-holds-barred battles between candidates.</p>

<p>Low score (Feminine): meaning that the dominant values in society are caring for others and quality of life. A Feminine society is one where the quality of life is the sign of success and standing out from the crowd is not admirable.</p>		
<p>Uncertainty Avoidance The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety, and different cultures have learned to deal with this anxiety in different ways. High score: Uncertainty avoiding. High -context Low score: uncertainty Tolerant. Low-context</p>	<p>Score: 86. Costa Rica scores high on Uncertainty Avoidance. In countries exhibiting a high score of Uncertainty Avoidance, formality, and a strong emotional need for structure and rules is essential, even if it is not always working or followed. Bureaucracy is very time-consuming in Costa Rica; documentation, need for stamps, and written instructions are essential. As the Ticos are somewhat conservative, they do not always embrace strange and different ideas. Despite the hot weather, a bright and full-dress code is followed. As a contradiction to the high Uncertainty Avoidance, "Tico time" means a very flexible attitude to timekeeping.</p>	<p>Score: 70. Austria has a preference for avoiding uncertainty. Countries exhibiting high Uncertainty Avoidance maintain rigid codes of belief and behavior and are intolerant of unorthodox behavior and ideas. In these cultures, there is an emotional need for rules (even if the rules never seem to work) time is money, people have an inner urge to be busy and work hard, precision and punctuality are the norms, innovation may be resisted, security is an essential element in individual motivation. Decisions are taken after careful analysis of all available information. The usage of academic titles as part of people's names is a reflection of Austria's high score on the Uncertainty Avoidance Index.</p>
<p>Long term orientation vs. Short term orientation Describes how every society has to maintain some links with its past while dealing with the challenges of the present and future, and societies prioritize these two existential goals differently. Hofstede's website says that the scale is also reversed for Flexhumility (long-term orientation) versus monumentalism (short-term orientation). Low scores, f.e. prefer to maintain time-honored traditions and norms while viewing societal change with suspicion. High score, takes a more pragmatic approach: they encourage thrift and efforts in modern</p>	<p>NOT scored</p>	<p>Score: 60. Austria is making it a pragmatic culture. In societies with a pragmatic orientation, people believe that truth depends very much on the situation, context, and time. They show an ability quickly to adapt traditions to changed conditions, a strong propensity to save and invest, thriftiness, and perseverance in achieving results.</p>

education as a way to prepare for the future.		
Indulgence vs. Restraint (IVR) Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. Restraint stands for a society that suppresses gratification of needs and regulates it through strict social norms. (Hofstede, G. 1991) (p.280)	NO SCORE	Score:63 Austria is an Indulgent country. Countries rated with a high score, generally exhibit a willingness to realize their impulses and desires concerning enjoying life and having fun. They possess a positive attitude and tend towards optimism. Besides, they place a higher degree of importance in leisure time, act as they please, and spend money as they wish.

Table 4: [Country comparison tool from Hofstede Insights- Costa Rica vs Austria]

Source: [Information recovered from (Hofstede, G. 1991; Hofstede Insights n.d.)]

Appendix 2- Questions to build up the interview

Sub- topic1

The influence that the organizational culture has on New Product Development and Operational CRM

1.1 Organizational culture, CRM, and NPD.

Objective 1: Understand the influence that the organizational culture has in the implementation of Operational CRM & New Product Development.

Conclusion 1

- When companies have a customer-centric focus, it is very convenient to implement a CRM system. Nevertheless, it is necessary to use knowledge properly, and this is the job of the people – marketers, product managers, salespeople-.
- All this is in a customer-centric focused culture. But what about an innovation perspective? Kuan-Shun Chiu, K. et al. (2010) showed in their research that CRM implementation could bring great positive results in innovation programs.

If SMEs requires to develop new products for international customers in the B2B context.

- CRM in the process of developing new products: How is it in SMEs?
- How does this happen in real life in SMEs?
- What resources do they have?
- What do companies do to have a better relationship with their B2B customers?
- How do they generate new products? What process do they follow?

Conclusion 2

It is known in the literature that CRM is not only a system, is also a base for customer-centric corporate culture. When companies want to build and keep relationships with clients, this must be known and practice by everyone.

- To know if this has been applying to the SMEs, and if it does, how are they doing?
- How are SMEs implementing the idea of customer-centric in the company's culture?
- Are SMEs having a clear idea of the customer-centric vision? Is the customer relationship part of the corporate culture in SMEs? Or not?

1.2 The national culture of the company and prioritization on building relationships. (FOR FURTHER RESEARCH)

Conclusion 3---- NOT APPLICABLE IN THIS RESEARCH

- How important is it to keep a good relationship with international clients?

Sub-Topic 2

The impact of national culture and operational CRM in NPD processes and international stakeholders.

Objective 2: Understand the influence that the national culture of clients and operational CRM could have on NPD.

Objective 2.1: Identify the positive and negative impact of culture on the development of new products.

2.1 Culture-related customer interactions on NPD processes.

Conclusion 4

Customer involvement is an important activity of CRM to implement if the company wants to reach two things: 1) get the proper information to satisfy the client's needs, 2) and build a long-term partnership with maybe key customers.

- How much is the client involved in the SMEs NPD process?
- How could CRM help?
- Is it "healthy" to involve the customer in this process?
- Is operational CRM useful to control and manage customer involvement?

Conclusion 5

Information sharing is an essential part of the development process. This is key to keep every party involved on the same page. Operational CRM could help to share information from clients to team members and connect the salespeople to clients.

- How is the information being shared between development stakeholders?
- How can CRM help in this process of information sharing?

2.2 Culture-related problems in international cooperation.

Conclusion 6

Knowledge management and gathering of information are vital to understand the customer and be able to customize product and service offerings to meet current and anticipated customer needs. Since in relationship marketing (R.M.) interrelations are social exchanges, culture tends to influence the type of emotional attachment. International understanding is critical in relationships in commercial processes.

Dual value (customer and client) can be generated by the NPD, and it is achieved by generating a good concept that meets the needs of the customer. The process follows steps like the collection of the consumer's needs, interpretation of these data in specifications, and finally, conceptualization. However, the literature recommends the use of efficient but a bit old method, given that exists technology and systems that allow the management and storage of customer information. Considering these things, SMEs that required the development of new products for international customers in the B2B context.

- How are SMEs dealing with the cultural aspect of clients?
- Is it a vital part of building long-term relationships in SMEs?
- Which methods are the companies using to gather information from international clients (with or without CRM) to develop new solutions?
- How they manage the cultural aspect of their clients?
- How much is the customer involved in the development of a product?

- How can CRM support the development of new products? From literature and an industrial designer's point of view.

Conclusion 7

It is also valuable to ask questions about the main culture-related problems (or aspects) in international cooperation related to the NPD processes. When this direct interaction with customers exists, how is this information collected and managed, and is a CRM or some alternative form used? In addition to this, the relationship with the client is a priority. Therefore, is questionable if the CRM is a useful tool for small and medium companies and if CRM is not used to maintain relationships with customers, then they use it.

- Which problems could the firm when international collaboration in the NPD process? How is this solved in reality? Could CRM help?
- How are the interactions with clients collected and managed? With or without CRM.
- Which are the options to manage this cultural data?
- Are culture-related problems (separated/compared to all the other problems)?
- Can these problems (if there are) be eliminated by CRM?
- Or is the cultural difference on the other hand not consciously wanted and thus also a qualitative advantage in the NPD? Is this depending on the field or industry?
- How could CRM help to support the cultural influence in a positive sense?
- How can the cultural influence be measured?
- How can it be managed in the NPD (with and without CRM)?

Appendix 3- Interview guidelines for different types of interviewee

Interview guide to Companies

Warm up question: :

- Q1. Tell me about your company and international experience.
- Q2. Are you familiar with the term Customer Relationship Management? What is your understanding of this? – Purpose: understand what people understand by CRM. Is not only a system or tool. / Customer centric focus.
- Q3. Would you say that the company is customer-centric or product-centric and why? Purpose: Are SMEs having a clear idea of the customer-centric vision? Is the customer relationship part of the corporate culture in SMEs? Or not?

For Sub-topic 1 -The influence that organizational culture has on new product development and CRM.

- Q1. What is the process that the company follows to design and develop a new product? Workflow?
- Q2. When a customer wants customized services or products to key clients. How is the process?
- Q3. How much effort is your organization making to understand and find out the customer needs?
- Q4. How could CRM be implemented in the process of developing new product?
- Q5. What are _____ doing to have a better relationship with their B2B customers?

For Sub-topic 2 - National culture and operational CRM in NPD processes. International customers and stakeholders.

- Q6. How should be managed the cultural knowledge of the international clients and or partners? Do you think it is important? – Purpose: Is cultural knowledge relevant for SMEs to build long-term relationships?
- Q7. How are SMEs dealing with the cultural aspect of clients? Which methods are the companies using to gather this information from international clients (with or without CRM) to develop new products?
- Q8. How much is the international customer involved in the development of a product?
- Q9. Do you think that marketing, sales, or service automation can help to gather this data?
- Q10. Which culture-related problems might appear in the NPD process? How could this solved? Could CRM help?

Interview guide to CRM experts

Warm-up question:

- IQ1. Could you please tell me more about yourself and your expertise in CRM area?
- IQ2. What do you know about the implementation of CRM in the development of customized products?

For Sub-topic 1 -The influence that organizational culture has on new product development and CRM.

- Q11. *How is it usually implemented the idea of customer-centric in the company's culture?*
- Q12. *Based on your experience, how much effort should be done to understand and find out the customer needs? Do you think that CRM could help this?*
- Q13. *Is CRM implemented in the process of developing new products? How is it in SMEs is a CRM system or ideology applied? How does this happen in real life in SMEs?*
- Q14. *What can companies do to have a better relationship with their B2B customers?*
- Q15. *How would you describe the relationship that SME should have with it's international clients?*

For Sub-topic 2 - National culture and operational CRM in NPD processes. International customers and stakeholders.

- Q16. *How should be managed the cultural knowledge of the clients? Do you think it is important?*
- Q17. *How are SMEs dealing with the cultural aspect of clients? Which methods are the companies using to gather this information from international clients (with or without CRM) to develop new products? How could CRM help to do this?*
- Q18. *Do you think that marketing, sales, or service automation can help to gather this data?*
- Q19. *Is cultural knowledge relevant for SMEs to build long-term relationships?*
- Q20. *Regarding the international development partners that a company might have: Which culture-related problems could appear in the NPD process? How is this solved? Could CRM help?*

Interview guide to Industrial designers or Product Development experts

Warm up question:

- IQ1. *Please tell me more about yourself and your expertise in NPD.*
- IQ2. *Are you familiar with the term Customer Relationship Management? What is your understanding of this?*
- IQ3. *How do you think that the idea of customer-centric could be implemented?*

For Sub-topic 1 -The influence that organizational culture has on new product development and CRM.

- Q1. *What is the process that the company follows to design and develop a new product? customer-centric or user-centric? Workflow?*
- Q2. *When a customer wants customized services or products to key clients. How is the process?*
- Q3. *Based on your experience, how much effort should be done to understand and find out the customer needs? **Do you think that CRM could help to this?*
- Q4. *How can the development of new products be supported by CRM or alternative solutions?*
- Q5. *What can be done to have a better relationship with their B2B customers?*

Sub-topic 2 - National culture and operational CRM in NPD processes. International customers and stakeholders.

- Q6. *How should be managed the cultural knowledge of the clients? Do you think it is important?*
- Q7. *Which methods do you think are useful to gather this information from international clients (with or without CRM) to develop new products?*
- Q8. *How much should be the international customer involved in the development of a product?*
- Q9. *Do you think that marketing, sales, or service automation can help to gather this data?*
- Q10. *Which culture-related problems might appear in the NPD process? How could this have solved? Could CRM help?*

Appendix 4 – Customer involvement quotes

Group	Interview	Code	Start	Segmento	Comment
Company - Costa Rica	CR1. Interview - Ampo	Customer involvement in PD processes\first stages of process	15	First the sales agent takes note of the customer's need, uploads it through the crm platform to the research and development department and to the sales management. When the prototypes are generated, a focus group is created with some friendly clients and they submit the product to hear the degree of acceptance.	
Company - Costa Rica	CR1. Interview - Ampo	Customer involvement in PD processes\involvement in prototyping	28	Javier: During the generation of prototypes in the R&D level, some samples are sent to the clients so they can give some feedback. Paula: mmm okay, but in which way? How is the workflow? Javier: The samples are sent by the specialist to explain the technical issues of the design. These tests are customized by the company until the product meets the expectations. Once the company accepts the product, it is taken to other companies for additional feedback. If the initial company is very large and with only this one, it is worth the production. Then they do not investigate further but produce the product only for this company given its high volume of sales.	
Company - Costa Rica	CR2. Interview - Grupo Vargas	Customer involvement in PD processes\first stages of process	26	We use Prinect software that is link to our design flow, that receives by the portal web the arts for the new project, is other software is focus in our process that is graphic arts.	Service software
Company - Costa Rica	CR2. Interview - Grupo Vargas	Customer involvement in PD processes\in whole process	42	Is the principal for us when we have a new product, they need to be in every stage so we can produce and garanty that the customer will be satisfied.	
Company - Costa Rica	CR3. Interview - AIA del Caribe	Customer involvement in PD processes\involvement in prototyping	43	And then I tell the client I'm doing the sample, but once it's approved, we have to discuss it. Because I had already gone through the process of developing a product and making all the investment in equipment, and in the end, they were taken away. So, I kept new equipment, but it was no longer necessary to produce anything.	
Company - Austria	AT1. Interview - TigerDental	Customer involvement in PD processes\first stages of the process	59	The first step then is to evaluate if this is something that really creates an echo. So we are right now, you know, having phone calls with certain customers asking about it best, I would give you an example, so it makes it a little bit easier.	

Company - Austria	AT2_Interview - StarMedia	Customer involvement in PD processes\in whole process	134	<p>. What we cannot do is we cannot approach a customer with a standard product. This is not how we want because we are these customers and we have this customer centric approach. So, we cannot we cannot give standard product. Even though we try to standardise modules or components in our, in our offer process so to speak.</p> <p>To resonate with the client, he would say hey, I feel this is so standard. I don't want this and also we would have to deliver significant amount of product That we don't want. So we have at least one or two meetings in before we get to sign a deal or be off before we can present a deal an offer. Once the deal in the deal we offer can only be exactly what the client wants. Or to a certain degree, it's mean it's never 100% but to very certain degree has to be very high match. And from there we go forward, then we have like regular meetings, continuous conversation, at least once a month, probably more often. Yeah, that's it depending on the intensity, how the client wants, also how much money they have, how much money we spent for them, how much yeah, these are then more factors that are involved</p>
Experts - CRM	EC1. Interview- Javier Ortiz G	Customer involvement in PD processes\first stages of process	56	<p>But evidently, the envelope can maintain me and generate information about the culture of the clients he is going to keep for me all this "culturalization" and this investigation of culture that you have made is very interesting because the processes of culture in the same way each country and town has its culture each, person that is to its own micro-culture, one has to know that part of a culture</p>
Experts - Product development	ED2. Interview_Jorge and Beatriz	Customer involvement in PD processes\first stages of process	34	<p>With all this information that is collected and built with the client, we proceed to search in the product portfolios for solutions that come close to that need or in its absence, which products may have such specifications that allow adjustments to the design or specifications, assembly etc, which allows to fill the customer's need.</p>
Experts - Product development	ED2. Interview_Jorge and Beatriz	Customer involvement in PD processes\first stages of process	55	<p>The designer needs all the inputs he has available to incorporate in the development of the product design. The research stage must collect all the exogenous and endogenous variables that can be obtained to ensure the acceptance and functionality of the product in the markets for which it is intended. For this purpose, the CRM is a vital tool because of the amount of relational information it can store.</p>
Experts - Product development	ED1. Interview_Andreas Ebermann	Customer involvement in PD processes\first stages of process	52	<p>In this first round the they should be involved, of course, but it's his first challenge to convince them that we need to have a little bit more freedom in, this basically in this I will be starting with the UX process, development parts challenge here. When it comes for our traditional industrial design development also for the client we have long term, long term relationship with. It it's not it's not easy to tell them.</p>

Experts - Product development	ED1. Interview_Andreas Ebermann	Customer involvement in PD processes\hierarchal approach	52	<p>Maybe I'm explaining a little bit this because only about this client relationship, I can tell because many people are involved in this hierarchy know, when you work with a company that has like, I don't know, thousands of employees and you have like, it's like a political system more or less.</p> <p>Interviewer 20:20 Okay.</p> <p>Andreas E. 20:22 It's a political thing. And you have the board and the board is God, and everything the board says needs to be followed. So if the board and this company, which is in the client has as a specific request, then everybody needs to follow in a company and also we as a service agency, providing that so it's very helpful to have the client involved here in this very in this very specific development process, you know, specific industrial design process and the phases we went through before.</p>	
Experts - Product development	ED1. Interview_Andreas Ebermann	Customer involvement in PD processes\first stages of process	56	<p>And the further the process goes in this development stage from division to constructional service, the more the client gets involved in smaller steps, iterative steps in the first vision and we're presenting some some graphs and some proposals and its variations to making shoes, and then discuss which we do best. What you want and those, like with this one time feedback after the briefing, we go into the next phase. And then it's also like, well, we don't we don't ask the client too much. But we're developing design feedback. When we're dealing done with the engineers, it's a very close working together.</p>	"We do not ask the client to much. But we are developing design feedback."
Experts - Product development	ED1. Interview_Andreas Ebermann	Customer involvement in PD processes\first stages of process	88	<p>It's, the beginning, it's very, very important to talk about this. Talk about common goals. So, that's very important. Within the process, you need to have the contact to the client in order to not do something that is completely against their will.</p>	

Table 5 [Customer Involvement quotes_Appendix 4]

Appendix 5 – Efforts to understand client quotes

Group	Interview	Code	Start	Segmento	Comentario
Company - Costa Rica	CR1. Interview - Ampo	effort to understand clients\it should have...\previous preparation	17	On Fridays, meetings are held in the commercial area where visits to clients are planned for the following week, both locally and to clients outside the country. In these meetings are scheduled each appointment and the issues that would be addressed such as ways to increase sales, support them in financing, improve price, facilitate the process of buying and selling, and meet new needs.	weekly meetings
Company - Costa Rica	CR1. Interview - Ampo	effort to understand clients\it should have...\Communication with client (+)	19	Javier: The CRM is involved from the moment the sales agent puts the new opportunity into the system.	sales investment
Company - Costa Rica	CR1. Interview - Ampo	effort to understand clients\it should have...\good customer service	23	The relationship with the international business clients is excellent basically because of the good treatment and good attention, personalized service and attend their needs to create products short with their needs.	The relationship with the international business clients is excellent basically because of the good treatment and good attention, personalized service.
Company - Costa Rica	CR2. Interview - Grupo Vargas	effort to understand clients\it should have...\Communication with client (+)	13	Investing in systems, automation, and controls, so that customer can have the best service for our customer. Our sales have improved by applying this method of customer focus, have their deliver on time, quickly manage our improvement opportunities and very low defects.	sales investment
Company - Costa Rica	CR2. Interview - Grupo Vargas	effort to understand clients\it should have...\CRM technology or automated	15	We have a design team that receives the inquiry's for our customer and we research with our suppliers how to develop the product with the finish that our customer needs. In most of the cases are with paper mills, varnish, and inks suppliers.	automated service tool
Company - Costa Rica	CR2. Interview - Grupo Vargas	effort to understand clients\it should have...\CRM technology or automated	22	We tried to put to their service our design systems, so they can see how the product it's going to be, we establish procedures so the customer signs everything that approves and process controls so we ensure that we are fulfilling the requirements.	automated service tool
Company - Costa Rica	CR2. Interview - Grupo Vargas	effort to understand clients\weak follow up	28	I think in our case to have a good service, good prices and continue follow ups.	weak follow up
Company - Costa Rica	CR2. Interview - Grupo Vargas	effort to understand clients\it should have...\active investment	36	Our strategy follow to have people trained, people that knows what the customers want, for example the medical devices requires an highly strong quality system, we are an ISO 9001 certified company and also we are working in ISO 13485, we bet in our strategy to have an active investment in ultimate technology, for have a high productive manufacturing process and automated controlling softwares	Not only invest in technology but also have people trained, people that knows what the customers want, for example the medical devices requires an highly strong quality system.

Company - Costa Rica	CR3. Interview - AIA del Caribe	effort to understand clients\it should have...\Communication with client (+)	35	There are others who do not know what they want and so it takes more effort to get the information out of them, almost "with a spoon".	hard time when customer does not know what they want. R&D should be more involved here not only sales that is why is hard.
Company - Costa Rica	CR3. Interview - AIA del Caribe	effort to understand clients\it should have...\Communication with client (+)	35	He asked me for a product and for a photograph as a reference. He doesn't mention flavor, texture, nothing but the picture. But the photograph won't tell me much, it just gives me the cosmetic part and that's it. And then I ask him questions and he insists that's what he wants. So now if you start researching what options can be offered to the client or that company. And according to the possibilities, to what is investigated to what is solved the problem or product.	hard time when customer does not know what they want. R&D should be more involved here not only sales that is why is hard.
Company - Costa Rica	CR3. Interview - AIA del Caribe	effort to understand clients\it should have...\Communication with client (+)	42	A lot, but I would say more than an 80% -just to illustrate- when clients that does not know what they want.	hard time when customer does not know what they want. R&D should be more involved here not only sales that is why is hard.
Company - Costa Rica	CR3. Interview - AIA del Caribe	effort to understand clients\weak follow up	45	We are very deficient with the follow-up issue.	weak follow up
Company - Costa Rica	CR3. Interview - AIA del Caribe	effort to understand clients\it should have...\previous preparation	56	Remember that information is power, the more information you have about the customer you can understand better and relate better to him.	Previous knowledge of client and culture
Company - Austria	AT1._Interview - TigerDental	effort to understand clients\it should have...\Communication with client (+)	59	So it's a multi step process, but it eventually starts with the idea which either comes from us as a company where we say we need to change something or in most cases it comes from the market where we get an also feedback to either an adaption of an existing product or a new product.	they come with the idea or need, we create a standard solution form them and others. Innovative products
Company - Austria	AT1._Interview - TigerDental	effort to understand clients\it should have...\Communication with client (+)	59	The first step then is to evaluate if this is something that really creates an echo. So we are right now, you know, having phone calls with certain customers asking about it best, I would give you an example so it makes it a little bit easier.	they come with the idea or need, we create a standard solution form them and others. Innovative products
Company - Austria	AT1._Interview - TigerDental	effort to understand clients\not enough efforts	75	I would say at this point too little we are still having a lot of push technology, technology where we where we develop because we think that the market will need it. Yeah, at this point that's the case. We're trying to change it but I think at this point we're not doing enough.	too little
Company - Austria	AT1._Interview - TigerDental	effort to understand clients\it should have...\Communication with client (+)	87	I think it's most important to get a good understanding which requests of doctors or just in general which request of clients are valid, and which wouldn't make sense because you will always get into a situation where a client will ask you for things for changes that may be in his or her head are really good but for you effectively would mean, this would mean that you have to develop a whole new product range just for this one client, maybe two or three others. But I think this is really the the crucial part about	feedback in interactive process

				communication with the clients that you always are	
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\weak follow up	33	generally I think most clients just most companies in front like, they just don't have really they don't sell pretty much, they have a great product and they wait until the customers and send an email and say I need your product.	weak follow up
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\it should have...\Communication with client (+)	88	So we have, for example, a pizza shop. They are only on Facebook at this time, they don't have a website, but we build for them a working marketing campaign that is only based on Facebook tools. So we cannot go outside of this ecosystem. But then another client, they maybe have everything in place already. They already have a website, they already have AdWords and everything. Then we say okay, what is the next missing piece? And so we always look at the client like a puzzle game, and build the most valuable puzzle point within the next two weeks that we can build. So that's the process that we try to follow. Repeat.	see client as a puzzle- time investment
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\it should have...\good customer service	100	We do have a CRM, but I would not as a next step using, I would not invest more into the CRM. Does that make a lot of sense? So what I would do is, I think it makes sense to invest into a relationship, which would be more where a client is already. So if we think of the three letters that are made from the built the word CRM, client relationship management People are investing too much into em into the management. And not so much into the client and not too much into the relationship. So I think what I would invest next, what I want to invest as a next step in my company is to invest more into the client into the C and into the relationship into the R. Because typically, people think too much of the tool of the M	I want to invest as a next step in my company into the client into the C and into the relationship into the R of the CRM. Because typically, people think too much of the tool of the M. (management tool)
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\it should have...\previous preparation	134	we're elaborating this still honestly, what I can say now pretty much is that we need at least one or two meetings until we have onboard the customer until we can offer him something valuable.	meetings before offer something valuable
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\not enough efforts	134	we're elaborating this still honestly, what I can say now pretty much is that we need at least one or two meetings until we have onboard the customer until we can offer him something valuable.	too little
Company - Austria	AT2._Interview - StarMedia	effort to understand clients\it should have...\previous preparation	135	So we have at least one or two meetings in before we get to sign a deal or be off before we can present a deal an offer. Once the deal in the deal we offer can only be exactly what the client wants.	meetings before close deal

Experts - CRM	EC2. Interview-Francis Buttle	effort to understand clients\it should have...\CRM technology or automated	14	Many companies claim to be customer-centric, but few are. To be truly customer-centric requires an intimate understanding of customer preferences and requirements, and an intimate understanding of competitors' value propositions. Then, building an organizational culture that puts customers at the heart of the business requires leadership that prioritizes customers over employees and business owners.	understanding of clients but also competitor value preposition
Experts - CRM	EC2. Interview-Francis Buttle	effort to understand clients\it should have...\active investment	14	HR teams have to recruit or train people to be customer focused, and business rules and rewards systems recognize the critical value that customers bring.	Train to be customer focused, and business rules and rewards systems recognize the critical value that customers bring.
Experts - CRM	EC2. Interview-Francis Buttle	effort to understand clients\it should have...\Communication with client (+)\buyer-seller relationship	23	Relationships between buyers and sellers are frequently long-term, close in nature, and involve a complex pattern of interaction between and within each company. Buyer-seller links often become institutionalized into a set of roles that each party expects the other to perform,	long-term relationship
Experts - CRM	EC2. Interview-Francis Buttle	effort to understand clients\it should have...\Communication with client (+)\buyer-seller relationship	56	Again, I advise you to look at the IMP literature which examines buyer-seller relationships in international context.	READ LITERATURE
Experts - CRM	EC1. Interview-Javier Ortiz G	effort to understand clients\it should have...\Communication with client (+)	17	At that moment, the Sales Executive who is already very well trained, he not only expects to arrive at the office that right there with his tablet activates the recording within the CRM platform and everything the customer says or is saved in audio or written form. And they're all the information is taken, that is to say, the client's need, for example, the equipment we are bringing from Scania Brazil that is a solid waste collector. It is a collector that does not work for a client X because it does not have a compartment Y, which it needs to handle the waste for recycling. So he needs a collector that is different from the one we propose, so the question we ask ourselves is if we can offer this particular client a collector that meets those new requested specifications. That's very common, and that's part of the consumer-focused and nano-commercial trade.	salesperson effort
Experts - CRM	EC1. Interview-Javier Ortiz G	effort to understand clients\it should have...\CRM technology or automated	18	In other words, all that information that can be extracted from the customer about the product is recorded in the CRM in the initial stages of a sale.	CRM data saving
Experts - CRM	EC1. Interview-Javier Ortiz G	effort to understand clients\it should have...\Communication with client (+)	54	With CRM it is possible because everything related to that person is stored and connected to the server, it connects me to all the phones when he came to call, with this you can see in everything to call Brazil to the person in charge of production in Brazil.	CRM interconnection / comp. client

Experts - Product development	ED2. Interview_Jorge and Beatriz	effort to understand clients\it should have...\Communication with client (+)	35	There our R&D department intervenes in order to modify and/or develop luminaires with the specifications and needs that were established in the previous step.	R&D department intervenes in order to modify and/or develop.
Experts - Product development	ED2. Interview_Jorge and Beatriz	effort to understand clients\it should have...\Communication with client (+)	37	is a comprehensive process that requires a considerable investment of time, technical work and communication with the client to understand and clarify their needs as well as the solutions that can be offered.	to clarify
Experts - Product development	ED2. Interview_Jorge and Beatriz	effort to understand clients\it should have...\Communication with client (+)\buyer-seller relationship	46	i.e. account advisors who have full knowledge of both the portfolio and the scope of the customers' business, as well as the Sylvania product portfolio that best suits the customers' needs.	Account advisor has knowledge of portfolio and customers, true, but don't have knowledge if is possible to create something. when is customized i thinks the best is to but departments together
Experts - Product development	ED2. Interview_Jorge and Beatriz	effort to understand clients\it should have...\active investment	47	In this line, I believe that it is also vital to have technical updating and training programs that can be carried out with B2B customers in order to have a vanguard market.	technical updating and training programs that can be carried out with B2B customers in order to have a vanguard market.
Experts - Product development	ED2. Interview_Jorge and Beatriz	effort to understand clients\it should have...\active investment\Public Relationship Executive	60	but when talking about niche products, you can work a little more with a PR (Public Relationship Executive), but this is much more expensive because it is a very personalized service. For example, let's look at personal banking, premium banking. There is always an advisor there who handles the relationship with the client. So in this case, the marketing automation tool might not be necessary because in the end the success of that relationship is that the client feels individualized.	
Experts - Product development	ED1. Interview_Andre as Ebermann	effort to understand clients\it should have...\Communication with client (+)	52	well, it's funny because if you go to clients they have very often pretty precise expectations on what they want. And first is to convince them that maybe they should be a little bit more open and let us do the job. And that's exactly where we are with the UX part right.	*** Designers don't care that much of customer requirements or especifications because most of the time, people do not know what is needed. Sometimes the solution is something completely diferent.
Experts - Product development	ED1. Interview_Andre as Ebermann	effort to understand clients\it should have...\Communication with client (+)	88	It's, the beginning, it's very, very important to talk about this. Talk about common goals. So, that's very important. Within the process, you need to have the contact to the client in order to not do something that is completely against their will.	
Experts - Product development	ED1. Interview_Andre as Ebermann	effort to understand clients\it should have...\Communication with client (+)\buyer-seller relationship	130	As I said like, two sides like marketing, sales side is one aspect and the other aspect is working within the project. Both sides can't be separated. Because if you're doing like acquisition and sales, you're some point collecting information about the client and the project. And this should be hand in hand with end development in this in the next face.	do not separate processes

Experts - Product development	ED1. Interview_Andreas Ebermann	effort to understand clients\it should have...\Communication with client (+)\buyer-seller relationship	130	Um, not necessarily all information, like, important for both sides, but it can be a problem that customers like talk to and projects are created and there's a cooperation that's going on. And the sales side is doing deals and getting information that are there is not going to the designer or the the actual, contract development, that's basically possible and the bigger the company gets bigger this problem gets like sometimes in smaller companies, smaller agencies, like the acquisition and sales part is sometimes also done by the designer itself. You know, it's like, it's not like two different departments. There's like, I think a number of employees that have like, company size, where this problem gets bigger. So it is also depending on how the roles in the company are set.	departments : not real cooperation sales and developers, but in small, designers are also de salesperson. That makes it easier
Experts - Product development	ED1. Interview_Andreas Ebermann	effort to understand clients\it should have...\Communication with client (+)	134	It's also really important that if you're making if you're starting to have a contract with a potential client, that amount, have money in charge. And the service you want to provide him is something the actual design or the product developer is sharing. You know, it's not that it's not that someone sells something and then the designer has a total different approach because he's the one who has decision about this project. So there should be a connection.	connection client designer

Table 6 [Efforts to understand client quotes__Appendix 5]

Appendix 6 – Cultural Knowledge quotes

Group	Interview	Code	Start	Segment	Comment
Company - Costa Rica	CR1. Interview - Ampo	cultural knowledge RELEVANCE\in partnerships or client relationships\matching cultures	21	The culture of the Central American companies, despite being different in vocabulary, idiomatic phrases, has been compensated by the friendly treatment and service and simply not talking about political issues. I think our cultures are very similar and that is why it can make things easier.	Uppsala model helps to build relationships faster
Company - Costa Rica	CR1. Interview - Ampo	cultural knowledge RELEVANCE\Relevance in PD \how to behave	25	It is important because in Central America there are countries with their own cultures in language, way of behaving, negotiating. What you do is be very careful and have protocols to speak only what is working. It is not allowed to talk about topics outside the work context.	similar but different
Company - Costa Rica	CR1. Interview - Ampo	cultural knowledge RELEVANCE\depend s on industry type	38	An important population in Guatemala is indigenous and to say that products are derived from plants of which they as indigenous use them as medicinal products, but with a religious connotation, makes that not all the plants can be used to produce the disinfectant products because an indigenous population would not buy them. The problem with that is that it is not easily understood which areas are sacred, cemeteries or places forbidden to collect plants. This is a cultural issue that does not occur in all of Latin America, however, it is possible to find and culture.	Folders
Company - Costa Rica	CR1. Interview - Ampo	cultural knowledge RELEVANCE\Relevance in PD \adaptability	40	This is achieved simply through an excellent relationship with clients, international partners and AMPO executives. An excellent relationship makes new business possible, business in line with customer needs. That are adapted to their requirements and designed without affecting their religious, political, social culture, etc.	
Company - Costa Rica	CR2. Interview - Grupo Vargas	cultural knowledge RELEVANCE\depend s on industry type	26	This design flow has the capacity to manage the art and prepared for the press room. In this part we don't link anything to a CRM.	Labels and printed products
Company - Costa Rica	CR2. Interview - Grupo Vargas	cultural knowledge RELEVANCE\in partnerships or client relationships	36	cultural knowledge is part of building a solid service method.	solid service method
Company - Costa Rica	CR2. Interview - Grupo Vargas	cultural knowledge RELEVANCE\Relevance in PD \adaptability	40	r, helps us to know what they want, we have people focus in markets and a manager by segment, so they have a base of knowledge. Also the managers have inplants in our AAA cust	define implicit needs - solid service
Company - Costa Rica	CR3. Interview - AIA del Caribe	cultural knowledge RELEVANCE\Relevance in PD \Countries reputation - decision making	47	we do not manage international partners everything is national. But the culture part is a very important issue, in the case of BTM1, I participated last year. There are people coming in, potential buyers from Canada, Jamaica, well from all over, Central Americans, etc. So you see the cultural differences, the way you have to treat people.	

Company - Costa Rica	CR3. Interview - AIA del Caribe	cultural knowledge RELEVANCE\Relevance in PD \adaptability	47	Likewise, how you have to adapt the product for each, for each country. Just like there are products that are not called the same, because there are products that have different names depending on the country.	
Company - Costa Rica	CR3. Interview - AIA del Caribe	cultural knowledge RELEVANCE\Relevance in PD \Countries reputation - decision making	49	So I know that, if in the future I want to do business with them, I need to get someone who is well developed and knows what we do to represent me.	
Company - Austria	AT1._Interview - TigerDental	cultural knowledge RELEVANCE\in partnerships or client relationships\matching cultures	99	In those countries we have, for example, Germany where we have a direct contact with the developer and we are working. I'm able to have the screen share with him and I'm able to work with him directly until we solve the problem with South Korea, we have a different approach where a lot of work has to be undergone certain stages of confirmation within the our partner company.	heriarchal cultures are more complex
Company - Austria	AT1._Interview - TigerDental	cultural knowledge RELEVANCE\Relevance in PD \adaptability	105	And the team doesn't see the necessity to control or to manage or to save data of the culture so far. Yeah, well, if it's related with clients, I think yes because it's also related with marketing studies and researches and so on.	Related with marketing studies and researches. Marketing and R&D are involved so as sales.
Company - Austria	AT1._Interview - TigerDental	cultural knowledge RELEVANCE\Relevance in PD \Countries reputation - decision making	105	as you said correctly, if someone's gone, it would be super helpful to have those information, especially also cultural information. But I mean cultural information. It's one part but also a whole technical information. It's, you know, you start to you start to collaborate with someone and you really get to know this person.	
Company - Austria	AT1._Interview - TigerDental	cultural knowledge RELEVANCE\in partnerships or client relationships	105	Not only about the culture itself, but due to the culture about the company, you know, you you wouldn't ask certain questions you wouldn't ask about certain relationships because you already know that Yeah, very important.	Company's culture
Company - Austria	AT1._Interview - TigerDental	cultural knowledge RELEVANCE\Relevance in PD \Countries reputation - decision making	135	Back then the the production of, of this product that we are partnering on was very was very sophisticated in South Korea, and it's still a so basically the medicine industry for this product was in South Korea. Nowadays we are able to also have those products produced in Europe, but back then their quality of the product and its until today is is breathtaking.	
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\depends on industry type	88	So the idea is that we don't have like a, we avoid to have like a standard process. But we want to have a, let's say a standard process that is like a standard business process where it's okay First, you have to get the website and when you have a website, then you get Google Ads campaign and then you have Facebook ads campaign that we want to get a modular process more like, like a puzzle game, where you start with the puzzle that you have with the past point.	Digital

Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\Relevance in PD \how to behave	122	And in each each of if you know how people expect things to be, you can adapt to it can be either way. I mean, every each of these three ways works. But if you do the one thing and the other, if you do behave like one culture in another in, everything breaks down.	what to do and what not to do
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\in partnerships or client relationships	130	you have to imagine companies are like in this, in this relation companies are like countries. That's my perspective. They all have different cultures also, completely different cultures can be like, totally. And this is, that's also the reason why certain companies like an agency attract certain other clients, they have a certain degree of interacting with each other, they have a certain feeling how they want it to be treated, they have a certain feeling what they consider right what they consider wrong.	companies are like countries
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\in partnerships or client relationships\Ethics part of culture	130	So yeah, for example, our company attracts pretty much people that are in the field of biological products. Because we take ethics serious, it is something that is important for them because they also work in ways that are, let's say, kind of more advanced. So if you sell an apple and you sell by Apple or organic apple, it's Match the same product, but it's completely different because you have to manufacture it differently and you have to market it differently. So if for example, we don't we don't we actively do not work with certain clients we don't work with for example, gambling companies, we don't work with companies I know agencies in the region that work with they build porn websites, we don't do that.	
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\in partnerships or client relationships\Ethics part of culture	130	But I mean for them it's okay for for us it wouldn't work. Yeah. I mean you can get good decent money from it. It's but we choose to not get this money, but they don't want to charge it for them. It works for us. It wouldn't work.	
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\Relevance in PD \how to behave	139	Yeah, I think this is a feeling, pretty much it's, it's like with every person that you meet, you have a certain feeling because you behave in a certain way and the other person behaves in a certain way.	certain feeling of how to behave
Company - Austria	AT2._Interview - StarMedia	cultural knowledge RELEVANCE\in partnerships or client relationships\matching cultures	139	When we started the company, we didn't turn down any clients, we took everyone. This ended up badly, often or not barely. But if we had to deliver products that we didn't want, and we had to go, miles that we were not open to go and it was a bad experience. So now we started to more and more turndown clients.	Is not benefit when generate products that does not want to.

Experts - CRM	EC2. Interview-Francis Buttle	cultural knowledge RELEVANCE\in partnerships or client relationships\matching cultures	26	Firms choose whom they interact with and how. The relationships that firms participate in can be many and diverse, carried out for different purposes, with different partners, and have different levels of importance. These relationships are conducted within a context of a much broader network of relationships	Firms choose whom they interact with and how.The relationships that firms participate in can be many and diverse, carried out for different purposes, with different partners, and have different levels of importance.
Experts - CRM	EC2. Interview-Francis Buttle	cultural knowledge RELEVANCE\Relevance in PD \how to behave	34	IMP researchers have focused on two major streams of activity-related research: the structure and cost effectiveness of activity links, and the behavioural characteristics the enable relationships to survive.	effectiveness of activity links and behavioural characteristics the enable relationships to survive
Experts - CRM	EC1. Interview-Javier Ortiz G	cultural knowledge RELEVANCE\Relevance in PD \adaptability	58	products don't match the requirements needs and style of the customer. ---- For example, a company's culture or branding----- That is, that could be the problem, but you would see that something is the opposite.	
Experts - Product development	ED2. Interview_Jorge and Beatriz	cultural knowledge RELEVANCE\Relevance in PD \adaptability	31	An example of this is the color temperature of the lamps, which have certain trends according to the regions that are purchased... While in the North American markets the most usual color temperature is neutral, in the Latin American markets we tend to use cold color temperatures between 6000k and 6500k, so the data we collect from CRM helps us to quantify and process the preferences of our markets.	
Experts - Product development	ED2. Interview_Jorge and Beatriz	cultural knowledge RELEVANCE\depends on industry type	50	Yeah, look. For example, what goes into culture is also the kind of industry that consumes. I'm going to make this very specific. Sylvania is a company that has a presence in all markets, well Europe in America in Asia, and Africa. So, if we're talking about the color for example, the color of the light bulb. That goes from very white to very yellow. People culturally have certain preferences. For example, let's say, the color temperature that's used most is white light, but if you go to Europe or the US, people tend to use neutrals, neither white nor yellow, neutral.	Luminiers
Experts - Product development	ED2. Interview_Jorge and Beatriz	cultural knowledge RELEVANCE\depends on industry type	60	I think it also depends a lot on the niche market, but in general when you're opening up to mass markets, you're going to lose a lot of connection with your target audience if you don't retain. This talking about mass products...	Luminiers

Experts - Product development	ED1. Interview_Andreas Ebermann	cultural knowledge RELEVANCE/Relevance in PD	100	, first of all, if you are developing and designing for a certain cultural user like user with a cultural backgrounds, you need to consider this. You need to know if they have like a different approach to control or steer device and also need to know if those people are usually a little bit smaller than an American guy. That's something you need to have in mind, like the market you're designing for, of course. On the other hand, like our products, we're designing our life international company and very often also, like for international markets, so they're also in China and Japan and you know everywhere. So, that aspect is has not not very big, should not be too big because it should fit everyone,...	implicit needs + adaptability (in PD point of view)
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Table 7 [Cultural Knowledge quotes_ Appendix 6]

Appendix 7 – Product Development with CRM quotes

Group	Interview	Code	Start	Segment	Comment
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM track and controlling	13	The CRM in the company is managed in a platform designed by the company and the same seeks to keep track of customer service and processes pending to serve them properly.	
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM knowledge management	15	If of course, for example, the print designs, colors, writing of the AMPO becomes standard for all customers, but also adapt to the colors of the companies. Sizes are standard, small, letter and legal. First the sales agent takes note of the customer's need, uploads it through the crm platform to the research and development department and to the sales management. When the prototypes are generated, a focus group is created with some friendly clients and they submit the product to hear the degree of acceptance. Then this department issues a report and prototypes, it is presented to the board of directors and if they like the idea it is approved. This means that the production phase begins.	CRM as database but available for the departments involved
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM new opportunities	17	These appointments are recorded in day, time, place and automatically the crm controls the appointment and sends emails to the client and those involved for follow-up ... as the appointments are given, the agent must enter the CRM from the customer's office in real time, the results, new business opportunities. These opportunities are controlled by the CRM who initiates an automatic follow up process until those involved close the case in the platform. This ensures that the client was properly attended.	Tracking of every step that influence client. Like meetings with clients, were new opportunities can be discovered, and CRM could keep track of all these.
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM value chain / holistic	19	Javier: The CRM is involved from the moment the sales agent puts the new opportunity into the system.	SALES: Normally involved in sales and service. The Downtream part of the value chain.
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM value chain / holistic	32	The CRM allows the sales agent to enter customer information, therefore, it is clear the pending, requests, knowledge of the culture. All this information is entered day by day through the designed CRM platform.	SALES: Allows the sales access to information.
Company - Costa Rica	CR1. Interview - Ampo	NPD process with CRM Positive impact while implenting OCRM track and controlling	34	The CRM is required to be automated. Five years ago, we didn't have this platform and it was impossible to keep track, to know the customer, his culture in a physical file because it was impossible to be updated minute by minute.	Is very difficult to keep track of customers and their information without OCRM. To do this, the system requieres to be automated
Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process with CRM Positive impact while implenting OCRM track and controlling	20	To be able to keep track of what is the product they consume and it is a total relationship until we see if we can offer another product. In other words, it means understanding the client well and seeing that this partnership relationship always exists.	tracking relationship

Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process with CRM Positive impact while implementing OCRM track and controlling	27	But there comes a time when I need to set up a more robust system where not only the person who follows up, but there is some way to follow up from somewhere else, mostly in the cloud.	sales track
Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process with CRM Positive impact while implementing OCRM track and controlling	45	the relationship is very weak, I think that we need a little more follow-up. I mean, track the customer. This is also why I need to implement the CRM, so I will be able to see those things.	Some companies see the necessity to implement a CRM that help them follow up the customer. Thinking that their relationship is weak, they believe that implementing some sort of automation will be helpful to track customers better.
Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process with CRM Positive impact while implementing OCRM avoid assumptions	56	The more collaborative the system, the more information. Remember that information is power, the more information you have about the customer you can understand better and relate better to him. In fact, among all this quarantine, this issue has been like my vision. I have attended online courses on sales and marketing digitalization.	Major understanding
Company - Austria	AT1. Interview - TigerDental	NPD process with CRM Positive impact while implementing OCRM track and controlling	47	it is a tool that helps to get connected with customers on the one hand, but especially to stay connected with and keep track of customers and facilitate enhance the contact with your customers.	OCRM is seem as a tool that besides connecting with customers, keep track of them and communication.
Company - Austria	AT1. Interview - TigerDental	NPD process with CRM Challenges while implementing OCRM needs people factor	51	I think that if, for example, you have a culture, which is geared towards customer service, so everyone is really, really having the same mindset about how to interact. That's one thing which is really fundamental. But on the other hand, if you do not have the inputs that you need, you will never perform as well as you would if you have system in place. So yes, it's definitely I see the CRM as a platform or a software.	A culture that is geared towards customer service everyone has clear how to interact with customer. So the culture can be there, but without a tool or system that support that ideology, the company will never perform as well as with a OCRM in place.
Company - Austria	AT1. Interview - TigerDental	NPD process with CRM Positive impact while implementing OCRM value chain / holistic Communication in processes / information sharing	83	I see there's a really crucial point in this communication and in the process. I hope that I'm not having unrealistic expectation towards it. But this really I see as a big help to keep an overview of the project. Be able to have all informations of the projects for all the persons to have access, to available and therefore also to keep it more visible for everyone.	OCRM helps to keep track of projects, involving departments involved.

Company - Austria	AT1._Interview - TigerDental	NPD process with CRM	83	That's to be honest, that's for me one of the most especially focused off towards R&D. That's one of the most important parts for me that the CRM will have, so that there is information on a mutual desk when a mutual virtual desk light laying there. There are more. There's several people having access to this virtual desk, and then you're able to work together and sit together on this desk and you don't have to To send emails back and forth, you don't have to have each bit of information.	The OCRM could have a big influence in R&D, especially in small teams were is convenient to have actual information from actual customers and then the team could use this to define where to go. On the other hand, the CRM could help to predict and acquire.
Company - Austria	AT1._Interview - TigerDental	NPD process with CRM Positive impact while implenting OCRM value chain / holistic Communication in processes / information sharing	99	Um, and then of course, we have the other the third one, which is Czech Republic and also Ukraine and Russia. We see that there it's quite direct. Of course we have differences there are younger developers with Ukraine and Russia where it's a little bit easier and we have a little bit older developer in Czech Republic but we see that that the culture is very similar there.	communication with external collaborators, international freelancers
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Challenges while implementing OCRM needs people factor	11	I think it's the job of entrepreneur to implement the customer focus strategy and the theorem can be a part of this spread team but it's not the tool that is doing the strategy, it's more than the person that is going on that learns how to interpret feedback.	The customer focus strategy is not build by the tool or system in place, it is more with the people that must know how to interpret feedback and data.
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Challenges while implementing OCRM needs people factor	16	But not I don't think that companies really use the benefits of the CRM they have and the differences they use it more like an address database that's what I'm saying I think it would be great to have I think it would be good opportunity for our region to have series. But I think we should have to we should start earlier in the strategy process already.	CRM used as a database. Needs analytical human factore
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Positive impact while implenting OCRM value chain / holistic	20	my hypothesis would be that you only implement the CRM once you're done with developing the product, so it can be that there can be like a feedback so the question would be probably uh maybe you have to take a different spin on these two to get real feedback. For it I think that maybe for example if you have products or portfolio and you receive feedback an maybe that also gives you an input of what could be the next what you can develop in the next you know yes but wha	service: receibling feedback to improve products or services

Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Positive impact while implementing OCRM value chain / holistic Communication in processes / information sharing	105	This is more like, the funny or the interesting thing is Slack was not the first player on, so why is this relevant for you? Slack is a kind of not a client relationship management but it's a chat pretty much it's a typically chat solution, but for professional purpose and in your context I would see it as a as an employer relationship management tool, so many modern digital companies and use this chat. It originated pretty much from people using WhatsApp in the company and using email as a chat solution and then people found out this is very inefficient indeed. just sucks. And therefore they came up new solutions. And one of those were slick check. But before Slack, there was a one of the leading software companies. It was it's called Atlassian. They identified the same need and they built a chat that was very, very similar and to a certain degree even more powerful because it had some more features and slack for the professional workplace which was called GibChat. They bought this company and there was one major difference in slack it is possible to have private chats. So this what we are doing now a one on one video chat or text chat was possible and it was private, and in GibChat, it was not private. So in GipChat, the administrators could enter to every check. And it was a and I think this is the The primary factor why slack succeeded and GipChat did not succeed is because as a company you also have implicit communication	https://slack.com/intl/en-at/help/articles/218913838-Slack-for-sales
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Challenges while implementing OCRM change resistance - HR	105	Why CRMs are not adopted very well, is because it's a management tool. In the end, it's like SAP. If you have SAP, people just use SAP to squeeze out money out of every single profit centre. That's why people hate SAP. That's why people hate CRMs because the sales manager can go and say, Hey, you didn't send enough emails last month. I think that management that's the reason why CRMs are not adopted.	CRM is a management tool, and so control more the communication and interactions with client, but also in certain way the performance of the employees.
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Positive impact while implementing OCRM track and controlling	152	it's through this tool called that we use Active Campaign. This is a solution that is tracking clients, according to their behaviour pretty much so they behave in a certain way. system identifies this behaviour and feeds it back into the tool. I mean, that's that's pretty much how it works.	Active Campaigns
Company - Austria	AT2._Interview - StarMedia	NPD process with CRM Challenges while implementing OCRM needs people factor	156	, I think what people often think is that maybe this would be some precision that makes sense. The system then will not tell you how what to do. I mean, that's something that people often think oh, then I have a system in place for this piece. And now it tells me everything is wrong.	The system does not say what to do. But
Experts - CRM	EC2. Interview- Francis Buttle	NPD process with CRM Positive impact while implementing OCRM value chain / holistic	4	Operational CRM applies technology solutions in customer-facing functions such as marketing, selling and customer service, sometimes fully automating them.	Marketing, Sales and Service
Experts - CRM	EC2. Interview- Francis Buttle	NPD process with CRM Positive impact while implementing OCRM new opportunities	18	Indeed, it is often a specific job requirement that a key account manager (they exist in SME's too) keeps track of customer requirements and identify product development opportunities.	

Experts - CRM	EC2. Interview-Francis Buttle	NPD process with CRM Positive impact while implenting OCRM track and controlling	18	Indeed, it is often a specific job requirement that a key account manager (they exist in SME's too) keeps track of customer requirements and identify product development opportunities.	Track and control starts with the sales agents, in the first contact with client. This is crucial, they also must be well trained to ask the right questions, specially if a new product or personalized product or service is required.
Experts - CRM	EC2. Interview-Francis Buttle	NPD process with CRM Challenges while implementing OCRM Not collecting cultural knowledge	52	CRM has very little role in creating cultural knowledge, until interactions begin with first clients, and notes can be recorded in CRM systems and shared internally.	Not easy to collect cultural knowledge unless that is defined to do so
Experts - CRM	EC2. Interview-Francis Buttle	NPD process with CRM Challenges while implementing OCRM Not collecting cultural knowledge	54	Yes, operational CRM in which there is interaction with prospects and customers can be used to capture cultural information. However, most, maybe all, CRM systems would need to have database modifications to enable this data to be collected, stored, and analyzed.	Modification regarding cultural information
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Challenges while implementing OCRM change resistance - HR	11	At that time, it became a pressure element for the employees who were directly attending customers, because it was a matter of metrics about the length of time it took them to attend the service.	Pressure elemento for the employees who attend customers. Sales agent mainly. This is why OCRM is seem more like a management tool.
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM value chain / holistic	11	they parameterize both the technological application (the software) with the processes of each of the institutions, but always linked to customer service, that is, no longer only sought to serve at the counter or at the cash desk, but also within the internal processes of the institutions and companies, as they can be more efficient so that the customer can meet their needs.	SERVICE: customer service
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM value chain / holistic Communication in processes / information sharing	11	Where large companies like Dos Pinos acquire this platform and manages to parameterize all their operations systems and processes related to CRM so that today companies have within the electronic platforms, have software that controls absolutely all processes, and is indexed with the CRM platform. In this way the platform seeks to involve all elements and resources, as well as people who are within the organization, so that these people according to the processes to be developed can be efficient in terms of process service you have, your responsibility and not cause what is known in industrial engineering "bottlenecks."	Big companies also use it to parametrize all their operations systems and processes related to customer relations. This relates to the value chain process, because try to avoid the "bottlenecks"

Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic	11	the platform seeks to involve all elements and resources, as well as people who are within the organization, so that these people according to the processes to be developed can be efficient in terms of process service you have, your responsibility and not cause what is known in industrial engineering "bottlenecks." That the "bottlenecks" are those processes that a person does and takes more time than it should take, and then the person who is the predecessor of him keeps on passing him processes, and that person cannot respond to the speed of the predecessor this generates bottlenecks.	UPSTREAM: Avoid the bottlenecks
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic	12	The value chain starts within the whole organization integrating all processes, and the end of the value chain is the customer service. Then if within that process, something is delayed, customer service is affected. Then the CRM controls all this	integrating processes within value chain
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Challenges while implementing OCRM\nneeds people factor	14	two variables were needed: professional technical knowledge and technology.	Knowledge and technology
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Challenges while implementing OCRM\nneeds people factor	14	In-state institutions and large companies have the luxury of having support teams of high professional level with a high level of constant training. The small companies do not have the facility of response in the constant professional update, then when the CRM starts, the big companies, by the knowledge that comes from abroad, the CRM started where you can pay for that training and the multinationals that entered the country.	OCRM requieres people that knows the possibilities of the data and the system it sealf. As read in literature, is useful to analyze and create strategies.
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM	17	trained and even bring their own company tablets that parameterize with the CRM applications. When they talk with the customer, part of their work and the relationship with customers is to find customers' needs to satisfy them, to create a product, a solution.	Salespeople in this process
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM	17	At that moment, the Sales Executive who is already very well trained, he not only expects to arrive at the office that right there with his tablet activates the recording within the CRM platform and everything the customer says or is saved in audio or written form. And they're all the information is taken, that is to say, the client's need, for example, the equipment we are bringing from Scania Brazil that is a solid waste collector. It is a collector that does not work for a client X because it does not have a compartment Y, which it needs to handle the waste for recycling. So he needs a collector that is different from the one we propose, so the question we ask ourselves is if we can offer this particular client a collector that meets those new requested specifications. That's very common, and that's part of the consumer-focused and nano-commercial trade.	Everything starts before the sale. Then the CRM acts like a projec managent tool or assistant cotrolling everything with the goal to satisfy the client
Experts - CRM	EC1. Interview-Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic	19	When the client's needs are clear, the Sales Executive in the same office sends this information, and it is parameterized with a response time to the client and reaches the people involved, in this case, the people in Brazil.	Sales + production. Collaborative system

Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Positive impact while implenting OCRM\track and controlling	19	When we do the market study, we control why the program gives me a week of time to do it and if I don't do it in that week, a warning is activated, which is the yellow one, and if I don't do it more another week, it is activated in red, so it arrives to the CEO.	warnings - project manager tool
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Challenges while implementing OCRM\change resistance - HR	23	So I think that also encompasses the general culture of being tied to processes of change. Implementing a CRM tries to understand that the barrier within an organization implies understanding that the barrier of the psychological shock of the human resource to accept that new philosophy. Already in automatic is a problem, and the employee is the main resource in charge of boycotting or sabotaging the system. They are the first to complain and say that it does not work	Phycological shock is a barrier that is sometimes a issue when is planed to implement any management system.
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Positive impact while implenting OCRM\value chain / holistic\Communication in processes / information sharing	31	For example, the BAC bank is a bank that works 100% CRM complete control of its customers remember that is a regional bank international all requirements of the BAC pass and transcend the region. Paula: Regional, you mean Central America? Javier: Ehh yes, Central and South America and the Caribbean and Mexico. CitiBank is a Mundial bank that is another one. For example, using a CRM that was very robust and powerful, that controlled all the systems and all the departments or what one does is parameterize everything that is done within the organization and the whole globalized world.	International communication as well. Parameterize processes involved in different countries.
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Positive impact while implenting OCRM\track and controlling	35	it is like a "papa caliente1,"	is "hot potato" and the idea is to get rid of it. But in this context the interviewee means that the the " hot potato" is the task that is related to the customer.
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Positive impact while implenting OCRM\value chain / holistic\Communication in processes / information sharing	37	in my case JAFERO Costa Rica is a commercial unit, we are a commercial area. Brazil is a factory where the collector is designed and the machinery and trucks are manufactured. I am the battlefront, who detects the need of the customers in Costa Rica. Everything that the customer tells me and asks me I parameterize with Scania, they get the specifications and requirements that we get here, and they then tell me okay we will start designing while so many find out how the market is then we do joint work of the project. We do the market research here in Costa Rica, and they design products.	Conection of teams even in international background
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM\Positive impact while implenting OCRM\knowledge management	53	Look if now you involve me in the CRM I would say yes because tomorrow maybe I do not know io the morning I'm in another area oh I'm not in the company then it becomes important that the organization, not me Javier Ortiz that the organization knows the company to China culture and relevant aspects of, but that already allows the classic formats.	Important that the information remains inside and not only in the employees.

Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic\Communication in processes / information sharing	54	With CRM it is possible because everything related to that person is stored and connected to the server, it connects me to all the phones when he came to call, with this you can see in everything to call Brazil to the person in charge of production in Brazil.	internal communication
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\avoid assumptions	58	When you design a product, you shouldn't design it with only the technical specifications of a product in mind. If it is not the other way around when you design a product, it is because you know the customer's technical and cultural needs. So if you design the product, you already clearly understand the culture, because if you do market research to make products to China, first to assess the needs and requirements.	Design begins with the technical and cultural needs known
Experts - CRM	EC1. Interview- Javier Ortiz G	NPD process with CRM Positive impact while implenting OCRM\avoid assumptions	58	But the question what you are doing is very important, I will tell you why. If you analyze the case of Euro Disney, it is a megaproject that is studied when courses of projects arrive, this park that is in France. But that park when it was almost bankrupt. Why? Why a world-famous Disney because it almost bankrupted? Paula: I guess Javier: Culture theme Paula: Yeah, Europe's not so pro-Disney Javier: No, what are the best known and best-selling cartoons there? Here it's Mickey Mouse, Goofy, the princesses, which are the dolls you see in Europe? Have you identified them? Paula: Yes, but they're very local, Javier: Exactly, for example, this Viking character who forgot the name... Olafo, I think. Okay, then they sell everything from food and drinks, but nothing in the stores, the Europeans did not identify with those cartoons. It's a cultural issue; the Americans ignored and imposed their American Culture on products to be sold in another continent.	Assumptions regarding culture could be very risky
Experts - Product development	ED2. Interview_ Jorge and Beatriz	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic	29	Especially for the products and solutions that are developed in the production plant in Costa Rica, the implementation of a CRM in the development process is critical and essential because by controlling the creation value chain, the CRM allows to obtain information that enriches the investigation of the needs, expectations and scope that our products have in the market. In the case of imported products, the CRM also has a leading role in determining the entire product offering and specification which are more adapted to the needs, customs, or characteristics of the market	control creation of value and enriches the investigation of research
Experts - Product development	ED2. Interview_ Jorge and Beatriz	NPD process with CRM Positive impact while implenting OCRM\value chain / holistic\Communication in processes / information sharing	67	the CRM becomes a vital tool for filling such potential "gaps" in the development chain because it allows clear and comprehensive documentation of the NPD processes.	communication with external collaborators, international freelancers
Experts - Product development	ED1. Interview_ Andreas Ebermann	NPD process with CRM	76	This pipe drive is is at the moment use an old site for just for the sales activities for listing clients in the product developments on the product development side or the service development side. We don't use it. It's not it's not implemented on our site. So, okay, we're just on in terms of sales and Project listing.	Used only to list clients in the product developments.

Experts - Product development	ED1. Interview_A ndreas Ebermann	NPD process with CRM	134	It's also really important that if you're making if you're starting to have a contract with a potential client, that amount, have money in charge. And the service you want to provide him is something the actual design or the product developer is sharing. You know, it's not that it's not that someone sells something and then the designer has a total different approach because he's the one who has decision about this project. So there should be a connection. Okay. other departments are more like separated in the bigger company bigger agency. Like it's very important that information can be shared through like, for example, a Pipedrive or CRM system and in a smaller company in any way like, usually this the same person. I mean also like, if you're in a second round go to a new client. Always also designer was someone who's actually been working with them together.	Sales and design - work together sharing info
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Table 8 [Product Development with CRM quotes_Appendix 7]

Appendix 8 – Product Development without CRM quotes

Group	Interview	Code	Start	Segmento	Comentario
Company - Costa Rica	CR1. Interview - Ampo	NPD process without CRM\Challenges of NPD processes without OCRM\lack of traceability in value chain	34	The CRM is required to be automated. Five years ago, we didn't have this platform and it was impossible to keep track, to know the customer, his culture in a physical file because it was impossible to be updated minute by minute.	Not possible to keep trrrce of customer's information
Company - Costa Rica	CR2. Interview - Grupo Vargas	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	15	We have a design team that receives the inquiry's for our customer and we research with our suppliers how to develop the product with the finish that our customer needs. In most of the cases are with paper mills, varnish, and inks suppliers.	
Company - Costa Rica	CR2. Interview - Grupo Vargas	NPD process without CRM\Alternative ways - positive side\App or alternative software	26	We use Prinect software that is link to our design flow, that receives by the portal web the arts for the new project, is other software is focus in our process that is graphic arts. This design flow has the capacity to manage the art and prepared for the press room. In this part we don't link anything to a CRM.	Prinect - client can follow up project, but no link to CRM
Company - Costa Rica	CR2. Interview - Grupo Vargas	NPD process without CRM\Alternative ways - positive side\App or alternative software	44	in our process we do not apply the CRM for this, we have other systems that gather all the information to develop prototypes as the customer needs, before that we create an internal design order and we schedule updates to see advances and see if is fine to pass it to manufacturing.	Other systems to gather data
Company - Costa Rica	CR2. Interview - Grupo Vargas	NPD process without CRM\Alternative ways - positive side\App or alternative software	46	we have special software to attend technical specs, some of them are born and raised in our company, we have also an app the its call "autogestion" so the customer sends arts, purchase order and any documents such as specs. And they can see the status of their orders until is ready for shipment.	App "Autogestion"
Company - Costa Rica	CR2. Interview - Grupo Vargas	NPD process without CRM\Alternative ways - positive side\App or alternative software	48	We have all systems to gather all the information in data base and transform in reports, we don't invest time in building reports, only to analyze and take actions and make things happen. We have qlick sense, shoplogix and minitab to report data, and Business Intelligence (BI) data to gather info for our software to have automated reports, such as inventories dashboards, sales dashboards, and balance scorecard automated indicators.	Business intelligence
Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	27	It was from several things, from a job I had, which was not a so-called MCA. But I already had information and I also started to investigate and dedicate myself to that to see what could help me for what I wanted to do. Before, everything was done in an Excel sheet.	

Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process without CRM	34	<p>basically, if it's to be customized for a client, he tells us what he wants. Usually they already know what they want so we give them a technical sheet and they fill it out and we develop the product under that technical sheet. Then the relevant tests are done, and a sample is presented to the client.</p> <p>There are others who do not know what they want and so it takes more effort to get the information out of them, almost "with a spoon". In fact, at this moment I have a project like this. It's just difficult when they don't know exactly what they want. He asked me for a product and for a photograph as a reference. He doesn't mention flavor, texture, nothing but the picture. But the photograph won't tell me much, it just gives me the cosmetic part and that's it. And then I ask him questions and he insists that's what he wants. So now if you start researching what options can be offered to the client or that company. And according to the possibilities, to what is investigated to what is solved the problem or product.</p>	Cuando el cliente no sabe, hay que dedicarle mas esfuerzo para entender que quiere
Company - Costa Rica	CR3. Interview - AIA del Caribe	NPD process without CRM	42	<p>But now, before developing a product is necessary to check how feasible is to produce it in plant. If we need to buy new equipment, which equipment is needed, see if we need to adjust or build because sometimes there are no equipment for some processes, and we have to solve it somehow. This is because sometimes I have had to place equipment and modify it to produce what I need.</p>	Feseability of projects *??? IS RELEVANT ?
Company - Austria	AT1._Interview - TigerDental	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	59	<p>So it's a multi step process, but it eventually starts with the idea which either comes from us as a company where we say we need to change something or in most cases it comes from the market where we get an also feedback to either an adaption of an existing product or a new product.</p>	starts from a idea found form experience (Dr. Winsauer)
Company - Austria	AT1._Interview - TigerDental	NPD process without CRM	59	<p>So it's a multi step process, but it eventually starts with the idea which either comes from us as a company where we say we need to change something or in most cases it comes from the market where we get an also feedback to either an adaption of an existing product or a new product. The first step then is to evaluate if this is something that really creates an echo. So we are right now, you know, having phone calls with certain customers asking about it best, I would give you an example so it makes it a little bit easier.</p>	The process is done by the entepreneuers. Family grandfather, father and son. Today the R&D is done by Julian and Heinz (this father)
Company - Austria	AT1._Interview - TigerDental	NPD process without CRM	59	<p>So, after we checked that product will not be more or less expensive or less wouldn't be a problem but wouldn't be more expensive than another size. We started with the planning, so we were sending emails back and forth with with our developer. And then until the first phase when we had the plans and we had to confirm them. We received our first prototypes. We were testing the prototypes and first on machines to really see how stable they are if they are working after we had a confirmation of a certain number of pieces that they were. We transferred into the clinical testing. And after the clinical testing, when we saw that it works, we're, we started to we have it certified and then that's it. Okay, I need to promote it afterwards.</p>	example

Company - Austria	AT1._Interview - TigerDental	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	87	we have no program or anything that's it's just via email via phone. And then the survey on the website,	
Company - Austria	AT2._Interview - StarMedia	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	33	I mean if I have a hotel then I would be maybe one of these thousands or the after 2500 or something, but they don't use the CRM, I mean they have like a list for sale this client wants to have like let's say I don't know a bottle of champagne on their room or something, but I mean today do I need a CRM for this? no, probably not. I think it would be sufficient to have just the registration book and the proper a person at the counter where they write it down. I mean they can do it in a CRM and it's good, but there's no automation, you need that they don't use it for marketing	
Company - Austria	AT2._Interview - StarMedia	NPD process without CRM\Alternative ways - positive side\Rudimentary but effective for SME	80	Yeah, at this moment, we do this person on a personal basis we talk to the people directly because we can, but on but on the other, but when we are using when we are using, when we built, for example, the shops or when we market the product to the clients of the customers, we cannot talk to every single customer.	
Company - Austria	AT2._Interview - StarMedia	NPD process without CRM\Challenges of NPD processes without OCRM\when poseses product portfolio	80	when we built, for example, the shops or when we market the product to the clients of the customers, we cannot talk to every single customer. I mean it will be impossible because these shops typically have hundreds and thousands of users. So there we primarily use. On the one hand, Google Analytics we would use or reconsider to use like personal analytic solutions.	When target clients of the clients of the customers
Company - Austria	AT2._Interview - StarMedia	NPD process without CRM\Alternative ways - positive side\App or alternative software	80	when we built, for example, the shops or when we market the product to the clients of the customers, we cannot talk to every single customer. I mean it will be impossible because these shops typically have hundreds and thousands of users. So there we primarily use. On the one hand, Google Analytics we would use or reconsider to use like personal analytic solutions. So I think your approach about the CRM, I think it's good but we don't at this time we do not have a analytics solution that is also GDPR compliant, and that is affordable to make personal analytics work. What we do use is we do have software that is doing kind of something like this we use Active Campaign is an email marketing software that triggers inside the website to generate certain behaviour texts and therefore creates a specific personalised dialogue flow. So this goes pretty much I think, into your field of knowledge. On one hand, this is one of the most powerful tools we use, because it works very, very well. And on the other hand, we also see that it's pretty hard for the companies, for our clients to adopt this approach.	Google Analytics - Active Campaings

Experts - Product development	ED2. Interview Jorge and Beatriz	NPD process without CRM	24	<p>For the case of the development of products in the plants of Asia, Shanghai Feilo Acoustics has a network of departments of Design and development of product that are in charge of developing and innovating the market with solutions of illumination of tendency and high technology. These portfolios are available to the different regions of the group, in order to assemble the portfolio and offer that best suits the needs of the region and its customers. In the case of our factory in Costa Rica, as it is a metal-mechanical factory, we only develop certain types of lights. The process can be derived in two ways:</p> <ol style="list-style-type: none"> 1. Our R&D department develops products for the lighting market based on trends, needs or concepts that are acquired at international lighting fairs or with feedback from the group's R&D departments. 2. We respond to specific lighting needs of our customers, so our R&D department develops lighting solution systems or products to solve specific needs together with the customer. 	Could be more helpful in R&D instead of Development
Experts - Product development	ED2. Interview Jorge and Beatriz	NPD process without CRM Challenges of NPD processes without OCRM lack of information - without CRM	39	In our case, product development without the implementation of a CRM as a product management model would not be possible. Because the approach with the client is so narrow and the complexities of the lighting projects are so big, we work with the clients in achieving that our products in their ranges and specifications can fulfill their needs or in their defect we develop from adaptations to new products to be able to satisfy the need of lighting of these.	Possibly in depends on the particular niche when the projects complexity get bigger and involve possibly more departments to full fill it. Example technological projects lightning, engines, etc.
Experts - Product development	ED2. Interview Jorge and Beatriz	NPD process without CRM Challenges of NPD processes without OCRM lack of information - without CRM	41	I mean, let's see. What I mean is, we don't have a CRM, but really the product design process should be with a CRM. What I mean is, it is much more difficult or rather much more effective in making development decisions, if you don't have a feedback like the CRM, but good that you can, you can because we work without it, but that has caused certain limitations, missing and even lack of missing information. This is much more inaccurate work.	Information missing while working without OCRM
Experts - Product development	ED2. Interview Jorge and Beatriz	NPD process without CRM Challenges of NPD processes without OCRM when poses product portfolio	43	Basically feedback information, because if you do the development of a product you need. Let's see, if you are starting from a product that has an extension within the same category, say portfolio that already exists. The feedback that the CRM can give you can even last for a while.	The lack of constant and updated feedback extends the process and make the firm increase efforts.
Experts - Product development	ED2. Interview Jorge and Beatriz	NPD process without CRM Challenges of NPD processes without OCRM lack of information - without CRM	44	If the product is new. Then the CRM will give the very basis to be able to fulfill a customer. That's the idea, if you don't have it, you can do it, but you're assuming a lot. You are therefore taking many more risks, and you are falling into great uncertainty because it is not easy to make decisions without this clear information. Then you have more uncertainty because you can't preach so much about your projection, acceptance or market behavior of the product.	High risk of uncertainty when working without OCRM in this processes

Experts - Product development	ED2. Interview_Jorge and Beatriz	NPD process without CRM\Challenges of NPD processes without OCRM\when poses product portfolio	60	I think it also depends a lot on the niche market, but in general when you're opening up to mass markets, you're going to lose a lot of connection with your target audience if you don't retain. This talking about mass products	To retain, avoid lose connection
Experts - Product development	ED2. Interview_Jorge and Beatriz	NPD process without CRM\Challenges of NPD processes without OCRM\lack of traceability in value chain	66	For me, the main cultural problem that can appear in the NPD process is governance (rigour of compliance with the stages) and traceability that must exist in the value chain, in addition to the lack or laxity of documentation or in the establishment of the stages. By virtue of the above, the CRM becomes a vital tool for filling such potential "gaps" in the development chain because it allows clear and comprehensive documentation of the NPD processes.	Lack of traceability regarding processes and value chain
Experts - Product development	ED1. Interview_Andreas Ebermann	NPD process without CRM	44	,since we are working with for a very long time for bigger client, this process shortened to the I would say like the two additional industrial design product design process which starts from, of course clients requests for a new product development with its briefing which is usually in our case since it is like a process that has been gone through many times. quite quite specific. We get 3D data, we get some random information on the product itself. Already provided from our client, and then we start to think about what we start with sketching and division. So it's like a free sketching process and with our expertise we put all the information which would have been collected in the first UX process, we put a pause in this and then this, this leads to, to vision into which is sketch and design idea that we are going to present to the client.	Even though the company has one (PipeDrive), is not implemented in the NPD process
Experts - Product development	ED1. Interview_Andreas Ebermann	NPD process without CRM\Challenges of NPD processes without OCRM\Designers are not familiar with the CRM	80	as I, as I don't work with this, because I'm more on the development side than on the sales side, I don't actually know what this program is, like what could be also functionality in terms of collecting information.	Lack of knowledge of CRM from designers and developers

Table 9 [Product Development without CRM quotes _Appendix 8]

Appendix 9 – Cultural-related challenges quotes

Group	Interview	Code	Start	Segmento
Company - Costa Rica	CR1. Interview - Ampo	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\religious, political issues	36	there could be products could be produced that due to lack of knowledge of the culture are not adapted or simply not used due to religious, political, etc. issues. This cannot happen at AMPO because it could not pass the research and development phase because it does not adapt to the culture. But if it happens, the design is simply discarded.
Company - Costa Rica	CR1. Interview - Ampo	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\Cultural Heritage	38	Example Guatemala, which is one of the Central American countries with very strong and important indigenous roots. Therefore, a partner company in Guatemala that is a strategic partner (of the same nature, that is, a plant that produces biodegradable products). The case is of religious origin.
Company - Costa Rica	CR1. Interview - Ampo	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\religious, political issues	38	An important population in Guatemala is indigenous and to say that products are derived from plants of which they as indigenous use them as medicinal products, but with a religious connotation, makes that not all the plants can be used to produce the disinfectant products because an indigenous population would not buy them. The problem with that is that it is not easily understood which areas are sacred, cemeteries or places forbidden to collect plants. This is a cultural issue that does not occur in all of Latin America, however, it is possible to find and culture.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\Cultural semantics	47	Then you had to understand, just like the customer when he saw the product with a certain ingredient, he said that it was necessary to model or target the segment. Then, as soon as it is packaged, for example, even the colors have a lot to do with it. In some countries it is important to see what is not consumed and what is. The cultural part is always important when you are developing a product.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\Androcentrism culture	49	I also learned in Arab countries, they are more likely to do business with men, not so much with women. They need to do business with men.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\Androcentrism culture	52	but one finds that problem even in Costa Rica. I was recently making some repairs in the plant and I had that situation with the contractor. I was the one who was paying, and I was the one who designed the place and approved the design. And he would come and when I talked to him, - yes, yes, yes-. Then he would go and ask someone else. And I, something is not right here. In fact, I hesitated and let the first and second time go by. The third time I confronted him, I pointed out that I am the one who pays, the one who approves here is me. Therefore, I told him that if he was not willing to work with me then he can't get my money, it's that simple.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\Androcentrism culture	54	You have to demonstrate a lot, and the worst thing is that you have to demonstrate twice as much as you can do. And the culture is interesting because I was working with American companies, and the relationship I had with the Americans was greater than in the "tico" market.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process	58	I was told not to offer that product. That was what the representative who told me, not to offer those products because that product is consumed only by animals, nothing else. In Costa Rica it also happened, in my grandparents' time bananas were not seen as food because that was what was given to the animals.

Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\Cultural semantics	58	That was what the representative who told me, not to offer those products because that product is consumed only by animals, nothing else.
Company - Costa Rica	CR3. Interview - AIA del Caribe	Cultural problems or challenges PD process\Cultural semantics	58	In Costa Rica it also happened, in my grandparents' time bananas were not seen as food because that was what was given to the animals.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast\Communication contrast-uncertainty avoidance	99	I would see Czech Republic as a little bit the same way. The two I think Germany is a very extreme way in being very, very be open and very, very direct. South Korea is the other way, where it's very indirect communication.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast	99	So for us the knowledge on the cultural knowledge on the cultural differences goes as far as our previous studies of those countries before we even are when we started with the partners, but then having also our own experiences with the partners, and especially for Asia, we see that we have, for example, very different hierarchies.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast>Contact rotation	105	But I mean cultural information. It's one part but also a whole technical information. It's, you know, you start to you start to collaborate with someone and you really get to know this person. And then it was really interesting to see our Korean partners, we tend to have switched positions each one or two years. So as a result, I have been working in my past six years. With the company I've been working with, for five years, I've been working with three different guys from from there. Well, that makes things really complicated
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\build trust	105	Well, that makes things really complicated. It's especially and now I think this is a really important part for your thesis, especially when you have to kind of gain trust again, which is very important in Korea.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast	113	I mean, in our culture, if you are developing a product and you are collaborating on it with your partner, your partner will tell you the things that are possible and the things that aren't possible. That's the first step. And then in the second step you directly followed. He will tell you why it's impossible. You have an issue, and you have the clear statement, why isn't it possible? Why can you can you? with Asia we had the problem of non clarification. So things weren't working. Things just didn't work out.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast\Communication contrast-uncertainty avoidance	113	I mean, in our culture, if you are developing a product and you are collaborating on it with your partner, your partner will tell you the things that are possible and the things that aren't possible. That's the first step. And then in the second step you directly followed. He will tell you why it's impossible. You have an issue, and you have the clear statement, why isn't it possible? Why can you can you? with Asia we had the problem of non clarification. So things weren't working. Things just didn't work out.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast\quanxi not for all	113	And we see that in Asia, at least all partners are having very big difficulties in telling you that they're not able to do something. And then elaborating closer Why? which is which we had we had one example with the development of a screw, which cost us about two years of development time because we're going back and forth. And we were really seeing that this was the point, you know, we were seeing a problem somewhere else. And then after two years, we had to realise it was a very, very different cause of the whole problem. But they wouldn't tell us they wouldn't really tell us, we needed to really personally meet them and talk a lot of time spent time together. And then we were able to read a little bit between the lines and for someone from Europe. That's Really, really hard.

Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast	129	So basically, if you're trying to learn this type of culture, if you will be successful in your product development, and this is why I'm having this thought of that we also discussed when when you were in the company of rather trying to have a certain development process internally and then have certain well, production steps, outsourced internationally, but I think this is if that's why I think it's really hard because, yes, you can do a culture course, yes, you can do notes, you can have a dashboard, where were all the important informations about this partner is about this habits. But if it's really about very different culture, it's difficult.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\not national but generational culture	129	On the other hand, I would also be bold enough to make the assumption that you see a difference when especially looking to China and Asia, that you have a real big difference between the elder population and the younger generation where the younger generation it's really different than I know first hand from the developers, I know firsthand that now communication with the guys in the company in the our partner company, we who are speaking fluent English, they are super, like having an almost an American accent.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\not national but generational culture	130	Whereas the older generation, even due to the language barrier, and it's, I'm sure also the cultural aspects. It was way more difficult. So I think that yes. Bringing it now to the point of your question, yes, those tools definitely help to avoid big mistakes and big problems with the communication, especially if the next like if there is a new person coming into the company.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast>Contact rotation	131	But if you're talking about product development, you're talking about a very complex and big thing, you know, and it's getting frustrated, you know, you're getting frustrated, you're having multiple faces, where things will fail, where things will not work. And I think in this type of work to really keep like, to those norms that are absolutely not yours or is real Really difficult.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\build trust	139	I mean that's the end of the story. You know, you know, the we have now a German company is we are developing the screw with. And we were trying to to do it with with the Asian company for quite a long time. But this I think it was really this combination of this combination of culture the language and connected with those two factors also trust it was it was for me the most I think we talked about that already.
Company - Austria	AT1._Interview - TigerDental	Cultural problems or challenges PD process\big cultural contrast	139	I think the big problem is when you have such a different culture, and it's really hard to you have to you know, you have to change yourself to, to work with them. It's not natural, you know, they're, they're just basically part of the culture. It's not to smile too much not to lose your feelings or whatever. I mean, Well, you're in this environment. And it's such a, like, crucial topic for you that you're working with. Yeah, it's it's for me it has if I cannot trust the people 100% it's it's hard to to cooperate.
Company - Austria	AT2._Interview - StarMedia	Cultural problems or challenges PD process\build trust	24	So I think it's absolutely important because when, let's say, probably I mean I saw so many different ways, how to sell to some people, they just drink with their clients. That's how they sell, did they just build up relationships make them make the clients friends and they said that's how they sell.
Company - Austria	AT2._Interview - StarMedia	Cultural problems or challenges PD process\big cultural contrast	24	So I think it's absolutely important because when, let's say, probably I mean I saw so many different ways, how to sell to some people, they just drink with their clients. That's how they sell, did they just build up relationships make them make the clients friends and they said that's how they sell.

Company - Austria	AT2._Interview - StarMedia	Cultural problems or challenges PD process	24	If you are selling very big key account product, that's how you sell if you are selling screws, to take clients today you don't have, you cannot drink with every client. Until they are out of out of consciousness so because it will be after the first man you're done so then that's completely different approach so in the one way you have a very structured product we would say and in the other way you have a very social center.
Company - Austria	AT2._Interview - StarMedia	Cultural problems or challenges PD process/build trust	172	they had a different approach to the product, they had a different view on how things should be done and so on. So I think on people, once people meeting personal they can build a personal relationship and can develop kind of a common culture, but the more distant the culture is, so if you are, I think, for example, it's pretty difficult to work with people that are probably from the other side of the of the planet. It can it can work can work if everyone wants, but it can be pretty difficult.
Experts - CRM	EC2. Interview- Francis Buttle	Cultural problems or challenges PD process/build trust	27	Relationships are composed of actor bonds, activity links and resources ties, as now described. Actor bonds are defined as follows: Actor bonds are interpersonal contacts between actors in partner firms that result in trust, commitment and adaptation between actors Actor bonds are a product of inter-personal communication and the subsequent development of trust. Adaptation of relationships over time is heavily influenced by social bonding.
Experts - CRM	EC2. Interview- Francis Buttle	Cultural problems or challenges PD process/big cultural contrast/quanxi not for all	47	Here's an extract from my CRM text, which explains more fully. Guanxi (pronounced Gwan-She) is, essentially, a philosophy for conducting business and other inter-personal relationships in the Chinese, and broader Asian, context. Therefore, its effects have a significant impact on how Asian societies and economies work.
Experts - CRM	EC2. Interview- Francis Buttle	Cultural problems or challenges PD process/big cultural contrast/quanxi not for all	50	Guanxi has become a necessary aspect of Chinese and, indeed, Asian business due to the lack of codified, enforceable contracts such as those found in western markets. Guanxi determines who can conduct business with whom and under what circumstances. Business is conducted within networks, and rules based on status are invoked. Network members can only extend invitations to others to become part of their network if the invitee is a peer or a subordinate.
Experts - CRM	EC2. Interview- Francis Buttle	Cultural problems or challenges PD process/big cultural contrast	56	Many US firms have found it very difficult to win business in Asian markets because of cultural differences.
Experts - CRM	EC1. Interview- Javier Ortiz G	Cultural problems or challenges PD process/big cultural contrast/Regional or micro-cultures/micro-culture / personality	56	I'm going to go into more detail, I don't know if I can call it micro-culture, because we had a relationship with a Canadian client, for example, and we had a collection truck for that client. This man talks to me directly from Canada, but if someone else wants to talk to this client, because I am on vacation or because I do not work for the company, at least he should know the way this man likes to behave, his micro culture, his personality.
Experts - Product development	ED1. Interview_ Andreas Ebermann	Cultural problems or challenges PD process/big cultural contrast/Communication contrast-uncertainty avoidance	44	And there is like already different in terms of how you communicate like if it's to German or client that is closed by go there personnel right you presented in front of directly in front of the client if you're doing it for example to Japanese guys, we just sent a presentation and mostly communication is done on this Japanese side through presentations and those are like much more detailed in explanation. Because of the language barrier and after that vision, we go into detailing of 3D CAD modeling right.

Experts - Product development	ED1. Interview_And reas Ebermann	Cultural problems or challenges PD process\big cultural contrast\Communication contrast-uncertainty avoidance	44	We do also this like based on the feedback we get, on the first phase. Next phase we sent a 3D model to them. Maybe there are some iterations in between, can be. In the next phase, they are transferring our design data CAD data into construction, construction models, construction files and then we are then we are not the ones who are like giving them the data but we are like helping them to realize construction data and get close to our CAD model and our design that we were proposing. So it's like a communication between us and the engineers pretty much in detail.
Experts - Product development	ED1. Interview_And reas Ebermann	Cultural problems or challenges PD process\big cultural contrast\Regional or micro-cultures\hierarchy culture	56	Between the Japanese, the German or the American guys, the communication is very different. In Japan, you need to explain everything with a presentation. You cannot call them because of the language mostly. They need to have someone to read and someone to translate. And that's the first reason, you need to communicate like this. Second is they have different hierarchy. So it's not like that you call directly to the engineer who's doing it communicating to the manager. And also, he cannot decide directly if this can be done, but they can they take like, the request, and then they communicate internally. Okay, after we made a decision based on the hierarchy, they communicate back. No, it's no decisions made directly. It's always like in their backside based on a very, very different even we're developing sometimes very similar products, development process is always different
Experts - Product development	ED1. Interview_And reas Ebermann	Cultural problems or challenges PD process\big cultural contrast>Contact rotation	60	like First of all, it's about nationality, this biggest thing. Of course, you always work with different persons. And that's, I mean, it always has an effect you're working, if this guy was a retard is always like, it depends on the working process, but maybe maybe it's a matter of cultural background.
Experts - Product development	ED1. Interview_And reas Ebermann	Cultural problems or challenges PD process\big cultural contrast\Communication contrast-uncertainty avoidance	100	And also like if you're talking about how to say like something like taste which is very, very important you know, Japanese people, for example, have a totally different kind of; perceive things different and they have different architecture and the different totally different perception of fear of flying in Chinese guys, for example, you know, and also that is in our case, the reason that those products are like worldwide distributed. It doesn't have a big impact. And it's more the working was it was a totally before it's well, different small in the in the cooperation between us and engineers and developers. Because communication what I said before, but also the way you communicate. I'm much more polite. It's not like you don't do this very direct communication. You don't say that is s**t. It's not good. But it's really enough, and I also see it on the client side itself is that it's like a huge political system, such a company. Like the board of those companies, there's kind of very specific species of people and so in the German side of the board can say something like this shit, f** this . That's the young Japanese, the Japanese side would never do that. It's that's more like not that direct way. It's also even within Europe you have this if you're talking to a Swiss guy, for example, I don't know how long you've been here, how long you will stay. But Germans are much more direct than for example, Swiss guidance, same thing.

Experts - Product development	ED1. Interview_And reas Ebermann	Cultural problems or challenges PD process/big cultural contrast\Communica tion contrast- uncertainty avoidance	114	<p>“Communication is, of course, the most. The biggest challenge, let’s call it positive. Well, in our case, sometimes the expectations the Japanese have to our work may be sometimes too unreal. [...] the way that the Japanese guys are working, how do they more or less planned, so it might be that they can ask us to help them with some problem or some project and of course like we as Germans or as European we would set up all requirements very well and be sure that everything is safe and then we would go to design or to the partner and give this requirement package to them. Sometimes they don’t think that way and don’t make it that complete, it can be that they give us some first attempt on their project draft which is unfinished, and so we’re starting to develop and help them and after we are finished [...] We figured out, then they changed their mind to change the plan in some ways, then the requirements totally look different and we can start from scratch. So, there are many many iterations but not during the process just starting from the start.</p>
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Table 10 [Cultural-related challenges quotes_Appendix 9]

Appendix 10 – Costa Rican- companies interviews transcripts

CR1. Transcript - Costa Rican company AMPO s.a./Javier Salazar - Finance director

Interviewer: Tell me about your company and international experience.

Javier: AMPO Ltda. Started its work in 1965; it has specialized in the manufacture of "Manual Office File Cabinets", from which the name AMPO is derived. We have been distinguished by the excellent quality of their products and the careful service to their clients in the Central American area, Mexico, and the Caribbean.

AMPO is a company committed to sustainable development. And we distinguish ourselves by the excellent quality of our products and the careful service to our customers. For ten years we have been exporting to Central America, to the main supermarkets in the Central American region and Mexico.

Interviewer: Would you say that the company is customer-centric or product-centric and why? - B2B context

Javier: Okay... everything started because Don Juan José Trejos saw that at that time, papers were filed in boxes because there were only folders, and these could not hold more than a certain quantity of papers. Therefore, in one of the many trips, he observed something similar and put the company, today it is still almost a monopoly, so this is known as AMPO, and we all position as AMPO the portfolio, when in fact, AMPO is the brand. The company was initially created not so much thinking about the customer but to provide a product of files, folders, and stationery that at that time, nobody produced in Costa Rica. The idea was to cover a need that the client did not feel now because it was not offered in the market as an alternative. When AMPO was created, and with time, the orientation became a little more in the product. In other words, the aim is to create products that do not pollute, and this is in line with the world's need. Obviously, the customer is attracted by the interest of the product and the environmental responsibility of the brand. Currently there is much relationship with the direct client, and this helps a lot to create new products that are friendly to the environment. It can be said that there is a culture of customer service. Our commitment through these decades is to improve day by day to serve all our customers better.

Interviewer: and in this case

Interviewer: How this idea of customer-centric is implemented in the company's culture?

Javier: The owners have marked a culture of personalized customer service. This has been defined since the creation of the corporate government which allows the generation of a customer service policy.

Interviewer: Are you familiar with the term Customer Relationship Management? And if so

Interviewer: What is your understanding of this?

Javier: CRM has been used in the company for approximately 5 years and maintains a direct customer service relationship. The CRM is a work philosophy through which the company and the customers are integrated. Processes and specialized customer service are controlled. The CRM in the company is managed in a platform designed by the company and the same seeks to keep track of customer service and processes pending to serve them properly.

Interviewer: Ok, now regarding the product development. When a customer wants customized services or products to key clients. How is the process?

Javier: If of course, for example, the print designs, colors, writing of the AMPO becomes standard for all customers, but also adapt to the colors of the companies. Sizes are standard, small, letter and legal. First the sales agent takes note of the customer's need, uploads it through the crm platform to the research and development department and to the sales management. When the prototypes are generated, a focus group is created with some friendly clients and they submit the product to hear the degree of acceptance. Then this department issues a report and prototypes, it is presented to the board of directors and if they like the idea it is approved. This means that the production phase begins.

Interviewer: How much effort is your organization making to understand and find out the customer needs?

Javier: On Fridays, meetings are held in the commercial area where visits to clients are planned for the following week, both locally and to clients outside the country. In these meetings are scheduled each appointment and the issues that would be addressed such as ways to increase sales, support them in financing, improve price, facilitate the process of buying and selling, and meet new needs. Once the week's agenda is planned, the appointments are entered into the CRM platform. These appointments are recorded in day, time, place and automatically the crm controls the appointment and sends emails to the client and those involved for follow-up ... as the appointments are given, the agent must enter the CRM from the customer's office in real time, the results, new business opportunities. These opportunities are controlled by the CRM who initiates an automatic follow up process until those involved close the case in the platform. This ensures that the client was properly attended.

Interviewer: Is CRM implemented in the process of developing new product? If so, how?

Javier: The CRM is involved from the moment the sales agent puts the new opportunity into the system. The implementation of the CRM was dictatorial by the board of directors given the aversion to change shown by some departments. It was not easy, but it was achieved.

Paula: What are companies do to have a better relationship with their B2B customers?

Javier: AMPO's relationship with its client companies is based on an excellent personal relationship. The culture of the Central American companies, despite being different in vocabulary, idiomatic phrases, has been compensated by the friendly treatment and service and simply not talking about political issues. I think our cultures are very similar and that is why it can make things easier.

Interviewer: How would you describe the relationship that the company has with the international customers?

Javier: The relationship with the international business clients is excellent basically because of the good treatment and good attention, personalized service and attend their needs to create products short with their needs.

Interviewer: And, how should be managed the cultural knowledge of the clients? Do you think it is important to build long-term relationships?

Javier: It is important because in Central America there are countries with their own cultures in language, way of behaving, negotiating. What you do is be very careful and have protocols to speak only what is working. It is not allowed to talk about topics outside the work context.

It is relevant because every country, every company, every person has its own culture and must be respected.

Interviewer: How much is the international customer involved in the development of a product?

Javier: During the generation of prototypes in the R&D level, some samples are sent to the clients so they can give some feedback.

Interviewer: mmm okay, but in which way? How is the workflow?

Javier: The samples are sent by the specialist to explain the technical issues of the design. These tests are customized by the company until the product meets the expectations. Once the company accepts the product, it is taken to other companies for additional feedback. If the initial company is very large and with only this one, it is worth the production. Then they do not investigate further but produce the product only for this company given its high volume of sales. Then they will follow an advertising campaign trying to sell that product in other companies. If the modality of focus group exists and sometimes several companies are also invited to the plant to learn about new inventions and designs. If the acceptance is group, they may also produce the product.

Interviewer: How are you dealing with the cultural aspect of clients? Which methods are the companies using to gather this information from international clients (with or without CRM) to develop new products?

Javier: The CRM allows the sales agent to enter customer information, therefore, it is clear the pending, requests, knowledge of the culture. All this information is entered day by day through the designed CRM platform.

Interviewer: Do you think that marketing, sales, or service automation can help to gather this data?

Javier: The CRM is required to be automated. Five years ago, we didn't have this platform and it was impossible to keep track, to know the customer, his culture in a physical file because it was impossible to be updated minute by minute.

Paula: Which culture-related problems could appear in the NPD process? when dealing with "international development partners"?

Javier: there could be products could be produced that due to lack of knowledge of the culture are not adapted or simply not used due to religious, political, etc. issues. This cannot happen at AMPO because it could not pass the research and development phase because it does not adapt to the culture. But if it happens, the design is simply discarded.

Interviewer: Ah, okay I understand. And could you give me some examples?

Javier: We use materials that come out of the plants, and they use that to produce biodegradable products, which seems to be good and accepted in the market. However, when you explain where that comes from, there's a spotlight. And while some may accept the idea, others may not. Example Guatemala, which is one of the Central American countries with very strong and important indigenous roots. Therefore, a partner company in Guatemala that is a strategic partner (of the same nature, that is, a plant that produces biodegradable products). The case is of religious origin. An important population in Guatemala is indigenous and to say that products are derived from plants of which they as indigenous use them as medicinal products, but with a religious connotation, makes that not all the plants can be used to produce the disinfectant products because an indigenous population would not

buy them. The problem with that is that it is not easily understood which areas are sacred, cemeteries or places forbidden to collect plants. This is a cultural issue that does not occur in all of Latin America, however, it is possible to find and culture.///CODE-- Regional cultures (INDIGENAS example9).

Interviewer: How should be managed the cultural knowledge of international clients and partners?

Javier: This is achieved simply through an excellent relationship with clients, international partners and AMPO executives. An excellent relationship makes new business possible, business in line with customer needs. That are adapted to their requirements and designed without affecting their religious, political, social culture, etc.

CR2. Transcript - Interview Company – Grupo Vargas GV S.A./Industrial Engineer Diego Salazar-Controller / 26.05.2020

Interviewer: Tell me about your company and international experience.

Diego: Grupo Vargas GV S.A. is a 100% Costa Rican company who manufacture wet glue labels for the beer industry, IFU's for medical devices In different finishes such as glue, stapled and fold, also we produce folding cartons for medical devices, beer industry and for food, electronic industry. We export 80% of our production to free trade zones and USA (medical devices), Heinekens Brewery's in Panamá, Ecuador and Haíti and Nicaragua and Costa Rican national Brewery.

Diego: Today our company have 205 employees and manufacture over 300 tons of paper per month, having with us the latest technology of printing and finish manufacturing, our Infrastructure is about 8000 sqm.

Interviewer: Would you say that the company is customer-centric or product-centric and why?

Diego: Our company is customer centric because we are a company that manufacture by make to order and not to make to stock, our product is only produced by our customer orders so we manage this by projects, our systems and productions controls and measurements are by project and customer. In our strategy, we tried to focus in retention of our customer by fulfill of all the requirement's and having a the best service and attention to all the customer needs, we understand the customer and we now it from the insight, so we know what they need.

Diego: We have an operations excellence area, which manage the balance scorecard and, in this part, we manage customer satisfaction, quality events, On time and in full indicators and more. So, our company everyday has access to the data and every issue who affects the BSC, we have a non-conformance, so we apply an improvement opportunity by A3 forms, and we control the plan effectiveness.

Interviewer: Are you familiar with the term Customer Relationship Management? What is your understanding of this?

Diego: Yes, we managed this by our ERP, the actual scope manages quality alerts and product nonconformance, commercial goals per month, links commercial projects to budget orders and forecast

⁹ Central america, due to mexican influence the aztec and mayan influence still exists in these countries in a very marked way, it walks in the societies and it is a very respected and appreciated part in these countries.

and increase the efficiency of our sales and quality departments by having a more accurate response to our customers. .

For Sub-topic 1 -The influence that organizational culture has on new product development and CRM.

Interviewer: How are you implementing the idea of customer-centric in the company's culture?

Diego: Investing in systems, automation, and controls, so that customer can have the best service for our customer. Our sales have improved by applying this method of customer focus, have their deliver on time, quickly manage our improvement opportunities and very low defects.

Interviewer: How do you generate new products? What process do they follow?

Diego: We have a design team that receives the inquiry's for our customer and we research with our suppliers how to develop the product with the finish that our customer needs. In most of the cases are with paper mills, varnish, and inks suppliers.

Interviewer: Al right, mmm. I am not fully understanding. What is discussed with the suppliers? Materials, recipes, methods?

Diego: When we develop new products, we seek by specifications and needs, how can we accomplish the final product, by that requirements and our process capabilities we manufacture new products, that only applies for folding cartons, labels and IFU's.

Our partners are paper mills, inks suppliers and varnish suppliers. For example: if we have to develop a new folding carton for any brewery, we receive the customer's need, then we have a analysis with our technical team to know for example what type of paper especificacions we need, for example: resistance variables: calipers, grammage, family: SBS, CARRIER BOARD, KRAFTBACK. Inks: special inks and varnish to give the right color and the brightness finish that the customer requires, then we have tests in our print process to have a go. In this case we seek for suppliers for mills all around the world, we buy paper from USA, EUROPE, ASIA and SOUTH AMERICA, seeking price and the right paper for the job.

Interviewer: When a customer wants customized services or products to key clients. How is the process?

Diego: Is the same, we managed a quote, established quality tolerances and process as need it.

Interviewer: How much effort is your organization making to understand and find out the customer needs?

Diego: We tried to put to their service our design systems, so they can see how the product it's going to be, we establish procedures so the customer signs everything that approves and process controls so we ensure that we are fulfilling the requirements.

Interviewer: Is CRM implemented in the process of developing new product? How is it in SMEs is a CRM system or ideology applied? How does this happen in real life in SMEs?

Diego: No is not, we manage in other process.

Interviewer: Okay, so which are those processes?

Diego: We use Prinect software that is link to our design flow, that receives by the portal web the arts for the new project, is other software is focus in our process that is graphic arts. This design flow has the capacity to manage the art and prepared for the press room. In this part we don't link anything to a CRM.

Interviewer: What are you doing to have a better relationship with their B2B customers?

Diego: I think in our case to have a good service, good prices and continue follow ups.

Interviewer: how are you controlling this?

Diego: we control everything by the balance scorecard, this gather all the data for on time delivers, quantity effectiveness and quality controls. We measure customer satisfaction day by day. Our capabilities is also an a strong point regarding the technology that we offer, that has a difference in our offer.

Interviewer: How would you describe the relationship that the company has with the international customers?

Diego: Well, our KPI's measure this and we can tell that for a point of view of service, pricing and quality, it defines that our relation is according of a top supplier that efforts of doing things always better.

Interviewer: which are examples of the KPI's?

Diego: key performance indicators, we measure our effectiveness as a supplier, and we have a continued improvement system that allow us to make plans base on lean and six sigma method.

Interviewer: How should be managed the cultural knowledge of the clients? Do you think it is important?

Diego: Yes, cultural knowledge is part of building a solid service method. We have 78 years in the market, we know by our experience how is the process in the brewery's and in medical devices. Our strategy follow to have people trained, people that knows what the customers want, for example the medical devices requires an highly strong quality system, we are an ISO 9001 certified company and also we are working in ISO 13485, we bet in our strategy to have an active investment in ultimate technology, for have a high productive manufacturing process and automated controlling softwares.

Interviewer: Is cultural knowledge relevant for SMEs to build long-term relationships?

Diego: Yes, it is.

Interviewer: how it is affecting Grupo Vargas?

Diego: Knowing relevant cultural aspects of our customer, helps us to know what they want, we have people focus in markets and a manager by segment, so they have a base of knowledge. Also the managers have inplants in our AAA customers, so that helps to increase base business.

Interviewer: How much is the international customer involved in the development of a product?

Diego: Is the principal for us when we have a new product, they need to be in every stage so we can produce and garanty that the customer will be satisfied.

Interviewer: How are you dealing with the cultural aspect of clients? Which methods are the companies using to gather this information from international clients (with or without CRM) to develop new products?

Diego: in our process we do not apply the CRM for this, we have other systems that gather all the information to develop prototypes as the customer needs, before that we create an internal design order and we schedule updates to see advances and see if is fine to pass it to manufacturing.

Interviewer: can you talk more about this alternative systems?

Diego: we have special software to attend technical specs, some of them are born and raised in our company, we have also an app the its call "autogestion" so the customer sends arts, purchase order and any documents such as specs. And they can see the status of their orders until is ready for shipment.

Interviewer: Do you think that marketing, sales, or service automation can help to gather this data?

Diego: Yes, very important. We have all systems to gather all the information in data base and transform in reports, we don't invest time in building reports, only to analyze and take actions and make things happen.

We have qlick sense, shoplogix and minitab to report data, and Business Intelligence (BI) data to gather info for our software to have automated reports, such as inventories dashboards, sales dashboards, and balance scorecard automated indicators.

Interviewer: Do you have to deal with "international development partners"? Which culture-related problems could appear in the NPD process? How is this solved? Could CRM help

Diego: In our case no, we only need the raw materials to produce, we don't need at the moment development partner.

Interviewer: How should be managed the cultural knowledge of international clients and partners?

Diego: In our case, we use BI's and gather all the information to manage new projects, and the accounts to supply what they need.

CR3. Transcript – Interview Costa Rican company AIA del Caribe./Johana Morris - CEO

30.05.2020 / memo done during interview

- First thing we spoke about how important is to follow up the client and too give a good service. Track the customer or client.
- In regard of the culture we spoke about gender topics and how cultures can also be affected or affecting female entrepreneurs or CEOs or salespersons entering countries. increased the case of Costa Rica apparently you can see also some is not very heavy this problem but she found out that she got more accepted in the American United States market rather done in Costa Rica. she also had an experience related to a construction contractor, When she was building the infrastructure of the company. company apparently this person was Taking her for granted and asking other people guys to check what she was supposed to be signing or excepting or approving.
- "Machismo" is a issue in centralamerican cultures, CR Even that is not that a big issue it's possible to see some problems for example this in the market and the reaction of the people.
- Also something regarding culture and how it can this effect the development of a product in relation to clients and to find a market is that different cultures perceive stuff in different ways coma for example she spoke about these specific food that is seen in certain countries as not eatable it is seen that is only for animals even though there are countries that eat it and use it

for meals and different recipes and so on some countries has the have the perception that this kind of food is not for human is only for animals ,and the interesting part is that she realized about it because she traveled there like a tourist.

Transcripción / Transcript

Interviewer: Tell me about your company and international experience.

Johana: Well AIA del Caribe we are in charge of the manufacture of recipes prepared from tubers and grains. We make them as natural as possible since we know that there are people with different types of intolerances and allergies, and the idea is that those people can benefit from the nutritional properties of both the raw materials, with which they are made, as well as having the possibilities of eating, let's say, normally, because many customers come to me with many restrictions. Things for us are as common as going to the bakery, buying a piece of bread and eating a cake, others can't. Within that, because, let's not only talk about coeliac disease, we talk about many intolerances and allergies. And within the same product we also have what is personalization of the product. For example, a few months ago a customer called and told me that he couldn't eat either rice or corn, which is the basis of everything,

Interviewer: yes

Johana: and he had other allergies on the side. So we developed a bread for him because he had years of not consuming bread and we had to develop a bread based on other products and this was really a challenge because the base was rice or corn. And the customer is very happy, and that is what has made us grow and become known.

Interviewer: Alright, and what about your international experience?

Johana: I had long ago, some international experience. We were exporting to the USA. But that was more than 10 years ago, basically. But after the, not the recession, but an economic impact that was in the States in that time, we lost some clients, some clients just disappeared. So, we had to re-invent ourselves, basically, and do some other stuff. However, if have been step by step staring with the local market again and see how it has been changes. Because there where a period, where the circumstances changed, and we are trying to reinvent everything there.

Interviewer: ok, so for now only you only handle local markets, right?

Johana: yes, only for the moment.

Interviewer: IQ2. Are you familiar with the term Customer Relationship Management? What is your understanding of this?

Johana: Most of all, let's say, when in that part is to see from the moment the customer contacts us, the relationship that we have seeing their needs giving follow up, understand what their needs are, if we have to develop a new product is made and follow up every time. To be able to keep track of what is the product they consume, and it is a total relationship until we see if we can offer another product. In other words, it means understanding the client well and seeing that this partnership relationship always exists.

Interviewer: Ok, so do you have have already one?

Johana: No, but actually that is in what I have been working so far. I want to find something to help us track out clients and help us to give a better service.

CONEXTION LOST

Interviewer: and do you have any idea of what and how to implement it?

Johana: Magento es el que me han recomendado. He estado investigando muchos y ese es el que me han recomendado.

Interviewer: How did you come to the conclusion that you needed a CRM? I mean, I knew the term beforehand, experience or

Johana: It was from several things, from a job I had, which was not a so-called MCA. But I already had information and I also started to investigate and dedicate myself to that to see what could help me for what I wanted to do. Before, everything was done in an Excel sheet. But there comes a time when I need to set up a more robust system where not only the person who follows up, but there is some way to follow up from somewhere else, mostly in the cloud.

Interviewer. Would you say that the company is customer-centric or product-centric and why?

Interviewer: ok and based and what you have said. How do you consider the focus of the company? Would you say it is customer or product centric?

Johana: Is both indeed. Because we have so many clients that we develop in mass and personalized. We have several product lines. We develop a product for a massive client, and then we pack it or if we already have a product available we do private label maquila and we also do that service to the final consumer which is what it really requires since there is a deficiency in the supply for the local market in that part. Therefore, we arrived here, in that sense we do not leave the artisanal part.

Interviewer: but if they focus on the needs of the consumer when designing the product

Johana: always looking at the needs of the consumer. We have a portfolio of products, but in the end, it is the customer who tells us what he wants.

Interviewer: When the company design and develop a new product, or when a customer wants customized services or products to key clients. How is the process? Workflow?

Johana: basically, if it's to be customized for a client, he tells us what he wants. Usually they already know what they want so we give them a technical sheet and they fill it out and we develop the product under that technical sheet. Then the relevant tests are done, and a sample is presented to the client.

There are others who do not know what they want and so it takes more effort to get the information out of them, almost "with a spoon". In fact, at this moment I have a project like this. It's just difficult when they don't know exactly what they want. He asked me for a product and for a photograph as a reference. He doesn't mention flavor, texture, nothing but the picture. But the photograph won't tell me much, it just gives me the cosmetic part and that's it. And then I ask him questions and he insists that's what he wants. So now if you start researching what options can be offered to the client or that company. And according to the possibilities, to what is investigated to what is solved the problem or product.

The last thing I'm saying is for export and it's for a big project. And that's one of the reasons why I'm more frustrated lately because it's not that I have to go around the corner to drop off the sample, they're in another country.

Interviewer: and where do you have to send it?

Johana: To the United States.

Paula: and how it would be in this case to send a sample? Because I imagine that because its food industry, you must follow a long protocol.

Johana: yes indeed, there are issues of requirements. But because they are samples they are not as strict as when you already make the product. Because you already do the development and the registration part of the product, then the FDA part for instance.

Interviewer: ok, and How much effort is your company doing to understand and find out the customer needs?

Johana: A lot, but I would say more than an 80% -just to illustrate- when clients that does not know what they want. Because in the case of the, ok I will tell you about it. When we started it was like in the kitchen, checking that everything was fine because anyways I could also eat it. But now, before developing a product is necessary to check how feasible is to produce it in plant. If we need to buy new equipment, which equipment is needed, see if we need to adjust or build because sometimes there are no equipment for some processes, and we have to solve it somehow. This is because sometimes I have had to place equipment and modify it to produce what I need. [08:53]

And then I tell the client I'm doing the sample, but once it's approved, we have to discuss it. Because I had already gone through the process of developing a product and making all the investment in equipment, and in the end, they were taken away. So, I kept new equipment, but it was no longer necessary to produce anything.

Interviewer: How could CRM be implemented in the process of developing new product? and What is AIA del Caribe doing to have a better relationship with their B2B customers?

Johana: umm well, the relationship is very weak, I think that we need a little more follow-up. I mean, track the customer. This is also why I need to implement the CRM, so I will be able to see those things. We are very deficient with the follow-up issue.

Interviewer: Okay, so. How are you dealing with the cultural aspect of clients or partners? Which methods are the companies using to gather this information from international clients is CRM is not used?

Johana: we do not manage international partners everything is national. But the culture part is a very important issue, in the case of BTM10, I participated last year. There are people coming in, potential buyers from Canada, Jamaica, well from all over, Central Americans, etc. So you see the cultural differences, the way you have to treat people. Likewise, how you have to adapt the product for each, for each country. Just like there are products that are not called the same, because there are products that have different names depending on the country. Then you had to understand, just like the customer when he saw the product with a certain ingredient, he said that it was necessary to model or target the segment. Then, as soon as it is packaged, for example, even the colors have a lot to do with it. In some

¹⁰ Buyers Trade Mission 2019 - One of the largest business conferences in Latin America, in which quality, innovation, and a large variety of products come together to represent Costa Rica's exportable goods from the food, agriculture, and specialized industry sectors. <https://www.btmcr.com/>

countries it is important to see what is not consumed and what is. The cultural part is always important when you are developing a product.

One of the most recent examples is Jamaica. Jamaica, and what was the other one, I think it was Trinidad. What we call a "milkshake", a smoothie, they call it "punch". That's something totally different for us. When a client came to me with that request, luckily I already knew people from that country and I already had the experience, if I hadn't been confused. So by discussing how they should handle the product we came to the conclusion that what is needed is to tropicalize it. But then before I went I found out which countries I could meet with, and then I researched the form, the culture of each one, and what their way of doing business is. It's not the same for a Latino, we say, as for a European, you who are there know it. They get to the point, they're more direct.

I also learned in Arab countries, they are more likely to do business with men, not so much with women. They need to do business with men. So I know that, if in the future I want to do business with them, I need to get someone who is well developed and knows what we do to represent me. In order to do business even that I don't share this, it's a cultural thing with them that I have to accept.

Interviewer: Wow, that sounds so against my thoughts, is true that we must respect but sounds ...

Johana: Yeah, I'm one who goes on the defensive in case I have to defend myself. But in this case it's their culture. So I can't, it's like coming into your house and talking shit about you. No, and even though it bothers me a lot, I have to respect it. The only thing I can do is if they come here, because we play by my rules. That's the only thing I can do, but if I come over there, all I have to do is play by your rules.

And it seems like a lie, but one finds that problem even in Costa Rica. I was recently making some repairs in the plant and I had that situation with the contractor. I was the one who was paying, and I was the one who designed the place and approved the design. And he would come and when I talked to him, - yes, yes, yes-. Then he would go and ask someone else. And I, something is not right here. In fact, I hesitated and let the first and second time go by. The third time I confronted him, I pointed out that I am the one who pays, the one who approves here is me. Therefore, I told him that if he was not willing to work with me then he can't get my money, it's that simple.

Interviewer: I lived a similar situation in my first job in a R&D team. I had to work very close with the industrial engineers and the guys from plant, and most of the times, it feels that is needed to prove and behave very secure, strong. Otherwise is complicated.

Johana: You have to demonstrate a lot, and the worst thing is that you have to demonstrate twice as much as you can do. And the culture is interesting because I was working with American companies, and the relationship I had with the Americans was greater than in the "tico" market. And it was like, they praised your work, they saw us as an expert, they asked us if things should be done that way, while the tico didn't even want to relate.

Interviewer: Do you think that marketing, sales, or service automation can help to gather this data?

Johana: Yes, of course, very important. Because you get to know the client better, you involve everything they require, or what you sell, all from their cultural side. The more collaborative the system, the more information. Remember that information is power, the more information you have about the customer you can understand better and relate better to him. In fact, among all this quarantine, this issue has been like my vision. I have attended online courses on sales and marketing digitalization.

Interviewer: Which culture-related problems might appear in the NPD process? How could this have solved?

Johana: Years ago, I had traveled, I do not remember if to Trinidad, wait to see if I remember where it was. I do not remember which country was where I was offering a product and I was told not to offer that product. That was what the representative who told me, not to offer those products because that product is consumed only by animals, nothing else. In Costa Rica it also happened, in my grandparents' time bananas were not seen as food because that was what was given to the animals.

Appendix 11 – Austrian companies interviews transcripts

AT1. Transcript - TigerDental GmbH / Julian Winsauer - CEO / Tue, 5/26 11:50PM • 52:39

paula ortiz 00:16

Okay, so the first question would be what is the main activity of the company, what is the company doing?

Julian Winsauer 00:27

So, we are a niche producer of dental appliances and have very strong connection with a dental practice in order to develop our appliances and also get a good feedback about it. That's basically.

paula ortiz 01:15

Ok, Do you have to deal with international development partners?

Julian Winsauer 01:27

Yes, we do. Yes.

paula ortiz 01:30

In which countries are they?

Julian Winsauer 01:33

They are in South Korea, in Czech Republic, in Germany, and in Spain,

paula ortiz 01:49

Spain as well? Alright, what is the one doing?

Julian Winsauer 01:56

Well, the Spain is basically it's often forgotten. But it's a very, very crucial one. It's the not now but it has been very crucial. It was Dr. Andy Welter because he was the one who was basically, you know, doing all the tests. But okay, let's put it this way, maybe four. If we are really talking about companies, it's only South Korea, Germany and Czech Republic.

paula ortiz 02:28

Okay. All right. Okay.

Julian Winsauer 02:32

I guess also my direct contact and the other one is really the collaboration, research collaboration between the following let's maybe keep an eye out for this one.

paula ortiz 02:43

Okay. All right. Um, so I know that Tiger Dental has international customers which I have the list. I will not ask you about this. But now, would just say that the company is customer centric or product centric? and why?

Julian Winsauer 03:06

Oh, just one one thing Paula was forgetting about that. Sorry, about the developer. I think it's really important also to mention Ukraine because Ukraine slash Russia because that is our whole Upwork thing. Yeah, they're really developing a lot.

Paula Ortiz 03:24

That's true. That's true. Like freelancers, maybe.

Julian Winsauer 03:31

Yeah, it's like this. I think it's also like a special type of cooperation, right with freelancers. Yeah.

Paula Ortiz 03:43

Okay, yeah, that's important too. Okay. So I repeat the question, would you say that the company is customer centric or product centric, and why?

Julian Winsauer 04:01

Well, basically, it's...this part is definitely. Is it an either or question or can it be both?

Paula Ortiz 04:18

It could be both...

Julian Winsauer 04:22

It's I mean, if I think about customer centric, I think about our customers which are doctors. And if I think about being customer centered for me, it means to really give a benefit to the doctor when he is treating, so, making the times, making it less complicated for the doctor, to treat the patient and having probably more effective results, but if I think about the product related part. It's, I think a lot about the patient, which is also kind of a customer. But he's, that's I think our special field, right? He's not our direct customer. He's a very indirect customer. Yeah. And then I would think about the benefit of the product for its use, so for there to really avoid surgical surgical interventions to avoid extractions of teeth. I think this is a very product focused approach where you say you want to you want to do that. But to be honest, to promote the product and to be successful with it, we have to be customer-centric, because even though we like to have the product which will help the patient the most, if it's something very unusual for the doctor, and it takes him in and it doesn't give him joy in using it, we will not sell it. So of course our main or we are it's very difficult to make this decision which you want to be you surely need to be both. I mean, it doesn't make sense to create the product, which is super simple for a doctor to use, but then it doesn't really work the way it needs to. But

Paula Ortiz 06:38

Yeah. Okay. So let's say that it's So are you familiar with the term CRM and what is your understanding of it?

Julian Winsauer 07:32

Yes, I'm familiar with it. And for my understanding, it is a tool that helps to get connected with customers on the one hand, but especially to stay connected with and keep track of customers and facilitate enhance the contact with your customers. I see it as a special as especially useful in having all communication within the company set ready so that in the end the customer has basically one well

has basically uninterrupted flow of service without many people being involved. So, all informations that the customer will provide us are all at all times are there they are accessible from multiple persons and at the same time you are also reminded At certain points to catch up with the customer.

paula ortiz 09:07

Okay, so you relate this more with a software or platform?

Julian Winsauer 09:17

Yes, I think you need to relate it to a platform. I think that if, for example, you have a culture, which is geared towards customer service, so everyone is really, really having the same mindset about how to interact. That's one thing which is really fundamental. But on the other hand, if you do not have the inputs that you need, you will never perform as well as you would if you have system in place. So yes, it's definitely I see the CRM as a platform or a software.

paula ortiz 10:08

Okay. Okay. Do you think that this platform will integrate only, as you said, it will communicate to people only internally or it also can involve external? Because it, includes the people from the company and also the clients. Right. That's external.

Julian Winsauer 10:37

Yes, exactly.

paula ortiz 10:38

Yeah. Okay, can you explain me a bit how is the process that the company follows to develop and design or develop new products? so far?

Julian Winsauer 10:57

Yes. So it's a multi step process, but it eventually starts with the idea which either comes from us as a company where we say we need to change something or in most cases it comes from the market where we get an also feedback to either an adaption of an existing product or a new product. The first step then is to evaluate if this is something that really creates an echo. So we are right now, you know, having phone calls with certain customers asking about it best, I would give you an example so it makes it a little bit easier. So, we have this new size from one product which was a demanded by one doctor. It was a special size that wasn't there before. And we basically were calling other users afterwards. And we're trying to see if if they if they have issues with the existing sizes, and if they would like to change it. So that was the first or the second step after getting the idea. After we were confirmed in this after we were confirmed by the this thought that it's really necessary, we were starting to contact our developer. And we were asking the developer in how far if he's able to make this new size. And at this point, it was also really important to not only ask him about the possibility and the technical possibility but also about the price, because we want to make sure early enough in the process that the whole economical situation will be satisfying. So, after we checked that product will not be more or less expensive or less wouldn't be a problem but wouldn't be more expensive than another size. We started with the planning, so we were sending emails back and forth with with our developer. And then until the first phase when we had the plans and we had to confirm them. We received our first prototypes. We were testing the prototypes and first on machines to really see how stable they are if they are working after we had a confirmation of a certain number of pieces that they were. We transferred into the clinical

testing. And after the clinical testing, when we saw that it works, we're, we started to we have it certified and then that's it. Okay, I need to promote it afterwards.

paula ortiz 14:20

And this clinical testing is in the practice this is not abroad is here, right?

Julian Winsauer 14:28

Or this? Yeah, this is this is with us. Yep. Exactly.

paula ortiz 14:32

Right. Okay. So now I have a question. Does Tiger Dental have key clients which is customizing products?

Julian Winsauer 15:13

Our customers? No, no, we don't. It this would most likely be the case with having our, with expanding our operations into the digital planning of certain devices where you adapt them in the according to the situation the mouth right now.

paula ortiz 15:39

Yeah, great.

Julian Winsauer 15:40

I'm not sure if you're familiar with I think you're familiar right with those labs were, which are getting the STL files off the mouth, and then you're planning an individual appliance.

paula ortiz 15:55

Yeah, yeah. All right. How much effort is the company making to find out the understanding of the client's needs.

Julian Winsauer 16:15

I would say at this point too little we are still having a lot of push technology, technology where we where we develop because we think that the market will need it. Yeah, at this point that's the case. We're trying to change it but I think at this point we're not doing enough.

paula ortiz 16:50

Okay, I know that Tiger is working to have a CRM, but is not available yet, so do you think that this will be useful for all these processes that we already talked about to implement?

Julian Winsauer 17:11

So you talk about the developing the product.

paula ortiz 17:15

Correct and the involvement of the customer base, basically. Both of them.

Julian Winsauer 17:28

I see there's a really crucial point in this communication and in the process. I hope that I'm not having unrealistic expectation towards it. But this really I see as a big help to keep an overview of the project. Be able to have all informations of the projects for all the persons to have access, to available and therefore also to keep it more visible for everyone. So it's not going to be a box or folder, which can be forgotten under some, some other work but it's really something where each person has access. That's to be honest, that's for me one of the most especially focused off towards R&D. That's one of the most important parts for me that the CRM will have, so that there is information on a mutual desk when a mutual virtual desk light laying there. There are more. There's several people having access to this virtual desk, and then you're able to work together and sit together on this desk and you don't have to To send emails back and forth, you don't have to have each bit of information. Everyone has another bit of information and you're trying to really understand what the other one is talking about. I think this is a really, really crucial part of it. Yeah.

paula ortiz 19:33

So, what is Tiger Dental doing to keep that relationship with, a good one?

Julian Winsauer 20:41

Well, basically we are. We are right at this point. Trying to get an update at least once a year. Why the website where we are giving doctors the opportunity to or giving the practice businesses the opportunity to tell us about their experience, tell us about their happiness with our products. And ideally, also tell us about changes that they would like to have. That's one part. But to be honest, I'm in our informal way of handling it right now. I see the personal contact as as our only really good tool, which I mean it is the other one. It's important that context the personal contact where doctors are able to call in and tell you, they have this problem with the product they have that issue with with something is, I think our most important tool that we have. And we are really, you know, mean on solving those problems, I think it's most important to get a good understanding which requests of doctors or just in general which request of clients are valid, and which wouldn't make sense because you will always get into a situation where a client will ask you for things for changes that may be in his or her head are really good but for you effectively would mean, this would mean that you have to develop a whole new product range just for this one client, maybe two or three others. But I think this is really the the crucial part about communication with the clients that you always are. And this is something that I think you need to have experience with. But yeah, not getting too long answers. This would be the the tool. This would be our efforts, which we make to get in touch. It's it's, we have no program or anything that's it's just via email via phone. And then the survey on the website,

paula ortiz 23:45

basically like a very rudimentary or, yeah, it's like an old way. No manual way to do it, basically.

Julian Winsauer 23:55

Yes.

paula ortiz 23:58

Okay. Okay. So, now regarding the cultural aspects of the international customers and international partners, what is your opinion of managing these cultural aspects?

Julian Winsauer 24:30

I don't know if you can, if I can you can you specify the term cultural knowledge?

paula ortiz 24:38

Yeah. In this case, we are talking about the nation or culture. So if it's from Germany from Korea, then Czech Republic Russian

Julian Winsauer 24:58

Okay, so there as well we, of course have found a big manual component and it's not only manual, it's experimental. We have to, get to know your partners. And, especially with with Asia, it's, it's special. It's something where you have very different very, very different way of of handling issues than in Germany for example. I would see Czech Republic as a little bit the same way. The two I think Germany is a very extreme way in being very, very be open and very, very direct. South Korea is the other way, where it's very indirect communication. So for us the knowledge on the cultural knowledge on the cultural differences goes as far as our previous studies of those countries before we even are when we started with the partners, but then having also our own experiences with the partners, and especially for Asia, we see that we have, for example, very different hierarchies. In those countries we have, for example, Germany where we have a direct contact with the developer and we are working. I'm able to have the screen share with him and I'm able to work with him directly until we solve the problem with South Korea, we have a different approach where a lot of work has to be undergone certain stages of confirmation within the our partner company. Um, and then of course, we have the other the third one, which is Czech Republic and also Ukraine and Russia. We see that there it's it's quite direct. Of course we have differences there are younger developers with Ukraine and Russia where it's a little bit easier and we have a little bit older developer in Czech Republic but we see that that the culture is very similar there.

Julian Winsauer 28:06

how does help explain it? Um,

paula ortiz 29:23

So, um, okay, what about saving this data? It's a thing. So, I know that for clients, it's important. And it's, it's coming out from this market research and everything to see if a country works or not, and so on and so on. But in the case of the social, so sorry, with the partners. For example, if I am not there tomorrow, and you hired someone you and she has, or she has to start from zero to Get in touch with everyone and to understand how they are, and I know that at the end of this human human relation, you know, but maybe some input about a culture or something that we already know that they like, would be a good hint. What do you think about it? Do you think it should be managed like that or it should be saved somehow or? I don't know how to how to elaborate a question.

Julian Winsauer 30:32

no it makes I totally understand your question. And it's a good question. We are a small team. And the team doesn't see the necessity to control or to manage or to save data of the culture so far. Yeah, well, if it's related with clients, I think yes because it's also related with marketing studies and researches and so on. Because it's really something that's it's all, I'm also happy that you're asking this question because we have experienced this. Not so much from our side. But we have a special expert, why? Because we have done the R&D, so far with it has been my father and it has been me. So we have really done the R&D. We've been here, but that's also part of the reason why we have done it right.

Because as you said correctly, if someone's gone, it would be super helpful to have those information, especially also cultural information. But I mean cultural information. It's one part but also a whole technical information. It's, you know, you start to you start to collaborate with someone and you really get to know this person. And then it was really interesting to see our Korean partners, we tend to have switched positions each one or two years. So as a result, I have been working in my past six years. With the company I've been working with, for five years, I've been working with three different guys from from there. Well, that makes things really complicated. It's especially and now I think this is a really important part for your thesis, especially when you have to kind of gain trust again, which is very important in Korea. So you have to you are, if you're a new person and you start to collaborate with another new person there and you have no info about the culture, you have no info about the company. You probably will use another half year or at least some months to get to know the topics that are important topics to be avoided. Not only about the culture itself, but due to the culture about the company, you know, you you wouldn't ask certain questions you wouldn't ask about certain relationships because you already know that Yeah, very important.

Paula Ortiz 33:05

And do you think that the CRM could help to do that? Regarding the, I think that

Julian Winsauer 33:16

that would definitely help a big deal. Right. Okay. Okay.

Paula Ortiz 33:30

Um, do you have an example of any? I mean, you mentioned already some issues that you can find with international partners. But do you have an example in particular that you would like to put the clients to come to your mind regarding culture?

Julian Winsauer 33:56

Definitely. I mean, in our culture, if you are developing a product and you are collaborating on it with your partner, your partner will tell you the things that are possible and the things that aren't possible. That's the first step. And then in the second step you directly followed. He will tell you why it's impossible. You have an issue, and you have the clear statement, why isn't it possible? Why can you can you? with Asia we had the problem of non clarification. So things weren't working. Things just didn't work out. And they told you, you know, this is not working, but you weren't able to figure out why. And I think you know, from your experience or everybody knows, if you don't know why you cannot solve the problem or not able to, you're sitting there and you hear no, it doesn't work. But you don't have any base to to see why. And this makes it very hard because then you are not able to work together on this solution as a team now, and this type of trust on and also telling you about problems that they have a something that we are very open with, like we say, okay, it doesn't work. And we see that in Asia, at least all partners are having very big difficulties in telling you that they're not able to do something. And then elaborating closer Why? which is which we had we had one example with the development of a screw, which cost us about two years of development time because we're going back and forth. And we were really seeing that this was the point, you know, we were seeing a problem somewhere else. And then after two years, we had to realise it was a very, very different cause of the whole problem. But they wouldn't tell us they wouldn't really tell us, we needed to really personally meet them and talk a lot of time spent time together. And then we were able to read a little bit between the lines and for someone from Europe. That's Really, really hard.

paula ortiz 37:01

Well, you're talking about the one from Korea, right?

Julian Winsauer 37:05

Yes.

paula ortiz 37:06

Yeah. Well, that that's so. I mean, it's it's a huge thing, actually. And yeah, I understand because it's it's, you need to move I there is an author Erin Meyer, she wrote the book, the map of culture, something like that. And she was talking, she was giving a speech and saying that nowadays, leaders in companies and multinational companies are even Well, in the case of diaries not been but it's international already. And the leaders should be switching from one culture to another. And that is very hard to get, because it's like if you want to touch to your own culture, With one feet with one foot, and with the other one, you're trying to go into different ones. Until there is a point that you can just jump from one to another. But it is with practice. And that actually that you mentioned, this reminds me too bad because they're so different. This two cultures are very different. And yes, here are more direct the people is just telling you what it is. And that's it. And there, yeah, I also, I also study that in master. Yeah, they don't want to lose the face, or making the space so that's why

Julian Winsauer 38:42

it's really yeah. Yeah.

paula ortiz 38:46

Well, okay. Let's see, I think that we already answered these two that I mean, In this conversation completely answered the next question. So I think we are almost done. Let me try to Okay I will read it, how it did while you have it, and what methods are used or could be used in a company to manage cultural knowledge. They think that this knowledge is used or could be used to develop my products

Julian Winsauer 39:56

develop new products with international

paula ortiz 40:03

Yeah, yeah. Yeah.

Julian Winsauer 40:15

I think yes. He could be used yes he could be used. I think the big question that that has to be asked at this point is and I really speak from experience with all the emotional factors included like frustration over many years of like always having to adapt. You know you were mentioning this, this type of personality where you are able to due to the knowledge, the cultural knowledge or knowledge are able to switch. And then, you know, I am, however not hundred percent convinced if this collaboration will be as successful as a natural one. So basically, if you're trying to learn this type of culture, if you will be successful in your product development, and this is why I'm having this thought of that we also discussed when when you were in the company of rather trying to have a certain development process internally and then have certain well, production steps, outsourced internationally, but I think this is If that's why I think it's really hard because, yes, you can do a culture course, yes, you can do notes, you

can have a dashboard, where were all the important informations about this partner is about this habits. But if it's really about very different culture, it's difficult. So ever. Yeah. On the other hand, I would also be bold enough to make the assumption that you see a difference when especially looking to China and Asia, that you have a real big difference between the elder population and the younger generation where the younger generation it's really different than I know first hand from the developers, I know firsthand that now communication with the guys in the company in the our partner company, we who are speaking fluent English, they are super, like having an almost an American accent.

Yeah. Whereas the older generation, even due to the language barrier, and it's, I'm sure also the cultural aspects. It was way more difficult. So I think that yes. Bringing it now to the point of your question, yes, those tools definitely help to avoid big mistakes and big problems with the communication, especially if the next like if there is a new person coming into the company.

On the other hand, I also think that if you have a partner who has a very, very strong culture and it's not really like willing to, or it's not having this a little bit more international attitude. It's gonna be super hard. I doubt that a notebook, or like certain videos will help you in such a crucial and long process as product development, if it's about, you know, a small thing where it's meeting itself. But if you're talking about product development, you're talking about a very complex and big thing, you know, and it's getting frustrated, you know, you're getting frustrated, you're having multiple faces, where things will fail, where things will not work. And I think in this type of work to really keep like, to those norms that are absolutely not yours or is real Really difficult. Okay, that's that's my opinion about from the experience that I had, you know?

paula ortiz 45:07

Yeah. Yeah. It's been interesting. So we did okay. Um, now I have this question. Why did he choose and why why Korea was the option back then?

Julian Winsauer 45:22

It's a good question. And it's very simple. Back then the the production of, of this product that we are partnering on was very was very sophisticated in South Korea, and it's still a so basically the medicine industry for this product was in South Korea. Nowadays we are able to also have those products produced in Europe, but back then their quality of the product and its until today is is breathtaking. They are having zero tolerance for any bad screws. They're having super, super precise. They're very, very precise. So this was the reason in the first place. And this is also why we stick so long with them because they're just so good in doing their job. It's really, yeah. All right. Okay. Okay.

paula ortiz 46:34

Sure. But do you think that maybe finding another company with you? I mean, like, a newer company developers?

Julian Winsauer 46:43

Yeah. So Well, I mean that's the end of the story. You know, you know, the we have now a German company is we are developing the screw with. And we were trying to to do it with with the Asian company for quite a long time. But this I think it was really this combination of this combination of culture the language and connected with those two factors also trust it was it was for me the most I think we talked about that already. But for me it was the most eye opening moment when when I went to South Korea and that's why I'm super happy to know that I went there. Because when I went there, I got convinced

that and that sounds weird, maybe but that I have to really follow my feelings. And I didn't have a good feeling with those guys. It's really hard if you have to, like such a, you know, product development, its property intellectual, intellectual property sorry. It's your hard work you're really your most smart thoughts, you know all this highly personal things that are so crucial for your business. And you need to, I think the big problem is when you have such a different culture, and it's really hard to you have to you know, you have to change yourself to, to work with them. It's not natural, you know, they're, they're just basically part of the culture. It's not to smile too much not to lose your feelings or whatever. I mean, Well, you're in this environment. And it's such a, like, crucial topic for you that you're working with. Yeah, it's it's for me it has if I cannot trust the people 100% it's it's hard to to cooperate. That's so Wow, that's interesting. Yeah. Yeah. All right. I mean, you know, I think this is also a special case. It's press was this troubleshoot product but I mean, it shouldn't be like taking in, you know, for for each product development. I think there there are certain parts that are very easy to do.

paula ortiz 49:50

Yeah, yeah. But yeah, yeah, I'm just I'm just thinking about other Oh, no, no, but but it breaks up. But in the case of Blum, they are just selling their products there. They produce everything here I think.

Julian Winsauer 50:08

Yeah. Yeah.

paula ortiz 50:11

He's he's a bit different. He's not the same as

Julian Winsauer 50:15

well. And that's, that's funny enough, you know they are. Oh, my father he was talking with with the owner of Blum and he was what and it's not only him I think, I'm not sure but I think they even he probably even gave interviews about it that you know, they have all their knowledge here. And they have built machines here. The machines, they are here, and they produce so fast. I mean, so freaking fast. That for them The only difference they they don't have a cost difference. They don't have a cost difference in that big The only cost difference if this whole thing's dense in Malaysia would be electricity because that's the only factor for them. Right? They don't have labour costs too much in there. And and yeah, they were they were heavily investing into into our region R&D.

paula ortiz 51:32

Yeah, that's quite interesting. And that's why they're doing the fast I think, as you said, it's easier to control you.

Julian Winsauer 51:41

It's super funny that's Yeah, but

paula ortiz 51:49

okay. Okay. Yeah. Yeah, anyways, I mean, they could just because people know there But anyways, I need small, medium company. So It's, it's fine. It's just an example that came into them. But yeah, no, Julian, I think those were the questions so far if I have something else, because possibly I will. Meanwhile, I am analysing data or something. I will come up with something

Julian Winsauer 52:22

just just took me up, just let me know.

 paula ortiz 52:25

Okay. All right. Thank you so much.

Julian Winsauer 52:32

Yes, okay. When I say Thank you, you too. Bye bye

AT2. Meeting with Guntram:

Informal chat in march seeking to understand the CRM more. This correspond to the notes and memos took during the meeting. There were some technical issues, for this reason it was not possible to record it fully.

Interviewer

Tell me about your company and international experience.

Guntram

so maybe give you a short introduction about myself. My name is Gumtram Bechtold. I'm thirty seven years old, I run an agency called Stars Media. We are specialized in performance marketing. We typically help businesses build online business models for their own purpose. So that's what we are doing in an everyday job. We do this by using commercially available advertising channels like Facebook ads, Google AdWords and so on. And connect these generic advertising solutions with the specific needs of the businesses so that they find the right customers, and that the customers have the expected experience that they want to make. Because oftentimes, like Jeff Bezos explains the most important aspect today in building a business is to be customer centric. It's not about educating the customer or changing the customer or transforming the customer, but it's rather about adapting the business to meet the needs of the customer. To the best degree. So, it's that's what we are really doing in an everyday job.

Interviewer

How familiar are you with the Operational CRM (automated marketing, sales and services)?

CRM as technological tool or as a customer-focused business strategy? Your opinion according to experience

Guntram

The strategy that CRM for the system is a tool and test it. I think it's the job of entrepreneur to implement the customer focus strategy and the theorem can be a part of this spread team but it's not the tool that is doing the strategy, it's more than the person that is going on that learns how to interpret feedback. I think it is a good point that casting focused at this apartment but theorem is not doing it for you in the end it can only be a tool you can get a step ahead with this but in the end it's ongoing process while the theorems only always the step in this process uhm.

Interviewer

So what your company offers do you think that is like an alternative solution of what the theorem does? no it it ties into a theorem we're doing.

Guntram

So we technically would if a company would have CRM or if they would be they make solutions for marketing and sales that can be implemented in CRM systems. I think you have to have very clear vision of your company to implement the CRM only if you want to scale a company you will implement the CRM, if you don't want if you want if you're happy with the number of clients you already have you shouldn't have CRM, so i think.

Find out if you want to scale the company if you believe that your product can be sold to a larger audience and therefore if you want this more systematically approach than the audience by serving by giving more value by automating and so on. So I think the question of whether our CRM went better as Austria dealing with this topic, I think many of the companies that have a certain size, let's say 50 people plus, then they have one or several theorems probably. Do they use it properly? not sure because they do it to capture their business process. But not I don't think that companies really use the benefits of the CRM they have and the differences they use it more like an address database that's what I'm saying I think it would be great to have I think it would be good opportunity for our region to have series. But I think we should have to we should start earlier in the strategy process already.

Interviewer

Yep set it up so I have to be concern OK did you read the topic of my research yeah so um now I would like to ask you if I don't know I mean do you have any clients or do you know any companies small or medium companies that are using the CRM in the in the product development.

Guntram

Actually I think why I think the idea is makes sense I think at least from my point of view I don't think that there is like a um they can be I don't think that there can be like a huge overlap for this because when you implement this my hypothesis would be that you only implement the CRM once you're done with developing the product, so it can be that there can be like a feedback so the question would be probably uh maybe you have to take a different spin on these two to get real feedback. For it I think that maybe for example if you have products or portfolio and you receive feedback an maybe that also gives you an input of what could be the next what you can develop in the next you know yes but what would I learn so when I was for example in that world So that's why I think there was like at least paint when I was working there there was no the intent in using this feedback loop even though I see your point it could be valuable but you would have to um it's tough let's see yeah yeah yeah perspective is a tough one but nobody is doing that that's why I'm that's the gap actually that's why I wanted to do a research regarding this um but at the end now I have to focus it if it's if that culture topic it's you know in the beginning it was only about the product an if the data that you received from the customers will help to develop new products and so on but then

Interviewer

How should be managed the cultural knowledge of the international clients or partners? Do you think it is important?

Guntram

So I think it's absolutely important because when, let's say, probably I mean I saw so many different ways, how to sell to some people, they just drink with their clients. That's how they sell, did they just build up relationships make them make the clients friends and they said that's how they sell. If you are selling very big key account product, that's how you sell if you are selling screws, to take clients today you don't have, you cannot drink with every client. Until they are out of out of consciousness so because it will be after the first man you're done so then that's completely different approach so in the one way you have a very structured product we would say and in the other way you have a very social center.

Interviewer

OK and do you think that people are applying that already. Like, are they using it in the system. Or you? did you use it?

Guntram

they don't think about it they just do it because if your company is selling a key account tickets, very big tickets of 100,000 euros plus for client uhm you have two completely different sets approach. Then if you have like if you are going from one computer to the next one and selling screws and then you need completely different CRM, so you will you're forced to then the CRM will be totally different. The one guy only has like certain clients overall and Gavin has like 500 or 300 times and the one visits these 30 clients only every person once a year send some couple of events and the other ones visits them every day so they have very many touch points so we did it also has to be technically very different because the one really needs a mobile front end and and so on by the other one he's sitting in the office and just sending out emails and maybe talk talking with on the phone it's also.

Interviewer

yeah OK OK interesting actually,

Guntram

I don't know if this would help but I I will forward you the following, I just receive the newsletter which is from a multi level marketing company. What is interesting about this is that you see a lot of different product that can be sold over networks and every of the screen it's got IT company of the each of these companies has to have that is something that is listed by this company's publisher. Has to have a way to sell wow to that sense and I think what you could do is to identify either really physically or just by analyzing which company matches based switch stealing.

That's interesting because I think your question or your last question was the SMEs in foreign back, and generally I think most clients just most companies in front like, they just don't have really they don't sell pretty much, they have a great product and they wait until the customers and send an email and say I need your product. That's how they do it and if they can't if they are stuck probably they run an ad but then that's really the maximum uh-huh are probably make a web design redesign but they don't have like they are nothing too building a complex product or so on. So so if you search a lot in for a black market you will not get a lot out of it, I mean there are there are couple of companies that use CRM the big ones that say the 50 biggest companies, they have CRM. I'm sure and they also use it properly but let's say if you go for I mean there are 25,000 companies. Let's say only maybe 1000 tests really make really CRM tools larger degree. I mean if I have a hotel then I would be maybe one of these thousands or the after 2500 or something, but they don't use the CRM, I mean they have like a list for

sale this client wants to have like let's say I don't know a bottle of champagne on their room or something, but I mean today do I need a CRM for this? no, probably not. I think it would be sufficient to have just the registration book and the proper person at the counter where they write it down. I mean they can do it in a CRM and it's good, but there's no automation, you need that they don't use it for marketing. So my point is that I want to make is most companies don't use marketing, most companies don't use CRM so try to not waste your time it, you should look into it but just be sure go only for the big companies. Try to get a fast run over, it so that you have a clearview and then don't don't waste your time in companies that just are not into selling, because most companies in for like are not into sending even if they use a CRM, but it, let's say, if I have like a metal metal manufacturing company they have client they sent them an email they have a CD file and they analyzed it and then they signed an offer but I mean they could use the outlook for it they don't need the theorem. Yeah hope I don't discourage you but I uh maybe more clear if you.

Interviewer

no that's really good actually I would like them to maybe look for one and one and to research about it because at the end that's that's part of the question now to figure it is up.

Guntram

so perfect then then you can get text me if you need anything else and other than that let's just stay in touch and I'm curious for your results yeah me too I will send you the thing when I and then but I think I will also call you or text you eventually I have further questions for you 'cause actually I think it's I would I would honestly would like to go to visit your office when whenever told me I was like yeah I would like to go I didn't have the time um and then the Corona happen and stuff so.

AT2. Transcript- Austrian company StarMedia /Guntram Bechthold - CEO

Wed, 5/20 1:08PM • 47:42

Interviewer 00:09

Okay, that's good. Yeah, I guess I didn't your company's not as effective because it's more digital product, right.

Guntram 00:26

Yeah. What is interesting is that we will I would have expected that there would be more people that wanted to digitalize their work. But the reality is a bit different. We saw more demand in professionalising the digital efforts of companies that already digitalized before the virus. So there was no new push for going digital. But we saw that people that were digital now use the time to expand their effort into Yeah, I find it pretty interesting. I didn't expect it to be like that. I thought that maybe it was different. So people that would have like a General Business Standard business, they would say, Okay, now let's just switch and try this. But this didn't happen.

Interviewer 01:13

Oh, okay. Well, yeah, I think now, a lot of people were also worried about it. So maybe that was not a big quantity of people who did it. But

Guntram 01:26

I still think that some people tried to maybe, I don't know, maybe implement some trade integrations or to bring some illusions through their business or commercial. I say it because I saw it all the time. My company, we're like, okay, we are giving courses online. Now. We haven't done that before. And now we're trying to push that kind of thing because it's like, I mean, we cannot do anything else. For the rest of the year. We don't have this money.

Interviewer 01:59

Yeah. I just adopted it. It's kind of crisis.

Guntram 02:09

Interesting, interesting.

Interviewer 02:12

Okay, good. So I'll just go through the questions. And by the way, this is going to be recorded. Just for the transcript. And yeah, so I will put also in the chat questions that I will give to you. So you can also read them if you need.

Guntram 02:39

yeah, okay.

Interviewer 02:45

So I remember that in the first chat that we had. You told me that you offer basically personalised services to your customers to connect generic advertisements solutions. It means that its focus in B2B context. Right or no,

Guntram 03:01

no, we have quite a lot b2c also, we are our direct clients are always b2b. We don't have, let's say, end consumers that purchase products through us at this time. At least not to a significant degree. Yeah, the typical class customer is a b2b customer. Yes, that's true.

Interviewer 03:22

Okay. And the customer, can you manage our local, international or both? How

Guntram 03:29

are no primary local, local? I would say it's local.

Interviewer 03:32

Okay. You don't have any. I mean, like, any collaboration, either with I don't know, foreigners from Germany or from Switzerland or any international experience.

Guntram 03:44

Yes, we do. I mean, I mean, our at the moment, so it depends on how you look at our client base. If we look at it on a on a 12 month basis, I would say that the most part of our revenue is coming from clients that are within in less than 100 kilometres distance, okay. But we do have But we do have on a professional basis a significant network where we work with international companies in two ways. We

call organise a conference and this conference is we organised this together with another company in the region and our our sponsors our international software company. So we are selling them advertising to end customers towards the local community. So let's say typically cases, Google is paying us money for being advertised with their software for our local developers, so that people learn about what Google tools could do or the same as with other international software players that are Like also the attendants are international at these conferences. So, for example, the engineers from booking.com buy tickets at this conference. So we do have a two sided marketplace for these events. But the, in our agency, our typical professional services that we built online shops are that we have built digitalizing the business model online. That's what we are doing on a on an everyday basis. Let's say.

Interviewer 05:38

And you told me last time, we're talking about a customer centric focus. Do you think that you could StarsMedia immediately working on the basis of customer centric,

Guntram 05:57

Yeah, I think I'm absolutely so I just got the situation that we just picked up a new client, several new clients in the recent months. And they caught them primarily because we try to be customer centric. So it's not so much. It's not about any other tool or strategy that we employ, let's say a very smart advertising form or whatever. But it's really primarily because we try to figure out what clients want or how to help them best.

Interviewer 06:05

Next question. But I would like to know, like, how far or how much effort is a company doing to understand what customers want and how is this done? Are you using kind of this? Well, we talked about the CRM before. How are you dealing with this kind of information?

Guntram 06:20

Yeah, at this moment, we do this person on a personal basis we talk to the people directly because we can, but on but on the other, but when we are using when we are using, when we built, for example, the shops or when we market the product to the clients of the customers, we cannot talk to every single customer. I mean it will be impossible because these shops typically have hundreds and thousands of users. So there we primarily use. On the one hand, Google Analytics we would use or reconsider to use like personal analytic solutions. So I think your approach about the CRM, I think it's good but we don't at this time we do not have a analytics solution that is also GDPR compliant, and that is affordable to make personal analytics work. What we do use is we do have software that is doing kind of something like this we use Active Campaign is an email marketing software that triggers inside the website to generate certain behaviour texts and therefore creates a specific personalised dialogue flow. So this goes pretty much I think, into your field of knowledge. On one hand, this is one of the most powerful tools we use, because it works very, very well. And on the other hand, we also see that it's pretty hard for the companies, for our clients to adopt this approach.

Okay, because they don't have to this mindset at this time we try to develop it with them. But for them, it's often hard they often see themselves more as the artist, then the servant to their clients.

Interviewer 10:45

How to say, because every service that you offer is customised for the client, right? So, actually, how is this process on the company? like, okay, you have to talk with the client and you have a meeting to decide what are their needs. Okay, this is what I don't know how is it process that you have?

Guntram 11:06

Our internal processes you mean we are working together with the clients? Correct? We try to follow the HL Scrum process. So we are you trying to use the Scrum framework? I don't know if you know it or if you have heard of it. It's the idea is it's originating from HR software development. I can share you a link.

The framework is coming from the US pretty much and the idea is that you plan check act, so you have like a two week process or four week process. Or one week process depends on what's needed.

By that you continuously optimise and iterate towards the goal that is defined by the client.

So the idea is that we don't have like a, we avoid to have like a standard process. But we want to have a, let's say a standard process that is like a standard business process where it's okay First, you have to get the website and when you have a website, then you get Google Ads campaign and then you have Facebook ads campaign that we want to get a modular process more like, like a puzzle game, where you start with the puzzle that you have with the past point. So it can be like okay, I I only have a Facebook site and I want to stay on Facebook. So we have, for example, a pizza shop. They are only on Facebook at this time, they don't have a website, but we build for them a working marketing campaign that is only based on Facebook tools. So we cannot go outside of this ecosystem. But then another client, they maybe have everything in place already. They already have a website, they already have AdWords and everything. Then we say okay, what is the next missing piece? And so we always look at the client like a puzzle game, and build the most valuable puzzle point within the next two weeks that we can build. So that's the process that we try to follow. Repeat.

Interviewer 13:00 So interesting Scrum. The first time I hear about it, and it's what do you think that it's, they know where to come from? The origin of this?

Guntram 13:07

Yeah, they on this page that I showed you the second one. It shows the two founders. They built it in 1990 or 1995.

Interviewer 13:09

Yeah, yeah. So you can join, it's going to be free. Ah nice , if you can turn the link, I will.

Guntram 13:19

I should share with you now the Facebook event where you can subscribe and you will get the link there.

Interviewer 13:26

Okay, so what do you think that companies should do? To get a better relationship with their customers.

Guntram 14:02

We should build the systems that we that we sell our clients pretty much. We already sell the systems and we don't have them ourselves. So the first strategy would be that we first progress professionalise our, relationship could be

I wouldn't use a tick. We do have a CRM, but I would not as a next step using, I would not invest more into the CRM. Does that make a lot of sense? So what I would do is, I think it makes sense to invest into a relationship, which would be more where a client is already. So if we think of the three letters that are made from the built the word CRM, client relationship management People are investing too much into em into the management. And not so much into the client and not too much into the relationship. So I think what I would invest next, what I want to invest as a next step in my company is to invest more into the client into the C and into the relationship into the R. Because typically, people think too much of the tool of the M, if that's what I see, because it makes much more it's much more business value if I have, let's say, 10 times more sees, or 10 times more, less than 10 times more, so to speak.

Interviewer 15:43

Yeah. Oh, yeah, it's true. I've also seen that with the other interviews that have been is quite interesting, because one of them were telling me that the company that he was working, he was working in a bank for time and when applied to CRM. Everyone didn't want it because it felt controlled by this. But at the end, it's a control that you have to lead to the customer satisfaction, you know, everything is related to that goal is not because they want to control you or anything, just that

Guntram 16:24

I think this is pretty much about how the software is implemented. I agree with your hypothesis to a certain degree, but I think this is something that could be probably even the takeaway from your, from your research. There is there or maybe you know, Slack, do you know slack?

This is more like, the funny or the interesting thing is Slack was not the first player on, so why is this relevant for you? Slack is a kind of not a client relationship management but it's a chat pretty much it's a it's a typically chat solution, but for professional purpose and in your context I would see it as a as an employer relationship management tool, so many modern digital companies and use this chat. It originated pretty much from people using WhatsApp in the company and using email as a chat solution and then people found out this is very inefficient indeed. just sucks. And therefore they came up new solutions. And one of those were slick check. But before Slack, there was a one of the leading software companies. It was it's called Atlassian. They identified the same need and they built a chat that was very, very similar and to a certain degree even more powerful because it had some more features and slack for the professional workplace which was called GibChat. They bought this company and there was one major difference in slack it is possible to have private chats. So this what we are doing now a one on one video chat or text chat was possible and it was private, and in GibChat, it was not private. So in GibChat, the administrators could enter to every check. And it was a and I think this is the The primary factor why slack succeeded and GibChat did not succeed is because as a company you also have implicit communication. You have two workmates talking about your boss bad you have, this is a reality. And just because you can control every room, it's not that it will go away. But it's an I think this is the same. The same design pattern. Why CRMs are not adopted very well, is because it's a management tool. In the end, it's like SAP. If you have SAP, people just use SAP to squeeze out money out of every single profit centre.

That's why people hate SAP. That's why people hate CRMs because the sales manager can go and say, Hey, you didn't send enough emails last month. I think that management that's the reason why CRMs are not adopted.

Interviewer 20:02

Okay, interesting, but okay. Now, I am trying to understand how is this kind of customer centric or customer relationship management idea implemented in a culture of a company? Oh, everyone can be this thing in mind without using this kind of system or software. You know what I'm saying?

Guntram 20:32

It's very hard. It's very hard. I cannot tell you how or I can I can tell you what I would say. But I would better than telling it myself. I would like to forward you this video and this, this chat because there is a right very, very good video and a good book about this. I think this book is called what you do is who you are by Ben Horowitz. And he also has an interview which I would like to share with you. You can either watch the video or read the book, I think I read to a certain degree the book. I didn't finish it yet. I'm still reading it. But it pretty much explains how to implement customer centricity. And even though I didn't know the book before, I tried to embrace this, but I think he listed most of the paradigms very well. So I think Yeah, it's a very good book.

Interviewer 21:32

Okay.

Guntram 21:34

Yeah, no, it's not an interview, but I think I'm pretty sure I didn't see this interview, but I'm pretty sure that he will go to a certain degree and you can check out in the video if you want to read the book.

Interviewer 21:45

Okay, interesting. okay. Thank you. It's not only national culture that I'm going to explore is also the culture of the company and how this kind of customer centric idea should be sold. And if you want to customise for example service or product to applying, how is it on our day people really looking for? You know, you're really focused on it or how is how has it been in SMEs? Because in the become very comfortable with the CRM and so on, but in the small companies, I don't know.

Guntram 22:37

I think that's no, in the book. In the book, he explains that it has to start in the very beginning. In the book, he explains it pretty much. He says it starts with the first relationship. It's something Either you are customer centric or not, you can always become customer centric, you can also do it. I think also for me, it's Not so much about customer centricity in the business place. Yes. But generally, I would say it's more about human centricity. Because a human is more than a customer. It's not I think this is what chase Jeff Bezos got wrong. Not from a marketing perspective or from a business perspective, he got it right. Because, I mean, he's the most probably the most value or more most rich person on the world. So, it has something right for sure, no question. But he could also I think he could have been probably at least as successful or maybe a similar similar degree of success, if he would have used a human centric approach and a customer centric approach. Because I mean, there is no reason I mean, it makes sense to give a for example, an employee in a in a in a certain shipping centre or logistic centre, a certain wage, I mean, you look at the market you see okay, what is viable? What can we spend and

you give him a certain wage, I mean, there's no no point in defining it a budget a way to make sense, you can do it, I think. But I think it's not. You don't have to be an asshole pretty much. So I think if he would have used the human centric approach instead of customer centric approach, he would have been maybe more human more nice. Which doesn't mean that you have to pay everyone a billion, but it makes that it just makes you less cold to the inside of the company. Because the customer centric approach makes you cold to the inside of the company. You can be customers you can be World's Most customer centric company like Amazon, have great service and still be on the inside a very hard place to be. And I don't think this is necessary. I think you can be fair and okay. And still not bring you into troubles.

Interviewer 25:02

now is related with the National quarter of clients or international corporations that you might have. So, how do you think or how you should manage this cultural knowledge for the clients and how you think it's actually important to manage?

Guntram 25:23

Yes, it's absolutely important to manage. It's absolutely important to manage it's, it's, it's something that's completely different. I mean, it makes total different. I mean, you you know it from yourself for if you are talking about appointments, I mean, if you go to Germany, and you come to an appointment to late people or kill you, if you go to Austria and you get to five minutes late to an appointment, people say, Oh, you're a bit late. If you go to another country, people say, oh, granted, you are just 15 minutes late. I mean, I mean, that's, that's like a major difference. And in each each of if you know how people expect things to be, you can adapt to it can be either way. I mean, every each of these three ways works. But if you do the one thing and the other, if you do behave like one culture in another in, everything breaks down. So, if I go to German meeting, 15 minutes late, everyone will kill me. And if I go to, for example, a company and country where it's okay to be 15 minutes late, I go on time, I will be like, really pissed because no one shows up, so. So I think it's, managing culture locally is absolutely key.

Interviewer 26:46

Okay. And for example, in your case, okay, let's take apart the meeting part. Let's say that anything how to put it I don't know, but you have to customise the solution for someone in, let's say, Spain. And you cannot move personally. And so, considering that you have to solve something for someone in another country, you have to consider the culture as something written for the procedure of solving the solution. You know what I'm saying? Not only do I communicate with the people also to solve a problem.

Guntram 27:39

And yes, that's true. Yeah. And what's your question? You mean, if there is a difference in adapting the company, you mean? I mean, yes, yes, it is. Absolutely. 200% It's really it's like different countries, you have to imagine companies are like in this, in this relation companies are like countries. That's my perspective. They all have different cultures also, completely different cultures can be like, totally. And this is, that's also the reason why certain companies like an agency attract certain other clients, they have a certain degree of interacting with each other, they have a certain feeling how they want it to be treated, they have a certain feeling what they consider right what they consider wrong. So yeah, for example, our company attracts pretty much people that are in the field of biological products. Because we take ethics serious, it is something that is important for them because they also work in ways that

are, let's say, kind of more advanced. So if you sell an apple and you sell by Apple or organic apple, it's Match the same product, but it's completely different because you have to manufacture it differently and you have to market it differently. So if for example, we don't we don't we actively do not work with certain clients we don't work with for example, gambling companies, we don't work with companies I know agencies in the region that work with they build porn websites, we don't do that. But I mean for them it's okay for for us it wouldn't work. Yeah. I mean you can get good decent money from it. It's but we choose to not get this money, but they don't want to charge it for them. It works for us. It wouldn't work.

Interviewer 29:49

How much? How much is the customer involved in in this procedure? How many times do you have to call to them Yeah, he held that our site is particular

Guntram 30:08

we're elaborating this still honestly, what I can say now pretty much is that we need at least one or two meetings until we have onboard the customer until we can offer him something valuable. What we cannot do is we cannot approach a customer with a standard product. This is not how we want because we are these customers and we have this customer centric approach. So, we cannot we cannot give standard product. Even though we try to standardise modules or components in our, in our offer process so to speak.

To resonate with the client, he would say hey, I feel this is so standard. I don't want this and also we would have to deliver significant amount of product That we don't want. So we have at least one or two meetings in before we get to sign a deal or be off before we can present a deal an offer. Once the deal in the deal we offer can only be exactly what the client wants. Or to a certain degree, it's mean it's never 100% but to very certain degree has to be very high match. And from there we go forward, then we have like regular meetings, continuous conversation, at least once a month, probably more often. Yeah, that's it depending on the intensity, how the client wants, also how much money they have, how much money we spent for them, how much yeah, these are then more factors that are involved.

Interviewer 31:53

Now coming back to the question. How should be managed the cultural knowledge of international clients or partners?

Guntram 32:40

So you mean how I identify if we are matching in terms of our company or not? Yeah, I think this is a feeling, pretty much it's, it's like with every person that you meet, you have a certain feeling because you behave in a certain way and the other person behaves in a certain way. When we started the company, we didn't turn down any clients, we took everyone. This ended up badly, often or not barely. But if we had to deliver products that we didn't want, and we had to go, miles that we were not open to go and it was a bad experience. So now we started to more and more turndown clients. We still are a company. So we trend we live more from taking clients and turning them down. So we try to get people into a relationship, that's our goal. But if there is just, let's say, to get this just too big, if they have like, totally different attitude, than we have to say, this will not work and we pass on the deal, pretty much. But it's a relatively rare occasion. We try to not do this too often because I mean, that's not how it should be. I mean, generally you should be able to work on mean we some clients who work better with others

not so much, but on a general basis, you should work together with clients otherwise you're out of business not to say to

Interviewer 34:09

yeah, yeah, I understand that. Well, the company of my mom was similar...

Guntram 34:17

What? Can you tell me a bit more about the company that you are referring to or that you work with?

Interviewer 34:23

Well, okay, a company of my mom is that's in Costa Rica. And a company where only my mom my sisters and I working and we were doing we are, they are still working on it. I'm here now but they still have it. They are designing and producing costumes or artistic or sending discipline. So theatre, dance, all those kind of things. In the beginning, everything like started so smooth, you know liquid With comments that people like, but my mom paid and so on. So we're increasing and we were accepting everything. It was a mistake, because we were not focusing, you know, it was just so broad. We had a lot to do in some different things. And we were three people. So it can't just be Ms. It My dad always was saying like, No, you need to focus, you need to be clear what you can offer the kind of people you can have not have because that's also the thing. And that's only with experience, I guess. Exactly. So it takes time to learn other kinds of when you have.

Guntram 35:46

Yeah, I think there is no plan B. People skip this but it takes us time. Now there is no figuring it out up front. I mean, with more experience, you can do it easier. You get faster, but it takes time. Yep.

Interviewer 36:04

Yeah. All right. So let's see. There are just three questions. So, do you think that marketing, sales and service automation would help to gather information with cultural information?

Guntram 37:38

Yes, absolutely.

So I mean, we do this as I mentioned previously, for example, it's through this tool called that we use Active Campaign. This is a solution that is tracking clients, according to their behaviour pretty much so they behave in a certain way. system identifies this behaviour and feeds it back into the tool. I mean, that's that's pretty much how it works. So they visit the website, they do stuff, whatever, and the system tries to make his bill makes sense from it.

Interviewer 38:19

Okay, yeah. That's very good data and yeah.

Guntram 38:28

and I think I think it is, I think what people often think is that maybe this would be some precision that makes sense. The system then will not tell you how what to do. I mean, that's something that people often think oh, then I have a system in place for this piece. And now it tells me everything is wrong.

Interviewer 38:51

You have to you have to have the question. I mean, to manage this data, you have all this data, but you need to ask to the system. Okay, I need Nobody comes with this.

Guntram 39:03

Yeah, exactly.

Interviewer 39:08

have you do you have to deal with international development? partners? You mentioned before. Sorry with international development partners, you mean? Yes. Like you mentioned before about Switzerland.

Guntram 39:40

I don't at the moment we are trying to do this. I'm trying to establish a relationship with with a company from Poland. We are we want to hire experts so to speak.

Interviewer

Do you think they are a marketing agency in Poland?

Guntram

Yeah. They are very good. And we are we want to, to get them out to to work with them to bring people. In this case, it's really, let's say, educated people to Germany to Austria.

Interviewer 40:40

I mean, that you're starting with them, but have you intensify any problems so far or culture related in its process so far or not?

Guntram 40:52

I know, yes, we used to work with a Romanian development company. We did have some Specifically with not with the exit management level people but with the Mr. Developers pretty much with the working people, we did have significant differences , in terms of how to work together. Because they had a different approach to the product, they had a different view on how things should be done and so on. So I think on people, once people meeting personal they can can build a personal relationship and can develop kind of a common culture, but the more distant the culture is, so if you are, I think, for example, it's pretty difficult to work with people that are probably from the other side of the of the planet. It can it can work can work if everyone wants, but it can be pretty difficult.

Interviewer 42:01

But what they were doing, what were you working with them? Really the marketing or is artificial was

Guntram 42:08

Yeah, we had both cases we had once once we built a software product in with people from Romania and once we we tried to build a marketing campaign with people from Poland and I think if you are talking to the business people they often have pretty they know how to switch to cultures. They are

pretty good at this. They know how to adapt. But not so much if we are talking about let's say, not working people just normal. They are not necessarily trained in deflecting not want to judge it but it's just that it probably they don't have yet to experience or could be working with international people.

So, you have to build you have to train them pretty much I mean, it's like training a language. Once people can speak the other language they can work together. But if you are, if you don't know what, what is important for the other person stuff?

Interviewer 43:16

Yeah, you know, in design, that's some that type of thing that is a must. If you design something for someone from another company, you need to research and try to fit into their culture, you know, even if it's International, it's kind of saying understand what they would like. I'm also seeing and because we are right now working with a company from Russia, they are developing our website. And sometimes it's a bit complicated to tell them hey, this is not what we like what we need. You see the first sketches and they look so Russian or so the things that you find from Russia, but not from here. So, it took a while now, I think they understood Finally, but it was a bit. And it's I don't think it's, I don't think it's communication. Well, could be, but I just feel that it's or forgetting, or it's hard to get to the point to what the customer would like.

Guntram 44:23

I mean, I think it's, it's several several degrees of what could happen can be what you described now can be different. Let's see. Yeah. Can be can be that. They didn't they were not able to meet your needs. Because it could be that it just didn't want to. And oftentimes, this is a heart hard way to figure out Yeah, which is now true. Which one is true at this time. Yeah, so because you can if you say, okay, you just don't want to I mean, that's a tough that's a tough one. I mean, see, tell this a person. I mean, it's like really, really evil. Yeah, probably they want it probably tried. But on the other hand, probably they just didn't care for it. So, they don't even know that they should do it or something.

Interviewer 45:28

Thank you so much. For your time for the links. Very helpful.

Appendix 12 – CRM experts interviews transcripts

EC1. Expert Interview- Javier Alberto Ortiz González / 18.05.2020

Paula: Can you tell me more about your experience is with CRM?

Javier: It's a philosophy that began in Costa Rica about ten years ago. It began mainly in large companies, as well as multinationals and large local companies such as the Costa Rica Brewery, Dos Pinos, La Nación, large public institutions such as Banco Popular, the Ministry of Finance, the Costa Rican Institute of Electricity (ICE), La compañía fuerza y luz, acueductos y alcantarillados (AyA).

Javier: Initially, the CRM started as an electronic platform basically to control mainly the need that existed at that time, and it was seen more as a solution for customer service. The one leading all this was the BAC bank, about 12 years ago, it was the BAC who started it, using it mainly in customer service, and it does it mainly from the cash registers or counters. This is how CRM starts. At that time, it became a pressure element for the employees who were directly attending customers, because it was a matter of metrics about the length of time it took them to attend the service. Later, some public institutions started the same process first from the counter and boxes. This is how the process started; the mainly large and public companies continue a process of integration of the CRM within the organization. And then they parameterize both the technological application (the software) with the processes of each of the institutions, but always linked to customer service, that is, no longer only sought to serve at the counter or at the cash desk, but also within the internal processes of the institutions and companies, as they can be more efficient so that the customer can meet their needs. And then the software applications come to contribute much in this, and very important software emerges as Oracle that presents an important platform of CRM. Where large companies like Dos Pinos acquire this platform and manages to parameterize all their operations systems and processes related to CRM so that today companies have within the electronic platforms, have software that controls absolutely all processes, and is indexed with the CRM platform. In this way the platform seeks to involve all elements and resources, as well as people who are within the organization, so that these people according to the processes to be developed can be efficient in terms of process service you have, your responsibility and not cause what is known in industrial engineering "bottlenecks." That the "bottlenecks" are those processes that a person does and takes more time than it should take, and then the person who is the predecessor of him keeps on passing him processes, and that person cannot respond to the speed of the predecessor this generates bottlenecks.

Javier: However, all of this can be parameterized with a CRM system. The slowness that can exist in this value chain is controlled and becomes more agile. It controls those times that you can say in some resources within a process of the value chain. Therefore, then monthly, weekly, are valued with what is known as heat maps. The heat map is evaluated with control indicators, latency times, or durations. If it shows green is when everything goes perfect, yellow is when there is a delay in some processes, and red is when there is slowness and obstructs the process, the value chain is affected. The value chain starts within the whole organization integrating all processes, and the end of the value chain is the customer service. Then if within that process, something is delayed, customer service is affected. Then the CRM controls all this. So, let's say that it has been like a little evolution in Costa Rica with the CRM issue.

Paula: Okay, but does this mean that he is only employed by large companies?

Javier: No, it started in public institutions and big companies because two variables were needed: professional technical knowledge and technology. Of the people within small companies, the professional degree is lower. In-state institutions and large companies have the luxury of having support teams of high professional level with a high level of constant training. The small companies do not have the facility of response in the constant professional update, then when the CRM starts, the big companies, by the knowledge that comes from abroad, the CRM started where you can pay for that training and the multinationals that entered the country. The small and medium companies are those that sell two million dollars a year or up to two million dollars a year and do not necessarily have the knowledge so clear, in the case of Costa Rica, at least, and it costs them more to emerge. However, despite this, what there is, is more ignorance than anything else. Since the platforms that there are for CRM can cost 100 dollars a year approximately, they are very nice for small businesses to access and control very well. It does not integrate the organization, but it is possible to control customer service processes, customers, business, integration no longer.

There are few small companies that have a clear concept of what CRM is and how to apply it, one example is a company I had JAFERO. We, as an emerging company, applied it, allowing us to follow up on customer service, needs, sales, and sales compliance in a timely manner. But that's because I know about this. I come from a multinational bank. That is, let's say that the level of that small company is a level with a high-level professional, who comes from global banking as Citibank was. Well, obviously, the knowledge I have allows me to enter as small business schemes playing in big leagues. But the small businesses here in Costa Rica don't all have them.

Paula: What do you know about the implementation of CRM in the development of customized products?

Javier: The relationship processes between sales agents and the client, that is, not for sale but simply for a direct client/company relationship; what is through sales agents, business executives, sales areas, sales managers. When the interaction between a customer versus sales representative of the company is made, what is normal and very common. Today those companies that are linked to the CRM, people are already trained and even bring their own company tablets that parameterize with the CRM applications. When they talk with the customer, part of their work and the relationship with customers is to find customers' needs to satisfy them, to create a product, a solution. So when a customer tells you about a requirement and talks to you about their needs, the sales agent gives you the time to talk as much as you want. At that moment, the Sales Executive who is already very well trained, he not only expects to arrive at the office that right there with his tablet activates the recording within the CRM platform and everything the customer says or is saved in audio or written form. And they're all the information is taken, that is to say, the client's need, for example, the equipment we are bringing from Scania Brazil that is a solid waste collector. It is a collector that does not work for a client X because it does not have a compartment Y, which it needs to handle the waste for recycling. So he needs a collector that is different from the one we propose, so the question we ask ourselves is if we can offer this particular client a collector that meets those new requested specifications. That's very common, and that's part of the consumer-focused and nano-commercial trade.

Then a simple boot from there records everything the customer wants and what he wants and then takes all the information he needs well. For example, if it's a collection kit that requires particular spaces, Okay, perfect. It is that it needs plastic metal video, etc., the container has to come in three sections is what you want, how you want it to work how it is going to be used how you want those compartments

to be turned over. In other words, all that information that can be extracted from the customer about the product is recorded in the CRM in the initial stages of a sale.

0:16:14] When the client's needs are clear, the Sales Executive in the same office sends this information, and it is parameterized with a response time to the client and reaches the people involved, in this case, the people in Brazil. The CRM system is in charge of sending and contacting the person in charge of designing the new garbage collector to finish the meeting. Meanwhile, in Brazil, the technical analysis process of this project is starting. Then it validates several things like the probability of the design, the price, the costs; meanwhile, the factory side is also activated. At this point, he tells Costa Rica (from the partner in Brazil), "okay, perfect, so you have to do a market study and tell me how many of these collectors think I can sell in the country, why I am not going to do a collector of that nature just for one client. Then comes the issue of commercial sellers, where an analysis and market study must be done to see how many municipalities, how many customers such a collector can buy from me. Then the CRM starts controlling absolutely all the processes. When we do the market study, we control why the program gives me a week of time to do it and if I don't do it in that week, a warning is activated, which is the yellow one, and if I don't do it more another week, it is activated in red, so it arrives to the CEO.

0:19:00 So I deliver the market report when I deliver the design of the collector comes a presentation to him CEO or the area that decides and at that time the person accepts between design and production how and put the product produce. With the draft, the design becomes a project and goes to the plant how it is designed and they make it comma and once it is ready they notify the sales agent and in the meantime the client is automatically informed with the CRM platform of everything that is happening. Then there comes a moment when an appointment with the client arrives and I tell him look at that plan is the truck is what we are going to do he likes it perfect if the visa does not have light bulbs does not have space extra details that need to be adjusted. And there comes again an adjustment, he likes it and is accepted and then there is a sale process point I just want then we enter a bidding process, and then we enter the sale.

Paula: How could be implemented the idea of customer-centric in the company's culture?

Javier: It's a very complicated and difficult issue, but the solution is very simple. It's difficult because it's a cultural issue. From the moment you tell an employee that you are going to incorporate a control, because the CRM becomes a control, to improve customer service. To improve sales, to improve customer service, to design the products that the customer wants to design, the products that the customer needs and for that you need to find the almost perfect one, where everything that goes out with the customer has to be parameterized in databases, to everything that the customer needs has to be stored, and what the customer generates of ideas has to be controlled. And the Executive has to be clear about this, as well as the organization has to be clear about this. Internally to think in terms of the customer to such an extent that he has to respond so that the customer is satisfied. From the moment you do that, you are going to encounter barriers. It is not only a Costa Rican culture; it seems to be more like a human culture. Perhaps you are very young, and perhaps you do not understand this, but for example, you say someone of my age who can no longer give classes in person and has to do video conferences and has to learn to use a platform like Zoom that for a 59-year-old Javier Ortiz who does it without a problem, is a "freak," because I talk to people ... for example a kid one of these days. I was very angry because he says but this technology for people with technology, but for me, it is very interesting. I like it, and I am open-minded.

So I think that also encompasses the general culture of being tied to processes of change. Implementing a CRM tries to understand that the barrier within an organization implies understanding that the barrier of the psychological shock of the human resource to accept that new philosophy. Already in automatic is a problem, and the employee is the main resource in charge of boycotting or sabotaging the system. They are the first to complain and say that it does not work, but here no one uses me information as they do not use it, etc. For example, in my business that I mentioned earlier JAFERO, when I put CRM the anger that I had the commercial as I jump as to what if this ***** is not good for anything, "you who care where I go I have to trust me," but it is not a matter of trust, is about controlling. So the problems I had with him were simply that he didn't accept, it's a cultural barrier.

- "It's that you don't care where I am or what I'm doing."

"-If you are not here tomorrow and you die or get sick, I have no idea how anything will turn out, so it's not a matter of trust, it's a matter of control. If you become incapacitated, I have to follow your work, and if you don't leave me information about where you go and whom you talk to, I can't continue with your work. Who sets and develops the culture of an organization?"

0:27:33

Javier: The owners are the people who are going to put the culture, for example, I see in your company if they want you to arrive on time always and be happy then they have to give the example. But if they start coming late you are not going to be happy with them because you say okay they don't set an example then you don't see it equal not equal for example if you see a boss that works **** that supports you a lot that never lets you down that is always with you train you to teach you to take you and take all the exhibitions, training you, encouraging you, motivating you; what are you going to expect from that culture? You become equal, and if you don't become equal, the system takes you out because you are not cultured that way of thinking, then you retire, or you say goodbye that easy. So how do we get a CRM in, is a cultural issue, the whole Board of Directors or the Council, the owners will believe in it, 100% and it will be subject to implementation by them, so they set the example. What does it mean? It means that if the CEO is involved, he will also report to them if something is in the red. Then the warnings that come out, come to me and when a red comes every week you have to be doing a follow-up meeting of the CRM, and every week the CEO sits down with the person in charge of the process that gave the alert and tries to get to the reason of the delay or performance deficiency detected by the CRM.

Javier: If it reaches the red CEO warning every week, we'll be doing a follow-up meeting where the boss will mention the performance and the alarms detected. Look Fulano, you have this process in red, we were supposed to be doing this like this, and it's not going as planned, what happened? That's when you come in and accept or not accept the CRM why you get angry that you always have to be giving answers about that, if you are in green don't worry because you are complying with everything, everything is coming out as needed and as defined in the beginning. But the employees accept it or not, to control performance, it is necessary to control much more the time. So, if before I had flexibility of time I am now, there is not so much depends on how it is programmed or managed.

Javier: But if the CEO is not in on it, it dies because CRM is too hard to handle. If the Board of Directors doesn't believe in it, it is complicated a lot to implement. If the owner isn't there or the Board isn't using it and doesn't believe in it, then it doesn't work. For example, in my case in JAFERO, or if I don't continue string in my position, this is killed because a partner we had didn't want to accept it but at the end had

to accept it, although he didn't want to because we had a majority of votes and in the end, he had to accept it.

Javier: The other collaborators also had to do the same thing by entering the customer's information, the customer's specifications, about the other trucks as the truck can be assembled as they want, then new designs and specifications can be requested to generate new products with respect to what the customer needed.

Javier: Every day they had to put in the ground opportunities to improve customer information customer specifications, for example, we generated trucks developed as the customer wanted The truck goes out with the customer wants then the customer can ask for new designs of the trucks that are very nice because it gives a lot that the customer asks for new designs and the designs go to the area of the salesman draw them we send them to customers all that you wrote down and saved and controlled. Then it is a cultural issue costs much easier and the only way to do it is simple and easy that the Board of Directors or the highest body of the organization implemented it, if they do not implement its human resources do not learn to use it and it does not take the taste of the system. For example, the BAC bank is a bank that works 100% CRM complete control of its customers remember that is a regional bank international all requirements of the BAC pass and transcend the region.

Paula: Regional, you mean Central America?

Javier: Ehh yes, Central and South America and the Caribbean and Mexico. CitiBank is a Mundial bank that is another one. For example, using a CRM that was very robust and powerful, that controlled all the systems and all the departments or what one does is parameterize everything that is done within the organization and the whole globalized world.

Paula: Okay, I find it interesting since it seems that not everyone has a notion of what it or implies. With the people, I've talked to, and they talk to me about CRM in general way, everyone only mentions that it's a platform or it's a technological solution to help generate customer relationships, but from there, it's more they don't know everything. I admit that, in my case, it was also a bit complicated to understand what was behind a CRM.

Javier: Yes, yes, CRM is not just an application where you fill in and select spaces, AND it meets a requirement imposed by the directive. In fact, if it had been like that, I wouldn't have thought about whether they want to invest in something like this. It's not that, CRM in general, obviously seeks to keep customers satisfied, but it integrates into its philosophy of being able to meet the customer's needs, it integrates the entire organization... complete. We all have to be stuck with the CRM because, at some point, someone has a link with a specific area, and then the CRM shows the whole series of units in the organization, the customer data, and in turn, all the departments involved. Because if there is something that the customer asks me that has a link with this department, once I link that customer's request with that particular department, and that person, from the moment he receives that mail, it is like a "papa caliente"¹¹, he has to solve that because the CRM is activated and gives him some time to respond if he does not respond, then yellow and red alerts come out. He has to respond like Paula, that can be

¹¹ "Papa caliente"- is the a kids game popular in Hispanic cultures, in which an object is thrown from one person to another because is "hot potato" and the idea is to get rid of it. But in this context the interviewee means that the the "hot potato" is the task that is related to the customer. Example if is needed to answer back to the client within 2 days, is better to get rid of it before getting the chance to get a warning.

done so Paula, that can't be done because if we don't have material or machinery, etc. then he communicates with the client to inform him that he can't use it and if the client leaves, he stays in the CRM, and it arrives at the general manager with a report. That is a little bit like the relationship that links areas with people, so it involves involved inside and outside the organization. Because it involves the customer, the CRM keeps the customer informed through mailings, for example.

Paula: But now you told me that he is being sent to Brazil with Scania, for example. So it also involves third parties related to development or partners?

Javier: Yes, yes, because in my case JAFERO Costa Rica is a commercial unit, we are a commercial area. Brazil is a factory where the collector is designed and the machinery and trucks are manufactured. I am the battlefield, who detects the need of the customers in Costa Rica. Everything that the customer tells me and asks me I parameterize with Scania, they get the specifications and requirements that we get here, and they then tell me okay we will start designing while so many find out how the market is then we do joint work of the project. We do the market research here in Costa Rica, and they design products. When the first design format is designed, they pass it to me with the CRM ...maybe a "papa caliente" sends me the design and from there the clock is like ...when you are playing chess the time is measured with a clock and the time runs against you, the faster you respond, you press the clock and follow the other one...you know right?

Paula: Yes,

Javier: Okay, Okay when they send the first sketch of the design they press the clock and now I have the design it's a clock effect so what does it mean I have to meet the client fast because if he doesn't renew to be behind me controlling me.

Javier: Of course it's better because it makes all the development operations more productive too...

Javier: Of course that CRM, so I do not understand why in organizations, ... that is, we are in the 21st century Paula how is it possible that they do not know the CRM. Not as a philosophy but as a practical application, because everything you are looking for is for the good of ...

Paula: but I think the thing is that it's complicated to understand what it is it took me a month and a half if you don't explain it to me with examples and how it works I don't understand it so easily and people especially people with a background in this or experience find it hard to understand

Javier: what happens is that you can do a CRM application by stages first start with the customer versus customer service or be customer here customer service platform to know requirements for example because at least arrive at the company through that customer all the requirements of the customer and know it like this can start an m after that they stick the CRM with the production area for example after that they stick it with directly with design then with plant and then there comes a moment when they have stuck with the whole organization the principles in the beginning their sales control more than a serve because they see it as a sales control. And it's true, but it's not just that..

Paula: Well, then apart from CRM and a consumer-focused culture, what do you think would be useful to improve the relationship with international B2B customers?

Javier: I remove the CRM from my head at this moment

Paula: Yes

Javier: ... Paula then if I don't have a CRM business relationship customized by itself, it's always going to have to keep on giving that is the relationship. Ok, let's say the factory in Brazil. I didn't but my partner had a direct relationship with the custom manufacturing and we always maintained a close relationship with the customers especially when we didn't use a CRM. For example, in China, for the tires that they had to bring from China, I had a CRM link with China, however, there wasn't a CRM, in the end, call it a classic or rudimentary model, but I communicated with the salesperson in China through e-mail, I could not control everything that we talked about, but I always pointed it out and followed a classic format of personalized customer service and now with social networks it is more intense and easier to manage, since social networks can have that relationship link through different areas, Facebook, Twitter, even generating sales in that way.

Paula: But regarding the culture itself you are talking about this China uh to gain contact with it you should have information and handle that cultural information

Javier: Yes, obviously you see when I in that was the relationship with this company from China, first was born as a question of a product, me as a customer. And immediately I got my answer, and she wrote me back in Spanish I was written in Spanish, and the answer I gave meets the requirements there was no CRM, but there was a relationship that started that way via mail and there immediately very aggressive very direct asks me the phone and indexes me once to WhatsApp, so it was directly then so was the being in the classic format. Now when she answers me, and she keeps asking me I am answering and vice versa the question comes up if I speak English to her I said yes, and she keeps writing to me in English, so we keep talking in English; she told me that she already speaks Spanish very well and that I possibly did not speak Mandarin, so we better communicate in the following days she starts asking me about Costa Rica and I about Qingdao China which starts to happen there is an automatic "culturalization." Knowing cultures, she already sends me pictures, and I send her pictures of Costa Rica, she sends me a picture of her with her family wife and daughter, and I send her pictures of my family and me, and there begins to generate a relationship with the client. All the subjects and norms of culture including food and others that help to create a very interesting commercial relationship knowing culture then if there is a cultural process I also read a lot of China I prepared myself for the culture, and she was evident that I had investigated Costa Rica culture because I already asked her things in particular like the meaning of the typical cart I already answered her yes clear if there is a basic culture process and it is imperative.

Paula: But that information was not stored there is no control with respect to these cultural data about this particular person or maybe the particular company or maybe the particular area of China is not stored that

Javier: no, no that wasn't saved or anywhere

Paula: Okay, so now my question is, do you think it is important to control and manage this data?

Javier: Look if now you involve me in the CRM I would say yes because tomorrow maybe I do not know io the morning I'm in another area oh I'm not in the company then it becomes important that the organization, not me Javier Ortiz that the organization knows the company to China culture and relevant aspects of, but that already allows the classic formats. No, that is not stored, not saved. If I leave, the new person who needs to be reacquainted with that person will get to know a company and a bit of Chinese Culture but not that particular person or his culture or personality and nothing.

With CRM it is possible because everything related to that person is stored and connected to the server, it connects me to all the phones when he came to call, with this you can see in everything to call Brazil to the person in charge of production in Brazil.

That appears, and I get customers to mail then sent mail through the service 12 phones now have IP is linked to computers, so it's time I want to call the teacher by the CM is the phone of EI in the computer dialed from the computer is activated the phone and I have peace because they are based and when I call, and that recording that call is recorded everything that is done with a customer is stored in the CRM. So it is very important to walk with all the equipment necessary for that tablet computer phones and so on why everything is stored and saved.

But evidently, the envelope can maintain me and generate information about the culture of the clients he is going to keep for me all this "culturalization" and this investigation of culture that you have made is very interesting because the processes of culture in the same way each country and town has its culture each, person that is to its own micro-culture, one has to know that part of a culture I'm going to go into more detail, I don't know if I can call it micro-culture, because we had a relationship with a Canadian client, for example, and we had a collection truck for that client. This man talks to me directly from Canada, but if someone else wants to talk to this client, because I am on vacation or because I do not work for the company, at least he should know the way this man likes to behave, his micro culture, his personality. If Javier Ortiz is not there, I have to call this client from Canada and I don't know what he looks like, I need information about him, I don't have time to look for it, all that is in the CRM stored, there are hints about this person: "he is a direct person, he asks to the point, he doesn't give much detail, you have to look for more information or ask him more about those important customer relationships".

Paula: Okay, you told me about some possible complications, but what problems in relation to culture can occur in these relationships with international partners?

Javier: Ehm, the answer I think is easy, that the products don't match the requirements needs and style of the customer. ---For example, a company's culture or branding----- . That is, that could be the problem, but you would see that something is the opposite. When you design a product, you shouldn't design it with only the technical specifications of a product in mind. If it is not the other way around when you design a product, it is because you know the customer's technical and cultural needs. So if you design the product, you already clearly understand the culture, because if you do market research to make products to China, first to assess the needs and requirements. But the question what you are doing is very important, I will tell you why. If you analyze the case of Euro Disney, it is a megaproject that is studied when courses of projects arrive, this park that is in France. But that park when it was almost bankrupt. Why? Why a world-famous Disney because it almost bankrupted?

Paula: I guess

Javier: Culture theme

Paula: Yeah, Europe's not so pro-Disney

Javier: No, what are the best known and best-selling cartoons there? Here it's Mickey Mouse, Goofy, the princesses, which are the dolls you see in Europe? Have you identified them?

Paula: Yes, but they're very local,

Javier: Exactly, for example, this Viking character who forgot the name... Olafo, I think. Okay, then they sell everything from food and drinks, but nothing in the stores, the Europeans did not identify with those cartoons. It's a cultural issue; the Americans ignored and imposed their American Culture on products to be sold in another continent. So they needed to adapt. So in order to make a good product design, it is also necessary to do good market research.

Paula: And now with regard to international collaborations, any problems that may arise with regard to culture...

Javier: It's just that I'm back to the same thing, Pau. For example, when I first met the people of Brazil, the way we got to know each other led to several things. One, to understand how they are, when Roberto (my partner) told me that I had to meet three people who are coming, then I had to prepare myself and study what they like and what they don't like.

Javier: See, for example, you have to know how to deal with the Spanish. Spaniards are a bit rude and, and when you realize it, you feel offended. These two options like for example in the bank happened to me once I had to treat people from Spain, and they are very direct very spoiled when speaking one very easily feels offended, but you don't have two options, or you adapt to the culture and ignore the fact that you feel offended, or simply lose the contract. Opposing understanding and adapting to these other cultures. It is very normal for example the Germans, the German a very particular culture he goes straight to the point of a single what he needs what he wants he goes to the point and direct, not like the Spanish; the Spanish are ruder with their expressions. On the other hand, Germans are the direct ones. So when you are thinking about a new product, manufacturing or buying an already manufactured product, the cultural relationship is basic and therefore it is necessary to know the culture.

EC2. Transcript – Previous questions to Francis Buttle

Used for the theoretical framework via email 20/4/2020 4:05

Paula: Operational CRM involves every technological tool that helps the company to automate daily and often used functions like marketing, sales, and support. But, does it mean that the company must apply all of them + strategical perspective and analytical perspective to say that they are customer-centric?

Francis: Operational CRM applies technology solutions in customer-facing functions such as marketing, selling and customer service, sometimes fully automating them. Full automation example: virtual assistants used in customer service. Operational CRM is a generator of customer data, for example, response data about outbound customer communications. This data is then used in analytical CRM and to guide decision-making in strategic CRM. For example, data from and about customers, generated by operational CRM can be used to guide decisions about which customers to target for acquisition and retention. These decisions are strategic CRM decisions. It's hard to imagine a company making sound strategic CRM decisions without data acquired during operational CRM interactions, either face-to-face or remotely, with customers. A customer-centric firm organizes itself around the acquisition and retention of selected customers, delivering offerings that are valued by those customers. Data from operational CRM is critical is becoming customer centric.

Paula: Regarding the CRM software: I read in a blog (I believe this is not right, but I got a bit confused), that there is a difference between CRM and Marketing automation software. They explained it based on the sales funnel. Being marketing automation focused on the first steps (I agree), but the last steps are CRM because, according to them, is when the company interacts with the customer... Based on

what I have read from you, others, and my understanding: the whole funnel in CRM, the interaction is always there. So in this image would be Sales automation possibly. What do you think about this?

Francis: CRM software includes marketing automation, sales automation, and service automation software solutions; CRM is an umbrella term that includes marketing, sales, and service technologies. Marketing automation often is used to create and deliver leads to sales teams. Those sales teams then use sales automation tools to advance those leads through a selling process, and beyond, maintaining relationships with profitable customers into the future. The distinctions between marketing and sales solutions are not always clear because many companies have different views on the boundaries between them.

EC2. Transcript - Written interview to Francis Buttle

Sent the 17.05.2020 / Received 19.05.2020 / Processed 19.05.2020

Interviewer: IQ1. Could you please tell me more about yourself and your expertise in the CRM area?

Butte: Formerly full Professor of CRM, and previously full Professor of Marketing, and Relationship Marketing at Manchester Business School and Cranfield School of Management (both UK), and Macquarie Graduate School of Management (Australia). Now retired from academic life, but still consulting and serving as an expert witness in legal cases. Author of 14 books (including 5 on CRM) and about 150 peer-reviewed journal articles and conference papers. I can send you a full CV if needed.

Interviewer: What do you know about the implementation of CRM in the development of customized products?

Butte: At its simplest, CRM is about collecting and using customer data to develop and sustain mutually beneficial relationships with customers. When you go into your local coffee shop and the barista serves you your personalized coffee with one sugar and a cinnamon topping, that is CRM at work. This is a customized product to meet the requirements of a particular customer. When Boeing constructs airframes for Qantas, they collaborate closely with Qantas engineers to identify and meet Qantas's particular requirements. This is also CRM at work. When Jeep customizes vehicles to customers' specific requirements using online mass customization processes this is CRM at work.

IQ3. How is normally implemented the idea of customer-centric in the company's culture?

Many companies claim to be customer-centric, but few are. To be truly customer-centric requires an intimate understanding of customer preferences and requirements, and an intimate understanding of competitors' value propositions. Then, building an organizational culture that puts customers at the heart of the business requires leadership that prioritizes customers over employees and business owners. HR teams have to recruit or train people to be customer focused, and business rules and rewards systems recognize the critical value that customers bring. It's interesting that in these COVID-19 days, many companies that have claimed to be customer-focused are now saying that they put customer and employee safety as their highest priority.

Interviewer: Based on your experience, how much effort should be done to understand and find out the customer needs? Do you think that CRM could help to this?

Butte: There is no point in trying to run business that ignores customer needs. The purpose of a business is to create and keep customers; the reward for doing so is profit. Operational CRM (See my previous email to you) generates much customer data, which can be enriched with data from other sources, e.g. big data.

Interviewer: How is it in SMEs is a CRM system or ideology applied? How does this happen in real life in SMEs?

Butte: First, I need to explain what is meant by 'new products'. Very few new products are new-to-the-world. Most are line extensions or product improvements, and in many cases, these are designed to meet the needs of particular customers. SME's who have deep customer insight and close relationships with customers are in a much better position to identify changing customer requirements and communicate those changes internally to engineering and product design teams. Indeed, it is often a specific job requirement that a key account manager (they exist in SME's too) keeps track of customer requirements and identify product development opportunities.

Interviewer:.. What companies can do to have a better relationship with their B2B customers?

Butte:That is a huge question. There have been hundreds of papers that investigate this question. I suggest you have a look at the IMP literature, which began in the 1970's. IMP stands for Industrial Marketing and Purchasing. You'll find out more at www.impgroup.org In my opinion this is the best body of knowledge on business-to-business relationships. Indeed, there are several IMP papers on new product development in B2B context. Here are some core ideas from the IMP literature.

The characteristics of B2B relationships, from an IMP perspective, are as follows:

Buyers and sellers are both active participants in transactions, pursuing solutions to their own problems rather than simply reacting to the other party's influence.

Relationships between buyers and sellers are frequently long-term, close in nature, and involve a complex pattern of interaction between and within each company.

Buyer-seller links often become institutionalized into a set of roles that each party expects the other to perform, and expectations that adaptations will be made on an ongoing basis. Adaptations include product modifications.

Interactions occur within the context of the relationship's history and the broader set of relationships each firm has with other firms – the firm's network of relationships.

Firms choose whom they interact with and how. The relationships that firms participate in can be many and diverse, carried out for different purposes, with different partners, and have different levels of importance. These relationships are conducted within a context of a much broader network of relationships.

Relationships are composed of actor bonds, activity links and resources ties, as now described.

Actor bonds are defined as follows:

Actor bonds are interpersonal contacts between actors in partner firms that result in trust, commitment and adaptation between actors

Actor bonds are a product of inter-personal communication and the subsequent development of trust. Adaptation of relationships over time is heavily influenced by social bonding.

Activity links can be defined as follows:

Activity links are the commercial, technical, financial, administrative and other connections that are formed between companies in interaction

Activities might centre on buying and selling, technical cooperation or inter-firm projects of many kinds, including product development. Activities such as inter-partner knowledge exchange, the creation of inter-partner IT systems, or the creation of integrated manufacturing systems such as Just-In-Time (JIT) and Efficient Consumer Response (ECR) are investments that demonstrate commitment.

IMP researchers have focused on two major streams of activity-related research: the structure and cost effectiveness of activity links, and the behavioural characteristics that enable relationships to survive. The reduction of transaction costs is an important consideration when customers form links with suppliers. Dyer argues that search costs, contracting costs, monitoring costs and enforcement costs (the four major types of transaction cost) can all be reduced through closer B2B relationships

Resources are defined as follows:

Resources are the human, financial, legal, physical, managerial, intellectual, and other strengths or weaknesses of an organization.

Interviewer: How would you describe the relationship that SME should have with its international clients?

Butte: It depends on the relative value and strategic importance of the client. I identify 7 core customer management strategies in my CRM textbook. Here they are.

1. Start a relationship. This makes sense when a supplier has identified a prospect as having potential strategic significance for the future. The company will need to develop an acquisition plan to recruit the customer onto the value ladder. You can read about customer acquisition strategies in chapter 3.
2. Protect the relationship. This makes sense when the customer is strategically significant and attractive to competitors. We discuss the creation of exit barriers in our review of customer retention strategies in Chapter 4.
3. Grow the relationship. Like the strategy above, the goal is to migrate the customer up the value ladder. In this case it is done not by re-engineering the relationship, but by increasing your share of customer spend on the category, and by identifying up-selling and cross-selling opportunities.
4. Harvest the relationship. When your share of wallet is stable, and you do not want to invest more resources in customer development, you may feel that the customer has reached maximum value. Under these conditions you may wish to harvest, that is, optimise cash flow from the customer with a view to using the cash generated to develop other customers. This may be particularly appealing if the customer is in a declining market, has a high cost-to-serve or has a high propensity-to-switch to competitors.
5. Re-engineer the relationship. This strategy makes sense when the customer is currently unprofitable or less profitable than desired but shows profit potential if costs were trimmed from the relationship. This might mean reducing or automating service levels or servicing customers through lower cost channels.

6. Terminate the relationship. Sacking customers is generally anathema to sales and marketing people. However, when the customer shows no sign of making a significant contribution in the future, it may be the best option. We discuss sacking customers in chapter 4.

7. Reactivate the relationship. Sometimes customers take some or all of their business to other suppliers. If they are not strategically significant, it may make sense to let them go. However, when the customer is important, companies will want to develop and implement win-back strategies. The starting point must be to understand why they took their business away.

Interviewer: How should be managed the cultural knowledge of the clients? Do you think it is important?

Butte: Of course this is important. For example, if you want to do business with a Chinese customer, you need some kind of introduction from a trusted third party. Chinese business practices reflect Confucian values embedded in Guanxi. Here's an extract from my CRM text, which explains more fully.

Guanxi (pronounced Gwan-She) is, essentially, a philosophy for conducting business and other inter-personal relationships in the Chinese, and broader Asian, context. Therefore, its effects have a significant impact on how Asian societies and economies work.

Guanxi has been known to western business people since at least 1978. This was the time when the Chinese market began to open up to the west. The foundations of Guanxi are Buddhist and Confucian teachings regarding the conduct of inter-personal interactions. Guanxi refers to the informal social bonds and reciprocal obligations between various actors that result from some common social context, for example families, friendships and clan memberships. These are special types of relationship that impose reciprocal obligations to obtain resources through a continual cooperation and exchange of favours.

Guanxi has become a necessary aspect of Chinese and, indeed, Asian business due to the lack of codified, enforceable contracts such as those found in western markets. Guanxi determines who can conduct business with whom and under what circumstances. Business is conducted within networks, and rules based on status are invoked. Network members can only extend invitations to others to become part of their network if the invitee is a peer or a subordinate.

Interviewer: How are SMEs dealing with the cultural aspect of clients? Which methods are the companies using to gather this information from international clients (with or without CRM) to develop new products? How could CRM help to do this?

Butte: First time entrants to new international markets often use third parties in those countries to market their products (e.g. import/export companies, importer's agents) because they have neither the contacts nor the local knowledge. National governments also help exporters by offering cultural assistance. Embassies employ trade attaches to help exporters. CRM has very little role in creating cultural knowledge, until interactions begin with first clients, and notes can be recorded in CRM systems and shared internally.

Interviewer: Do you think that marketing, sales, or service automation can help to gather this data?

Butte: Yes, operational CRM in which there is interaction with prospects and customers can be used to capture cultural information. However, most, maybe all, CRM systems would need to have database modifications to enable this data to be collected, stored, and analyzed. Very few systems have tabs or fields dedicated to cultural information.

Interviewer: Is cultural knowledge relevant for SMEs to build long-term relationships?

Butte: Yes, absolutely. Marketers and salespeople need to understand local practices such as buying behaviors, terms of payment, relationship management expectations. Many US firms have found it very difficult to win business in Asian markets because of cultural differences. Again, I advise you to look at the IMP literature which examines buyer-seller relationships in international context.

Appendix 13 – Product development interviews transcripts

ED1. Product development experts from Schindler Creations /11.06.2020- Interview: Andreas Ebermann. / Wed, 6/3 1:42PM • 53:43

About Schendler Creation:

At Schindler Creations, we have implemented more than 5,120 projects with our clients and we have implemented them in the market since 2006. At our locations in Zurich, Munich and Lake Constance, more than 60 designers and technologists are working on products and services of the future and developing them until they are ready for the market and beyond.

At Schindler Creations, designers meet with technologists to improve the daily lives of users. How do we do this? By developing the connections between people, technology and business. Always with the goal in mind of creating the best possible physical-digital user experience: a comprehensive user experience.

<https://schindlercreations.com/en/about/>

Interviewer 00:00

My research seeks to define how culture and CRM impacts in the product development processes and innovation. So, I know already that the culture impacts when you have to think about the user and their culture and so on, that gives you some hints, but I would like to know more in detail what can affect inside the process not only the customer or user, also the corporations that are in the processes. So, I will divide the questions into blocks. And first is going to be more inside the company or like cultural company, and then outside the company. Okay, so can you please tell me a bit more about your experience in product development and your expertise in general?

Andreas E. 00:56

As you know I work at Schindler Creations for like seven years now, almost seven years and we are doing B2B industrial good development for bigger companies also international companies, and I am running like projects as a project leader, to also like team leading, so and in this responsibility in my main like for couple of couple of years so basically you're running like projects from different mounts or volumes. It's part of my my daily business, my job

Interviewer 01:50

Okay, and yeah, because I was corious when you mentioned about the industrial. What do you mean when you mean when you talk about industrial.

Andreas E. 02:02

we are as a company, like this specified animation industry. Most of our clients come from that from that field. So we work for example, by myself, especially for DMG Mori. That's a company which is, which is specified in turning milling machines. One of the, like biggest companies worldwide and this is an international company as well. Part of it is in Germany, but the other part, which is in the Mori part is Japanese.

Interviewer 02:54

Okay, that explains why the salutation was in Japanese as well. All right. And do you have clients from all over the world or just from this? Yeah, Europe,

Andreas E. 03:11

Well done. Well, most of our clients are from Europe. DMG Mori itself, like, as I said, it's international companies. So when we are dealing projects with them and working on projects with them, it can be that we are working within with engineers and with people from the area. But it can also be that we're working with guys from Tokyo or Eagle in Japan, or also from USA, thing like each project has its own responsibility. So it's kind of like worldwide And like me, I'm mostly in charge for this client also dealing with other companies. But they are mostly exchanges in Europe.

Interviewer 04:13

Okay, okay. All right. And are you familiar with the term customer relationship management, or CRM?

Andreas E. 04:24

Well, I'm like, not in my education. I'm a product designer. So I don't have the background actually. Education, role of management and stuff. So I'm familiar with the term. But I don't have, the background to deal to deal with this. So I'm like as an industrial designer,

Interviewer 04:55

correct. I know. Actually, I'm out As industrial designer but my Masters in Business, so I'm trying to merge somehow terms. And actually I find very interesting because it's like, it's not the same when you talk about customer and user I know. But for me, it's like the same way of thinking but in different for designers and for managers. So, yeah, I would like to know if you, I mean, are you using this kind of system in, in the studio in your work or not really?

Andreas E. 05:39

now, like, maybe you can explain like, basic, basic key points of this system. So I can maybe, maybe we're doing that or not?

Interviewer 05:49

Yeah. Okay. So there are different types, let's say, or this can be automated marketing automated services. automated sales. These are programs or software's or systems that work to integrate the clients and the company. So just to keep this workflow together, so for example, if you want to buy something in particular and say a bike, and then you go to the website, and then you find out that they have different types of bikes that you want it that you can personalize it as well. So then you text, a comment, and you send an email and then it automatically send you back an answer. By Okay, this is going to be, I will give you answer in a few minutes. And then someone is already connected with this client. So this client is giving all the information and all this information between client and company, it stays in the system.

Andreas E. 07:16

Okay so, well, no, we don't we don't have we don't have that. I mean, we're a small company, right? Yeah. So this ultimate process is, we don't have it of course, like internally we have, like, programs in order to list clients in order to have to fly position and the platform, but that's done internally and it's nothing related directly to the to the customer or to potential client. If we go to our website, we had like

a, maybe you were in on our website. We had like contact formula and stuff like that, but it's not automatic process within the company.

Interviewer 08:14

All right. Okay. And your perspective, do you think that the company's following an idea of customer centric or product centric?

Andreas E. 08:27

Well, it's user centered more. It's, of course, we want to work for the for the customer and we want to satisfy the customer but at the end, and it's also in the interest of the customer is that we are working for that for the end user and this, this needs to be the central idea of product development. And, like for my personal background, you know, I'm also like, not a manager and The sales guy. So I'm also more interested in the product itself and in the user, than the customer but at the end, of course, like, this whole chain needs to be, needs to be fulfilled. But at the end user, the user should be in the center, and the user should be first of all development. Yeah. Services,

Interviewer 09:23

correct. Yeah. I totally agree. Okay. So Okay, can you please explain me How is the process to design a product? How is the workflow normally?

Andreas E. 11:10

Um, Well, it's different. It's basically not not easy to answer, there is a process which is for new and smaller clients and for development from scratch. Maybe the best one which comes from user experience and user centered aspect, starts doing research on the user and its environment and it needs itself, and with doing interviews and few research and stuff like this. And of course, like, with the results of this and the requirements that are resulting from those phases need to go into a product development.

And I ,since we are working with for a very long time for bigger client, this process shortened to the I would say like the two additional industrial design product design process which starts from, of course clients requests for a new product development with its briefing which is usually in our case since it is like a process that has been gone through many times. quite quite specific. We get 3D data, we get some random information on the product itself. Already provided from our client, and then we start to think about what we start with sketching and division. So it's like a free sketching process and with our expertise we put all the information which would have been collected in the first UX process, we put a pause in this and then this, this leads to, to vision into which is sketch and design idea that we are going to present to the client. Okay. And there is like already different in terms of how you communicate like if it's to German or client that is closed by go there personnel right you presented in front of directly in front of the client if you're doing it for example to Japanese guys, we just sent a presentation and mostly communication is done on this Japanese side through presentations and those are like much more detailed in explanation. Because of the language barrier and after that vision, we go into detailing of 3D CAD modeling right. We do also this like based on the feedback we get, on the first phase. Next phase we sent a 3D model to them. Maybe there are some iterations in between, can be. In the next phase, they are transferring our design data CAD data into construction, construction models, construction files and then we are then we are not the ones who are like giving them the data but we are like helping them to realize construction data and get close to our CAD model and our design that we were

proposing. So it's like a communication between us and the engineers pretty much in detail. So it's like, don't use two screws, but use the other screw and please, internal construction and liquid train, and this is very specific stuff. And at the end in this process is an iterative process. We have a common common result where we say that's okay, and they say we are. We liked it. We can, we can finish it. And after that, they're going to To build that prototype product, right? It's like it's a very, very traditional process in industrial design, we we still have. Um, but, of course, like for new clients, we also, like in the digital side, we have quite a little bit different process which which I'm not involved in my position. But there is more. Yeah, it's more about sprints. And not this. Not this like working to a goal but working in iterations and sprints.

Interviewer 16:40

Okay, the digital side is, uh, like apps and websites and will UX / UI?

Andreas E. 16:45

Well, we are live. I don't know if you've done research into the company. And basically, we provide like a holistic service to the client which is consisting of of the industrial design service, UX service, as well as interaction design. So also like I mean if you have a machine for example if the if the housing but you also have a control panel and you have also software running this and we're dealing also manage and also when we're we are now able within our companies to do backend development for the software as well. Okay. So we have like quite a big picture we can.

Interviewer 18:07

Okay, now how much do you think that the customer should be involved in hope in this process? I know that it's in the beginning, but...

Andreas E. 18:23

well, it's funny because if you go to clients they have very often pretty precise expectations on what they want. And first is to convince them that maybe they should be a little bit more open and let us do the job. And that's exactly where we are with the UX part right. So if you start to redesign pencil and they ask you please make a new shape for the pencil but at the end, maybe need some just control as a result, that's basically the ideal way for us to give the client the best possible solution they need, and their clients need so. In this first round the they should be involved, of course, but it's his first challenge to convince them that we need to have a little bit more freedom in, this basically in this I will be starting with the UX process, development parts challenge here. When it comes for our traditional industrial design development also for the client we have long term, long term relationship with. It's not it's not easy to tell them. Maybe I'm explaining a little bit this because only about this client relationship, I can tell because many people are involved in this hierarchy know, when you work with a company that has like, I don't know, thousands of employees and you have like, it's like a political system more or less.

Interviewer 20:20

Okay.

Andreas E. 20:22

It's a political thing. And you have the board and the board is God, and everything the board says needs to be followed. So if the board and this company, which is in the client has as a specific request, then everybody needs to follow in a company and also we as a service agency, providing that so it's very

helpful to have the client involved here in this very in this very specific development process, you know, specific industrial design process and the phases we went through before. Like, of course after each phase we have a feedback with the client in order to adjust direction. And the further the process goes in this development stage from division to constructional service, the more the client gets involved in smaller steps, iterative steps in the first vision and we're presenting some some graphs and some proposals and its variations to making shoes, and then discuss which we do best. What you want and those, like with this one time feedback after the briefing, we go into the next phase. And then it's also like, well, we don't we don't ask the client too much. But we're developing design feedback. When we're dealing done with the engineers, it's a very close working together. So ideally, you call them and ask for a detail and then you get a feedback. And then you can continue working. So it's very, very tight together. And also hidden works quite different between the two. Between the Japanese, the German or the American guys, the communication is very different. In Japan, you need to explain everything with a presentation. You cannot call them because of the language mostly. They need to have someone to read and someone to translate. And that's the first reason, you need to communicate like this. Second is they have different hierarchy. So it's not like that you call directly to the engineer who's doing it communicating to the manager. And also, he cannot decide directly if this can be done, but they can they take like, the request, and then they communicate internally. Okay, after we made a decision based on the hierarchy, they communicate back. No, it's no decisions made directly. It's always like in their backside based on a very, very different even we're developing sometimes very similar products, development process is always different a little bit. Like communication and the way you find results.

Interviewer 24:09

Okay,

Andreas E. 24:21

then of the product or the client or the people that you work with, again. And of course, like First of all, it's it's about nationality, this biggest thing. Of course, you always work with different persons. And that's, I mean, it always has an effect you're working, if this guy was a retard is always like, it depends on the working process, but maybe maybe it's a matter of cultural background.

Interviewer 24:55

All right. Okay, so now if you have a system, this, let's call it CRM, where you can have access to the information of all the clients and you can get I mean all the feedback or the questions that they have. And they for example, there is the support system. Do you think that this kind of system would help in the to implement this system will help in the process of developing new products?

Andreas E. 25:30

You mean, you mean like, we're in the middle of a development and we have an automatic platform? All the client asked for requests or changes.

Interviewer 25:45

No is more thing to action between people but the system is just saving everything. So everything that for example, everything that the customer say to the to the sales person or to the designer, it's all say In this platform, also, if he has some questions, everything that is related with this client that has relation with a company, is it in some accounts.

Andreas E. 26:13

In one, Yeah. Basically, yes. Basically, as I said, I, I don't I don't have experience in those in those kind of systems. But since communication is very, it's very difficult very often and also like responsibilities change on our side as well as client side. And you have of course, different levels of development itself on the designer side as on the sales side as on the project management side, you know, all those those levels like belonging to this to this whole process. Information if it would be connected and collected, it's it's helpful and, I mean we're I'm just googling thing I'm just googling like typical CRM systems existing on the market. Um, can you can you name some some programs or some platforms that that are based?

Interviewer 27:48

Okay for example, let me let me let me see. Zoho is one. It said I will touch it. Insightly Magento, but I think Magento is more related into marketing and sales I think, Pipedrive...

Andreas E. 28:19

because that was that was an I, that was the one I had in mind because we're using Pipedrive.

Interviewer 28:27

Yeah. Okay.

Andreas E. 28:31

This pipe drive is is at the moment use an old site for just for the sales activities for listing clients in the product developments on the product development side or the service development side. We don't use it. It's not it's not implemented on our site. So, okay, we're just on in terms of sales and Project listing.

Interviewer 29:04

Okay, interesting.

Andreas E. 29:08

as I, as I don't work with this, because I'm more on the development side than on the sales side, I don't actually know what this program is, like what could be also functionality in terms of collecting information.

Interviewer 29:28

Yeah, I think that well, my thought, honestly, my thought was that it could help just to see what clients want to define some trends or to define some new needs that you might create in the new product and so forth. But in the case of your daily work, I think is not the case. Because you're developed before con for come. Sorry for clients, not for the company itself you're not you're not producing anything inside Schindler Creations.

Andreas E. 30:04

Yeah, no. Okay.

Interviewer 30:06

Okay, in the case is fine. So in your perspective, what can be done to get a better relationship with a client's b2b clients?

Andreas E. 30:26

Um it's like it depends on if it's a, if it's a client, you already have that to work with or with potential new clients. with potential new clients, it's very important that the expectations are clear, like what, what they can expect from us and they also they also somehow understand our work a little bit because it's always you need to talk about pricing, right, and they need to have an understanding of the service we're delivering. And also, you need to you need to tell them, what are the chances here in a new development, right? It's, the beginning, it's very, very important to talk about this. Talk about common goals. So, that's very important. Within the process, you need to have the contact to the client in order to not do something that is completely against their will. Or against what they have in mind, right? So you always need to be on on track. I'm in communication with the client. That's very important. Okay.

Interviewer 32:06

Okay. Yeah, everything is related to communication.

Andreas E. 32:10

Yeah.

Interviewer 32:17

Okay, how do you think that the culture from the clients should be managed? Like how it should be used or managed?

Andreas E. 32:34

What do you mean? Like, do you mean like we should be aware of the client's culture or?

Interviewer 32:44

Mhmm. Like how is how is how are you managing this topic of culture from the clients? Do your planning in the process of design? is it matter? Doesn't matter? is it influencing somehow or.

Andreas E. 33:03

yeah yeah , Like First of all, first of all, if you are developing and designing for a certain cultural user like user with a cultural backgrounds, you need to consider this. You need to know if they have like a different approach to control or steer device and also need to know if those people are usually a little bit smaller than an American guy. That's something you need to have in mind, like the market you're designing for, of course. On the other hand, like our products, we're designing our life international company and very often also, like for international markets, so they're also in China and Japan and you know everywhere. So, that aspect is has not not very big, should not be too big because it should fit everyone, right. And also like if you're talking about how to say like something like taste which is very, very important you know, Japanese people, for example, have a totally different kind of; perceive things different and they have different architecture and the different totally different perception of fear of flying in Chinese guys, for example, you know, and also that is in our case, the reason that those products are like worldwide distributed. It doesn't have a big impact. And it's more the working was it was a totally

before it's well, different small in the in the cooperation between us and engineers and developers. Because communication what I said before, but also the way you communicate. I'm much more polite. It's not like you don't do this very direct communication. You don't say that is s**t. It's not good. But it's really enough, and I also see it on the client side itself is that it's like a huge political system, such a company. Like the board of those companies, there's kind of very specific species of people and so in the German side of the board can say something like this shit, f** this . That's the young Japanese, the Japanese side would never do that. It's that's more like not that direct way. It's also even within Europe you have this if you're talking to a Swiss guy, for example, I don't know how long you've been here, how long you will stay. But Germans are much more direct than for example, Swiss guidance, same thing.

Interviewer 36:56

And austrian?

Andreas E. 36:59

I am not Austrian and German. Um, I would say it's rather more German way of negation. Yeah. But you can you can you can really offend a Swiss guy by saying it in a way you would usually straight to the German.

Interviewer 37:21

Mm hmm. Yeah. It's so it's so interesting. Yeah. I mean, that's what everyone says. And that's also the perception that we have in Costa Rica is like, yeah, they're so direct. So don't be offended if you if a German comes here and tells you what the truth is.

Andreas E. 37:42

You need to see it in the very beginning. But as soon as you understood that it's not meant personally.

Interviewer 37:54

Yeah, yeah. True. Hey, actually in Latin America, Central America. I similar it not that much as as as Japan, but we are also like, yeah, maybe you can do this in another way and lalalala because we are so sensitive and so we are quickly.

Interviewer 38:20

Okay, do you have any example of any problem related with culture that you have ever had with collaborations, international collaborations besides the communication.

Andreas E. 38:59

“Communication is, of course, the most. The biggest challenge, let's call it positive. Well, in our case, sometimes the expectations the Japanese have to our work may be sometimes too unreal. [...] the way that the Japanese guys are working, how do they more or less planned, so it might be that they can ask us to help them with some problem or some project and of course like we as Germans or as European we would set up all requirements very well and be sure that everything is safe and then we would go to design or to the partner and give this requirement package to them. Sometimes they don't think that way and don't make it that complete, it can be that they give us some first attempt on their project draft which is unfinished, and so we're starting to develop and help them and after we are finished [...] We figured out, then they changed their mind to change the plan in some ways, then the requirements

totally look different and we can start from scratch. So, there are many many iterations but not during the process just starting from the start.

Interviewer 42:02

Yeah,

Andreas E. 42:05

yeah, that's different kind of philosophy. It's just a different way of thinking. For us, it's not, it's sometimes a little bit frustrating. But at the end, it gives us work. But I also know that this is different kind of work approached, they have company insight inside of their company, it's the same issue they're facing with.

Interviewer 42:39

so is not only cultural, cultural,

Andreas E. 42:42

well, it is cultural, but the company itself has different cultures.

Interviewer 42:46

So Exactly.

Andreas E. 42:49

This is an issue. Yeah.

Interviewer 42:54

Yeah, okay. Okay. All right. So, in your point of view as a designer, how can the development of new products be supported by CRM or alternative ways of automation, marketing Sales Automation or support and automation?

Andreas E. 43:45

As I said like, two sides like marketing, sales side is one aspect and the other aspect is working within the project. Both sides can't be separated. Because if you're doing like acquisition and sales, you're some point collecting information about the client and the project. And this should be hand in hand with end development in this in the next face. Um, not necessarily all information, like, important for both sides, but it can be a problem that customers like talk to and projects are created and there's a cooperation that's going on. And the sales side is doing deals and getting information that are there is not going to the designer or the the actual, contract development, that's basically possible and the bigger the company gets bigger this problem gets like sometimes in smaller companies, smaller agencies, like the acquisition and sales part is sometimes also done by the designer itself. You know, it's like, it's not like two different departments. There's like, I think a number of employees that have like, company size, where this problem gets bigger. So it is also depending on how the roles in the company are set.

Interviewer 45:53

Yeah, yeah.

Andreas E. 45:54

Um, it would help if you have like access on every position to this information, great. It's also really important that if you're making if you're starting to have a contract with a potential client, that amount, have money in charge. And the service you want to provide him is something the actual design or the product developer is sharing. You know, it's not that it's not that someone sells something and then the designer has a total different approach because he's the one who has decision about this project. So there should be a connection. Okay. other departments are more like separated in the bigger company bigger agency. Like it's very important that information can be shared through like, for example, a Pipedrive or CRM system and in a smaller company in any way like, usually this the same person. I mean also like, if you're in a second round go to a new client. Always also designer was someone who's actually been working with them together.

Interviewer 47:21

Exactly. Yeah. Because I think it's valuable in that part in this correlation if you work with a manufacturing, I don't know, in Mexico, and then you just put them together into this week. That's how I feel it could be useful. Also, not only getting the data from the customer, but yeah, it's, I don't I don't know. That's why I'm asking. This why I'm researching. So yeah. Okay. Now that's it so far. And those were my questions. Thank you for the time.

Andreas E. 48:02

I can I can imagine it's quite hard to find people to talk with. I know when when I was when I was studying and you want to have some cooperation with companies. It's it's quite hard to...

Interviewer 48:15

it's complicated, especially now with the corona stuff is like, they don't have time to think about an interview for a thesis, you know, it's like, the world is falling in pieces and I don't have time for that. So don't bother. And it's a bit complicated. Yeah. But I think I I, I need some person more in product development. But we'll see. I'm still looking.

Andreas E. 48:45

or something from from my side, like in the company we have, we have sometimes to say like open platforms to present topics and also from external from external side. So, in order to like open communications like all marketing marketing calls it open UX talk. So, it's like, yep, people can can participate and, you know, also like, people are presenting presenting topics. So, if you're finished with your thesis, maybe you can, you can send me or give me a give me a message and then I can ask my marketing if they think it's interesting, maybe you can share, you can share some results of your thesis. Like a short speech. This could be cool. Okay. Okay, yeah. Okay. Um, yeah, just just takes me then we see maybe, um, maybe it would be cool chance to share your share with you figure it out.

Interviewer 52:56

Okay. I'm so interesting. Yes, of course. kicked off. I will let you know.

Andreas E. 53:35

Thank you so much.

Interviewer 53:40

Bye bye

ED2. Product development experts from Sylvania / 11.06.2020- Interview: Jorge Madriz, Product Manager and Beatriz Guevara, Marketing Manager.

About Sylvania:

With nearly a century of experience in creating lamps and luminaires, Sylvania is a world-leading provider of residential, professional, and architectural lighting solutions. We not only design, manufacture and install lighting solutions, we create technology with environmental responsibility and efficiency. Sylvania is the leading brand of the Feilo Sylvania group based in Budapest, Hungary. We are present in more than 25 countries in Europe, Latin America, Asia, the Middle East and Africa. We are 2,500 employees and have 17 factories, innovating and supporting our customers around the world. The Latin American division extends to Colombia, Peru, Bolivia, Ecuador, Panamá, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala, Dominican Republic, Caribbean and Mexico.

Sylvania is supported by Shanghai Feilo Acoustics Co., Ltd, founded in 1984, which was the first joint-stock company in China. Therefore, product and technology development are done with the cooperation and technology of our factories and laboratories in China.

Interviewer: IQ1. Could you tell me more about yourself and your expertise in Product Development?

Beatriz Guevara: I am currently a marketing and BI Manager at Sylvania Lighting. I have almost 10 years of experience as global product manager in the multinational CITI bank, and the national telecommunication company Cabletica.

Jorge Madriz: I have been working as product manager for 1 year. Nethertheless, I have almost 5 years' experience as Industrial Design Engineer in Solano Tenorio (Furniture design) and almost around 8 years as a Research and Development (R&D) leader in Feilo Sylvania. Both of our expertise includes projects to companies as clients and some international background.

Breatiz: Now regarding Feilo Sylvania, it is a multinational group and particularly, as Sylvania Costa Rica owns the only plant in the Americas, the product development experience can be seen from 2 approaches:

1. Implementation and incorporation of products developed by the R&D departments of the Feilo group in Asia, of which our work is reduced to limited customization and negotiation with the plants regarding packaging and import aspects, MOQ, language, etc.

2. Implementation and incorporation of products developed by the R&D department of Feilo Sylvania CR that respond to the research and development of avant-garde products focused on the different market segments, or the development of products and portfolios that correspond to specific solutions or specifications of our clients.

Interviewer: IQ2. Are you familiar with the term Customer Relationship Management? If so, what do you know about the implementation of CRM in the development of customized products?

Jorge: Yes we both are familiar with it, in different levels, but because of experiences in other multinationals like Beatriz's case in CITI Bank. However, Sylvania Costa Rica does not have a CRM system to perform customer management, but everything is worked on and captured through the billing system.

In this case, we have here a interesting mix between customer and product focus. As its core business technology and in turn, lighting as a "commodity" of society, Sylvania's approach has been to offer its

customers business management models based on their needs and in turn, in its product approach, to innovate and offer solutions that exceed customer expectations.

However, by having a production plant in the region, it is possible to deepen the relationship with the customer around their product development needs, achieving levels of product customization that range from the implementation or insertion of parameter components such as an emergency battery in a luminaire, to the complete design of a lighting system or the development of a luminaire with well-defined specifications for a customer.

Interviewer: IQ3. How do you think that the idea of customer-centric cloud be implemented in the culture of a company?

Beatriz: Well, Sylvania has a client-centric culture that is very focused on product development or customization, lighting consulting, project consulting, training, and programs to upgrade and convert to new technologies (i.e. retrofit for fluorescent tubes and fixtures and non-electronic ballasts).

We are working on implementing a customer-centric culture in terms of service, response times, guarantee and replacement policies, as well as guidance and support in response to stock-outs and shortages.

Interviewer: Q1. Which is the process that you follow to design and develop new products? Is it centered on the client or on the user?

Beatriz: We Sylvania Costa Rica have the only factory that Feilo Sylvania has in the Americas, so we have two different processes to develop new products.

For the case of the development of products in the plants of Asia, Shanghai Feilo Acoustics has a network of departments of Design and development of product that are in charge of developing and innovating the market with solutions of illumination of tendency and high technology. These portfolios are available to the different regions of the group, in order to assemble the portfolio and offer that best suits the needs of the region and its customers.

In the case of our factory in Costa Rica, as it is a metal-mechanical factory, we only develop certain types of lights. The process can be derived in two ways:

1. Our R&D department develops products for the lighting market based on trends, needs or concepts that are acquired at international lighting fairs or with feedback from the group's R&D departments.
2. We respond to specific lighting needs of our customers, so our R&D department develops lighting solution systems or products to solve specific needs together with the customer.

Interviewer: Q4. What is your opinion of implementing CRM in the NPD processes?

Beatriz: Especially for the products and solutions that are developed in the production plant in Costa Rica, the implementation of a CRM in the development process is critical and essential because by controlling the creation value chain, the CRM allows to obtain information that enriches the investigation of the needs, expectations and scope that our products have in the market.

In the case of imported products, the CRM also has a leading role in determining the entire product offering and specification which are more adapted to the needs, customs, or characteristics of the market.

An example of this is the color temperature of the lamps, which have certain trends according to the regions that are purchased... While in the North American markets the most usual color temperature is neutral, in the Latin American markets we tend to use cold color temperatures between 6000k and 6500k, so the data we collect from CRM helps us to quantify and process the preferences of our markets.

Interviewer: Q2. When a customer wants customized services or products to key clients. How is the process?

Beatriz: Normally a customer requiring customized lighting products for their key accounts comes through the Projects department and almost always corresponds to electrical distributors in the region. Having said this, our Projects Department starts working together with the electrical distributor to demarcate and diagnose the need for lighting, technical aspects of lumens, power, color temperatures, photometry, etc.

With all this information that is collected and built with the client, we proceed to search in the product portfolios for solutions that come close to that need or in its absence, which products may have such specifications that allow adjustments to the design or specifications, assembly etc, which allows to fill the customer's need.

There our R&D department intervenes in order to modify and/or develop luminaires with the specifications and needs that were established in the previous step. The R&D department proceeds to develop the product in its specifications, light spectrum and photometry, and the product is also subjected to controlled environment tests in our lighting laboratory in order to guarantee the characteristics of the luminaire.

Interviewer: Q3. Based on your experience. How much effort should be done to understand and find out the customer needs?

Beatriz: It really is a comprehensive process that requires a considerable investment of time, technical work and communication with the client to understand and clarify their needs as well as the solutions that can be offered. In many cases, when working with technified clients, such work becomes more fluid, but not less dense.

Interviewer: Q4. How do you think that CRM could be implemented in the NPD processes?

Beatriz: In our case, product development without the implementation of a CRM as a product management model would not be possible. Because the approach with the client is so narrow and the complexities of the lighting projects are so big, we work with the clients in achieving that our products in their ranges and specifications can fulfill their needs or in their defect we develop from adaptations to new products to be able to satisfy the need of lighting of these.

Interviewer: But, is it implemented in the company or not? Is contradictory so far , because it says somewhere in the question IQ2 in the company sylvania, no CRM. But you say out there that without the CRM you can't do in the process of designing a new product around here, if I didn't understand, yes, that's what happens there.

Beatriz: I mean, let's see. What I mean is, we don't have a CRM, but really the product design process should be with a CRM. What I mean is, it is much more difficult or rather much more effective in making development decisions, if you don't have a feedback like the CRM, but good that you can, you can

because we work without it, but that has caused certain limitations, missing and even lack of missing information. This is much more inaccurate work.

Interviewer: Because it got my attention. But what kind of shortcomings, do you see, for example?

Beatriz: Basically feedback information, because if you do the development of a product you need. Let's see, if you are starting from a product that has an extension within the same category, say portfolio that already exists. The feedback that the CRM can give you can even last for a while.

If the product is new. Then the CRM will give the very basis to be able to fulfill a customer. That's the idea, if you don't have it, you can do it, but you're assuming a lot. You are therefore taking many more risks, and you are falling into great uncertainty because it is not easy to make decisions without this clear information. Then you have more uncertainty because you can't preach so much about your projection, acceptance or market behavior of the product.

Interviewer: Q5. In your perspective, what can be done to have a better relationship with B2B customers?

Jorge: For this business and this market, B2B customers must have dedicated business models, i.e. account advisors who have full knowledge of both the portfolio and the scope of the customers' business, as well as the Sylvania product portfolio that best suits the customers' needs.

Beatriz: In this line, I believe that it is also vital to have technical updating and training programs that can be carried out with B2B customers in order to have a vanguard market.

Interviewer: Q6. How should be managed the cultural knowledge of the international clients and or partners? Do you think it is important?

Jorge: The development and technological support is important to be able to have accessible and documented the process of knowledge of the client, as well as its cultural particularities as much of management as of consumption of products.

Beatriz: Yeah, look. For example, what goes into culture is also the kind of industry that consumes. I'm going to make this very specific. Sylvania is a company that has a presence in all markets, well Europe in America in Asia, and Africa. So, if we're talking about the color for example, the color of the light bulb. That goes from very white to very yellow. People culturally have certain preferences. For example, let's say, the color temperature that's used most is white light, but if you go to Europe or the US, people tend to use neutrals, neither white nor yellow, neutral.

It has a lot to do with the cultural situation of the region you are working in. So, all the information you can acquire that defines the particularities of each country, better. And where do you see it? First of all in the history, in the numbers. Because that way you discover that there are more popular products in some places compared to others. For example in Costa Rica has many more advances, in the displacement of clean technologies, so people buy more LED. That doesn't happen in the Caribbean and Nicaragua for example. The thinking of others is still a little behind and still a lot of savers are sold. So if you have to push for the whole portfolio to be LED, without a conversion campaign, you are going out of business. Because for some reason they're still buying these energy saving bulbs.

Interviewer: Q7. How do SMEs deal with the cultural aspect of customers? What methods are companies using to gather this information from international customers (with or without CRM) to develop new products?

Beatriz: In the case of Sylvania, although it is not an SME, the business model is segmented between international customers and local customers. For each one, we have staff that specifically attends to the markets and that is trained and experienced enough to be able to manage markets. In addition, pricing models, commercial policies, coin invoicing, service lines, etc. are also segmented and in the markets where they are needed, we have service, consulting, project, and local sales personnel.

Interviewer: Q8. From the designer's point of view, how can the development of new products be supported by CRM or alternative solutions?

Jorge: The designer needs all the inputs he has available to incorporate in the development of the product design. The research stage must collect all the exogenous and endogenous variables that can be obtained to ensure the acceptance and functionality of the product in the markets for which it is intended. For this purpose, the CRM is a vital tool because of the amount of relational information it can store.

Interviewer: Okay, so for example in marketing, sales or service automation do you think I can help?

Beatriz: There are two sides to the data collection according to the market offer we provide:

1. For product developments that do not correspond to specific projects, 1x1 marketing, sales or service automation can help us to massify and process large amounts of information to generate insight in decision making.
2. For the specific market niches that refer to projects, the level of joint work with the client does not allow the automation of processes, for what has been explained above. This is from the Sylvania point of view.

Beatriz: I think it also depends a lot on the niche market, but in general when you're opening up to mass markets, you're going to lose a lot of connection with your target audience if you don't retain. This talking about mass products, but when talking about niche products, you can work a little more with a PR (Public Relationship Executive), but this is much more expensive because it is a very personalized service. For example, let's look at personal banking, premium banking. There is always an advisor there who handles the relationship with the client. So in this case, the marketing automation tool might not be necessary because in the end the success of that relationship is that the client feels individualized.

But first of all you have very specific services and markets, that will generate you credit to do it because it is a very expensive and slow service. You have to have PR partners too and that means time and money. So in the end, like I say. There are market segments that are impossible not to reach without an automated marketing tool. For example, Coca Cola products. Impossible not to reach such a massive market, or when launching a new product into the market. How do I do this, if I don't magnify my voice?

If we talk about a B2B is the same, Sylvania sells a lot but not as B2C. We don't sell light bulbs to end consumers, but rather work with distributors so that they can reach their customers. That on the one hand, and on the other hand are the joint consulting projects with electromechanics for large lighting projects.

For example, about four months ago the new street near the roundabout of the social guarantees was lit up. In this case the government comes out with a bidding process and has to go with an electromechanical team to determine the requirements that must be met according to that would.

Because it's complicated, they have to light up a certain area. They can't just pick any light fixture. It has to be one that allows you to light the streets and sidewalks, 360 degrees but not so high that it doesn't light the windows of the house at night. What kind of light, the color of the light, etc. So, this type of advice is Sylvania's niche market when we do B2B. To reach the B2C is indirect, because I will never reach the market directly, but we reach it through the distributor, hardware store, etc. So in the end we are a model that has a service to customers almost always B2B and a little bit B2C.

Interviewer: Q10. What culture-related problems or challenges may arise in the NPD process? How could this be solved? Could CRM help?

Jorge:For me, the main cultural problem that can appear in the NPD process is governance (rigour of compliance with the stages) and traceability that must exist in the value chain, in addition to the lack or laxity of documentation or in the establishment of the stages.

By virtue of the above, the CRM becomes a vital tool for filling such potential "gaps" in the development chain because it allows clear and comprehensive documentation of the NPD processes.

Appendix 14 – Codes Summary

effort to understand clients
it should have...
good customer service
previous preparation
Communication with client (+)
buyer-seller relationship
CRM technology or automated
active investment
Public Relationship Executive
not enough efforts
weak follow up
Customer involvement in PD processes
hierarchal approach
first stages of process
in whole process
involvement in prototyping
cultural knowledge RELEVANCE
depends on industry type
in partnerships or client relationships
Ethics part of culture
matching cultures
Relevance in PD
adaptability
how to behave
Countries reputation - decision making
Methods to gather cultural knowledge
Protocols
cultural adaptation
business first
Respect
BI's
Modified OCRM
Approaches
Six-Sigma
Uppsala Model
Scrum framework
User-centered design
numbers talk
Customer satisfaction (+)
Experiential learning (+)
NPD process with CRM

Positive impact while implenting OCRM
knowledge management
track and controlling
new opportunities
value chain / holistic
Communication in processes / information sharing
avoid assumptions
Challenges while implementing OCRM
needs people factor
change resistance - HR
NPD process without CRM
Alternative ways - positive side
Rudimentary but effective for SME
App and software
Business intelligence
Challenges of NPD processes without OCRM
Designers are not familiar with the CRM
massive products (+)
CRM only with interactions
lack of traceability in value chain
uncertainty risk- without CRM NPD
lack of information - without CRM
Cultural problems or challenges PD process
build trust
remote work
Actor bond + trust
trust issues
contradictory to culture
big cultural contrast
Regional or micro-cultures
Androcentrism culture
micro-culture / personality
not national but generational culture
Cultural Heritage
religious, political issues
Contact rotation
quanxi not for all
Communication contrast- uncertainty avoidance
Cultural semantics

Statutory declaration

I hereby declare on oath that I have prepared this master's thesis independently and without the use of other than the specified aids. The positions taken directly or indirectly from external sources are identified as such. The work has not yet been submitted in the same way or a similar form to another examination authority and has not yet been published.