BACHELOR THESIS

21 CHECKS TOWARDS A SUCCESSFUL CRM IMPLEMENTATION

A renewed checklist to measure all factors that influence the CRM implementation in an organization.

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Abstract

Purpose – This research was commissioned by the organization Pre-U since their Customer Relation Management (CRM) process was not implemented satisfactory. The aim of this research is to find out what needs to be changed to reach satisfaction regarding the implemented CRM. Within the literature review a checklist was found, which can be used to measure the current CRM condition and points out the pitfalls in the CRM implementation of an organization. This study is about adjusting and expanding that checklist with more recent studies. The effectiveness of the renewed checklist was proven by the practical application within Pre-U.

Methodology – Within this study, semi-structured interviews were conducted in which the interview questions were presented to a representative group of the Pre-U employees. This interview questions were derived from the required statements of the checklist. It measured employees' experience of the presence of relevant CRM implementation factors. Afterwards, the interviews were transcribed, coded, and analyzed.

Results – The conducted interviews resulted in an overview of the fulfilled and unfulfilled required statements. The unfulfilled required statements demonstrate the shortcomings of relevant CRM implementation factors within the case organization, Pre-U. More than half of the required statements appear to be insufficient, which is consistent with the current situation experienced by Pre-U. Within the current situation, the CRM implementation is unsatisfactory. The applied checklist gave insights in what the organization needs to change, in order to improve the insufficient factors and achieve successful CRM implementation.

Conclusion – A checklist created in 2001, measuring the CRM implementation condition at organizations was found, adjusted, and expanded. The combination of the checklist with more recent studies, made the checklist more actual and valuable. To ensure the validity and demonstrate the effectiveness, the checklist was applied within the case organization, Pre-U. This practical application resulted in a valuable list of points of interest for Pre-U, so they can improve the factors that influence their CRM implementation.

Keywords: CRM, Relationship marketing, CRM checklist, CRM implementation, corporate organizations

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1. Introduction

The most important components of all organizations are the customers. Basically, an organization is offering services and products because of customer demand and the organization's goal is to satisfy the customers' needs. Since the early 1980s, the strategic management of customer information and relations became a relevant topic for the corporate business world (Payne & Frow, 2013). Customer relation management (CRM) is crucial in an organization to obtain an overview of the identities, demands and expectations of contacts (Srivastava, Shervani, & Fahey, 1999). Moreover, Hassan, Nazwas, Lashari and Zafar (2015) claimed well-functioning CRM is the core of good customer relations and thus a better market position.

CRM is defined as the processes and applications which support strategies to build long-term and profitable customer relations (Macnish & Ana, 2019; Ngai, Xiu, & Chau, 2009). In other words, in an organization CRM is a marketing strategy, expressed in a process and supported by a digital CRM system.

The rise of information technology in the early 2000s, showed the potential and the possibilities of relationship marketing strategies through information technology (IT). Developments in IT make it possible to use technology-based solutions in organizations to enhance the management of customer relations. These technology-based solutions are CRM applications, which are personalized or even built for an organization. This efficient mode of maintaining external contacts made the use of CRM applications increasingly popular within corporate companies (Payne & Frow, 2013).

Kinnet (2017) noticed that when people were talking about CRM, they were often talking about the CRM application, instead of the strategy or process. This can be devastating for a successful CRM implementation, since employees will then only focus on a small part of CRM. To distinguish the CRM process from a CRM application, the following definition of the CRM application is used: "the building of a single view of the customer relation across all contact channels and the distribution of customer intelligence to all customer-facing functions" (Reinartz, Kraft, & Hoyer, 2004, p294). The misunderstanding about CRM as process or application is one example of the pitfalls in CRM implementation. Experience shows that the implementation of CRM comes with difficulties and that successful functionality requires adaptation from across the organization (Zehetner, Sudarević, & Pupovac, 2011).

This research was commissioned by Pre-U, an organization that experienced similar difficulties regarding CRM implementation (personal communication with project manager, 2021 January 25th). Pre-U is a cooperate organization which mainly organizes educational activities for high school students to get an idea of university education. The mission and structure of this organization will be explained later in this report. Pre-U introduced their CRM application around four years ago. While the application should ensure a more efficient CRM process, the opposite seems to be the case. Data is found to be outdated and managing relationships seems more of a burden than a benefit. Therefore, it can be stated that the CRM process is not implemented satisfactorily. Pre-U would like to know what needs to be changed to improve the effectiveness of their CRM process. Assuming more organizations are struggling with their CRM implementation, this leads to the following research question of this study:

How to ensure a successful CRM implementation in an organization, *to achieve more effective and* *up-to-date relationship management?*

Several researchers investigated CRM processes within corporate organizations. Various relevant and useful literature is written. For example, Dyché (2001) created a checklist to measure the CRM readiness of an organization. In this rapidly changing world, especially in processes where the role of IT has increased, it is important to continue to adapt these types of checklists and to ensure that they are current. Therefore, the literature review of this thesis focused on combining and interacting previous findings on what affects CRM implementation. Some of the existing literature zoomed in on one or two specific elements that influence CRM in organizations, while other literature tried to give an overview of all relevant factors that have an impact on CRM. The aim of this thesis is to complement the second.

This study adds to the existing literature on CRM and functions as an adjunct to previous research. By combining the checklist that measures the readiness for CRM implementation (Dyché, 2001) with more recent studies, a more current and comprehensive checklist is created. In addition, this checklist is successfully applied in the case study, which implies a prudent, first confirmation of the validity of the checklist. This checklist can be applied in various organizations, to strengthen the validity. Besides, the factors of the checklist can be used in other research for further investigation.

The structure of this case study report will be as followed: first of all, the case organization of this study will be introduced. Secondly, the theoretical background will be outlined, from which an extensive checklist will flow. This will be the foundation of this study. Thirdly, the method of the conducted qualitative research will be explained. Fourthly, the findings and results of the research are discussed, which are analyzed thereafter. The results will demonstrate the usability and effectiveness of the checklist. At last, the main findings, the theoretical and practical implications, the limitations, the recommendations, and the conclusion will form the discussion part. This will elaborate on the eventual extension of the checklist and what the recommendations, based on the checklist, will be for the case organization to optimize their CRM. This list will help Pre-U to re-implement their CRM process and application and reap the benefits.

2. Case introduction

In this chapter the case company of this research will be introduced and an insight in the structure and mission of the organization is given. This case study is conducted within the organization named Pre-U. Pre-U is the pre-university program of the University of Twente which aims on developing talents at an early stage.

Pre-U offers three external programs:

1. The Pre-U Junior program, which focuses on primary school children from grade 3-8.
2. The Pre-U program, which focuses on high school students.
3. The Pro-U program, which focuses on the professionalization of teachers.

2.1. The internal structure

The organizational structure of Pre-U is quite complex, and therefore often explained with the metaphor: Het huis van Pre-U. Roughly translated; the house of Pre-U (figure 1).

At the top, you will find the ‘education employees’. Succinctly, they teach and guide Pre-U participants. In principle, the employees in the top block are executives and do not work with the CRM process. Therefore, they will not be included in this study.

The remaining blocks represent the ‘organization employees’. A distinction is

Figure 1. Het huis van Pre-U.

made between project-based- and functional-employees. The project-based employees are represented by the two blocks on the first floor. The ground floor represents the three departments that work on jobs across the entire width of Pre-U. Employees from both positions get to deal with CRM. This differs from retrieving and passing on contact information to sending emails.

Together these five blocks consist of 52 employees (personal communication with HR manager, 2021 April 28th). Twelve staff members, who are parttime or fulltime employees and work at Pre-U for an indefinite period of time. They can be seen as the management department. Besides, there are 40 coordinators, who are student employees. On average, student employees work at Pre-U for about two years. This means that 65% of the employees have an extremely high transfer frequency. This demonstrates the cruciality of good function transfers and clear workflows, especially with complex processes and applications such as CRM.

In addition, Pre-U is an element of the University of Twente (UT). Since the UT is seen as a whole by external parties, it is intended that different departments within the UT work together and that customer data is collected in a central place. For Pre-U this comes down to two close collaborations that have common ground with the target groups. The Marketing & Communication (M&C) department of the UT and the department of teacher development, ELAN. It is important to coordinate these collaborations and to stay informed of each other's contact moments with external parties.

2.2. External contacts

As explained before, Pre-U organizes various activities for all kind of target groups. Information of all these target groups is collected in order to be able to carry out the activities properly, or to inform the right people about specific activities. Most activities are organized for primary or high school students. To reach those students, Pre-U largely depends on the people that stimulate those students to participate in extracurricular activities. For example, teachers, deans, and team leaders. Besides, Pre-U tries to inform former participants about other or new activities that may be interesting for them.

The main target groups are shown below in figure 2. To clarify, partnerschools are schools are schools that have entered a partnership with Pre-U. This means they are part of the close network. Besides, internship coordinators are employees at a school that are responsible for the coordination of any UT interns at that school. The other groups are self-explanatory.

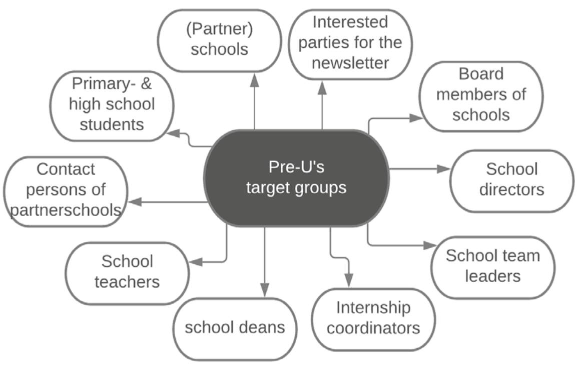

Figure 2. Target groups of Pre-U.

2.3. The CRM application

About four years ago, Pre-U introduced the CRM application that was already used by other departments of the University of Twente. It is intended to use the CRM application for:

1. Having a clear overview of all contact information;
2. Inform customers via mailings;
3. Follow the customer journey of participants.

The CRM system is an online application and employees need to log in with a username and a password. The system has endless features and possibilities. The most relevant features for Pre-U are: collecting and merging customer information; creating desired overviews; automatically connecting participant registrations to activities; generate marketing lists; designing and sending e-mails. Since the collaborating parties work with the same application, it becomes possible to keep abreast of each other's contact with external parties.

Apparently, not just the organizational structure of Pre-U is complex, the different target groups, external contacts and collaborations are complex as well. Therefore, Pre-U needs to know what affects the internal process of CRM, and how can they optimize their CRM.

3. Theoretical framework

In the previous chapters, the core definition of CRM and the structure of Pre-U are explained. Now, the more in-depth background of CRM, its functions and its influences on organizations will be outlined.

3.1. The CRM application

CRM processes aim at two main objectives, customer segmentation and direct marketing campaigns. From a marketing point of view, a well-functioning CRM process helps to obtain new customers and to develop and maintain customer relations (Chorianopoulos, 2016). As illustrated in figure 3, Payne and Frow (2013) placed CRM between relationship marketing and customer management.

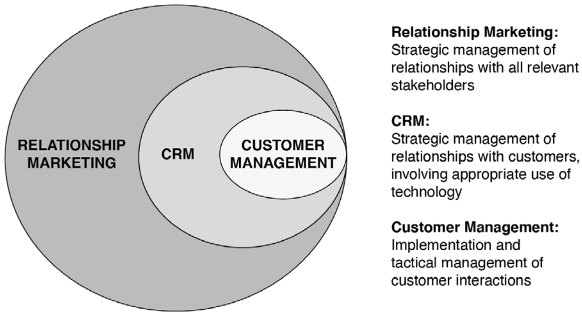

Figure 3. The domain of strategic customer management (Payne & Frow, 2013).

Three layers are categorized: The first layer is relationship marketing. Relationship marketing is the broader strategy of managing relationships within an organization. CRM, the second layer, is a more specific, strategic approach. This unites the potential of combining a relationship marketing strategy with IT, in order to create long-term, profitable customer relations. Moreover, cross-functional integration of employees, activities, marketing capabilities, applications, organizational processes, information, and technology make it possible to get a better understanding of customers (Payne & Frow 2005). The core of this figure includes customer management, which really focuses on how to deal with customer interactions in a tactical way. This goes beyond the strategic management of relationships, which is the focus of CRM.

Figure 3 illustrates customer management as core of the process. This means, customer management is the most in-depth phase of maintaining customer relations. To achieve valuable customer relations, and thus, a better market position, well-functioning CRM process will be sufficient.

Todays' cooperative markets are complex and competitive. According to Payne and Frow (2013), organizations have realized the value of building and sustaining relations, and the overvalue of relationship marketing compared to customer acquisition. In addition, they claim CRM processes are built from a combination of objective information technology and the philosophy of relationship marketing to develop a closer fit between the product and service offering of the organization and the customer requirements.

Based on customer information, the marketing team is able to create strategies, in which specified or personalized information is received by the right customer. Dyché (2001) discusses the effective one-to-one marketing concept. She emphasizes that one-to-one marketing includes communicating with customers as individuals and sending tailored messages, provided that customers have consciously opted for contact with the organization. Customer engagement increases significantly when customers are addressed personally (Dyché, 2001).

3.2. The supporting features of CRM technology

Technical possibilities enable CRM applications to offer lots of automatic and helpful features to improve the efficiency of tasks. For example, CRM applications are able to make one-to-one marketing processes run smoothly. The application automatically personalize communication with customers by, for example, addressing them by their first name and save the opt-in preferences (Dyché, 2001). Besides, CRM applications are able to create a clear overview of the customer information and previous contact moments. Furthermore, applications include contact management solutions, campaign management, event-based marketing, product configuration and opportunity management (Ang & Buttle, 2006).

3.2.1. Application as a resource

In modern organizations, it is almost impossible to implement and run an effective CRM process, without a digital CRM application. In fact, the CRM application is central to the process, collected information must be uploaded in the application, and needed information must be downloaded from the applications. Although the CRM application should be central in the CRM process, CRM applications depend on technological possibilities and can hinder organizations because of technical limitations (Sen and Sinha, 2011). It is important for organizations to take the process and ultimate goal of CRM as a starting point and to set up the application accordingly. Once the process is clear, the CRM application should be arranged to guide the process and function as a central point.

Since CRM applications are based on technology and can be quite complicated, Pullig, Macham and Hair (2002) argued that available organizational support is necessary to help employees with technical issues. For example, IT-specialists, or people with a lot of application knowledge. According to their study this is one of the most important factors for a functioning implementation of the CRM technology.

The added value of a properly implemented CRM process from a marketing point of view is confirmed by Payne (2005). In the book *'Handbook of CRM: Achieving Excellence in Customer Management'* he deals with each part of the CRM process and agrees on the statement that CRM applications are able to automatically personalize communication. However, Payne argues that CRM technology must be used to the maximum, but it can never compensate for human input.

3.2.2. General Data Protection Regulation

At first glance, CRM would seem contradictory to GDPR. After all, the purpose of CRM is to manage customer relationships and therefore collect personal data. Collecting customer information directly links with the General Data Protection Regulation (GDPR). GDPR is the

European privacy law, tightened on May 25, 2018, and includes all rules and requirements that must be met in order to collect customer information (European Union, n.d.). GDPR ensures personal data protection. First of all, Teodora, Popa and Sefora (2018) found that GDPR has a positive impact on recapturing customer trust, which indicates GDPR is function from a customer point of view.

Contrary to the suspected discrepancy, AVG and CRM are both acting with integrity when it comes to personal customer data. Moreover, information technology enables CRM applications to facilitate meeting GDPR regulations by automating actions to meet the requirements (Politou, Michota, Alepis, Pocs, & Patsakis, 2018). Different tools can be integrated in CRM applications to enable for example personal data deletion or anonymization, or to manage and audit data storage access. With these tools, personal data storage is limited and rules about reading and changing datafiles are provided. These limitations and rules are crucial to meet the new GDPR regulations. (Politou et al., 2018)

Following GDPR, the collection of data must have a defined purpose supported by a legal basis, such as a legitimate interest in using and storing data or that explicit consent has been given, or a contractual obligation (Davis, 2021). CRM applications may have the ability to digitally record consent. Another usable feature cited by Davis (2021) is the possibility to automatically process customer's desire to adjust or withdraw their marketing consent.

3.2.3. System integrations

Another possibility created by information technology in CRM processes is integrating the CRM application with other technological systems the organization is using. Liu, Liu and Xu (2013) emphasize the created value of CRM applications comes mainly from integrations that automize processes. Kinnett (2017) showed different possibilities of systems that could integrate with a CRM application (Figure 4).

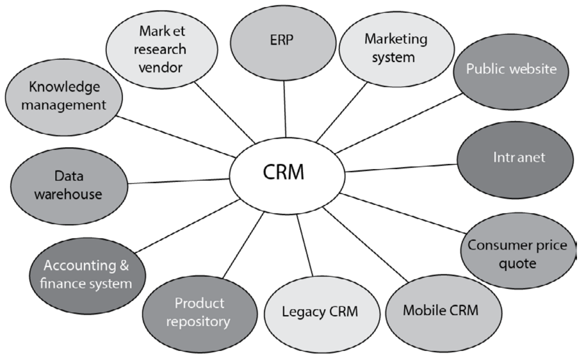

Figure 4. CRM integration possibilities (Kinnett, 2017).

System integrations will bring individual systems together and reduce the workload for specific work tasks, by automatically implementing and merging changes in all integrated systems.

3.3. Implementation

A CRM process helps to organize customer information and enhances effective and efficient marketing. Several studies confirmed the positive effects of a well implemented CRM process on organizational performances and customer satisfaction (Reinartz, Kraft, & Hoyer, 2004; Khan, Salamzadeh, Iqbal, & Yang, 2020; Chen, Ou, Wang, Peng, & Davison, 2019). It is emphasized, advantages only apply if the CRM process is properly implemented. Oshita and Prasad (as cited in Dyché, 2001) indicate four main characteristics of a well-implemented CRM process:

1. The ability of CRM to impact corporate strategy;
2. Successful integration of technology;
3. Enhanced strategic partnerships;
4. Assimilation of CRM-related technologies.

While these characteristics give a first impression of guidelines, the criticism to judge their level of sufficiency is quite subjective. In the following paragraphs it is tried to get a more detailed and objective view of the needed characteristics for a successful CRM implementation.

3.3.1. Information system project model

Since CRM is a process through the whole organization, the implementation must be guided by project management. Kim (2004) developed a model which summarizes the needed factors to manage an information system project. This model mainly focusses on the implementation of an application. It has become clear that an application alone is not sufficient for a successful CRM, but a successful process without a digital application is unthinkable these days. Given the scale on which the contact details must be kept, it is no longer feasible to do this without technology. Kim's (2004) model starts with at least one insider who should feel the commitment to create awareness of the advantages of the application. This insider must find adequate resources to convince others within the organization and influence at least one management-level stakeholder. Support from management level is crucial to stimulate user participation. Besides, it is the job of management to create a trusted environment and strive to a human-centered focus, in order to have an effective information system adoption (Mitcheltree, 2021).

Once organizational commitment, including a promoter, adequate resource, management support and user participation is fulfilled, a team of high quality and different skills should be brought together. Kim emphasizes, the requirements of management, the users, and the CRM strategy must be taken into account when outlining the process. Thereafter, the CRM process will be the guideline for the application design, along with technological requirements. These steps form the basis of an application introduction. After introducing and implementing the application, the next steps will be application-integration and application's functionality. These steps enhance the added value of a CRM application in the organization. However, the implementation should first be accomplished successfully.

3.3.2. Critical success factors

The step-by-step plan explained in the previous paragraph shows a simplified version of reality and does not get to the bottom yet. In addition, Slevin and Pinto (1987) developed a set of critical success factors (CSF). CSF are inputs to be considered for (in)directly project success (Alias, Zawawi, Yusof, & Aris, 2014). Recent studies showed more specified versions of the CSF's (Maleki & Anand, 2008; Alias, Zawawi, Yusof, & Aris, 2014), but in essence it all comes down to what is illustrated in figure 5.

To specify the factors, a list of factor descriptions was added, which can be found in appendix A. As can be seen in the CSF model, CRM implementation stands or falls with communication and feedback. All factors depend on clarity from decisions and coordination, in which internal communication plays a key role. In addition, it is important for all factors to detect any problems, to provide feedback and to check and evaluate the status of the factors.

In addition to the CSF, several studies underline training and leadership as crucial factors for CRM implementation (Pullig, Macham, Hair, 2002; kinnett, 2017). Besides, Kinnett (2017) cited "gaining value in the form of process efficiency, improved customer relationships, and firm performance requires collaboration beyond simply marketing and IT, but across all business areas. To that end, a successful company will be structured in a way that fosters cross functional communication and collaboration" (p. 41). In other words, teamwork cannot be left out of the CRM implementation factors. Finally, Chen, Ou, Wang, Peng and Davison (2019) examined organizational change and found that for the implementation of CRM,

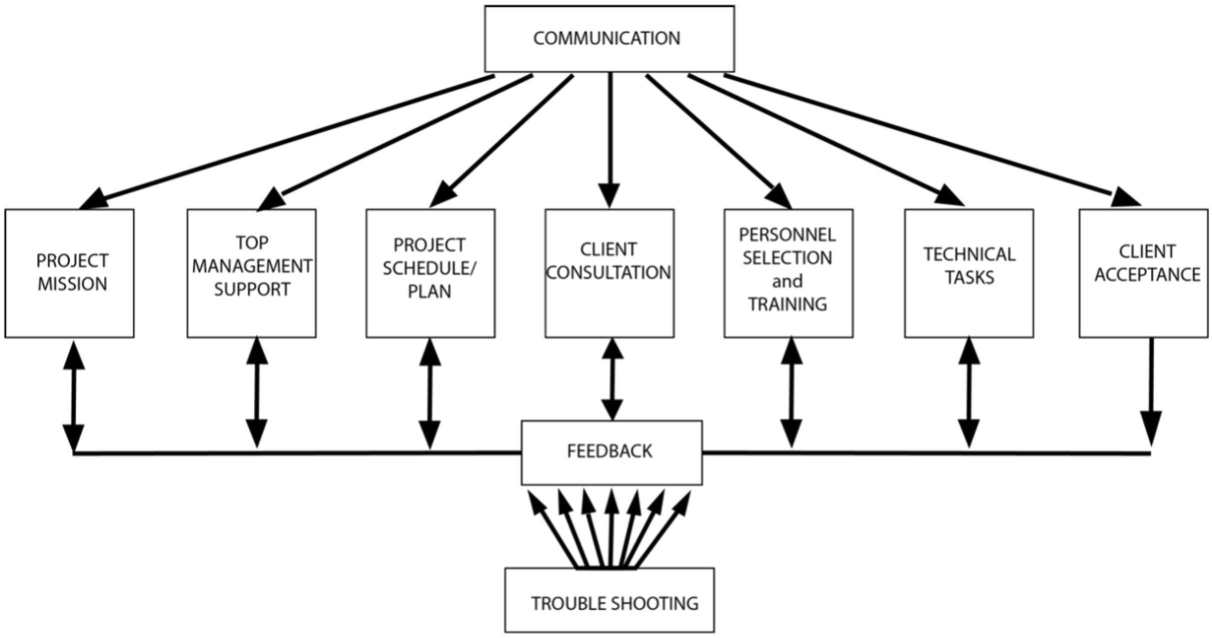

Figure 5. Ten-factor process model of project implementation showing critical success factor interrelationships (Slevin & Pinto 1987).

employees must incorporate the use of CRM application into their work routines. It must be included in the general workflow.

3.3.3. The implementation checklist

20 years ago, Dyché (2001) made a checklist (appendix B) to score the level of CRM readiness for success. This checklist covers several factors that are important for a successful CRM process. Based on a rating scale, the checklist resulted in a score, where a high score indicates the factors meet a sufficient level and the CRM process is ready to deliver success. In addition to the factors mentioned above, this checklist includes employee understanding, encouragement for user participation, understanding of customer differentiation, willingness of organizational investment, clear stakeholder relationship per CRM opportunity, technology, and reliable data sources.

So far, this literature review showed that a successful CRM implementation besides the factors of the checklist, also depends on several other factors. To have a comprehensive overview of the factors that influence a successful CRM implementation, all are combined and summed up in table 1. Teamwork, training, communication, GDPR and work routine are examples of the extensions of the checklist. These factors have slightly more distance from CRM and focus more on organization-wide aspects. To achieve actual change and improvement of the CRM implementation, it takes more than changing just CRM factors. Compared to the previous checklist of Dyché (2001) this new checklist contains all required factors organization wide. These factors are subdivided into clusters and supplemented with definitions and required statements (Appendix C). With this, a more recent and complete version of the checklist is created.

This literature review delivered an improved checklist, which can be used to answer the research question of this thesis:

How to ensure a successful CRM implementation in an organization, in order to achieve more effective and up-to-date relationship management?

In the following chapter is explained how this list can be applied in an organization and how this is supportive for more effective and up-to-date relation management.

Table 1.

Comprehensive overview of factors that influence CRM implementation in organizations

Factors
Top management support and encouragement
Employee understanding
Encouragement for user participation
Willingness of organizational investment
Understanding of customer differentiation
Project schedule/plan
Clear stakeholder relationship per CRM opportunity
Client consultation
Reliable data sources
Training of employees
Teamwork
Communication
Work routine
Monitoring and feedback
Technology
Trouble shooting
Meeting GDPR requirements

4. Method

In this chapter, the research methodology for this study regarding the CRM implementation at Pre-U will be introduced. The relevance of discussing the research method lies in ensuring a reliable and valid research. First of all, the research approach will be explained. Subsequently, the participants, the procedure and the analysis will be discussed.

4.1. Research design

The list of important factors for a successful CRM implementation, made up in the theoretical framework, forms the foundation for the research of this thesis. To find the core of a successful CRM implementation, this checklist will be walked through at the case organization, Pre-U.

To find out the current status of the required statements, it must be examined how the required statements are currently experienced by the employees. Therefore, a qualitative study was chosen, in which the experience, knowledge and awareness of the CRM process of employees was measured.

Focusing on understanding the experience of employees, phenomenological interviews seem the most appropriate choice (van Manen, 1990; Seidman, 2012). In a more natural conversation, the thoughts and knowledge of the employees regarding the CRM are revealed.

The interview was conducted with 12 participants, which formed a representative group of the organizational employees at Pre-U. In order to ensure the representation of the participative group, a purposive sampling was applied. A more elaborated explanation of the participant choices will be discussed on the following section. Since, the interview focused on demonstrating the condition and presence of CRM implementation factors, which actually concerns factual information or at least whether an employee has noticed the factor or not, more variety of aspects of communication such as tonality of conversation, gestures or facial expressions are not specifically taken into consideration.

4.2. Participants

12 employees participated in this study, who together are representative of the organization employees at Pre-U. The sample used in this study is almost equal to a quarter of the entire target group. However, a significant amount of the target group is integrated in this study, more important for a research based on interviews is data saturation. According to Fush and Ness (2015) data saturation occurs when no new information emerges in new interviews. Data saturation differs per study. In this case study, it seemed that the data saturation was reached after eight interviews, until a new topic, namely the essential collaboration with M&C, emerged in the tenth interview. To the original plan to ask eleven participants for the study, a twelfth participant was then added who confirmed the last topic but shared no new information. After twelve interviews, data saturation was reached.

As explained before, purposive sampling was chosen. Since the organization is not equally divided, and a representative sample is required for the truest reflection. The researcher compiled the sample herself, taking into account the following information.

The distribution of project managers and student employees at Pre-U is 3:10, but it must be calculated that student employees usually work 8 hours a week at Pre-U for about 2 years. Project managers, on the other hand, work 24 to 40 hours a week and often for several years. Besides, a few Pre-U employees are the connections with two other departments of the UT. The collaboration with these departments lies mainly in the cross-functional use of CRM. Therefore, the following participant selection is chosen: five student employees, six staff members, one of whom is the connection with M&C, and two employees of the close collaboration with ELAN.

In addition to the distinction between student employees, project manager and important employees of CRM collaborations, also a representative division between functional- and project-coordinators is taken into consideration. In general, functional coordinators have to deal with the CRM more often than project coordinators. That is why seven participants with functional tasks were asked and three participants with project-based activities.

An overview of the demographic participant data is shown in table 2.

Table 2.
Demographic participant information.

Participant	Gender	Age	Employment time	Job position	Study
1	Male	26-49	Over 2 years	Project manager, project-based	Technical
2	Male	≥ 50	Over 2 years	Employee of CRM collaborations	Non-technical
3	Female	26-49	Over 2 years	Project manager, functional	Non-technical
4	Female	≤ 25	Less than 2 years	Functional coordinator	Non-technical
5	Female	≤ 25	Over 2 years	Functional coordinator	Technical
6	Female	≤ 25	Over 2 years	Functional coordinator	Non-technical
7	Male	≤ 25	Less than 2 years	Coordinator – project-based	Technical
8	Female	26-49	Over 2 years	Project manager, project-based	Non-technical
9	Female	≤ 25	Less than 2 years	Functional coordinator	Technical
10	Female	26-49	Over 2 years	Project manager, functional	Non-technical
11	Female	26-49	Over 2 years	Interim project manager, functional	Non-technical
12	Female	≥ 50	Over 2 years	Employee of CRM collaborations	Non-technical

4.3. Participants

Similar to the checklist of Dyché (2001), the factor list found in the literature review of this study is categorized by clusters and clarified by the use of definitions. This table can be found in appendix C. All factors are translated into a 'required statement', which indicates what a factor must meet in order to be considered sufficient within the organization. For example, an indication of the fulfillment of the required statement: 'The process is applied via top-down communication and all parties are aware of the conversation and choices in the CRM process', may be the decision-making is in the hands of management. These required statements were then translated into interview question. The translation scheme can be found in Appendix D.

In outline, the interview is structured based on the 4 clusters: understanding, workflow, technology, data reliability, and preceded by a number of demographic questions. During the interviews, an attempt was made to make the different categories flow into the conversation line. Appendix E demonstrates the chronological sequence that was planned beforehand for the interview.

After the demographic questions, the research topic was introduced by the question 'What is CRM within Pre-U?' in order to gauge the participant's understanding and awareness of the topic. This question broke the ice and made the participants think straight about the subject and everything they knew about it. Then the interview questions flowed together about how the level of all factors were measured.

At the end of the interviews, all participants were asked if there were any factors, topics or other things they associated with CRM that had not yet been discussed. Finally, they were asked if there was anything they wanted to change or add to their answers.

4.4. Procedure

Some of the interviews were conducted physical, following the COVID regulations, while other interviews were conducted online. The preference of the participant was leading in this. Eventually, six of the interviews took place physically, and the other six were conducted digitally. Only audio was recorded since aspects as tonality of conversation, gestures or facial expressions were not taken into consideration.

During the six online interviews, consent was chosen to be orally agreed. Before the interview, participants were asked if their participation was voluntary and if they allowed the interview to be recorded for research purposes. Before the physical interviews, participants were asked to read through the printed informed consent (Appendix F) and sign it if they agreed with voluntary participation and allowed recording of the interview. It was made clear to the participants that all collected information will be processed anonymized to protect privacy.

In most interviews, the pre-planned question sequence was followed, supplemented by relevant follow-up questions. All interviews were completely transcribed. Nine interviews were transcribed by the researcher and three interviews were transcribed by a second objective transcriber. The participants were not asked to read through the transcriptions. Since everything said in the recordings is literally written down, the recordings guarantee the reliability of the transcripts.

On average, the interviews lasted 34,5 minutes, of which the most extended interview lasted 49 minutes and the least extensive interview 23,5 minutes.

4.5. Analysis

The interview was constructed based on required statements, which were translated from the list of important CRM implementation factors. Based on this previously performed categorization the first deductive version of the code book was drawn up.

After the first three interviews, the transcripts were read through and encoded with the deductive codebook. At the same time, the codebook was supplemented with missing codes. In other words, a combination of both deductive and inductive coding approaches has been applied in this study.

To ensure the reliability of the codebook, and thus this study, the codebook was assessed by determining the intercoder reliability of another researcher. The second coder coded three randomly chosen transcript parts, which resulted in the Cohen's kappa. After the first coding round, the calculated Cohen's Kappa value was 0.58 (Appendix G). This indicates that the interviewer and second coder too often had different code associations in the analyzed data. Along with the second coder, the codebook was improved to achieve more objective interpretations. For example, the codes regarding 'understanding' were replaced with 'knowledge', as this is specific and thus easier to interpret objectively. The second code round resulted in a calculated Cohen's Kappa of 0.73 (Appendix G), which indicates the codebook is reliable. To give an impression of the codebook, table 3 displays the code names. In Appendix H an extensive version of the codebook, including categories, code numbers, code names, definitions and examples can be found.

Table 3.
Code names

Code names
≤ 25 years old
26-49 years old
50 ≥ years old
Technical
Non-technical
< 2 years
> 2 years
Project leader – Functional
Project leader – Functional
Student employee - functional
Student employee – project based
Employee at collaborative departments
Being aware of the goal
Being informed
Relevance
Application knowledge
Training
Tools
Questions
Internal understanding
External appreciation
Tasks
Responsibility: division of tasks
Responsibility: own contribution
General
Feedback
Overview of customer information
Centralize information
Enhance marketing
Technical integrations
Comfortable atmosphere
Decisions & coordination
Encouragement
Accuracy
integrity
Current process
Future
Pros
Cons
Assumption
Don't know

To give meaning to the collected data, an interpretive analysis is done. The codebook made it possible to translate the participants' answers into analyzable segments, whereby connections could be made quickly. Once all data was collected and transcribed, the interviews were analyzed in ATLAS.ti using the final codebook (see Appendix H).

Eventually, after analyzing interviews, the current condition of the CRM implementation came to light. The findings demonstrate the strength and the weaknesses. From there it can be seen where change and improvement are needed to enhance the implementation. Briefly, with the interviews the presence (and to what extent) or the absence of the factors of the required statement are measured. If all required statements are met, the CRM process is ready to implement and should be successful.

5. Results

In the following section, the interpretive data of the qualitative interview analyses performed, are discussed. In this research the checklist is used to identify the shortcomings of the CRM implementation within Pre-U. To provide structure, the results are presented using the required statements from the created checklist (See Appendix C). The statements will be dealt with per cluster. First understanding, then workflow, followed by technology, and finally data collection.

The substantive part of the interview always started with the question: “Are you familiar with CRM within Pre-U?”. Despite the fact that this question is not based on a required statement, it already provides a lot of information about the current condition of CRM within the organization. 66% of the participants indicated that they knew about its existence, but that they had either not worked with it or were not aware of the possibilities.

“I know from my previous position that there was something to do with CRM, but I have no idea what the actual function is.” – Participant 6.

The fact that more than half of the participants signified uncertainty in this answer, reveals signs of a bad CRM implementation condition. It proves nothing yet, but it should be taken into account, when analyzing the results, that some answers have not been given with full knowledge of the current state. Additionally, a significant number of assumptions and disclaims of knowledge in the given answers is seen. However, there is not specifically one factor or subject that people are less aware of.

5.1. Understanding

The first cluster covers understanding, in the broad sense, of CRM and started with the statement: *‘The goal of CRM is clear through the whole organization’*. All participants answered the question: *"why is there a CRM?",* with something along the lines of ‘collecting contact information’ or ‘managing relationships’. This implies an understanding of the CRM goal. Yet, both goals apply to CRM in general, not specifically to the CRM process or strategy within Pre-U. Only two participants included the aim of Pre-U in the aim of CRM use. This suggests that the majority of the employees is not particularly well aware of the CRM purpose of the organization.

Next, three required statements are combined and analyzed as ‘the encouragement’ among management members. The three statements deal with the promoter roll, understanding, support and willingness of management members regarding the CRM process. It appears that management members do support the choice to implement and use CRM, but as participant 10 points out:

"There has been no success experience with CRM yet. And so, it is kind of for everyone, somewhere

in the middle of nowhere, and no one sees the benefits, because it just never worked properly." – Participant 10.

During the interviews it is often noticed that management members do support the use of a CRM process, if it functions properly. But it sounds like they find it much, if not too much effort, to keep for example all customer information up to date and ensure properly functionality of CRM. In other words, the statement: *'Management displays an understanding of CRM and supports the process within the organization'*, only applies to the organization in the ideal situation, but the management does not thoroughly support the entire or current CRM process. In addition, when participants were asked if there was room to invest in the CRM process, in terms of money, time and people, the participants agreed on a onetime investment, which results in a more efficient process.

"I think it is a onetime investment. Something working must be put in place in one go, with a workflow that has been set up that will ultimately cost less and less time and money" – Participant 3.

Meaning that the statement: *'There is willingness within the organization to sustain the organizational impact of CRM'*, again occurred a reserved attitude of management members towards CRM. Management members are willing to sustain the organizational impact of CRM, but there are limits on the willingness to invest.

For the last management encouragement statement: 'An insider takes the role as CRM promoter and monitors the continuity of the process', the participants tentatively mention a few employees. Coordinator CRM is mentioned most often in this regard. Besides, the project manager and the communication project manager are mentioned. The statement can be indicated as valid for Pre-U.

The next statement is: *'Employees are aware of the relevance and added value of the CRM process'*. It is remarkable that relevance nearly always is mentioned in conjunction with something that employees are not aware of. This is probably due to the lack of understanding of the added value of CRM.

"I notice student employees are often missing the broader picture. The influence of their contribution on the work of a colleague. It is important to inform student employees and keep the realization of the influences of an individual task for the rest of the organization." – Participant 1.

The urgency of management members supporting the CRM system comes up again here. In an organization with an extremely high transfer frequency, the stable factors, in this case the management members, have the responsibility to educate the student staff, to emphasize the relevance and to point out the added value.

The final statement of this cluster is about *'Employees understanding the identification of different customer segments'*. This was clearly evident in the conducted interviews.

"Regarding positions, it should be known if the contact is a student, high school student, teacher, board member or contact person in order to use it in a targeted manner." - Participant 9.

5.2. Workflow

The second cluster focusses on the workflow of the CRM process. Namely, task division, internal communication and agreements are discussed.

To define a clear project plan there should be *'a clear schedule of who, what and when, considering the CRM process'*. The *'who'* in this statement is analyzed on the basis of the participants' idea of the divisions of labor. For about 50% of the mentioned tasks the participants were able to designate a person responsible. Of which 15% pointed out their own tasks and 35% was the responsibility of a colleague. The other half of the mentioned tasks was assigned to 'someone' within the organization.

"As long as there is someone, or several people… If it is clear who is responsible, we will be fine." – Participant 5.

This establishes there is no clear schedule of *'who'* is responsible for the tasks in the CRM process.

Then there is *'what'*, what needs to be done in the CRM process. Two main tasks are arising from the interviews. Mainly, updating contact details and keep the database organized is mentioned as a task. The participants did not further specify the task. Lack of clarity is also interpreted here.

"It probably needs a lot of updating." – Participant 4.

The second task mentioned was sending emails. Again, no further task specification was given.

Given the limited knowledge of employees about tasks and division of tasks, it is not entirely illogical that the participants did not give notice of a time indication of tasks in the CRM process.

Likewise, the statement: *'Employees have integrated their role in the CRM process into their work routines'*, does not apply to Pre-U either. Moreover, participant 8 claims:

"And so, we have developed our own working method for each project, for which the CRM is not necessary." – participant 8

The third statement of this cluster is in line with the first one: *'In each department there is one responsible employee, that manages the contribution in the CRM process'*. As explained before, there is no transparency about responsibilities regarding the CRM process.

"Because the custodians of that piece of data don't realize that they are the custodians of that piece of data." – Participant 11.

The fact that employees are not aware of their own responsibilities, is probably related to following statement of the checklist: '*There is a clear introduction for employees that helps them to understand their role in the CRM process and how to fulfill that role'.* Participants were asked how they were introduced to CRM, for example by means of a training or by having access to any tools explaining how to participate in the CRM process. Where a few indicate they had ever had a training or saw a presentation about the application of CRM, it seems to have yielded little. None of the participants expressed they actual know how the application works. Besides, participants stated that there are no manuals available to work with the application. Moreover, regarding the process of CRM, something like an introduction, training, tool or presentation was not even mentioned. Rather the opposite seemed to be the case.

"It was written in my transfer document, but it said I didn't have a roll in the process." – Participant 6.

The results discussed so far, announce that the statement: *'Each department is aware of the value of its contribution in the CRM process and feels the responsibility to fulfill the contribution'*, is also not satisfied within Pre-U. Within the organization there is ambiguity about what the contribution of specific employees should include. Moreover, this ambiguity is also recognized by the various departments UT-wide.

"The agreements about sharing information internally, within Pre-U or the whole university, have never been spoken out loud." – Participant 10

This quote also relates to the following statement: *'The process is applied via top-down communication and all parties are aware of the conversation and choices in the CRM process'*. This is the most comprehensive statement, as it has been found that many statements are not fulfilled due to unclear or missing agreements.

"How that should be done and thát it should be done, has never been discussed." – Participant 8.

The lack of internal determination from management has consequences for almost all statements in the checklist. Meanwhile, the working atmosphere is experienced as very pleasant and open. The participants were unanimous about the possibility to have a say in decisions.

"The Pre-U working environment has an atmosphere in which there is room to think along." – Participant 7.

The fact that even student employees feel the ability to participate in decision-making betrays the absence of direction, leadership and lucidity. All three are essential to achieve good decision making, clear internal communication and an effective workflow.

The last statement regarding the CRM workflow within Pre-U is: *'A feedback session is implemented in the CRM process, the results are taken seriously and used to improve the CRM process'*. During the interviews, it became clear that there were no such evaluation moments.

"There are not exactly feedback moments. It is more like; it sometimes comes up in the work meeting. But not specific evaluation moments focused on CRM." – Participant 4.

The participants indicated that it would be valuable to apply feedback moments. For now, nothing can be said about feedback processing within Pre-U.

5.3. Technology

Technology is the next cluster to be discussed. There are two topics, the CRM application, which includes four statements, and ICT support. Both can be approached concretely. It is not exactly possible to discuss technical possibilities or the presence of a source of information, those are facts. Nevertheless, how this is experienced by the participants is extremely interesting.

The University has a CRM team which is able to fix technical issues, build application features and answer questions. That would mean the statement *'IT support is available to support employees with bugs, errors or misunderstandings'* is covered. Although, it appeared that not all participants know where they can go with their problems and questions. So, IT support is available, the employees just need to be informed about it.

A similar situation appears regarding the technical possibilities of the CRM system. The CRM application used by Pre-U, features the required options. Namely, the CRM application is able to: *'give an overview of customer information'; 'combine cross-functional customer data and centralize it'; 'enhance the effectivity and efficiency of marketing'; 'integrate with other technical applications used in the organization'*. It appeared that when participants were asked about the benefits of the

CRM application, most answers relate to at least one of the features.

It is seen that employees were particularly aware of the features that were in line with their project or in line with the goal they mentioned in the beginning of the interview. For example, participant 5 claimed the following purpose:

"I'm thinking about CRM as kind of a mailing system, so collecting customer information in order to have an up-to-date mailing list. I believe that would be the main goal eventually." – Participant 5.

To the question: 'What are the advantages of the CRM application within the organization?', participant 5 responded:

"It is advantageous that creating mailing lists does not have to be done manually." – Participant 5.

Again, the features are present, the employees just need to get to know the features and their benefits.

The participants expressed little knowledge about the integration of CRM with other technical systems.

"CRM is of course connected to the Pre-U website, and I don't think there is any other link." – Participant 6.

This is not entirely unreasonable. In the current situation there no other external integrations. The program used for mail design, is that integrated, it is never used as a standalone program.

5.4. Data collection

Since, CRM is mainly about collecting and saving customer information, the last cluster concerns data collection. The first statement regarding data collection is: *'There are indications of customers that want to be differentiated and communicate on a personalized level'.* Employees notice that there is more response and involvement with personalized contact. This shows that personalized communication is valued by external contacts.

"What we do see is that if you send a general mail starting with: dear Mr./Ms., you will get a response from time to time. But with the salutation 'dear, followed by a name', you will definitely get a response." – Participant 9.

The final statement of this cluster and checklist covers: *'Data sources are highly regard for data accuracy and integrity'.* A lot has been said about the collection of personal information, the effort to keep customer data up to date and how to handle all data with security. Pre-U employees seem to be well aware of the need, but also the risks of collecting customer information. The participants explained that all received information is collected directly from the contacts themselves, which indicates reliable data collection. However, after the receiving of the information, it appears too difficult to maintain accurate and up to date data.

Additionally, the GDPR regulations are often cited. Some participants describe GDPR as a burden, while others see CRM as a way to comply with the GDPR rules.

"Compliance with the GDPR rules is becoming increasingly urgent. So, in that regard the CRM should be deployed to ensure GDPR even more." – Participant 6.

It could be argued that the data sources of Pre-U indeed are highly regard for data accuracy and integrity. It is up to the internal workflow and dedication of employees, to keep the collected and saved information up to date and integer.

Moreover, based on factual information the required statement: *'The terms and conditions cover all requirements to comply with the current GDPR regulations'*, can be confirmed for Pre-U.

To summarize the results, an overview of the fulfillment of the statements is given in table 4.

Table 4.
Sufficiency of the required statements at Pre-U.

Fulfilled required statements within Pre-U	Unfulfilled required statements within Pre-U
An insider takes the role as CRM promoter and monitors the continuity of the process.	The goal of CRM is clear through the whole organization.
Employees understand the identification of different customer segments.	Management displays an understanding of CRM and supports the process within the organization.
The CRM application is able to give an overview of customer information.	Employees are aware of the relevance and added value of the CRM process.
The CRM application is able to combine cross-functional customer data and centralize it.	There is willingness within the organization to sustain the organizational impact of CRM.
The CRM application enhances the effectivity and efficiency of marketing.	There is a clear schedule of who, what and when, considering the CRM process.
The CRM application is able to integrate with other technical applications used in the organization.	In each department there is one responsible employee, that manages the contribution in the CRM process.
IT support is available to support employees with bugs, errors or misunderstandings.	There is a clear introduction for employees that helps them to understand their role in the CRM process and how to fulfill that role.
There are indications of customers that want to be differentiated and communicate on a personalized level.	Each department is aware of the value of its contribution in the CRM process and feels the responsibility to fulfill the contribution.
Data sources are highly regard for data accuracy and integrity.	The process is applied via top-down communication and all parties are aware of the conversation and choices in the CRM process.
The terms and conditions cover all requirements to comply with the current GDPR regulations	Employees have integrated their role in the CRM process into their work routines.
	A feedback session is implemented in the CRM process, the results are taken seriously and used to improve the CRM process.

6. Discussion

The aim of this study was to provide an answer to the research question:

How to ensure a successful CRM implementation in an organization, in order to achieve more effective and up-to-date relationship management?

This study actual split up in two parts. On the one hand, the literature was extended by combining previous literature and creating a new checklist. This checklist suggests successful implementation is achieved by fulfilling all the required statements linked to the checklist. With that it could function as answer to the initial question of Pre-U, provided that the effectiveness of the checklist is proven.

On the other hand, the conducted research practically applied the adjusted checklist at the case organization Pre-U. The practical application shows that the checklist is useful and effective, which gives a first indication of the validity of the checklist. The result section focused on the specific results of the interviews conducted within the case organization.

The main findings reflect the results and generalize them to fit more than just the case organization. Thereafter, the theoretical and practical implications will be presented. Finally, the limitations, the recommendations for further research and the conclusion are discussed.

6.1. Main findings

It appeared that a number of factors have influence on the CRM implementation in an organization. The updated checklist (Appendix C) covers all these factors and is a resource to measure the current CRM implementation condition. This checklist is successfully applied and can therefore be considered as effective.

During the practical application of this checklist, it has been found that the current CRM implementation at Pre-U does not meet more than half of the required statements. This corresponds to the situation observed at Pre-U, since the research was commissioned because the CRM process was not implemented satisfactory. For the validity of the checklist, this means the main findings for this specific case, Pre-U, agree to what has been found in the literature.

The analyzation of the results derived a few main findings. Throughout the interviews, the researcher noticed a difference in the perception of CRM between project-based and functional employees. The perception of functional employees (participants 3, 4, 5, 6, 9, 10 and 11) was more comprehensive, compared to the project-based employees (participants 1, 2, 7, 8 and 12), who focused more on their project and jobs. This is reflected in their quotes. In addition, the understanding of CRM, the overvalue and the relevance is associated more to the job-position, than to age, study or their employment time. In general, this means that an organizational-wide CRM perspective for all employees is crucial. The lack of a common vision for the entire organization can contribute to the failure of CRM (Payne & Frow, 2005).

Most of the required statements that were found insufficient are related. It always comes down to introduction, direction and agreements. In other words, communication. This applies to the uncertainty in task division and responsibility, the doubts about the ultimate goal, the unspoken agreements and the lack of a workflow and feedback moments.

Back in 1987, Pinto and Slevin (1987) already claimed that communication affects all factors of the CSF's (figure 5) and now, 34 years later, the same is proved again. This confirms that these findings can be extended beyond Pre-U.

The shortcomings in communication, leadership, and clear guidelines, are again illustrated by the overview in table 4. The right column, the unfulfilled required statements include most not tangible statements, e.g., communication. The column of fulfilled required statements is dominated by factors whose presence can actually be established, e.g., application features. Even with these statements there was often the caveat that not all employees were aware of the presence of these factors.

To sum up, it is essential for organization to be aware of the relevant factors that affect the CRM implementation and to ensure that they are present at the required level. The checklist made up in this thesis is an effective tool to measure those CRM implementation factors.

For Pre-U this mainly comes down to a clear mapping of the goals, agreements, tasks and responsibilities, and in particular the communication of those decisions to all employees in the organization.

6.2. Theoretical implications

This current study contributes several additional factors to a previous 'CRM readiness to success' checklist (Dyché, 2001). Various, more recent studies are merged. The Critical Success Factor model of Slevin and Pinto (1987) is again supported. Where some factors overlap with the factors of Dyché's checklist (2001) , te following factors form extensions in the new checklist: Communcaition, Training of employees, and Monitoring and feedback.

Besides, the Europeans privacy law, tightened on May 25, 2018, has made compliance with data integrity rules even more important. Therefore, Meeting GDPR requirements is added to the new checklist.

The relevance of Teamwork in a successful CRM implementation was emphasized by Kinnett (2017). The clarity of a project plan and the automation of a work routine also prove indispensable in the renewed checklist.

The renewed checklist is more in line with current knowledge and can therefore be better applied within contemporary companies.

6.3. Practical implications

Besides theoretical contributions, some practical implications for organizations that want to measure and improve the implementation of CRM can also be derived from this research.

The checklist made up in this thesis can be used to identify the shortcomings and missing factors that are important for a successful CRM implementation. Thereafter, a targeted plan can be initiated to change and improve the status of those specific factors. Finally, if the deficiencies have been corrected, the organization will benefit from more effective and up-to-date relationship management.

6.3.1. Manageral Implications

Regarding the case organization, this means that the clarity around agreements must improve. To do this, they will first have to sit down with management to make decisions about: The ultimate CRM goal for the whole organization; The time and money to invest in CRM (e.g., employed hours); Responsibility per task.

Once there is clarity about the agreements of this factors, the management members can spread that information among the student employees. This will enhance the organizational wide understanding and awareness of the value of CRM.

Besides, an introduction will be helpful to integrate CRM from the moment a new employee starts. With a clear introduction, and the possibility to have a look in a CRM manual the basis for individual CRM implementation is sufficient. A visual workflow would be useful to get clearness about the who, what and when regarding the CRM process, and helps to ensure all agreements will be adapted correct and the work routines will be as planned. Lastly, feedback sessions must be scheduled to evaluate the implementation and results of CRM, but also to create space for employees to share ideas about the CRM workflow.

6.4. Limitations

Although this research contributes towards new insights on the topic of CRM implementation within cooperate organizations, it also involved some limitations.

First of all, it is known that the purposive sampling approach entails high levels of bias. Moreover, the researcher that conducted this research, also worked at Pre-U, during the research. This means, the participants were familiar with the interviewer, and the researcher was biased by all the background knowledge of Pre-U. It is essential to take this into consideration. On the other hand, the complexity of the organization and its relation management leaves little room for an objective researcher. Several reliability checks were applied, for example, the original checklist as fundament, the Cohen's Kappa and objective second readers.

Next, in this study a conscious choice was made for a representative portrayal. In retrospect, it could have been a good addition to have someone from the technical CRM team join the participants. It does not mean that the data collection in this study was not saturated, but it could add an interesting perspective.

6.5. Recommendations for further research

In line with the last-mentioned limitation, further research can include the more technical perspectives of CRM applications in an organization.

Besides, to increase the validity of this checklist, it must be applied in more and various organizations.

Finally, the conducted research revealed what the specific problematic factors are, but it remains to be seen whether improving these factors will actually lead to more effective and desirable relationship management.

6.6. Conclusion

The present study extents research on the relevant CRM implementation factors. A previously used checklist has been adapted and expanded. This has been done by combining and merging more recent research and studies representing different perspectives regarding the CRM implementation factors.

Within this case study, the checklist is immediately applied in practice. The shortcomings to achieve a successful CRM implementation were demonstrated, showing that the checklist is effective. Organizations can measure their CRM implementation condition. Based on that, a procedure can be set up to improve the implementation.

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Appendices

Appendix A

Factor	Definition
Project mission	Initial clarity of goals and general direction
Top management support	Willingness to provide the necessary resources and authority of power
Project schedule/plan	Detailed specification of the individual action steps required for project implementation
Client consultation	Communication and consultation with and active listening to all parties
Personnel	Recruitment, selection and training of the necessary personnel for the project team
Technical tasks	Availability of the required technology and expertise to accomplish the specific technical action steps
Client acceptance	The act of 'selling' the final project to its intended users
Monitoring and feedback	Timely provision of comprehensive control information at each stage in the implementation process
Communication	Provision of an appropriate network and necessary data to all key actors in the project implementation
Trouble shooting	Ability to handle unexpected crises and deviations from the plan
Meeting GDPR requirements	An organization must comply with the legal rules surrounding GDPR

Noot. Adapted from *Strategy and tactics in a process model of project implementation,* by D. P. Sleven & J. K. Pinto, 1987, p 40.

Appendix B

CRM readiness evaluation metrics

	Factor	***Explanation***
1	Targeted business users display an understanding of CRM and accompanying benefits.	Are the businesspeople slated to use CRM after it's deployed aware of its intended improvements? (A bonus: Are they enthusiastic about them?)
2	Management displays an understanding of CRM and accompanying benefits.	Not only must executives understand what CRM means; they should also understand its value proposition and be able to articulate it consistently. And they should understand which corporate objectives depend on CRM.
3	CRM application opportunities are identifiable.	" he business areas most in need of CRM should be identified, along with the projected deliverables.
4	A business sponsor exists for each discrete CRM opportunity.	Staff members in the trenches, irrespective of their need for more customer intelligence, aren't enough. Someone in management should be lobbying for CRM, willing to tie his goals to CRM, and even willing to fund it.
5	Obvious stakeholdership (subject matter expertise, targeted end-users) exists for each discrete CRM opportunity.	Are there other people within each candidate business unit who will support or help deliver a CRM project? Are these people in the majority?
6	Client has expressed a need for market differentiation (or similar strategic objective).	Management should be able to tie CRM and its benefits back to the company's competitive goals and understand how CRM can help differentiate customers.
7	Communicated strategic initiatives can be supported by CRM.	If the company has a list of strategic objectives, those objectives should be customer focused and thus supported by CRM.
8	Stakeholders can articulate projected CRM benefits for each discrete opportunity.	Business sponsors or management should be able to describe the tactical business improvements that can be delivered by CRM.
9	Stated opportunities can be improved with customer-related data.	" he CRM opportunities being discussed must be able to be supported and/or improved with clear, consolidated customer data. (In other words, process improvements aren't enough.)
10	Projected data sources are highly regarded for data accuracy and integrity.	Where will the customer profiles and segments originate? If those systems aren't trustworthy, no one will trust the ultimate CRM applications.
11	Cross-functional customer data exists in a data warehouse or centralized database.	A data warehouse containing consolidated customer information from around the company will jump-start any CRM program and will decrease the infrastructure costs.
12	Organizations currently share a cross-section of information requirements.	Has data sharing been institutionalized already with other systems? This is a positive sign, particularly if the initial CRM project evolves toward enterprise CRM.
13	" he client is already engaging in some sort of customer differentiation or segmentation.	If customer segments are already being identified, there is an understanding of customer differentiation, which makes CRM much more culturally palatable. In addition, certain existing segmentation or analysis process might be leveragable.
14	Questions of data ownership across the company are either nonexistent or easily resolved.	Are specific organizations willing to share their data with the rest of the company? Is management willing to enforce this? Missing pieces of the customer puzzle could jeopardize an entire CRM program.
15	Business units and IT staff agree on CRM ownership boundaries.	" he extent to which one organization wants to “own” CRM is the extent to which politics will get in the way of productivity. There should be firm boundaries for who does what.
16	Executive management has an expressed commitment to fund CRM-related activities.	Executives should understand not only that CRM involves a significant invest- ment, but that additional funding dollars might also need to be reserved.
17	Client agrees to modify business processes as a result of CRM.	Access to complete customer data should trigger business efficiencies.

18	There is willingness to sustain the organizational impact of CRM(for example, reorganization or additional staffing).	Management should be aware that, along with more data and process changes, job roles might change and new skills might be needed.
19	A general understanding of requirements-driven development exists among both business and IT stakeholders.	Successful CRM projects are “top down,” meaning that they are driven by business need. Once understood, business requirements and their relative impact should drive CRM implementation priorities.
20	Management is willing to empower key customer- facing staff based on increased information and improved processes.	If employees such as salespeople and CSRs have more information, it follows that they can be more self-directed. Accountability should be maintained as employees are given more freedom, the focus being on ultimate improvements in customer satisfaction and revenues.
21	Management is willing to implement incentives or modify employee compensation to encourage CRM adoption.	Staff members who readily adopt CRM technologies and processes, and who participate in their ongoing improvement, should be rewarded. Staff members who refuse to adopt these improvements can be considered “saboteurs.” Penalize them.
22	No decisions have been made about potential CRM technology solutions.	Beware the tail that wags the dog: are stakeholders communicating CRM requirements based on a product demo or sales pitch? Assumptions about specific technologies can risk overspending on CRM.
23	Business sponsors and stakeholders have an understanding of the differences between CRM and other programs(such as business intelligence, ERP, or data warehousing).	Even the most astute managers lump CRM together with data warehousing and other key business solutions that involve information technology. Although CRM technology might very well connect with these systems, CRM should be planned and funded separately from other initiatives.
24	IT staffing infrastructure is in place to support CRM.	Although CRM might leverage skill sets and knowledge from other IT areas, it should be planned as a discrete IT activity with dedicated implementation staff.
25	" here is consensus that CRM is a process and not a one-time-only activity.	Like other large corporate initiatives, CRM is an ongoing process that grows and improves over time.
26	Business and IT stake-holders understand that CRM requires ongoing budget to support continued development and maintenance.	Because CRM is a process, it requires ongoing budget. Beware the lump sum CRM allocation…it probably won't cover all necessary CRM functionality.

Noot. Adapted from *CRM Handbook, The: A business guide to customer relationship management,* by Dyché, J., 2001, p. 102-104, Addison Wesley Professional.

Appendix C

Checklist overview of cluster, factor, definition and required statements

Cluster	Factor	Definition	Required statement
Understanding	Project mission	Initial clarity of goals and general direction.	The goal of CRM is clear through the whole organization.
	Top management support	Willingness to provide the necessary resources and authority of power.	Management displays an understanding of CRM and supports the process within the organization.
	Employees understanding	The people who work for the organization must understand why it is important to have a successful CRM, to feel the responsibility to contribute.Together with the top management support, this fulfills the “top-down” theory for a successful implementation.	Employees are aware of the relevance and added value of the CRM process.
	Encouragement for user participation	At least one person with distinction must be committed to make the CRM process successful and convince people to participate.	An insider takes the role as CRM promoter and monitors the continuity of the process.
	Understanding of customer differentiation	All employees of the organization understand the customer differentiation of the customer segments that are already identified.	Employees understand the identification of different customer segments.
	Willingness of organizational investment	Management is aware that, along with more data and process changes, new skills among employees might be needed.	There is willingness within the organization to sustain the organizational impact of CRM.
Workflow	Project schedule/plan	Detailed specification of the individual action steps required for project implementation.	There is a clear schedule of who, what and when, considering the CRM process.

	Clear stakeholdership per CRM opportunity	The CRM process touches different departments in an organization. In every department, one employee needs to be responsible for the contribution of that department.	In each department there is one responsible employee, that manages the contribution in the CRM process.
	Training of employees	To implement a new system withing the organization, employees should be feed with information and practical assignments to get used to the new processes.	There is a clear introduction for employees that helps them to understand their role in the CRM process and how to fulfill that role.
	Teamwork	Gaining value in the form of process efficiency, improved customer relationships, and firm performance requires collaboration across all business areas.	Each department is aware of the value of its contribution in the CRM process and feels the responsibility to fulfill the contribution.
	Communication	Provision of an appropriate network and necessary data to all key actors in the project implementation.	The process is applied via top-down communication and all parties are aware of the conversation and choices in the CRM process.
	Work routine	To implement a CRM process, employees must incorporate the use of CRM application into their work routines.	Employees have integrated their role in the CRM process into their work routines.
	Monitoring and feedback	Timely provision of comprehensive control information at each stage in the implementation process.	A feedback session is implemented in the CRM process, the results are taken seriously and used to improve the CRM process.
Technology	Technology	Availability of an application that fulfills the requirements the ultimate CRM goal is asking for.	The CRM application is able to give an overview of customer information. The CRM application is able to combine cross-functional customer data and centralize it. The CRM application enhances

			the effectivity and efficiency of marketing. The CRM application is able to integrate with other technical applications used in the organization.
	Trouble shooting	Ability to handle unexpected crises and deviations from the plan.	IT support is available to support employees with bugs, errors or misunderstandings.
Data reliability	Client consultation	Communication and consultation with and active listening to all parties.	There are indications of customers that want to be differentiated and communicate on a personalized level.
	Reliable data sources	Where does the customer information come from? To trust the data in the CRM application, the resources must be trustworthy.	Data sources are highly regard for data accuracy and integrity.
	Meeting GDPR requirements	An organization must comply with the legal rules surrounding GDPR	The terms and conditions cover all requirements to comply with the current GDPR regulations

Appendix D

Overview of interview questions translated to required statements

Required statement	Interview questions (Dutch)
The goal of CRM is clear through the whole organization.	Waarom is er CRM binnen Pre-U? Wat is CRM binnen Pre-U?
Management displays an understanding of CRM and supports the process within the organization.	Waar wordt het CRM-systeem voor gebruikt? Wat zijn de voordelen van het CRM? Sta jij achter de keuze om CRM binnen Pre-U toe te passen? (& waarom) Spoor jij collega's aan om het CRM te gebruiken?
Employees are aware of the relevance and added value of the CRM process.	Wat is CRM binnen Pre-U? Waar wordt het CRM-systeem voor gebruikt? Wat zijn de voordelen van het CRM?
An insider takes the role as CRM promoter and monitors the continuity of the process.	Heb je het idee dat je gestimuleerd wordt om CRM binnen Pre-U toe te passen? Hoe vaak wordt CRM besproken/aangehaald binnen werk overleggen en/of taken? Zijn er collega's die CRM min of meer promoten?
Employees understand the identification of different customer segments	Wat zou er veranderen als klanten niet persoonlijk worden aangesproken?
There is willingness within the organization to sustain the organizational impact of CRM.	Is er ruimte voor een extra CRM coördinator in de toekomst? Is er ruimte om trainingen voor een CRM workflow in te plannen? En in welke mate?
There is a clear schedule of who, what and when, considering the CRM process	Heb jij een rol binnen het CRM proces? Ja > wat is je rol? - Wat moet je daarvoor doen? - Wanneer en hoe vaak voer je die taak/taken uit? - Zijn er andere collega's die ook een rol hebben in het CRM? - Wat zijn hun taken? - Wanneer en hoe vaak voeren zij deze taken uit? Nee > zijn er collega's die een rol in het CRM hebben? - Wat moeten zij daarvoor doen? - Wanneer en hoe vaak doen ze die taak?

In each department there is one responsible employee, that manages the contribution in the CRM process.	Hoeveel ‘afdelingen’ zijn betrokken bij het CRM? - Hoe zijn zij betrokken? - Welke workflow volgen zij?
There is a clear introduction for employees that helps them to understand their role in the CRM process and how to fulfill that role.	Hoe is het CRM proces geïntroduceerd? Is er een CRM workflow binnen Pre-U? & hoe werkt deze? Heb je wel eens in het CRM systeem gewerkt? Heb je een handleiding gekregen/gezien? Welke hulpmiddelen heb je tot je beschikking om taken in het CRM proces te vervullen?
Each department is aware of the value of its contribution in the CRM process and feels the responsibility to fulfill the contribution.	Hoe belangrijk is het dat jouw ‘afdeling’ bijdraagt in het CRM? Zijn er andere afdelingen van wie hun bijdrage specifiek belangrijk is voor het CRM?
The process is applied via top-down communication and all parties are aware of the conversation and choices in the CRM process.	*zie training of employees* Hoe is het CRM geïntroduceerd? Kan jij meedenken over beslissingen die gemaakt worden in en over het CRM proces?
Employees have integrated their role in the CRM process into their work routines.	*zie training of employees/project schedule plan/ clear stakeholdership per CRM opportunity* Is er een CRM workflow binnen Pre-U? - Hoe werkt deze? - Heb jij een rol binnen het CRM proces? Ja > wat is je rol? - Wat moet je daarvoor doen? - Wanneer en hoe vaak voer je die taak/taken uit? - Zitten deze taken in je werk routine? - Zijn er andere collega’s die ook een rol hebben in het CRM? - Wat zijn hun taken? - Wanneer en hoe vaak voeren zij deze taken uit? Nee > zijn er collega’s die een rol in het CRM hebben? - Wat moeten zij daarvoor doen? - Wanneer en hoe vaak doen ze die taak? Hoeveel ‘afdelingen’ zijn betrokken bij het CRM? - Hoe zijn zij betrokken? - Welke workflow volgen zij?
A feedback session is implemented in the CRM process, the results are taken seriously and used to improve the CRM process.	Zijn er feedback momenten waarin het CRM proces besproken en geëvalueerd wordt? Ja > Hoe vaak komen deze momenten voor? - Wie zijn daarbij betrokken?

	Nee > Zouden deze momenten waardevol zijn? - Wie zouden daarbij betrokken moeten zijn?
The CRM application is able to give an overview of customer information.	Welke informatie heb jij nodig van externe contacten (deelnemers, scholen, docenten etc.)? Hoe verkrijg je de informatie?
The CRM application is able to combine cross-functional customer data and centralize it.	Ben jij wel eens afhankelijk van andere afdelingen of collega's, als het gaat om de goeie contact informatie? Ja > Hoe verkrijg je die informatie? - Hoe check de betrouwbaarheid van die informatie?
The CRM application enhances the effectivity and efficiency of marketing	Wat is de rol van CRM in de Pre-U marketingstrategie? Wat zou er veranderen aan de communicatie vanuit Pre-U als het CRM systeem geen onderdeel meer zou zijn?
The CRM application is able to integrate with other technical applications used in the organization.	Is er een connectie tussen het CRM systeem en andere technische systemen binnen Pre-U? - Welke systemen? - Zijn deze connecties voor of nadelig? - Welke connecties zouden een goede toevoeging zijn?
IT support is available to support employees with bugs, errors or misunderstandings.	Als er problemen zijn met het CRM systeem, is er dan iemand die kan helpen? - Welke hulp kan deze persoon bieden? - Kunnen Hiermee de problemen op zowel technische kennis als proces kennis worden opgelost?
There are indications of customers that want to be differentiated and communicate on a personalized level	Hoe belangrijk is het binnen Pre-U om externe contacten te onderscheiden? Heb je het idee dat externe contacten gepersonaliseerd contact waarderen? Wat zou er veranderen als klanten niet persoonlijk worden aangesproken?
Data sources are highly regard for data accuracy and integrity	Waar wordt contact informatie vandaan gehaald? Wie is er verantwoordelijk voor het verkrijgen van vertrouwelijke informatie? Wat is voor jou een reden om contact informatie wel of niet te vertrouwen?
The terms and conditions cover all requirements to comply with the current GDPR regulations	*This statement was intentionally not included in the interview because it was assessed on factual information.*

Appendix E

Interview questions, chronological sequence

Wat is jouw functie binnen Pre-U?
Hoe oud ben je?
Welke studie volg je?
Hoe lang werk je al bij Pre-U?

Ben je bekend met CRM (binnen Pre-U)?
Hoe is het CRM geïntroduceerd?
  a. Heb je wel eens in het CRM systeem gewerkt?
  b. Heb je een handleiding gekregen/gezien?
  c. Welke hulpmiddelen heb je tot je beschikking om taken in het CRM proces te vervullen?

Understanding

7. Wat is CRM binnen Pre-U?
   a. Waar wordt het CRM-systeem voor gebruikt?
   b. Wat zijn de voordelen van het CRM?
   c. Wat zijn de nadelen van het CRM?
   d. Sta jij achter de keuze om CRM binnen Pre-U toe te passen? (& waarom)
8. Heb je het idee dat je gestimuleerd wordt om CRM binnen Pre-U toe te passen?
   a. Hoe vaak wordt CRM besproken/aangehaald binnen werk overleggen en/of taken?
   b. Zijn er collega's die CRM min of meer promoten?
   c. Spoor jij collega's aan om het CRM te gebruiken?
9. Waarom is er CRM binnen Pre-U? / Wat is het doel?

Workflow

10. Heb jij een rol binnen het CRM proces?
    Ja > Kun je uitleggen wat die rol inhoudt?
      a. Wat moet je daarvoor doen?
      b. Wanneer en hoe vaak voer je die taak/taken uit?
      c. Zitten deze taken in je werkroutine?
      d. Zijn er andere collega's die ook een rol hebben in het CRM?
      e. Wat zijn hun taken?
      f. Wanneer en hoe vaak voeren zij deze taken uit?
    Nee > zijn er collega's die een rol in het CRM hebben?
      g. Wat moeten zij daarvoor doen?
      h. Wanneer en hoe vaak doen ze die taak?
11. Is er een CRM workflow binnen Pre-U? & hoe werkt deze?
12. Kan jij meedenken over beslissingen die gemaakt worden in en over het CRM proces?
13. Hoeveel 'afdelingen' zijn betrokken bij het CRM?
    a. Hoe zijn zij betrokken?
    b. Welke workflow volgen zij?
14. Hoe belangrijk is het dat jouw 'afdeling' bijdraagt in het CRM?
    a. Zijn er andere afdelingen van wie hun bijdrage specifiek belangrijk is voor het CRM?
15. Hoe denk jij over het toekomst perspectief voor CRM? Blijft het hetzelfde, moet het uitbreiden, moet het

afschalen?

a. Uitbreiden > Hoe denk jij over de ruimte voor investeringen (extra coordinator, trainingen etc.) binnen pre-u?

b. Afschalen > Op welke onderdelen zou specifiek ‘bezuinigd’ moeten worden?

16. Zijn er feedbackmomenten waarin het CRM proces besproken en geëvalueerd wordt?

    Ja > Hoe vaak komen deze momenten voor?

    a. Wie zijn daarbij betrokken?

    Nee > Zouden deze momenten waardevol zijn?

    b. Wie zouden daarbij betrokken moeten zijn?

17. Wat is de rol van CRM in de Pre-U marketingstrategie?

    b. Wat zou er veranderen aan de communicatie vanuit Pre-U als het CRM systeem geen onderdeel meer zou zijn?

Technology

18. Is er een connectie tussen het CRM systeem en andere technische systemen binnen Pre-U?

    a. Welke systemen?

    b. Zijn deze connecties voor of nadelig?

    c. Welke connecties zouden een goede toevoeging zijn?

19. Welke informatie heb jij nodig van externe contacten (deelnemers, scholen, docenten etc.)?

    a. Hoe verkrijg je de informatie?

20. Ben jij wel eens afhankelijk van andere afdelingen of collega’s, als het gaat om de goede contactinformatie?

    Ja > Hoe verkrijg je die informatie?

    a. Hoe check je de betrouwbaarheid van die informatie?

21. Als er problemen zijn met het CRM systeem, is er dan iemand die kan helpen?

    a. Welke hulp kan deze persoon bieden?

    b. Kunnen Hiermee de problemen op zowel technische kennis als proces kennis worden opgelost?

Data reliability

22. Waar wordt contactinformatie vandaan gehaald?

    a. Wie is er verantwoordelijk voor het verkrijgen van vertrouwelijke informatie?

    b. Wat is voor jou een reden om contactinformatie wel of niet te vertrouwen?

23. Hoe belangrijk is het binnen Pre-U om externe contacten te onderscheiden?

a. Heb je het idee dat externe contacten gepersonaliseerd contact waarderen?

b. Wat zou er veranderen als klanten niet persoonlijk worden aangesproken?

Appendix F

Informatieblad voor onderzoek 'de belangrijke factoren voor een succesvolle CRM implementatie binnen Pre-University'

Doel van het onderzoek
Dit onderzoek wordt geleid door Jasmijn Smedema.
Het doel van dit onderzoek is kijken wat de huidige status is van de factoren die invloed hebben op de implementatie en integratie van het CRM binnen Pre-U.

Hoe gaan we te werk?
U neemt deel aan een onderzoek waarbij we informatie zullen vergaren door: U te interviewen en uw antwoorden te noteren/op te nemen via een audio-opnameopname. Er zal ook een transcript worden uitgewerkt van het interview.

Uitsluitend ten behoeve van het onderzoek zullen de verzamelde onderzoeksgegevens worden gedeeld met de Universiteit Twente & Pre-University, Nederland.

Potentiële risico's en ongemakken
• Er zijn geen fysieke, juridische of economische risico's verbonden aan uw deelname aan deze studie. U hoeft geen vragen te beantwoorden die u niet wilt beantwoorden. Uw deelname is vrijwillig en u kunt uw deelname op elk gewenst moment stoppen.

Vertrouwelijkheid van gegevens
Wij doen er alles aan uw privacy zo goed mogelijk te beschermen. Er wordt op geen enkele wijze vertrouwelijke informatie of persoonsgegevens van of over u naar buiten gebracht, waardoor iemand u zal kunnen herkennen. Voordat onze onderzoeksgegevens naar buiten gebracht worden, worden uw gegevens zoveel mogelijk geanonimiseerd, tenzij u in ons toestemmingsformulier expliciet toestemming heeft gegeven voor het vermelden van uw naam, bijvoorbeeld bij een quote.

In een publicatie zullen anonieme gegevens of pseudoniemen worden gebruikt. De audio-opnamen, formulieren en andere documenten die in het kader van deze studie worden gemaakt of verzameld, worden opgeslagen op een beveiligde locatie bij de Universiteit Twente en op de beveiligde (versleutelde) gegevensdragers van de onderzoekers.
De onderzoeksgegevens worden bewaard voor een periode van [2 maanden]. Uiterlijk na het verstrijken van deze termijn zullen de gegevens worden verwijderd of worden geanonimiseerd zodat ze niet meer te herleiden zijn tot een persoon.
De onderzoeksgegevens worden indien nodig (bijvoorbeeld voor een controle op wetenschappelijke integriteit) en alleen in anonieme vorm ter beschikking gesteld aan personen buiten de onderzoeksgroep.

Tot slot is dit onderzoek beoordeeld en goedgekeurd door de ethische commissie van de faculteit BMS

Vrijwilligheid
Deelname aan dit onderzoek is geheel vrijwillig. U kunt als deelnemer uw medewerking aan het onderzoek te allen tijde stoppen, of weigeren dat uw gegevens voor het onderzoek mogen worden gebruikt, zonder opgaaf van redenen. Het stopzetten van deelname heeft geen nadelige gevolgen voor u of de eventueel reeds ontvangen vergoeding.

Als u tijdens het onderzoek besluit om uw medewerking te staken, zullen de gegevens die u reeds hebt verstrekt tot het moment van intrekking van de toestemming in het onderzoek gebruikt worden.
Wilt u stoppen met het onderzoek, of heeft u vragen en/of klachten? Neem dan contact op met de onderzoeksleider.

Jasmijn Smedema
j.j.smedema@student.utwente.nl
06-15692946

Voor bezwaren met betrekking tot de opzet en of uitvoering van het onderzoek kunt u zich ook wenden tot de Secretaris van de Ethische Commissie van de faculteit Behavioural, Management and Social Sciences op de Universiteit Twente via ethicscommittee-bms@utwente.nl. Dit onderzoek wordt uitgevoerd vanuit de Universiteit Twente, faculteit Behavioural, Management and Social Sciences. Indien u specifieke vragen hebt over de omgang met persoonsgegevens kun u deze ook richten aan de Functionaris Gegevensbescherming van de UT door een mail te sturen naar dpo@utwente.nl.

Tot slot heeft u het recht een verzoek tot inzage, wijziging, verwijdering of aanpassing van uw gegevens te doen bij de Onderzoeksleider.

Door dit toestemmingsformulier te ondertekenen erken ik het volgende:
1. Ik ben voldoende geïnformeerd over het onderzoek door middel van een separaat informatieblad. Ik heb het informatieblad gelezen en heb daarna de mogelijkheid gehad vragen te kunnen stellen. Deze vragen zijn voldoende beantwoord.
2. Ik neem vrijwillig deel aan dit onderzoek. Er is geen expliciete of impliciete dwang voor mij om aan dit onderzoek deel te nemen. Het is mij duidelijk dat ik deelname aan het onder- zoek op elk moment, zonder opgaaf van reden, kan beëindigen. Ik hoef een vraag niet te beantwoorden als ik dat niet wil.

3. Ik geef toestemming om de gegevens die gedurende het onderzoek bij mij worden verzameld te verwerken zoals is opgenomen in het bijgevoegde informatieblad.	JA	NEE
4. Ik geef toestemming om tijdens het interview opnames (geluid / beeld) te maken en mijn antwoorden uit te werken in een transcript.	☐	☐
6. Ik geef toestemming om mijn antwoorden te gebruiken voor quotes in de onderzoekspublicaties.	☐	☐
7. Ik geef toestemming om mijn echte naam te vermelden bij de hierboven bedoelde quotes.	☐	☐
8. Ik geef toestemming om de bij mij verzamelde onderzoeksdata te bewaren en te gebruiken voor toekomstig onderzoek en voor onderwijsdoeleinden.	☐	☐
Ik geef toestemming voor alles dat hierboven beschreven staat.	☐	☐

Naam Deelnemer: Naam Onderzoeker:

Handtekening: Handtekening:

Datum: Datum:

Appendix G

Calculated Cohen's Kappa after the first code round

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Measure of Agreement	Kappa	.588	.058	40.154	.000
N of Valid Cases		74			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Calculated Cohen's Kappa after the second code round

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Measure of Agreement	Kappa	.725	.052	47.348	.000
N of Valid Cases		74			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix H

The final codebook

Category	Code	Code name	Description	Example
Age	01.1	≤ 25 years old	Someone who is 25 years or younger. Indicates student employee.	"I'm 22 years old."
	01.2	26-49 years old	Someone who is between 25 and 50 years old. Indicates people that grew up with technologies.	“Today I’m still 31.”
	01.3	50 ≥ years old	Someone who is older than 50 years. Indicates people that did not grew up with technologies.	"I'm 65 years old."
Study	02.1	Technical	A study with a technical background.	“I’m currently doing the master technical medicine.”
	02.2	Non-technical	A study without a technical background.	"I study educational science"
Employee	03.1	< 2 years	Works at Pre-U for less than 2 years.	"I started working here in my first year, so I work here for almost two years now."
	03.2	> 2 years	Works at Pre-U for more than 2 years.	“I have been working there for 4 years now.”
Job position	04.1	Project leader – Functional	Staff member, in charge of a project that involves all aspects of the organization.	"I am an educational project manager, so I am responsible for quality of both the curriculum we run and the people who teach it."
	04.2	Project leader - Functional	Staff member, in charge of a project that focuses on a specific activity.	"I am project leader, education projects, counseling projects."
	04.3	Student employee - functional	A position with regard to the entire breadth of the organization.	"Well, I'm on the communications team."

	04.4	Student employee – project based	A position where you focus on your part of a project and ensure that everything is arranged for that part.	"I am a masterclass coordinator."
	04.5	Employee at collaborative departments	A position at one of the close collaborative departments that has common ground in the field of CRM.	"I am a management assistant within Elan."
Knowledge	05.1	Being aware of the goal	Knowledge of the desired result of implementing CRM.	"We have work where we want to reach a lot of people. That's where I think you get the gist."
	05.2	Being informed	Knowing of existence of CRM.	“Well, I know of its existence.”
	05.3	Relevance	Understanding why it is important to have and use CRM in the organization.	"The moment we want to send an email via the CRM application, we depend on contactinformation, and then the urgency comes up again."
	05.4	Application knowledge	Technical knowledge of the CRM application and know how to work with it.	"Since I started working at Pre-U, I know a little more about the technical background of the application. So from the implementation of the dashboards, the lists, etc."
Support	06.1	Training	Introduction with a training.	"We were introduced by the use of a presentation and a training about the CRM application was given."
	06.2	Tools	Available manuals, presentations, instruction video, etc.	“I think there should be a manual on the internal wiki, but I’m not sure if a manual exist.”
	06.3	Questions	Persons available to help and answer questions.	"If we face any technical issues, we have to ask the Marketing &

Customer segments				Communication department of the University."
	07.1	Internal understanding	Employees understanding of different customer segments and the importance of them.	"There are teachers, school leaders, Pre-U coordinators in schools. These are all indeed separate target groups that you need for different actions in order to ultimately reach those students."
	07.2	External appreciation	An indication of the appreciation of external contacts that they are approached through a personalized segment.	"People would feel less addressed if you don't approach them personally."
Workflow	08.1	Tasks	The different actions that are dealt with in the workflow.	"One have to manage the technical features, control the application and solve technical issues."
	08.2.1	Responsibility: division of tasks	Who, if not the participant self, is responsible for specific tasks.	"I think the partnerschool coordinator would be responsible for updating the schoolboard contact information."
	08.2.2	Responsibility: own contribution	Awareness of their own role, tasks, and contribution in the CRM process.	"That would mean, I, as Pro-U coordinator, will be responsible for the contact information of Pro-U contacts."
	08.3	General	The whole cycle of the CRM process, combinations of different links of the workflow.	“But, then again, if we want to use CRM, we should think of processes to keep the datafile up-to-date.”
	08.4	Feedback	Evaluation moments of the CRM process and processing those evaluations.	"I don't know if there should be specific feedback moments, but there should be moments on which people are reminded of CRM."

Application functions	09.1	Overview of customer information	Presenting a clear collection of all (selected) customer information.	"The advantage is that one overview is created. That there is an overview of the most important parties you work with, and that you know what is going on."
	09.2	Centralize information	Combine information from different departments in the application.	"I think the aim of using the CRM application, is because it is a UT system, which is used by several parties. In my opinion it is an information sharing system"
	09.3	Enhance marketing	Contribute to a more efficient way of reaching customers and maintaining relations.	"You want to be able to make a match between the target group and the content of your project and the interests and experiences of the student in my opinion."
	09.4	Technical integrations	Technological systems that are automatically merged with the CRM application.	"I would think then, for example the website, that if someone registers for something, it will automatically enter the CRM."
Conversation	10.1	Comfortable atmosphere	Indications of a conversational environment at the organization.	"I think the atmosphere at Pre-U is amazing."
	10.2	Decisions & coordination	Clarity and coordination about decisions and agreements made.	“The agreements have never been spoken out loud”
	10.3	Encouragement	The CRM is supported and the use of it is stimulated.	"If a question arises from, for example, how can we draw more attention to web classes, I always want to show what the function of the CRM can be in such a process."
Data collection	11.1	Accuracy	Collecting data and keeping it up to date.	"So, I actually assume that the contacts of our

				partnerschools are just completely up-to-date."
	11.2	Integrity	Handling data with care and ensuring that data collection proceeds according to the rules.	"Data. I think that's where the greatest danger lies. So that you have to look at which data of a person you may or may not collect."
Current process	12	Current process	Everything related to the current developments around CRM. Especially the current research that is conducted.	"Well, what is happening now, what the CRM coordinator is doing now is already something new, so that is more than before."
Future	13	Future	Everything related to the future of CRM.	"For the future, I would say the potential for developing a personal protofolio for high school students is huge."
Pros	14	Pros	Positive aspects of CRM.	"It is beneficial that you don't have to protect all documents with passwords.
Cons	15	Cons	Negative aspects of CRM.	"Keeping all data up-to-date takes lots of effort".
Assumption	16	Assumption	No certainty, so make an estimate based on limited knowledge and assumptions.	"So I expect that the CRM system will provide a secure environment to ensure that we can properly deal with the contacts we have as a Pre-U."
Don't know	17	Don't know	Disclaim of knowledge, undeciding when replying to a question.	"I don't dare to do pronunciations about if CRM is used for the marketing strategy or not. I have no idea."