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IMPACTS OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM) ON DEVELOPMENT OF CORPORATIONS

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1. INTRODUCTION

Customer requirements are continuously rising every year, thus also in the packaging industry. A trend to an increased exchangeability of product core services of the suppliers can be observed in this market. A differentiation from competitors through appropriate investments in a customer- and service-orientation is therefore getting more and more important. Corporations are increasingly forced to a systematic and professional arrangement of their customer contacts. The operation of professional CRM offers an opportunity to differentiate from the competition. Using CRM, companies can identify interesting customers and systematize their business relationships with them. This can increase customer satisfaction and loyalty to the company.

The packaging industry is a fast growing and modernizing industry. A company in this industry is gaining competitive advantages, when it's fulfilling strategically important activities more effective than its competitors. Customers in the packaging industry include both, end consumers and industrial users. CRM can help to increase profit through cost reductions and sales increases. It is not a temporally limited project or single IT-solution, but a holistic approach and customer-oriented strategy, which needs to be implemented within a continuous and organizational learning process.

An important prerequisite is the comprehensive and intensive IT-support via CRM-systems to enable the implementation of the overall CRM-strategy. CRM-systems provide members of the workforce with the instruments and facts needed to provide client and vendor understanding and allow the optimization of expenditures on evolving and sustaining profitable connections as well as optimizing possibilities. They enable users to occupy, handle, and follow all interactions with clients and vendors in one spot.

The acceptance of the employees is a decisive and mandatory factor for the success of a CRM-system, because it is only as good as the employees who implement and use it. Without the acceptance of the employees, the implementation of a CRM-system and the realization of associated benefits are difficult to realize. Technology acceptance forms the basis of the author's research. Since CRM-systems can meet rejection in sales, it is important to ensure the success of such a technology. It is significant to analyse influences and factors on the use and acceptance of CRM-systems that will be used in sales.

2. PROBLEM STATEMENT AND OBJECTIVES

The identification of design features of CRM-systems, which have a positive influence on the development and profit of corporations in the packaging industry, would mean a crucial competitive advantage and enable the specifically orientation of the CRM-system on this benefit. This topic has not been discussed so far in the literature for the packaging industry. One indispensable success factor for the implementation of CRM in an organization is the acceptance by its users or the employees of the company. It is considered as a mandatory prerequisite for a positive influence on the development and profit of corporations in the packaging industry. The current literature and data are mentioning many technical requirements and prerequisites for CRM-systems and their respective functionalities and processes, as well as general information about the acceptance of IT-systems. Common requirements for the effective accomplishment of a CRM-system and the acceptance by the employees and users, especially in the packaging industry, can hardly be found.

The overall aim of the author is the identification of design features and prerequisites for a CRM-system, which contribute to an increase in sales and the overall development of corporations in the packaging industry. The objective is to generate decisive competitive advantages through knowledge of the design features and prerequisites for a CRM-system, which have a positive impact on development and sales, and ensure lasting and profitable customer relationships. As a result, long-term competitive advantages and the existence of the company can be guaranteed. Within the scope of the author's research, measures are developed based on a representative case study that help corporations in the packaging industry with the introduction of a CRM-system in sales. The focus is on finding out dimensions and factors of acceptance and assessing the influence of sales employees when introducing CRM-systems. It is also important to analyse, in which phase of the introduction of CRM-systems which dimensions of acceptance can be assigned.

Concluded research questions by the author:

- (1) *“Which design features of CRM-systems have an impact on the turnover of corporations in the packaging industry and which general requirements need to be fulfilled?”*
- (2) *“Which are the necessary criteria and recommendations for actions for the acceptance and furthermore the success of CRM-systems by its users to contribute to the overall goal of an increased profitability and development of corporations in the packaging industry?”*

3. METHODOLOGY

The theoretical part is based on extensive literature research. The case study has been chosen as the research design by the author, as it is characterized by the concentration on a representative single social element as the object of investigation. Constantia Flexibles is among the internationally biggest producers of packaging materials in the pharmaceutical and consumer market. Due to this fact the company is considered as a representative example for the packaging industry by the author.

3.1 Qualitative Research

The acquisition of data will be carried out via problem-centred and guided interviews. In the central part of the first survey, questions will be asked about possible design features of a CRM-system with a view on increasing sales and the overall development of corporations in the packaging industry. The guide categories used for the evaluation result from the thematic affiliation of the questions from the interview guide as follows: impact on customers, efficient work, experience, cost reduction, importance, turnover and most important characteristics. They are based on the relevant literature. In order to gain access to the field and a broad range of knowledge, 14 sales employees from all sales regions as well as different hierarchy levels of the Constantia Flexibles Group will be interviewed in an empirical setting. The selection criterion for sales employees is that they must deal directly with CRM-systems in their daily work.

The second survey aims to determine the elements that affect the acceptance of CRM-systems by employees, as the appropriate acceptance of the CRM-system has been already identified in the literature review as a mandatory prerequisite. Six sales employees from the Constantia Flexibles Group and three external CRM-experts from providers of CRM-systems on the market will be interviewed. The interviews of the sales staff will be used to determine the needs for the acceptance of a CRM-system. Interviews with the external CRM-experts are the objective counterpart of the internal interviews and are intended to bring additional specialist and industry knowledge and objectivity. A requirement profile for a CRM-system in the packaging industry will be derived by the author from the results of the second qualitative research in order to increase employee acceptance. A criteria catalogue is created from the requirement profile in order to answer the research questions.

During an experimental trial of the interviews with two picked interview partners, the overall appropriateness of the interview guides was examined. Since no problems and difficulties could have been observed, the prepared guides have not been further modified and the outcomes of the interviews of the initial study were incorporated into the main research right away by the author.

The evaluation methodologies are predicated on the summarizing and structured approach of the qualitative subject matter investigation. An extensive subject matter investigation is employed for the information analysis of the first survey. The goal is to diminish the data to its needed contents and to establish a reasonable fundamental style. To be able to consequently generate resolutions for resolving the research questions, recorded declarations will be arranged in a structured manner. For this reason, the gained knowledge is separated into classes or categories.

Concerning the second survey, for the structuring of the conducted interviews and the respective results, specific categories for the acceptance of CRM-systems will be identified and defined in advance, before the individual records of the examinations will be transliterated. During the next phase, every statement that is not altering the subject matter, is withdrawn, as the primary importance lies only at the knowledge based on the subject matter. The categories are “person”, “task”, “technology”, “organization” and “management”. The aim of the structured content analysis of the second survey is to diminish the information to its necessary subject matters and to generate a user-friendly primary formation. Recorded proclamations will be arranged according the previously defined categories to enable the subsequent drawing of resolutions for answering the research questions.

3.2 Quantitative Research

The following hypotheses were developed based on the interviews that were carried out and analysed by the author:

H1₀ There is no connection between the age of a sales representative and the characteristic “customizability” that a CRM-system should have.

H1₁ There is a connection between the age of a sales representative and the characteristic “customizability” that a CRM-system should have.

H2₀ There is no correlation between the age of a sales representative and the “extra work” concern about a CRM-system.

H2₁ There is a correlation between the age of a sales representative and the “extra work” concern about a CRM-system.

H3₀ There is no connection between previous experience in dealing with CRM-systems and the concern “technical overload” compared to CRM-systems.

H3₁ There is a connection between previous experience in dealing with CRM-systems and the concern “technical overload” compared to CRM-systems.

The starting point of the data collection is the definition of the investigation unit. The objective is to derive statements from the packaging industry. The survey focuses on a business-to-business market, which is characterized by the strong relationship between the sales force and their customers. A pre-test by the author concluded the conception of the questionnaire. The goal of the preliminary study was to check the uniqueness and comprehensibility of the indicators and to ensure the relevance of the content of the indicators from the perspective of the practitioner.

The goal of the quantitative investigation is to detect possible barriers to acceptance when introducing and at the same time using sales-supporting CRM-systems in the packaging industry, to define their importance for sales employees and, based on this, to filter out the best possible design features of the use or implementation of CRM-systems in sales, so that they are able to contribute to the overall goal of having a positive influence on the development of corporations. In addition, the aim is to generate an effective, acceptance-oriented technology design so that the sales employees are motivated to deal with CRM-systems and work with them without immediately encountering resistance and rejection. Due to the high costs and

risks, the investigation is of essential importance for other corporations in the packaging industry that have planned the introduction of new systems in sales. The theoretical relevance is derived from the fact that there are studies that describe the barriers to acceptance of sales employees in relation to CRM-systems, but not which barriers are the greatest influencing factors on employees, especially in the packaging industry.

The target group of the quantitative survey are people in sales departments at various Constantia Flexibles locations who have already worked with CRM-systems or who are currently implementing CRM-systems. The quantitative survey is carried out using a standardized online questionnaire. In contrast to the qualitative research, only closed questions based on Likert-scales are used in the standardized questionnaire in order to guarantee the possibility of comparison and to filter out the importance of properties, activities and concerns of CRM-systems. Structural data, such as age and education, are also queried.

A partial survey is used by the author to carry out the quantitative survey. The method of conscious selection was chosen for the survey by the author. The quota method was chosen for the quantitative research. Here the sample is constructed independently, and the respondents are selected according to relevant characteristics. It is important to make the selection in such a way that the model is as exemplary as possible of the population. The quota selection in this survey relates to internal sales staff in the packaging industry. It is therefore important to consider what characteristics the sales staff, who work with CRM-systems or who deal with various IT-systems, have. Since the selection of sales employees as respondents is already an enormous limitation, they can still be assessed according to the following characteristics: sales employee in industry, sales employee in packaging industry. If these characteristics, which are regarded as relevant, are to be used for quotation, the distribution of these characteristics in the packaging industry would have to be determined, for example from statistics, and converted numerically to the intended sample size. From the resulting quota plan, there is a certain number of people to whom the questionnaire should be sent.

If carried out correctly, a sample is created that corresponds to the composition of the population in terms of all individual quotation characteristics. The sample of the quota procedure was calculated by the author based on statistical data. The total number of all employees (white-collar and blue-collar workers) in the packaging industry in Austria, which was 14,961 in 2019, was generally used. Of these 14,961 total employees in Austria, around 4,125 are white-collar workers. The sales staff in the packaging industry in Austria are among

these 4,152 white-collar workers. In order to find out how many employees are in sales; a general percentage was used for the calculation. On average, 3% are employed in sales.

Quota procedure
Number of total employees in the packaging industry: 14,961
Number of white-collar workers in the packaging industry: 4,125
Sales force approx. 3% of the white-collar workers
~ 120 sales employees to be surveyed

The statistics program SPSS was used by the author to organize the market research data obtained, to prepare it for and to carry out the evaluation. Descriptive statistics/frequencies are used for evaluation. The focus is on the following question: “How often does a certain value or classified characteristics, such as e.g. age groups, suggest a certain class of values?” Cross-tables are used to test the hypotheses of association.

4. RESULTS

4.1 Qualitative research

As a result of the content analysis, 190 exploitable statements from the interviews could have been obtained by the author. The main category “requirements” describes the prerequisites for the successful introduction of a CRM-system with the goal that this system is appropriately used and maintained. The category “benefits” refers to the expected advantages from the usage of a CRM-system. The initial research question is covered by the category “profit”. The main category “problem” contains possible or expected problems when working with CRM-systems or CRM-approaches and the category “efficiency” refers to the prerequisites for efficient work.

The importance of the CRM-system must be clarified throughout the organization starting from the management level (subcategories “planning” and “leadership”). There must be a willingness of the organization to work with the CRM-system in the future. All users should be informed about the meaningfulness and importance for the corporation. Starting from an expectation, the necessary decisions must be taken. The use of a CRM-system may not exceed a certain amount of work, since otherwise it loses its benefit. It must ensure that employees have enough time for other work. Such a system is intended to simplify work for users. CRM-approaches from the past have failed due to lack of acceptance and too high complexity. Systems are regarded as control instruments, which are associated with additional work.

As part of the evaluation of the conducted interviews, the following criteria for the acceptance of CRM-systems could have been identified by the author: added value; awareness creation; management, commitment, and involvement; planning and implementation; usability. For the acceptance of a CRM-system, the added value is crucial. The user must realize that the system is more than just a management control tool. They need to feel that the use of the system gives them additional value. The usability as a technology-related determinant of the acceptance of CRM-systems, describes that CRM-systems must be easy, fast, and mobile with regards to their usage. The system must support the user in everyday life and should be logical and intuitive, as complex systems lead to rejection and demotivation. The awareness that the CRM-system is important to the company is part of the organizational culture. The system must therefore be transparent and not giving the user the feeling of being replaceable. There must be a rethink, because nowadays, many leads cannot be handled alone. CRM must be understood as part of the corporate strategy. As part of the planning and implementing of a CRM-system,

management must make fundamental decisions about goals, usage, and expectations. Employees must be involved in the process right from the start. The decision for a CRM-system is made by the top management. The management must therefore stand behind the project and support it. Employees who are not convinced by the system must be motivated accordingly by them. During the empirical investigation it could be determined by the author that certain influencing factors are responsible for the acceptance of CRM-systems. These categories must be considered so that the system can be accepted by the employees or users.

4.2 Quantitative research

The link to the online questionnaire was sent to 120 people. A total of 101 people from various Constantia Flexibles locations took part in the survey. The response rate is thus 84.16%. The people surveyed all come from different sales departments. 44% of the salespeople surveyed are masculine and 56% of the informants are feminine. The hypotheses testing is carried out by the author, starting with the correlation test between age and properties in relation to CRM-systems. It can be said that there is a connection between the age of a sales employee and the property “customizability” that a CRM-system should have. Therefore, hypothesis H1₁ is accepted by the author.

H1₁ There is a connection between the age of a sales representative and the characteristic “customizability” that a CRM-system should have.

The correlation testing between experiences and concerns about CRM-systems showed that there is no connection between the age of a sales representative and the concern about “extra work” in relation to a CRM-system. Therefore, the hypothesis H2₀ is accepted by the author.

H2₀ There is no correlation between the age of a sales representative and the "extra work" concern about a CRM-system.

The correlation testing between experiences and concerns about CRM-systems showed that there is a connection between the experience of a sales employee in dealing with CRM-systems and the concern that a CRM-system is “technically overwhelmed”. Therefore, hypothesis H3₁ is accepted.

H3₁ There is a connection between previous experience in dealing with CRM-systems and the concern “technical overload” compared to CRM-systems.

5. SUMMARY

Based on the qualitative research, the author summarizes that for a positive effect of CRM-systems on sales and the development of corporations in the packaging industry, many necessary prerequisites must be met. Furthermore, problems to be expected must be considered in advance and avoided accordingly. Only after the creation of these basic requirements or framework conditions can a CRM-system develop its intended and expected benefits, have a positive effect on efficiency and result in an increase in sales. The acceptance of the CRM-system was identified as an imperative, which is why further attention was paid to this aspect.

Part of the author's work dealt with the qualitative identification of a requirement profile for a CRM-system in the packaging industry to increase employee acceptance. One aim is to design a catalogue of criteria that reflects the influencing factors of acceptance for CRM-systems. For this purpose, a literature analysis was first carried out by the author regarding the definition of CRM and the components of a CRM-system, as well as a definition of the acceptance term and a reflection of existing findings from acceptance research.

Based on the findings of the various acceptance models, essentially five determinants were identified as influencing factors of acceptance for operational information systems by the author: the technology-related determinant, the management-related determinant, the user-related determinant, the organization-related determinant, and the task-related determinant. To find out how these determinants express themselves in the acceptance of CRM-systems by employees in the company, an empirical study was carried out. Problem-centred interviews were carried out as part of the empirical study. As part of the qualitative evaluation of the interviews, the following criteria, which influence the acceptance of CRM-systems, could be derived: added-value, awareness creation, management, commitment, and involvement, planning and implementation, and usability. The derived criteria were assigned, based on the determinants of acceptance defined in the theoretical part. The technology-related determinant stands for the technical properties and possible uses of the information system. The management-related determinant concentrates on the central task of management in relation to building the acceptance of information systems. The influence of personal experiences on the acceptance of company information systems is the core of the user-related determinant. The organizational determinant defines the organizational culture and structure in which the company information system is used. The task-related determinant deals with the question of whether the task can even be solved with the help of an operational information system.

The catalogue of criteria derived from the empirical investigation contains the criteria that must be met for employees to accept a CRM-system. The added value relates to the fact that the CRM-system must provide the users with additional benefit. The system must also be able to give something back to the users. Modern CRM-systems offer a multitude of optimization options in order to generate this added value. Usability is the simple, fast, and mobile user friendliness of the CRM-system. A CRM-system is accepted by the users, if the contacts and opportunities can be entered and edited easily while on the move and there is no need to fill in endless input masks on the computer. For a functioning CRM-system, a concrete definition of goals and expectations on the part of management and employees are necessary. Both parties must have the same point of view, otherwise there will be no acceptance. The organization must also be ready to share the knowledge with each other and be aware that nowadays leads can no longer be processed alone. Employees must be open to new innovations. For a successful implementation of a CRM-system, management must make fundamental decisions regarding the planning of the system use. In order to guarantee the acceptance of the system, the management can involve the employees in the planning process right from the start. The decision in favour of a CRM-system is a management decision, so it is important that the management stands behind the system deployment and is continuously involved. The management has a role model function and must motivate the employees who are not yet convinced of the system.

6. NEW SCIENTIFIC RESULTS

The current possibilities of digital support in sales are constantly increasing, which is also largely welcomed by the sales staff. However, the author noted that sustainable successes, such as better consulting quality, sales performance, and a competitive differentiation based on this can only be achieved, if all the seller's barriers to acceptance are taken into account in the entire conception and implementation of the CRM-system.

Based on the results derived by the author, various recommendations for action can be given for the management of a corporation in the packaging industry that is planning the introduction of a CRM-system. Most CRM-systems are implemented based on management decisions in the company. Since the quantitative study was carried out from the operator's viewpoint, recommendations for action are given that take the sales employee into account. In addition, recommendations for action are derived based on the factors of acceptance research.

Change management is important for the accomplishment of CRM-systems from the beginning of the activity. Employees can always give feedback on how to improve the system. Employees must be involved from the early start. The project team and management must communicate the benefits of the CRM-system from the beginning.

Based on the quantitative survey, most sales employees would like a complete CRM-system. It is therefore important that each individual sales representative knows that it is up to them to have high quality data inserted to ensure that the system is useful. Help can be given to increasing the motivation to use the CRM-system through incentive systems. This creates better customer knowledge, better opportunity and lead management, and meaningful key figures. This leads to a win-win situation between employees (users) and management. Since every sales employee has their own habits and working methods, a survey can be carried out with the users before the implementation and planning of the CRM-system, which answers the following questions:

- What requirements does the sales employee have of the system?
- What is the workflow of a sales representative?
- What customer information is required?

Since more than 70% of those surveyed expressed the acceptance barrier of "overtime" as a very strong concern, it is important to communicate to all employees that the CRM-system

should not involve overtime, but that it should help to get data and information much faster, which leads to meaningful key figures, better customer knowledge, and more efficient customer service.

The entire corporation, from management to the sales force, must live the CRM-culture. The management must also include the executives. Even if they do not use the CRM-system, the manager must convince his sales staff of the advantages of the system and motivate them to use it.

Older sales staff in the front and back office who have been with the company for a long time and who have built up significant knowledge about customers, markets, and competition over the years must not have the feeling that they are interchangeable or replaceable through the CRM-system and its provision of information.

The qualitative interviews showed that change management is of essential importance in order to avoid the creation of acceptance barriers when introducing CRM-systems. The analysis of the interviews resulted in the fact that the project team should best consist of experts, who can fully concentrate on the project and do not have to do any other work. In addition, the benefits of the CRM-system must be correctly communicated to the users of the CRM-system and an incentive must be set so that the system is filled. Humans are creatures of habit and a change in the way they work can only be done step by step and takes time. The key user concept is therefore of great value.

7. BIBLIOGRAPHY OF THE AUTHOR

- Moser, M. A. (2020). CAPM versus APT – two models in comparison. *E-CONOM Online Scientific Journal*, Volume IX, Issue 1, pp. 105-120. DOI: 10.17836/EC.2020.1.105.
- Moser, M. A. (2020). Faults Made by Leaders and HR Managers in the Selection of Employees and Opportunities to Prevent Them. *Journal of Human Resources Management Research*, Volume 2020, Issue 2020, pp. 1-9. DOI: 10.5171/2020.889173.
- Moser, M. A. (2020). Key Figures and Important Questions before Entering into a Strategic Partnership with a Company. *Economic, Political and Legal Issues of International Relations 2020*, pp. 279-287. ISBN: 978-80-225-4728-4.
- Moser, M. A. (2020). Current Investment Strategies for Private Individuals as Small Investors in Times of Low Interest Rates. *International Journal of Business and Applied Social Science*, Volume 6, Issue 4, pp. 32-44. DOI: 10.33642/ijbass.
- Moser, M. A. (2019). Statistical Process Control (SPC) as an Instrument for Generating Competitive Advantages. *Journal of Economy and Society*, Volume 2018, Issue 2, pp. 83-100. DOI: 10.21637/GT.2018.02.05.
- Moser, M. A. (2019). Procedure and Methods for Implementing a Process-oriented Quality Management System. *E-CONOM Online Scientific Journal*, Volume VIII, Issue 1, pp. 13-26. DOI: 10.17836/EC.2019.1.013.
- Moser, M. A. (2019). Qualitative Identification of Acceptance Criteria for CRM-systems in the Packaging Industry. *Conference Proceedings of the 4th International Scientific Conference for Doctoral Students and Early-Stage Researchers in Eisenstadt, Austria*, pp. 117-144. ISBN: 978-3-9519937-0-6.
- Moser, M. A. (2019). Impact of Managing Customer Relationships on Profit and Evolution of Companies. *Conference Proceedings of the 3rd International Scientific Conference for Doctoral Students and Early-Stage Researchers in Eisenstadt, Austria*, pp. 45-72. ISBN: 978-3-9500919-0-8.
- Moser, M. A. (2018). *Qualitätsmanagementsystem: Einführung nach ISO 9001*. Mauritius: AV Akademikerverlag. ISBN: 978-620-2-21126-0.
- Moser, M. A. (2018). *Statistische Prozessregelung: in der Verpackungsindustrie*. Mauritius: AV Akademikerverlag. ISBN: 978-620-2-21003-4.
- Moser, M. A. (2017). *CRM-Systeme: und ihre umsatzbeeinflussenden Ausgestaltungsmerkmale*. Mauritius: AV Akademikerverlag. ISBN: 978-620-2-20561-0.