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An organizational perspective on critical success factors for customer relationship management – A descriptive case study

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ABSTRACT

Despite much IS research on CRM in general and CRM-related critical success factors (CSFs) in particular, CRM projects are still subject to high failure rates. Most current CSF studies focus on a project or technological perspective. What they neglect, for instance, is an organizational perspective, i. e. the setting in which people execute operational CRM processes and which should be considered and/or established during CRM projects. In order to provide deeper insights into the organizational perspective, we conducted a descriptive case study within a CRM project at the German sales department of a globally acting company from the electronics and electrical engineering industry. We also had the chance to analyze two of the company's so-called sales business types (SBTs), namely "product sales" and "solution sales". We identified 13 organizational CSFs, compiled a ranking for each SBT, and conducted a cross-SBT analysis.

Keywords

Customer Relationship Management, Critical Success Factors, Organizational Perspective, Case Study

INTRODUCTION

After many years of enthusiasm, customer relationship management (CRM) – which may be basically defined as a strategic approach with the objective of creating improved shareholder value through profitable and long-term customer relationships (Payne and Frow, 2005) – faces an ambivalent discussion today. The reason is that CRM projects can achieve high ROI, but also suffer from high failure rates. The upside, for instance, is reflected by the fact that the worldwide CRM software market is expected to grow by an average annual rate of 10 % up to \$13.3 billion in 2012 (Mertz, 2008). Moreover, companies still spend large amounts of money on CRM projects (Thompson, 2008). The downside is reflected in reported failure rates of up to 70 % (Langerak and Verhoef, 2003; Reinartz et al., 2004) – which should be subject to critical analysis, of course. In order to reduce these failure rates, much IS research has been conducted with respect to CRM-related critical success factors (CSFs). CSFs are the few fields of action where satisfactory results drive competitive performance (Rockart, 1979). Interestingly, most CSF studies take on a project or technological perspective. They thereby neglect that the former often leads to quite abstract CSFs and that reducing CRM to technological issues is a key reason of failure (Kale, 2004). Mostly neglected is the organizational perspective, i. e. the setting – in the sense of structures and processes – in which people execute operational CRM processes and CRM systems are embedded. Nevertheless, organizational CSFs are necessary to achieve CRM objectives. Just to mention two examples: If it is a CSF to involve the back office as customer contact point, organizational CRM processes should be shaped respectively in order to improve overall customer care. If it is a CSF to analyze the reasons why orders were won or lost, the CRM system should provide adequate functionality in order to foster organizational learning.

In this paper, we analyze the organizational setting of sales departments, which – beyond marketing departments – play a key role in CRM. More precisely, we focus on sales departments that serve business customers by area-covering direct sales. This is worth studying because such departments usually combine high workforce, complex interaction among sales representatives, back office, and other departments, a differentiated portfolio, a multi-level management hierarchy, and high demands of CRM systems. Thus, our research question is: *What are the concrete organizational CSFs of sales departments that serve business customers by area-covering direct sales?*

To approach this question, we conducted a descriptive single-case study. This seemed appropriate because we investigate a contemporary phenomenon within its real-life context where actual behavior cannot be controlled (Yin, 2009). Moreover, case studies are an appropriate IS research method (Benbasat et al., 1987; Lee, 1989; Schubert and Wölflé, 2007). The case study's philosophical grounding is interpretivist (Walsham, 1995). The research question qualifies single sales departments as unit of analysis. We selected the German sales department of a globally acting company from the electronics and electrical engineering industry because it seemed to be a typical case. We had the chance to investigate two of the company's so-called sales business types (SBTs), namely "product sales" and "solution sales", which will be defined below. Due to confidentiality, the company's identity must not be disclosed.

The paper is structured as follows: First, we briefly compile the state of the art regarding CRM-related CSFs. We then elaborate on the case study context according to Dubé and Paré (2003) as well as on the data collection and analysis process. After that, we present the identified organizational CSFs, a ranking for each SBT, and a cross-SBT analysis. Finally, we summarize the results and point out further research.

STATE OF THE ART OF CRM-RELATED CRITICAL SUCCESS FACTORS

Many researchers have already dealt with CRM-related CSFs. We present the findings of eight selected papers structured by the conceptual framework of Kim et al. (2002). The papers were selected for two reasons: First, they explicitly deal with factors influencing CRM success/failure. Second, they were published recently in international journals and proceedings and are supposed to represent the current mainstream of CRM-related CSFs to a large extent. Although some CSFs cannot be unambiguously assigned to one domain (e. g. management support), in the authors' opinion the framework provides basic assistance in identifying the research gap. Occasionally, similar CSFs have different names. In order to improve readability, a careful consolidation and grouping was performed. Table 1 shows the results.

The following is noteworthy: Most research has been conducted with respect to project and technological CSFs, while less research has been conducted with respect to process and organizational CSFs. Particularly the latter are quite abstract and do not provide concrete help for business practice. For instance, it is not clear what is exactly meant by "customer-centric organization". Against this research gap, our objective is to provide deeper insights – by means of concrete organizational CSFs – particularly into the organizational setting of sales departments serving business customers by area-covering direct sales.

Organizational CSFs	Process CSFs	Technological CSFs	Project CSFs
<ul style="list-style-type: none"> • CRM ownership at corporate level (Bohling et al., 2006) • Knowledge management capabilities (Croteau and Li, 2003) • Customer-centric organization (Langerak and Verhoef, 2003; Wilson et al., 2002; Bose, 2002; Rigby et al., 2002; Payne and Frow, 2006) 	<ul style="list-style-type: none"> • CRM process (Kim et al., 2002) • Solid training program (Bose, 2002) • Approval procedures allowing for uncertainty (Wilson et al., 2002) • Identification of customer/decision interaction points (Bose, 2002) • Focus on customer needs (Rigby et al., 2002) 	<ul style="list-style-type: none"> • User involvement during system design (Kim et al., 2002; Wilson et al., 2002) • Design for flexibility (Wilson et al., 2002) • Provision of all necessary customer information / Customer data redesign (Bose, 2002) • Continuous evaluation (Bose, 2002; Payne and Frow, 2006; Bull, 2003) • Board awareness of strategic potential of IT (Wilson et al., 2002) • Effective sourcing strategy (Kim et al., 2002; Bull, 2003) 	<ul style="list-style-type: none"> • Top management support (Langerak and Verhoef, 2003; Bohling et al., 2006; Croteau and Li, 2003; Wilson et al., 2002; Bose, 2002; Bull, 2003) • Effective targeting strategy (Bull, 2003) • Alignment of CRM and business strategy / with IT strategy / with key stakeholders (Langerak and Verhoef, 2003; Bohling et al., 2006; Rigby et al., 2002) • Long-term perspective / Staging project / Holistic approach (Langerak and Verhoef, 2003; Bose, 2002; Rigby et al., 2002) • Realistic expectations / Feasibility study (Langerak and Verhoef, 2003; Bose, 2002; Payne and Frow, 2006) • Integration of external expertise / Project Team Skills (Kim et al., 2002; Bose, 2002; Payne and Frow, 2006)

Table 1. Conceptual framework of CRM-related CSFs

THE CASE STUDY CONTEXT

The case study was conducted in 2007 within a globally acting company of the electronics and electrical engineering industry, which mainly addresses business customers via direct sales. Roughly speaking, the company consists of a global headquarters and multiple sales departments. The headquarter split into eight divisions each of which has a different portfolio of products and services. It is responsible for corporate functions such as R&D, production, project execution, accounting, and marketing. The sales departments address local markets by area-covering sales. They have a matrix-like organization. The first dimension consists of sales regions which subdivide the local markets geographically. The second dimension includes the eight divisions mentioned above. Our research group was part of a CRM project of the sales department responsible for the German market. In this project, a holistic CRM should be implemented. This meant to redesign and align the CRM-related organizational setting and the internal sales training programs. Moreover, the CRM application landscape of more than 100 legacy systems had to be consolidated. Our task was to identify and prioritize organizational CSFs, which should facilitate the redesign. In order to preserve some distance in the sense of an outside observer (Walsham, 1995), we had only little interaction with the other operational project groups.

Intending to identify current CSFs, the period under investigation was limited to the preceding and the current year, i. e. 2006 and 2007. Data was collected once by indirect observation, e. g. semi-structured and questionnaire-based interviews. We stayed approximately 10 months at the project site, which was necessary to prepare, organize, and conduct all interviews and review rounds. Moreover, we spent only 2 – 3 days a week at the project site. Due to this amount of time and the help of experienced and sometimes informant-like contact persons, such as the project manager, the CRM process board – which consisted of senior sales managers from each division and sales region –, and many interviewees, there was enough time to

develop an intimate understanding of the setting and the phenomenon of interest. The company also granted access to complementary sources of evidence such as intranet portals, organization diagrams, and process documentations.

We had the chance to analyze the company’s two most important SBTs. These were “product sales” and “solution sales”. An SBT represents a homogeneous way of conducting sales with respect to which organizational setting should be available, which hard and soft skills sales representatives should have, which information requirements sales representatives have, and how these information requirements are satisfied by CRM systems. The SBTs are orthogonal to divisions. The SBT “product sales” refers to the sale of standard products. This sometimes includes delivery, installation, or configuration. The SBT “solution sales” includes complex combinations of standard or individually developed products. In most cases, this implies considerable solution-specific consulting, engineering, assembly, and installation services as well as project management. Both SBTs address regular customers and have direct sales as primary sales channel.

DATA COLLECTION AND ANALYSIS

We conducted a two-stage data collection and analysis process, which is summarized in Table 2. Stage 1 aimed at identifying organizational CSFs. Stage 2 aimed at assessing the CSFs’ degree of implementation and compiling corresponding rankings with respect to each SBT. We relied on multiple quantitative and qualitative sources of evidence, which were compiled into a case study database.

	Stage 1: Identifying organizational CSFs	Stage 2: Establishing CSF rankings for each SBT
Sources of evidence	Semi-structured interviews (each 2 – 3 hours, attended by 2 researchers) Process documentations CRM- and sales-related textbooks / scientific papers	Questionnaire-based interviews (each 2 – 3 hours, attended by 1 researcher)
Sample	19 sales managers	37 sales managers (16 for “product sales”, 21 for “solution sales”)
Results	13 organizational CSFs without ranking Additional qualitative information	Ranking for each SBT and cross-SBT analysis from closed-ended items Additional qualitative information from open-ended items

Table 2. Key facts of the data collection and analysis process

Stage 1: Identifying organizational CSFs

In this stage, we conducted semi-structured interviews. This is because they are particularly suitable for exploratory settings and also constitute the foundation of Rockart’s original CSF method (Bullen and Rockart, 1981).

Intending to identify concrete CSFs, sales managers – the lowest sales management hierarchy level – were interviewed. This seemed reasonable because sales managers had usually gained experience as sales representatives for many years. They were supposed to be able to take on both a sales representatives’ and a sales management’s perspective. In order to cover each division and SBT at least once, 19 sales managers were interviewed. They were recommended by the project manager because they were known to be successful. All these sales managers came from the sales region where the project’s headquarters were.

Concerning interview preparation, the divisions' CRM processes were analyzed first. On the most aggregated level, these processes consistently consisted of three actions, namely "Understand", "Sell", and "Care". These served as consistent line of inquiry during the interviews because they were familiar to each sales manager. Additionally, CRM- and sales-related textbooks as well as scientific papers were analyzed. Our objectives were twofold: On the one hand, we strived for identifying existing knowledge about CRM-related CSFs in general and organizational CSFs in particular. On the other hand, we aimed at getting familiar with technical terms and abbreviations. Based on these foundations, we prepared a detailed interview guide with an introduction, instructions, and examples.

The interviews had three sections: introduction, CSF identification, and residual questions. The sales managers were asked to comment on what were the challenges, achievements, potentials for improvement, and respective reasons during the period under investigation. The sales managers were allowed to refer to example projects or customers. Most sales managers provided detailed answers, even on potentials for improvement. Each interview took between 2 and 3 hours and was attended by (always the same) two researchers. One of them led through the conversation, the other took notes. Each interview was recorded digitally in the case of prior permission.

After each interview, the audio recordings were consolidated with the written notes. We used intentional analysis to analyze these protocols (Lacity and Janson, 1994). This resulted in lists of CSFs and additional qualitative information that were sent to the respective sales managers for approval. Feedback and/or corrections were integrated. After having conducted all interviews, a single joint list of 13 CSFs was compiled for both SBTs and finally reviewed by the project manager and the CRM process board.

Stage 2: Establishing CSF rankings for each SBT

In this stage, questionnaire-based interviews were conducted. Each CSF was operationalized by several items, which were mainly derived from the qualitative information gathered in stage 1. In some other studies, CSFs were directly compiled into questionnaires (Teo and Ang, 1999; Somers and Nelson, 2001). Our motivation for the operationalization was to get more realistic results by confronting the interviewees with concrete statements. The questionnaire contained closed-ended and open-ended items. The former were statements and based on a 5-point Likert scale ranging from "I absolutely disagree" to "I absolutely agree" with either a positive or negative polarity. Open-ended items were used to gain additional insights in order to enrich the ranking. There were two types of open-ended items. Regarding the first type, interviewees could fill in arbitrary text. Regarding the second type, interviewees had to prioritize multiple given response options. For some CSFs, only a few items were/could be derived. In some cases, there were only two including open-ended items. This was for two reasons: First, the amount of time needed for filling in the questionnaire should be kept justifiable, but all CSFs should be included. Second, for some CSFs it was difficult to derive realistic items – even with the aid of the CRM process board. The closed-ended items are listed in the Appendix.

A draft version of the questionnaire was reviewed by the CRM process board and the project manager. Additionally, a pretest was conducted with the CRM process board. Based on the differentiated feedback, some items were replaced and/or their wording changed. Items belonging to one CSF were spread throughout the questionnaire. In order to enhance inter-interview consistency, we prepared detailed instructions for the interviewees and FAQs for the interviewers.

In order to be consistent with stage 1, again sales managers were interviewed; this time from each of the company's division and sales region. The selection policy was "learn from the successful". The underpinning assumption was that there is a strong positive correlation between the degree to which a candidate CSF is implemented by the sales representatives of a successful sales manager's group – measured by the respective closed-ended items' mean score – and the CSF's contribution to sales success. This assumption has already been made in other studies, but only seldom explicitly (Sarker and Lee, 2002). In order to identify successful sales managers for all divisions and sales regions – except for that where stage 1 had been conducted –, we had to ask the sales region managers – the highest sales management hierarchy level – for recommendations. This was necessary because the company had no consistently implemented set of cross-SBT or -division performance indicators. All in all, 37 sales managers were interviewed (16 for "product sales" and 21 for "solution sales"). Each interview took between two and three hours and was attended by one researcher. This researcher answered the interviewees' questions according to the FAQs and discussed open-ended items, which took most of the interview time.

After all interviews had been conducted, the mean score and standard deviation (S. D.) were calculated for each CSF and SBT according to the closed-ended items and their polarity. Thereby, the lowest score was 1, the highest score was 5. The CSF rankings were compiled for each SBT on the foundation of descending mean scores. The standard deviation was only included if more CSFs had the same mean score. In such cases, the CSF with lower standard deviation was ranked better. In order to analyze SBT-specific differences between CSF rankings, absolute rank differences – in the following often just rank differences – were calculated for each CSF by subtracting the respective SBT-specific ranks and using the absolute value.

FINDINGS AND DISCUSSION

As a result of both stages, 13 organizational CSFs were identified and two CSF rankings were created. All information is shown in Table 3, ordered by descending rank difference. In the following, we discuss each CSF. Wherever necessary, we provide a short definition. Wherever possible, we provide additional case-specific information from the interviews.

CSF	"product sales"			"solution sales"			Rank-Diff.
	Rank	Mean	S.D.	Rank	Mean	S.D.	
Topicality of order/project list	9	2.69	1.65	1	4.33	1.21	8
Project manager assistance during proposal preparation	13	1.94	1.52	6	3.52	1.43	7
Back office as customer contact point	5	3.34	1.31	12	2.98	1.44	7
Consideration of win/loss analyses	8	3.21	1.32	3	4.24	0.90	5
Back office assistance during proposal preparation	3	3.50	1.51	8	3.16	1.41	5
Active customer win-back	6	3.31	1.16	11	3.00	1.07	5
Early technical involvement in calls for tenders	2	4.19	1.38	4	4.10	1.17	2
Acquisition of new customers	11	2.31	1.16	10	3.14	1.42	1
Sales manager attendance at external customer calls	10	2.66	1.21	9	3.14	1.17	1
Direct headquarters contact persons for sales representatives	4	3.38	1.73	5	3.76	1.29	1
Reports of external customer calls	12	2.22	1.24	13	2.12	1.05	1
Long-term customer care by the same sales representative	1	4.31	0.92	2	4.26	0.90	1
Cross-divisional cooperation	7	3.22	1.35	7	3.38	1.25	0

Table 3. CSF rankings for “product sales” and “solution sales” (ordered by decreasing rank difference)

1. *Topicality of order/project list:* A topical order/project list increases planning accuracy. As for “solution sales”, this CSF is ranked on the first position. On average 78 % of the “solution sales” planned order volume were documented in the company’s order/project lists. As for “product sales”, the CSF is ranked on position 9. On average only 47 % of the “product sales” planned order volume were documented in the company’s order/project lists. The main reason given was that the demand for solutions is subject to higher variation and thus requires more sophisticated planning.
2. *Project manager assistance during proposal preparation:* Several reasons were given that justify involving the future project manager already during proposal preparation: First, the project manager helps to mitigate technical and financial problems as well as to anticipate project risks. Second, the agreed price is more realistic. Third, a trustful relationship between the project manager and the customer may be established earlier. Fourth, less information gets lost during the hand-over to project execution. This CSF is ranked on the last position for “product sales”. As for “solution sales”, it is ranked at position 6.
3. *Back office as customer contact point:* The possibility for customers to directly contact the back office, e. g. in order to ask technical questions or to place simple orders, is ranked on position 5 for “product sales”. It was estimated essential that sales representatives and back office update each other regularly. In contrast, the CSF is ranked on position 12 for “solution sales”. Two reasons were given: First, sales representatives of “product sales” care for considerably more customers. Second, “product sales” orders are less complicated than “solution sales” orders.
4. *Consideration of win/loss analyses:* Considering the results of previous win/loss analyses may help to constantly improve sales processes and customer intelligence. This CSF is ranked on position 3 for “solution sales”. As for “product sales”, it is ranked on position 8. In the case company, win/loss analyses were mostly conducted on a single proposal-basis. Lost proposals were analyzed more frequently than successful ones. Feedback interviews with the involved proposal team and single sales representatives were held for analyzing purposes.
5. *Back office assistance during proposal preparation:* Qualified assistance of the back office during proposal preparation can help to improve the proposal quality especially with respect to technical details. Moreover, sales representatives have more time for customer care in field service. Sometimes, proposals were even compiled by the back office on its own. As for “product sales”, this CSF is ranked on position 3. As for “solution sales”, it is ranked on position 8.

6. *Active customer win-back*: This CSF is ranked on position 6 for “product sales” and on position 11 for “solution sales”. In the case company, the most frequently used measures for winning back customers were increase of visitation frequency and intensive conversations about the reasons for migration. Only in a few cases, sales representatives cut prices or adapted selling conditions (such as liability).
7. *Early technical involvement in calls for tenders*: Sales representatives who technically counsel their customers prior to a call for tenders were said to be more successful. This is because they could shift their customers’ need towards the company’s portfolio. As for “product sales”, this CSF is ranked on position 2. Though sounding counter-intuitive at the first glance, the given reason was that particularly huge product orders were almost exclusively assigned by tender. Tenders also were an opportunity to identify new customers. As for “solution sales”, this CSF is ranked on position 4.
8. *Acquisition of new customers*: Sales managers stated that their sales representatives spent on average 10 % of their working time identifying new customers. The indicated reason was that due to area-covering sales many divisions believed to know most (potential) customers. New customers were mainly identified by own market analyses, but also by tenders and using data of external providers. As for “product sales”, this CSF is ranked on position 11. As for “solution sales”, it is ranked on position 10.
9. *Sales manager attendance at external customer calls*: In some situations, sales managers accompanied their sales representatives to external customer calls. As for “product sales”, most sales managers did this on explicit demand only. As for “solution sales”, the most important situations were order negotiations. This CSF is ranked on position 10 for “product sales” and on position 9 for “solution sales”. Sales managers of “product sales” stated to spend 20 hours, sales managers of “solution sales” stated to spend 27 hours on average per month at external customer calls.
10. *Direct headquarters contact persons for sales representatives*: The main reason for a direct contact to the headquarters was the opportunity for better technical support. This CSF is ranked on position 5 for “solution sales”, and on position 4 for “product sales”.
11. *Reports of external customer calls*: By using reports of external customer calls, it was supposed to be easier for sales representatives and sales managers to prepare for future customer calls and enhance proposal quality. However, this CSF is ranked on position 12 for “product sales” and on the last position for “solution sales”. The indicated reason was that creating such reports was said to cause only additional effort and does not foster sales success. Nevertheless, reports were created for very large projects.
12. *Long-term customer care by the same sales representative*: The fact that a sales representative cares for the same customers for many years is ranked on position 1 for „product sales“. The sales representatives of this SBT cared for their customers for 7 years on average. New sales representatives needed 12 months on average to get acquainted with customers, competitors, and the overall regional market. As for “solution sales”, the CSF is ranked on position 2. Sales representatives cared for their customers for 6 years on average. They needed 10 months on average to get acquainted with their customers.
13. *Cross-divisional cooperation*: In the case company, sales representatives could assign leads to other divisions. A lead represents a hint with low degree of maturity that refers to a potential customer or project/order opportunity. This CSF is ranked on position 7 for both SBTs. The main reason given for this low ranking was the perceived poor quality of leads from other divisions. Moreover, the existing CRM system was barely used for exchanging leads. Most leads were forwarded directly in the context of face-to-face communication or social events (e. g. sales trainings).

Concluding, it can be stated that there are CSFs with almost equal ranking for both SBTs and such with a high rank difference. Nevertheless, we observed a tendency for that CSFs with a high (low) ranking regarding one SBT also have a high (low) ranking regarding the other (Spearman’s rank correlation coefficient $r_s=0.68$).

SUMMARY AND CONCLUSION

We intended to gain a better understanding of CRM by taking on an organizational perspective on CSFs. As a result of a descriptive case study, we identified 13 organizational CSFs. We also proposed a ranking for each SBT and a cross-SBT analysis. For “product sales”, the top three CSFs are “Long-term customer care by the same sales representative”, “Early technical involvement in calls for tenders”, and “Back office assistance during proposal preparation”. For “solution sales”, the top three CSFs are “Topicality of order/project list”, “Long-term customer care by the same sales representative”, and “Consideration of win/loss analyses”. We hope that the identified CSFs constitute a step towards a holistic approach to CRM and help companies to achieve overall CRM objectives. Companies may implement the CSFs, for instance, by following the rankings as well as by successively reengineering organizational CRM processes and CRM systems.

According to the case study's context, the findings are supposed to hold for sales departments, especially for those that serve business customers by area-covering direct sales. We admit that this is a restricted scope. Nevertheless, we deliberately accepted this restriction because we aimed at identifying concrete CSFs. In order to gain further insights, e. g. with respect to other SBTs, marketing departments, or other perspectives on CRM, further empirical research is necessary. This may be conducted by means of multiple-case studies or field experiments.

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APPENDIX

The following table presents the closed-ended items from the questionnaire grouped by CSF. The open-ended items were omitted due to space restrictions. Therefore, the major findings were incorporated into the findings and discussion section.

ID	Item	Polarity
O1	Back office as customer contact point	
O1.1	The back office answers customer inquiries on behalf of my sales representatives.	+
O1.2	My sales representatives are the exclusive contact persons for their customers.	-
O2	Long-term customer care by the same sales representatives	
O2.1	My sales representatives care for their customers for many years.	+
O2.2	My sales representatives have a good personal relationship with their customers.	+
O3	Back office assistance during proposal preparation	
O3.1	The back office relieves my sales representatives of proposal preparation.	+
O3.2	My sales representatives prepare proposals almost exclusively on their own.	-
O3.3	The back office prepares proposals on its own.	+
O4	Direct headquarters contact persons for sales representatives	
O4.1	The headquarters helps my sales representatives directly by answering technical questions.	+
O4.2	My sales representatives don't have direct contact persons in the headquarters.	-
O5	Cross-divisional cooperation	
O5.1	My sales representatives forward sales leads to other divisions regularly.	+
O5.2	My sales representatives systematically process sales leads received from other divisions.	+
O5.3	My sales representatives don't receive sales leads from other divisions.	-
O5.4	Sales leads are almost exclusively exchanged before reporting deadlines.	-
O6	Sales manager attendance at external customer calls	
O6.1	I regularly accompany my sales representatives to external customer calls.	+
O6.2	I plan in detail and in advance which customer calls I will attend.	+
O7	Project manager assistance during proposal preparation	
O7.1	My sales representatives involve the future project manager during proposal preparation.	+
O8	Acquisition of new customers	
O8.1	My sales representatives currently entertain relationships with all relevant customers.	-
O9	Early technical involvement in calls for tenders	
O9.1	My sales representatives consult customers technically before calls for tenders are published.	+
O9.2	My sales representatives react on calls for tenders without having been technically involved beforehand.	-
O10	Active customer win-back	
O10.1	My sales representatives systematically try to win lost customers back.	+
O11	Consideration of win/loss analyses	
O11.1	My sales representatives regularly start order preparation processes from scratch.	-

O11.2	My sales representatives don't conduct win/loss analyses of previous order preparation processes.	-
O11.3	My sales representatives consider previous win/loss analyses in daily sales business.	+
O12	Topicality of order/project list	
O12.1	Our planning process is substantiated by topical order/project lists.	+
O13	Reports of external customer calls	
O13.1	My sales representatives systematically create reports of external customer calls.	+
O13.2	I prepare for external customer calls with existing reports.	+

Table 4. Closed-ended items from the questionnaire