International Entrepreneurship Review

2025, Vol. 11, No. 2

10.15678/IER.2025.1102.06

Investigating factors in the implementation of customer relationship management in Polish enterprises

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ABSTRACT

Objective: The article aimed to determine the factors of the implementation and functioning of customer relationship management (CRM) in Polish enterprises, whether they see the benefits and whether they can identify the reasons for choosing specific software and its supplier in the field of CRM systems, and whether the collected data is subjected to effective analyses. The research problem is to determine the determinants of the implementation and operation of the CRM system in Polish enterprises. Due to the lack of detailed research on this topic among Polish enterprises and the emerging need for more and more frequent use of the CRM system, the article attempts to examine this issue.

Research Design & Methods: We formulated five research hypotheses adequate to analysing the research problem described in the literature sources. We conducted research using a survey questionnaire with the participation of a professional research panel. We surveyed 261 enterprises. We examined the relationships using the chi-square test (with Yates' correction). We assessed relationship strength using Cramer's V coefficient. Furthermore, we evaluated the strength and direction of the relationship using the Gamma coefficient. We subjected the data collected during the research to statistical analysis in Statistica TIBCO 13.3 software.

Findings: Research has shown that larger enterprises and those with a greater reach are more willing to use CRM IT systems. Enterprises that have incurred investment expenditure in the last three years also use these systems. The article also has theoretical implications. They allowed us to reveal certain phenomena in organisations and mechanisms. This can serve to create universal theoretical business models.

Implications & Recommendations: The article shows business practitioners how vital the application of the CRM system and its constant updating in the light of the latest trends are for their success. Moreover, in theoretical considerations, researchers indicate that companies notice numerous benefits after implementing CRM, such as the ability to make effective business decisions and increased customer loyalty. However, as mentioned in the article, many CRM implementations are fraught with the risk of failure.

Contribution & Value Added: The article discusses using CRM systems in business, which are essential in building lasting customer relationships in a rather saturated market. The article is dedicated mainly to practitioners but also to scientists deepening the topic of using CRM.

Article type: research article

Keywords: CRM; enterprise; IT system; business; customer

JEL codes: E22, L86, M15

Received: 15 January 2024 Revised: 12 December 2024 Accepted: 18 December 2024

Suggested citation:

Bojanowska, A., Łukasik-Stachowiak, K., & Toborek, K. (2025). Investigating factors in the implementation of customer relationship management in Polish enterprises. *International Entrepreneurship Review,* 11(2), 105-118. https://doi.org/10.15678/IER.2025.1102.06

INTRODUCTION

In the 2020s, enterprises faced numerous challenges associated with, for example, increasingly demanding customers and increasingly competitive markets. One of the most critical differential values in companies that survive in an increasingly dynamic and competitive market today is their capacity for innovation and adaptation to the environment (Guerola-Navarro *et al*., 2021). Implementation of CRM

conception becomes such a solution. The CRM system used for managing customer relationships is increasingly becoming indispensable for organisations aiming to maintain groups of loyal customers. The genesis of CRM conception indicates that it emerged from the enterprise's internal needs and the evolution of marketing from a transactional to a relational approach. Enterprises stopped treating customers as petitioners and have begun to be partners with whom it is worth building lasting relationships. They began to notice such benefits from CRM. If appropriately implemented, CRM technologies may improve data gathering and analysis of critical client relationships, improving strategic and project-level decision-making (Preece *et al*., 2015). Similarly, customers have begun to notice that CRM allows them to gain additional advantages from establishing a relationship with an enterprise and increase their satisfaction. However, it seems essential to check the status of CRM implementation in enterprises and the determinants of CRM functioning in organisations. To generalise the research conclusions, we used the example of Polish enterprises. The CRM conception began to emerge in Poland around 2004. It seems likely that Polish enterprises should already have some experience with it. Having analysed the literature, we decided to formulate some hypotheses on the subject and determine which Polish enterprises are most likely to implement the CRM system, whether they perceive the benefits and can identify the reasons for choosing a particular software and its supplier in terms of CRM systems, and whether the collected data is subjected to effective analysis. In the era of sustainability, the conception of customer relationship management is still fundamental and can benefit enterprises. However, it requires support from appropriate technological solutions, which makes companies successful. Solutions of this type can be expensive, so it is worth checking whether companies use them skilfully and effectively, whether they have equal access to them, and whether it depends on the company size.

It seems important to investigate the CRM determinants in enterprises to understand the current state of the above phenomenon. Due to the lack of detailed research on this topic among Polish enterprises, as well as the emerging need for more and more frequent use of the CRM system, the article attempts to examine this issue. The article presents the results of its research on CRM implementations in enterprises, which is so essential in building lasting relationships with customers in a rather saturated market, showing business practitioners how vital the application of the CRM system is and its constant updating in the light of the latest trends for their success. Given the above, the study aimed to determine the factors of the implementation and functioning of CRM in Polish enterprises, whether they see the benefits and whether they can identify the reasons for choosing specific software and its supplier in the field of CRM systems, and whether the collected data is subjected to effective analyses. We formulated five research hypotheses. The study was cognitive. We intend to continue to use the collected data for further analyses.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The CRM concept combines people, processes, and technology to effectively manage customers and benefit the company and customers. The extensive availability of CRM systems, both domestic and foreign companies, with different functional features, makes the choice of CRM software rather problematic. During its selection, companies are mainly guided by substantive and functional criteria, but importantly, the systems can be replicable or dedicated exclusively to individual company needs (Siu, 2016). How does this convert CRM systems usage in the SME sector? Numerous domestic and foreign research conducted to date prove that a relationship exists between company size and CRM use (Chromčáková *et al.*, 2017; Reicher *et al.*, 2015; Pohludka & Štverková, 2019; Dalla *et al.*, 2018), essentially the larger the companies, the greater the interest in using CRM as the current research will indicate. Previously, several researchers have also suggested that CRM implementation in the SME sector has a slow adoption rate, with more than half of all adoptions failing (Ismail *et al.,* 2007; Reijonen & Laukkanen, 2010). Several researches suggest that SMEs lack the knowledge, understanding and ability to implement CRM applications (Özgener & İraz, 2006). Scholars conducted most CRM research in large organisations, and few studies have examined CRM adoption in SMEs (Nguyen & Waring, 2013; Krasnikov *et al.*, 2009). However, since then, a lot has changed, and currently, the SME sector is eagerly reaching for modern technological solutions, including systems and software to support the enterprise's work.

Regardless of their industry, SMEs can achieve many benefits by adopting CRM. As researchers predict, companies increasingly appreciate the advantages of using tools such as CRM (Arsić *et al*., 2018) because they contribute to building competitive advantage and increase productivity or long-term relationships with customers, and their trust is the most valuable currency, and in the digital age, technological tools are simply irreplaceable (Chang *et al.*, 2014; Dalla Pozza *et al.*, 2018; Santouridi & Veraki, 2017). Over the years, the trend and intensity of modern technology use for customer service have changed dramatically. Research conducted over a decade ago (Statistics Poland examined the use of ERP and CRM information systems by Polish enterprises, CSO, 2010) showed that only one in ten enterprises in Poland used an ERP and CRM system. However, more commonly used by Polish enterprises were and are CRM systems, both those for collecting, storing customer information and providing access to it to other enterprise units, which served over 17% of companies in the last year and those for analysing customer information for marketing purposes, which served over than 13% of companies. The CSO research also indicated that the use of systems in this class largely depends on the company's size. In 2009, less than 18% of all enterprises used CRM systems. Among small and medium-sized enterprises, their use is much lower – only 5% of small and 20% of medium-sized companies used CRM systems in 2009, but already more than 50% of large companies. In 2010, the overall CRM usage declined to 16.4% and appeared as follows: large companies (45%) used CRM most often, while medium-sized companies (27%) and small companies (15.8%) used it less often (CSO, 2010).

Another study conducted by the Central Statistical Office (CSO) on the use of information and communication technologies in enterprises in 2015 (CSO, 2015) on a sample of 18 000 Polish enterprises showed that an ERP or CRM system was used by one in five and one in four enterprises, respectively (most often by large enterprises). More precisely, the percentage of ERP or CRM software packages used was 24.9% of small enterprises, 58% of medium-sized enterprises and 88% of large enterprises. Noteworthy, SMEs are unlikely to hire specialists with digital competencies. Such people are employees in less than 7% of small and 29% of medium-sized companies, compared to 73.5% of large companies in Poland (Report PARP, 2018). The IDC Report (International Data Corporation) from 2023, commissioned by Salesforce, analyses various aspects of Polish companies' implementation and use of CRM systems. It includes an assessment of the adoption level of CRM technology, the key benefits for enterprises, their challenges, and forecasts for the future. The study showed that more and more Polish companies are implementing CRM systems to improve customer relationship management, increase sales efficiency and better adapt offers to customer needs. According to the IDC report, approximately 68% of companies in Poland use CRM systems, and this number is expected to grow. Entrepreneurs value CRM, particularly in the trade, financial and service industries, where they enable the collection and analysis of customer data, which allows them to tailor the offer to their needs and increases service satisfaction (Report *CRM market research reports by IDC*, 2023). Moreover, research conducted by Gemius for the Polish Chamber of Information Technology and Telecommunications in 2023 indicates that Polish companies use CRM systems mainly to manage sales (87%), marketing (78%) and customer service (75%). The popularity of these systems is due to their ability to integrate with other tools and platforms, which allows for more effective management of data and business processes (Report E-commerce w Polsce*,* 2023).

Generally, SMEs have more limited financial, human or knowledge resources than corporations. Consequently, they have limited resources for budgeting IT projects (Rostek *et al.*, 2012). We may find the reasons for the CRM used by larger companies in several aspects, like: (1) there is a belief among entrepreneurs that these programs are designed only for large companies, (2) entrepreneurs perceive such an investment as too costly, (3) lack of reliable knowledge about various technologies and software (including free software) enabling access to CRM functions, (4) lack of knowledge about positive experiences of other entrepreneurs operating in the SME sector, (5) lack of knowledge about the full functional scope of CRM-class systems and the potential benefits of their implementation in a small business.

Considering the literature considerations, we formulated the following research hypotheses:

H1: Larger enterprises are more inclined to use CRM information systems.

H2: Enterprises that have incurred investment expenditures in the last three years have implemented a CRM system.

H3: Enterprises that have implemented CRM perceive benefits from implementing this system.

H4: Enterprises that have implemented CRM can identify the reasons for choosing a particular software and its supplier regarding CRM systems.

H5: The data collected within the CRM system is subjected to effective analysis in enterprises.

The first hypothesis we formulated and verified, reads as follows: Larger enterprises are more inclined to use CRM information systems. The IDC Report indicates that the adoption of CRM systems is higher in large companies that appreciate the benefits of integrating customer data and optimising sales processes (Report CRM market research reports by IDC, 2023). However, analyses conducted by Salesforce show that large enterprises see CRM as a strategic tool for increasing customer loyalty and improving sales results (The State of CRM, 2023). Gartner's research also indicates a higher use of CRM systems in large organisations than in small and medium-sized companies, mainly due to the complexity of operations and greater financial resources (Gartner's Magic Quadrant Reports, 2023). Nowadays, the problem is not the tools' availability but their clever selection from among the possible solutions. This is because large companies, with their expanded structure, a larger number of employees, or greater market reach, also have greater needs and relationships to coordinate. A CRM system will help them adapt their organisation to the customer's needs, facilitate customer relationships and thus help increase revenue, improve marketing activities, and positively affect the company's image (Kumar *et al.*, 2018; Macdonald *et al.*, 2016). Undoubtedly, originally, mainly large and medium-sized companies used this type of solution, which resulted primarily from the number of customers served, the specific nature of contacts with customers and the financial capacity to implement CRM-class information systems. However, nowadays, small companies are also increasingly reaching for this type of IT solution, properly adapted in technological and functional terms for this group of enterprises' needs. It is obvious that reaching for modern solutions, including IT systems, constitutes a long-term decision designed to generate profits (Korzyński *et al*., 2023). Therefore, entrepreneurs should treat the implementation of CRM systems as an investment. The interest in CRM systems is fundamental and caused primarily by the high return on such an investment, as well as the increased level of transparency in all business processes (Bai & Qin, 2016). However, it is worth noting that the investment concept is associated with the principle of profitable investment. For CRM implementation, the achievable effects may be both soft and hard. Equally important, changing the work organisation and implementing any computer system is fraught with risk. Hence, many IT projects have never been completed. The CRM system is not easy to implement; it involves issues that are difficult to measure, *i.e.*, the previously mentioned soft elements. Nevertheless, SME companies, especially the larger ones, recognise its potential and possibilities.

The research conducted and the verification of the second research hypothesis: Enterprises that have incurred investment expenditures in the last three years have implemented a CRM system – will prove the above relationship, showing that investment expenditures in the last three years related to the implementation of CRM by the surveyed companies. Apart from a successful investment, CRM has many benefits and opportunities, like building positive customer relationships, including pre-sales, during-sales and post-sales functions (Abdul-Muhmin, 2012; Santouridis & Veraki, 2017; Nguyen *et al.*, 2007). It is worth mentioning that to buy and implement an optimal CRM system, it is necessary to conduct a thorough analysis of the SMEs' needs to make a successful investment. The system's implementation team should agree on implementation goals and develop a vision of what the company should look like after CRM implementation. Constantly increasing competition, manifested in modern business conduct, has made many SME companies from various industries realise the importance of retaining their customers (Santouridis & Veraki, 2017). CRM is supposed to perform its role in the company, which is to concentrate on maintaining profitable relationships with customers through all available communication channels and here front-office applications – supporting sales, marketing and customer service – and back-office applications – helping to integrate and analyse customer data with a view to customer satisfaction and fulfilment in the relationship with the company – are essential. Tracking customer behaviour according to tastes and needs is motivating enough for an SME company to implement CRM systems. Using this information, companies can create and develop improved products

and services and increase knowledge about customers by analysing their buying behaviour through various channels (Mithas *et al.,* 2005). Customer satisfaction has always interested researchers, with literature indicating that many benefits are associated with its achievement, including an increased customer retention rate (CRR). Therefore, examining the possible impact of CRM practices on customer satisfaction can provide SME managers with the necessary information regarding developing and implementing effective CRM strategies. Enterprises that have implemented a CRM system see benefits in various areas of the company, including (1) marketing (including increased marketing department efficiency), (2) sales (including customer segmentation, individualised tailoring of sales/service offerings), (3) company organisation in general (including company structure optimisation and operation procedures ordering, task completion time speed, more efficient communication) and (4) better service quality, which ultimately leads to (5) building exceptional customer relationships and increased customer satisfaction (Preece *et al*., 2015; Abdul-Muhmin, 2012; Meng, 2012; Bohling *et al.*, 2006). According to the above, the CRM system gives a competitive advantage to SMEs, improving the company's collection of information about customers to customise products and services to meet their demands, which consequently leads to the formation of a company's positive opinion and its products. Conducted self-research mostly confirms the third research hypothesis (Enterprises that have implemented CRM perceive benefits from implementing this system), thus indicating the awareness of the surveyed enterprises about the possibility of benefiting from the implemented CRM system.

Working in the CRM system is always directly related to work efficiency. The more complex and elaborate the system is both on the front-end, *i.e.*, the user side, and on the back-end, the more difficult it is to work efficiently and quickly on this kind of platform (Lin *et al*., 2010). SME enterprises deciding on a CRM system are already making a more conscious choice by comparing and testing different systems beforehand, especially within their design and ease of use. The most important thing is that the system should correspond to the business's priority needs and that the company's operating model, *i.e.*, industry and work specifics, should be able to be integrated into the system fundamentally. Currently, SMEs have several options for acquiring and implementing a CRM information system, *i.e.*, they either invest in a dedicated system (that meets the company's needs), otherwise 'customised,' or invest in the purchase of an 'out of the box' system, *i.e.*, a ready-made solution. Choosing will certainly not be easy, and equally worth considering is that implementing a CRM system is, on the one hand, a project of implementing a new tool in a company, and on the other hand, a process that requires changing habits and departing from the routine, often inept habits of employees. Each SME implementing the system must ensure that the employee is properly trained and motivated to operate the system, as well as monitor his work on an ongoing basis (the system's analytical module provides such an option). The effect of training employees to work with the implemented CRM system is, first of all, to make employees aware that the actions they take in the system also affect other people and relationships within the company. Therefore, the CRM system allows for building relationships with external and internal customers (Abbott, 2003; Aliyu & Nyadzayo, 2018). SME enterprises generally follow various guidelines to select the optimal software that meets their assumptions and expectations, *i.e.*, (Yapanto *et al*., 2021; Wach, 2020; Bohling *et al.*, 2006; Wang & Feng, 2012): (1) does the system provide the ability to manage the customer base and monitor sales efficiently? (2) does it provide the ability to create quickly needed reports, analysis of sales and customers, and workflow in general? (3) does it speed up the working time of the teams involved? – and so on. However, the choice of a system provider is most often dictated by criteria such as (1) the price of the software (Krasnikov *et al.*, 2009), (2) the opinion of other customers about its functionality (Becker *et al*., 2009), (3) the supplier's position in the market (Bull, 2003), (4) the program's ease of use (Jafari Navimipour & Soltani, 2016), (5) the speed of its implementation (Krasnikov *et al*., 2009), (6) integration with existing systems and hardware (Bose, 2002), (7) the ability to cooperate with applications (Valsecchi, 2007), (8) or the security of data in the system (Anshari *et al*., 2019). The research conducted and the results obtained analysed, provided opportunities to verify the fourth hypothesis (Enterprises that have implemented CRM can identify the reasons for choosing a par-ticular software and its supplier in terms of CRM systems), resulting in a reasonably rational evaluation and selection by the surveyed enterprises of the right CRM system and its supplier.

We performed data collection in the CRM system through operational and interactive CRM. We collected data in data warehouses. However, no effective CRM system will fulfil its tasks if the data is not adequately processed and analysed. This is what analytical CRM does. Analytical CRM systems aim to provide a better understanding of customers' behaviours and needs. It is an enabler that allows organisations to establish stronger customer relationships by analysing customer information and providing a complete view of the customer (Farhan *et al.*, 2018). Statistical and data mining methods used in CRM analytical systems can be instrumental in improving customer relationships. Some researchers report that 70-80% of CRM implementations are unsuccessful (Deshmukh *et al*., 2020; Bush *et al*., 2005; Finnegan & Currie, 2010; Wilson *et al*., 2007). This carries vast losses for implementing organisations, therefore all measures are required to avoid failure. As early as 2000, scholars noted that many enterprises had invested heavily in the infrastructure for operational CRM (call centre technology, funnel management systems, campaign management technology, loyalty cards) without having any coherent strategy for analytical CRM. Scholars and specialist suggested that the reason for CRM implementation failure was primarily due to a lack of experience in running a company in a free-market economy and using CRM analytical capabilities. In addition, data inaccuracy or defectiveness can be a problem (Turban *et al*., 2008). This article examines whether Polish companies properly use customer data they collect. Therefore, we decided to provide the following fifth hypothesis: **H5:** The data collected within the CRM system is subjected to effective analysis in enterprises.

RESEARCH METHODOLOGY

Materials and Methods

The survey was conducted in January 2023 using a questionnaire with a professional research panel. The population described consists of Polish enterprises from various sectors and industries. In 2022, the number of non-financial enterprises increased by 4.2% y/y, reaching 2 356.0 thousand entities in 2021 (CSO, 2023). We surveyed 261 enterprises. In the case of the research conducted for the article, micro-enterprises and sole proprietorships accounted for a total of 39.0%; small – 30.0%; medium – 10.0%; and large ones – 10.0%. Thus, in this case, we may treat the sample selection as purposeful. The sample of 261 enterprises selected for the study, with a confidence level of 95%, a fraction size of 0.3 (we estimate that approximately 30% of enterprises were in contact with CRM) and with the assumed maximum error of 6%, was sufficient. Table 1 shows the structure of the survey sample.

Table 1. Research sample characteristics

Enterprise size	**Micro**	**Small**	**Medium**	**Large**	**One-person**
Sample size	76 (29%)	77 (30%)	57 (22%)	26 (10%)	25 (10%)
Type of business conducted	Industrial activities	Service activities	Commercial activities	Construction activities	Other
Sample size	38 (15%)	163 (62%)	35 (13%)	22 (8%)	3 (1%)
Operation period of the current business	Less than a year	1-5 years	6-10 years	Over 10 years	
Sample size	3 (1%)	66 (25%)	51 (20%)	141 (54%)	
Enterprise coverage	Local	Regional	National	International	
Sample size	61 (23%)	64 (25%)	89 (34%)	47 (18%)	
Amount of investment expenditure in the last 3 years	Lack of expenses	Up to PLN10000 (2305.42EUR)	From PLN 10001 (2305.65 EUR) to PLN 100000 (23054.22 EUR)	From PLN 100001 (23054.45 EUR) to PLN 500000 (115271.12 EUR)	Over PLN500001 (115271.35 EUR)
Sample size	33 (13%)	43 (16%)	96 (37%)	42 (16%)	47 (18%)

Source: own study.

The questionnaire consisted of five metric questions and 20 substantive questions on the determinants of CRM implementation in companies in terms of both CRM philosophy and software. At the same time, part of the questionnaire was addressed only to enterprises that have implemented

CRM and part to those that have not yet implemented this system. The results of the responses to the screening question: 'Do you have a CRM information system for customer relationship management?' shows that 90 out of 261 companies surveyed have implemented a CRM system, 142 companies out of 261 have not, and 29 responses were 'I don't know.'

Respondents answered questions about the advantages of implementing a CRM system, reasons for choosing a CRM provider, and reasons for implementing a specific CRM by using a 5-point Likert scale. Prior to analysis, we ranked variables, with 1 indicating negligible benefit/marginal reason and 5 indicating significant benefit/very important reason. To assess the consistency of the blocks of questions on benefits, reasons for choosing delivery, and reasons for implementing a CRM system, we performed a reliability analysis and calculated Cronbach's alpha reliability coefficient. For questions about the benefits of implementing a CRM system, the Cronbach's alpha was 0.91, for questions about the reasons for choosing a supplier, the Cronbach's alpha was 0.89, and for questions about the reasons for implementing a CRM system, the Cronbach's alpha was 0.86. This indicated high question reliability.

We examined the relationship between enterprise size and having a CRM system, the relationship between enterprise coverage and having a CRM system, and the relationship between the number of investment expenditures in a business in the last three years and having a CRM system using the chi-square test (with Yates' correction when there were classes of less than 10 in the Table). We assessed relationship strength using Cramer's V coefficient. Moreover, we assessed the strength and direction of the relationship using the Gamma coefficient.

We subjected the data collected during the research to statistical analysis in Statistica TIBCO 13.3 software. We adopted a significance level of $p = 0.05$ in all analyses.

RESULTS AND DISCUSSION

Based on the answers given in the questionnaire, to verify **hypothesis one (H1)**, we counted the indications given by respondents in the question about having a CRM system, with a division by company size. Table 2 presents the results. In total, 29 people answered 'I don't know' and we did not include these answers in the summary.

To verify hypothesis one, we analysed the relationship between enterprise size and the use of the CRM IT system using the chi-square test of independence. We made the null hypothesis of independence between the questions against the alternative hypothesis that the variables are dependent. Based on the results of the chi-square test ($\chi2(4) = 35.05$, $p < 0.001$), we rejected the null hypothesis in favour of the alternative hypothesis indicating the relationship exists. This allowed us to conclude that smaller enterprises were less likely to implement the CRM information system, while larger enterprises were more likely to implement the CRM information system.

Table 2. Contingency table: Enterprise size vs presence of CRM system (percentages counted in rows)

Enterprise size	CRM IT system		
	Yes (%)	No (%)	Total
Micro	18 (26%)	51 (74%)	69
Small	29 (41%)	41 (59%)	70
Medium	29 (62%)	18 (38%)	47
Large	13 (59%)	9 (41%)	22
One-person	1 (4%)	23 (96%)	24
Total	90	142	232

Source: own study.

Graphically, we present the relationship in the three-dimensional histogram below (Figure 1). This positively verified **hypothesis one (H1)** regarding enterprise size. In one-person enterprises, 96% of companies have not introduced the CRM, in microenterprises, 74% of companies did not have CRM, in small enterprises, 59% of companies did not have the CRM, while 62% of medium enterprises and 59% of large enterprises had the CRM. Overall, 39% of companies have the CRM. Cramer's V coefficient of

0.37 indicated a medium relationship and a negative Gamma value of -0.14 indicated that smaller companies were less likely to have the CRM system, while larger companies were more likely to have one.

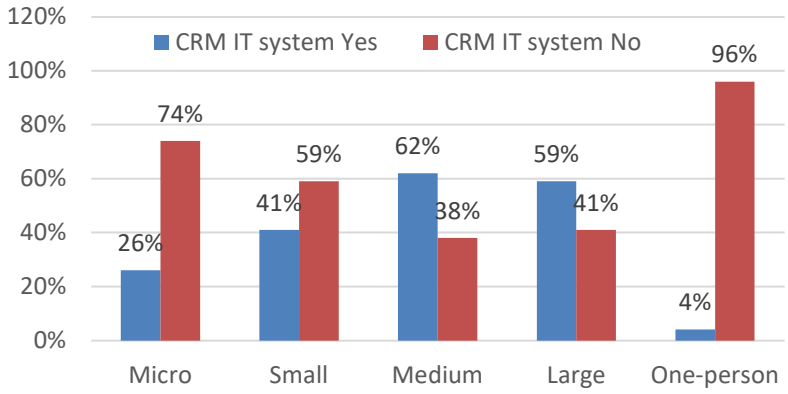

Figure 1. 3D histogram: Enterprise size x CRM IT system for customer relationship management
Source: own elaboration.

Before verifying **hypothesis two (H2)**, we counted respondents' answers to the question of whether the company had a CRM system, split by the amount of investment expenditure in the last three years. Table 3 presents the results (Table 3).

Table 3. Contingency table: The amount of investment expenditure vs CRM system presence (percentages counted in rows)

Amount of investment expenditure in the last 3 years	CRM IT system		
	Yes (%)	No (%)	Total
Lack of expenses	0 (0 %)	31 (100%)	31
Up to PLN 10000 (2305.42 EUR)	8 (20%)	32 (80%)	40
From PLN 10001(2305.65 EUR) to PLN 100000 (23054.22 EUR)	38 (47%)	43 (53%)	81
From PLN 100001 (23054.45 EUR) to PLN 500000 (115271.12 EUR)	20 (54%)	17 (46%)	37
Over PLN 500001 (115271.12 EUR)	24 (56%)	19 (44%)	43
Total	90	142	232

Source: own study.

Based on the results of the chi-square test ($\chi 2(4) = 36.72$; $p < 0.001$), we rejected the null hypothesis of independence in favour of the alternative hypothesis indicating the existence of a relationship. This confirms the observation that the greater the company's investment expenditures were, the more often the company had a CRM information system. Thus, we positively verified **hypothesis two (H2)**. No company that had not invested in development in the last three years had a CRM system. Cramer's V coefficient of 0.40 indicated medium dependence, while a negative Gamma value of -0.53 indicated high dependence, and as investment expenditure in the company increased, the number of companies without a CRM system decreased. The verification of **hypothesis three (H3)** was initiated by counting the responses regarding the benefits perceived by respondents after the implementation of the CRM system (Table 4). Respondents rated the particular benefits using a 5-point Likert scale, where 1 – meant a small benefit, and 5 – a very large benefit.

Noteworthy, over half of the respondents perceived all of the listed benefits. From the calculated averages and medians, we can also observe that the perceived benefits were important to respondents. Thus, we positively verified **the third hypothesis**. The most frequently mentioned benefit of implementing a CRM system was an increase in sales (as many as 81% of respondents gave this answer), while the least frequent answer was lower customer fluctuation (56% of respondents). According to respondents, lower customer fluctuation reported the least often, was also the least important benefit of those listed ($M = 3.5$, $Mdn = 3.0$). The mean values of the importance ratings for all other benefits exceed 3.8, with a median of 4.0.

Table 4. The benefits of IT CRM system implementation and basic statistics of CRM system benefit ratings for those who gave an affirmative answer for a particular benefit

Benefits	Yes (%)	No (%)	I don't know (%)	Mean	Mdn	Min	Max	SD
Increasing sales	73 (81%)	11 (12%)	6 (7%)	4.0	4.0	1.0	5.0	0.97
Increasing the marketing department's efficiency	70 (78%)	14 (15%)	6 (7%)	3.8	4.0	1.0	5.0	1.00
Better offer matching to the customer	68 (76%)	16 (17%)	6 (7%)	3.9	4.0	1.0	5.0	1.05
Better customer segmentation	67 (74%)	17 (19%)	6 (7%)	3.9	4.0	1.0	5.0	1.04
Effectively dealing with complaints and claims	67 (74%)	16 (18%)	7 (8%)	3.9	4.0	1.0	5.0	0.99
Ability to personalise an offer for a specific customer	67 (74%)	17 (19%)	6 (7%)	4.0	4.0	1.0	5.0	0.96
Increasing customer profitability	66 (73%)	16 (18%)	8 (9%)	3.8	4.0	1.0	5.0	0.99
Increased whisper marketing reach	66 (73%)	14 (16%)	10 (11%)	3.8	4.0	1.0	5.0	1.04
Increasing the customer numbers	65 (72%)	18 (20%)	7 (8%)	4.0	4.0	1.0	5.0	0.98
Better PR	63 (70%)	19 (21%)	8 (9%)	3.9	4.0	1.0	5.0	0.94
Ability to predict customer behaviour	61 (68%)	21 (23%)	8 (9%)	4.0	4.0	1.0	5.0	0.97
Increasing customer loyalty	56 (62%)	22 (24%)	12 (14%)	3.9	4.0	1.0	5.0	1.05
Increasing employee loyalty	51 (57%)	26 (29%)	13 (14%)	4.0	4.0	1.0	5.0	0.97
Lower customer fluctuation	50 (55%)	28 (31%)	12 (14%)	3.5	3.0	1.0	5.0	0.97

Source: own study.

To verify hypothesis 4 **(H4)**, we counted the number of responses for each question regarding the reasons for choosing a CRM system supplier (Table 5) and the reasons for choosing a specific CRM system software (Table 6). Respondents rated these reasons using a 5-point Likert scale, where 1 indicated a marginal reason, 5 a very important reason.

Table 5. Questionnaire results for questions about reasons for choosing a CRM system provider and basic statistics for the main reasons for choosing a CRM system provider

Results	Scale					n	Mean	Mdn	Min	Max	SD
	1	2	3	4	5						
Simpleness of using the program	4	2	20	39	35	90	3.9	4.0	1.0	5.0	0.99
The security level of the system due to the sensitive data stored in it for the company	2	7	17	38	26	90	3.9	4.0	1.0	5.0	0.99
Declared functionality in line with my expectations	3	3	23	37	24	90	3.8	4.0	1.0	5.0	0.97
Supplier's market position	2	4	23	43	18	90	3.8	4.0	1.0	5.0	0.89
Readiness of the CRM system to cooperate with the applications used in the company	3	4	22	43	18	90	3.8	4.0	1.0	5.0	0.94
Ability to use your existing computer equipment after system implementation (no need to purchase new equipment before implementation)	3	5	27	31	24	90	3.8	4.0	1.0	5.0	1.02
Attractive CRM system price	5	4	22	37	22	90	3.7	4.0	1.0	5.0	1.06
Declared implementation speed	5	8	21	36	20	90	3.6	4.0	1.0	5.0	1.10
The software was recommended to me by a friend/acquaintance using the same solution	5	10	22	40	13	90	3.5	4.0	1.0	5.0	1.05

Source: own study.

Respondents perceived all of the reasons listed in the questionnaire for choosing a supplier as quite important (respondents rated most responses in each case – 4). The findings of the answers to this question, together with the statistical analysis, allowed us to conclude that the respondents were fully aware of and could identify the reasons for choosing a CRM system provider, which confirms the first part of hypothesis four. As in the case of supplier selection, all the reasons listed in the questionnaire were perceived by respondents as fairly important (respondents rated most responses, in any case, at 4). Noteworthy, the relatively least important reason was that the previous program did not meet respondents'

expectations. This may result from the fact that the implemented CRM system is the first such system in the company. The above data allowed us to positively verify the second part of hypothesis 4 **(H4**).

Table 6. Questionnaire results for questions about the reasons for implementing a CRM system and basic statistics for the main reasons for implementing a CRM system in a company

Reasons	Scale					n	Mean	Mdn	Min	Max	SD
	1	2	3	4	5						
The previous program didn't meet my expectations	7	15	27	30	11	90	3.3	3.0	1.0	5.0	1.12
Until now, I couldn't create the reports I needed, or the time to generate them was too long	2	11	27	33	17	90	3.6	4.0	1.0	5.0	1.01
I couldn't create the analysis I needed on sales, customers, etc., or the time to generate it was too long	1	8	27	36	18	90	3.7	4.0	1.0	5.0	0.93
I wanted to manage my employees' time more effectively	1	5	31	36	17	90	3.7	4.0	1.0	5.0	0.88
I wanted to manage customer relations more effectively	1	6	28	38	17	90	3.7	4.0	1.0	5.0	0.89
I wanted to organise the document flow in the company	3	6	24	38	19	90	3.7	4.0	1.0	5.0	0.99
I wanted to monitor sales processes in the company	1	7	25	29	28	90	3.8	4.0	1.0	5.0	0.99
I wanted to have all the information needed for the company functioning in one place (*e.g.*, offers, orders, delivery confirmations)	1	3	24	42	20	90	3.9	4.0	1.0	5.0	0.84

Source: own study.

To verify hypothesis five **(H5)**, we asked respondents whether the data collected in their companies' CRM system served to perform market analysis and whether the customer data collected in the CRM system was subjected to analysis that yields measurable results for the organisation. The answers to these questions are presented in the charts below. In the vast majority of cases, according to the respondents, the company analysed the collected data, which produced measurable results for the company. This allowed us to positively verify **hypothesis five**.

For Statistics Poland, we conducted several analyses of information systems used in enterprises. In these analyses, CRM is often combined with ERP, an approach that is not entirely consistent with the purpose of such systems. CSO results from 2018 show that 88% of large enterprises used a CRM or ERP system, among medium-sized enterprises, it was 58%, and among small enterprises, it was only 24.9% (Becker, 2018). This confirmed the research results from this article. Scholars have studied the reasons that encourage enterprises to implement CRM more than once both in Poland and worldwide (Pohludka & Štverková, 2019). Researchers indicate that companies see numerous benefits after implementing CRM, such as the ability to make effective business decisions and increased customer loyalty. However, as has already been mentioned in the article, many CRM implementations are fraught with failure risk. Good planning and the appropriate approach to implementation can reduce them. It is also important to effectively process the data obtained from CRM systems for company management purposes.

This article adds value by providing a comprehensive analysis of the factors affecting CRM implementation in Polish enterprises. It highlights the practical benefits of CRM systems and underscores their importance in modern business environments.

Some researchers focus on other aspects of CRM in the enterprise, such as improving communication. For example, research conducted by Ukrainian researchers in 2023 indicates the need for CRM compliance with internal corporate policy (Berestetska *et al*., 2023). Other studies show improvements in customer satisfaction and experience after introducing CRM into the enterprise. Scholars determined that the desktop interface solution may improve this CRM's ease of use and user satisfaction, thereby benefiting the real estate industry through strengthened connections and more straightforward oversight of professionals' performances (Ferreira *et al*., 2023).

CONCLUSIONS

A combination of organisational size, technological readiness, strategic alignment, market dynamics, and regulatory considerations shape the implementation of CRM systems in Polish enterprises. Larger firms with complex operations, robust IT infrastructure, strong management support, and a proactive

approach to market and regulatory challenges are more likely to successfully implement CRM systems. These factors collectively contribute to the effective adoption and utilisation of CRM technologies, enabling enterprises to enhance customer relationships and achieve competitive advantage.

This article presents research results and an analysis of the determinants of CRM system implementation in enterprises. We aimed to determine which enterprises implement a CRM system most often, whether they perceive the benefits and, whether they can identify the reasons for choosing a particular software and its supplier for CRM systems, and whether the collected data is subjected to effective analysis. We achieved this purpose. We positively verified all the hypotheses posed in the article.

The practical implications of this article directly relate to the subject under consideration. Enterprises that have implemented CRM systems are current customers for these system providers, thus expanding their knowledge and allowing them to better customise their products and offerings. Enterprises that have not implemented CRM are potential customers for such products, and thus, their suppliers can get some clues about attracting possible beneficiaries.

These considerations also have theoretical implications. They allow for revealing certain phenomena in organisations and mechanisms. We can use this to create universal theoretical business models. The conducted research constitutes a certain contribution to the science of management and quality. It treats CRM as a specific part of enterprise management with a tool-oriented approach. However, we are aware that the research primarily focused on larger enterprises, potentially overlooking the unique challenges and opportunities faced by SMEs. While the research focused on Polish enterprises, the findings may not be fully generalisable to other regions with different economic, cultural, and regulatory environments. Moreover, rapid advancements in CRM technologies mean that some insights may become outdated quickly as new features and capabilities are introduced.

The authors of this article intend to continue using the collected data for further analysis. Their subject of interest may be entities that have not implemented CRM and their motivations and actions. The research identified 142 such entities from the entire research sample. Further work on this research material may include consideration of customer-oriented organisational culture, the correct definition of CRM in an organisation, or the lack of perceived benefits of CRM by entrepreneurs.

REFERENCES

Abbott, J. (2003). Does employee satisfaction matter? A study to determine whether low employee morale affects customer satisfaction and profits in the business-to-business sector. *Journal of Communication management, 7*(4). 333-339. https://doi.org/10.1108/13632540310807467

Abdul-Muhmin, A. (2012). CRM technology use and implementation benefits in an emerging market. *Journal of Database Marketing & Customer Strategy Management 19*, 82-97, https://doi.org/10.1057/dbm.2012.13

Aliyu, O.A., & Nyadzayo, M.W. (2018). Reducing employee turnover intention: A customer relationship management perspective*. Journal of Strategic Marketing*, *26*(3), 241-257. https://doi.org/10.1080/0965254X.2016.1195864

Anshari, M., Almunawar, M.N., Lim, S.A., & Al-Mudimigh, A. (2019). Customer relationship management and big data enabled: Personalization & customization of services. *Applied Computing and Informatics*, *15*(2), 94-101. https://doi.org/10.1016/j.aci.2018.05.004

Arsić, S., Banjević, K., Nastasić, A., Rošulj, D., & Arsić, M. (2018). Family Business Owner as a Central Figure in Customer Relationship Management. *Sustainability*, *11*(1), 77. https://doi.org/10.3390/su11010077

Bai, F., & Qin, Y. (2016). The Implementation of Relationship Marketing and CRM: How to Become a Customer-Focused Organization. *Journal of Business & Economic Policy*, *3*(2), 112-124. https://doi.org/10.30845/jbep

Becker, A. (2018). Wykorzystanie technologii informacyjno-telekomunikacyjnych w przedsiębiorstwach w ujęciu wojewódzkim. Statystyka w społeczeństwie informacyjnym. *Wiadomości Statystyczne*, *3*(682), 69-82. Retrieved from https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-804a6533-8677-4455-96a9-9dad4d1d457f on June 19, 2024.

Becker, J.U., Greve, G., & Albers, S. (2009). The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention. *International Journal of Research in Marketing*, *26*(3), 207-215. https://doi.org/10.1016/j.ijresmar.2009.03.006

Berestetska, O., Iankovets, T., Orozonova, A., Voitovych, S., Parmanasova, A., & Medvedieva, K. (2023). Using Crm Systems for the Development and Implementation of Communication Strategies for Digital Brand Management and Internet Marketing. *International Journal of Professional Business Review, 8*(4), 1-16. https://doi.org/10.26668/businessreview/2023.v8i4.1613

Bohling, T., Bowman, D., LaValle, S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan, R. (2006). CRM Implementation: Effectiveness Issues and Insights. *Journal of Service Research*, *9*(2), 184-194. https://doi.org/10.1177/1094670506293573

Bose, R. (2002). Customer relationship management: Key components for IT success. *Industrial Management & Data Systems, 102*(2), 89-97. https://doi.org/10.1108/02635570210419636

Bull, C. (2003). Strategic issues in customer relationship management (CRM) implementation. *Business Process Management Journal*, *9*(5), 592-602. https://doi.org/10.1108/14637150310496703

Bush, A.J., Moore, J.B., & Rocco, R. (2005). Understanding sales force automation outcomes: A managerial perspective. *Industrial Marketing Management*, *34*(4), 369-377. https://doi.org/10.1016/j.indmarman.2004.09.016

Chang, H.H., Wong, K.H., & Fang, P.W. (2014). The effects of customer relationship management relational information processes on customer-based performance. *Decision Support Systems*, *66*, 146-159. https://doi.org/10.1016/j.dss.2014.06.010

Chromčáková, A., Starzyczná, H., & Stoklasa, M. (2017). The level of selected CRM areas in small and medium sized enterprises in Czech Republic. *Forum Scientiae Oeconomia*, *5*(4), 59-70. https://doi.org/10.23762/FSO_VOL5NO4_17_5

Dalla Pozza, I., Goetz, O., & Sahut, J.M. (2018). Implementation effects in the relationship between CRM and its performance. *Journal of Business Research*, *89*, 391-403. https://doi.org/10.1016/j.jbusres.2018.02.004

Deshmukh, G.K., Mukerjee, H.S., & Prasad, U.D. (2020). Risk Management in Global CRM IT Projects. *Business Perspectives and Research*, *8*(2), 156-172. https://doi.org/10.1177/2278533719887005

Farhan, M.S., Abed, A.H., & Ellatif, M.A. (2018). A systematic review for the determination and classification of the CRM critical success factors supporting with their metrics. *Future Computing and Informatics Journal*, *3*(2), 398-416. https://doi.org/10.1016/j.fcij.2018.11.003

Finnegan, D.J., & Currie, W.L. (2010). A multi-layered approach to CRM implementation: An integration perspective. *European Management Journal*, *28*(2), 153-167. https://doi.org/10.1016/j.emj.2009.04.010

Gartner's Magic Quadrant Reports (2023). Retrieved from https://www.gartner.com/en/documents/4899431 on June 19, 2024.

Guerola-Navarro, V., Oltra-Badenes, R., Gil-Gomez, H., & Iturricha Fernández, A. (2021). Customer relationship management (CRM) and Innovation: A qualitative comparative analysis (QCA) in the search for improvements on the firm performance in winery sector. *Technological Forecasting and Social Change, 169*, 120838. https://doi.org/10.1016/j.techfore.2021.120838

CSO (GUS, 2010). *Społeczeństwo informacyjne w Polsce – Wyniki badań statystycznych z lat 2006–2010.* GUS Warszawa. Retrieved from https://stat.gov.pl/cps/rde/xbcr/gus/nts_spolecz_inform_w_polsce_2006-2010.pdf html on January 5, 2024.

CSO (GUS, 2015). *Nauka i technika. Społeczeństwo informacyjne.* Rocznik Statystyczny Rzeczypospolitej Polskiej 2015. GUS, Warszawa.

CSO (GUS, 2023). *Koniunktura w przetwórstwie przemysłowym, budownictwie, handlu i usługach 2000-2023* (grudzień 2023). GUS, Warszawa.

Ferreira, M.S., Antão, J., Pereira, R., Bianchi, I.S., Tovma, N., & Shurenov, N. (2023). Improving real estate CRM user experience and satisfaction: A user-centered design approach. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(2). https://doi.org/10.1016/j.joitmc.2023.100076

Ismail, H.B., Talukder, D., & Panni, M.F.A.K. (2007). Technology dimension of CRM: The orientation level and its impact on the business performance of SMEs in Malaysia. *International Journal of Electronic Customer Relationship Management*, *1*(1), 16. https://doi.org/10.1504/IJECRM.2007.014423

Jafari Navimipour, N., & Soltani, Z. (2016). The impact of cost, technology acceptance and employees' satisfaction on the effectiveness of the electronic customer relationship management systems. *Computers in Human Behavior*, *55*, 1052-1066. https://doi.org/10.1016/j.chb.2015.10.036

Korzyński, P., Mazurek, G., Altman, A., Ejdsys, J., Kazlauskaite, R., Paliszewska, J., Wach, K., & Ziemba, E. (2023). Generative Artificial Intelligence as a New Context for Management Theories: Analysis of ChatGPT. *Central European Management Journal, 31*(1). https://doi.org/10.1108/CEMJ-02-2023-0091

Krasnikov, A., Jayachandran, S., & Kumar, V. (2009). The Impact of Customer Relationship Management Implementation on Cost and Profit Efficiencies: Evidence from the U.S. Commercial Banking Industry. *Journal of Marketing*, *73*(6), 61-76. https://doi.org/10.1509/jmkg.73.6.61

Kumar, A., Steward, M.D., & Morgan, F.N. (2018). Delivering a superior customer experience in solutions delivery processes: Seven factors for success. *Business Horizons*, *61*(5), 775-782. https://doi.org/10.1016/j.bushor.2018.05.010

Lin, R., Chen, R., & Chiu, K. (2010). Customer relationship management and innovation capability: an empirical study. *Industrial Management & Data Systems*, *110*(1), 111-133. https://doi.org/10.1108/02635571011008434

Macdonald, E.K., Kleinaltenkamp, M., & Wilson, H.N. (2016). How Business Customers Judge Solutions: Solution Quality and Value in Use. *Journal of Marketing*, *80*(3), 96-120. https://doi.org/10.1509/jm.15.0109

Meng, X. (2012). The effect of relationship management on project performance in construction. *International Journal of Project Management*, *30*(2), 188-198. https://doi.org/10.1016/j.ijproman.2011.04.002

Mithas, S., Krishnan, M.S., & Fornell, C. (2005). Why Do Customer Relationship Management Applications Affect Customer Satisfaction?. *Journal of Marketing*, *69*(4), 201-209. https://doi.org/10.1509/jmkg.2005.69.4.201

Nguyen, T.H., & Waring, T.S. (2013). The adoption of customer relationship management (CRM) technology in SMEs: An empirical study. *Journal of Small Business and Enterprise Development*, *20*(4), 824-848. https://doi.org/10.1108/JSBED-01-2012-0013

Nguyen, T.H., Sherif, J.S., & Newby, M. (2007). Strategies for successful CRM implementation. *Information Management & Computer Security*, *15*(2), 102-115. https://doi.org/10.1108/09685220710748001

Özgener, Ş., & İraz, R. (2006). Customer relationship management in small–medium enterprises: The case of Turkish tourism industry. *Tourism Management*, *27*(6), 1356-1363. https://doi.org/10.1016/j.tourman.2005.06.011

PARP (2018). *Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce. 2018*. Warszawa. Retrieved from https://www.parp.gov.pl/publications/publication/raport-o-stanie-sektora-msp-w-polsce-2018?sort=default&term%5B%5D=1&text_search= on January 8, 2024.

Pohludka, M., & Štverková, H. (2019). The Best Practice of CRM Implementation for Small- and Medium-Sized Enterprises. *Administrative Sciences*, *9*(1), 22. https://doi.org/10.3390/admsci9010022

Preece, Ch., Chong, H.Y., Golizadeh, H., & Rogers, J. (2015). A review of customer relationship (CRM) implications: Benefits and challenges in construction organizations. *International Journal of Civil Engineering, 13*(3). https://doi.org/10.22068/IJCE.13.3.362

Reicher, R., & Szeghegyi, Á. (2015). Factors affecting the selection and implementation of a Customer Relationship Management (CRM) process. *Acta Polytechnica Hungarica*, *12*(4), 183-200. https://doi.org/10.12700/aph.12.4.2015.4.11

Reijonen, H., & Laukkanen, T. (2010). Customer relationship oriented marketing practices in SMEs. *Marketing Intelligence & Planning*, *28*(2), 115-136. https://doi.org/10.1108/02634501011029646

Report *CRM market research reports by IDC* (2023). Retrieved from https://www.marketresearch.com/IDC-v2477/CRM-c857/1.html on June 19, 2024.

Report *E-commerce w Polsce 2023* (2023). Retrieved from https://www.gemius.pl/wszystkie-artykuly-aktualnosci/id-79-internautow-kupuje-online-raport-e-commerce-w-polsce-2023-juz-dostepny.html on June 9, 2024.

Rostek, K., Wiśniewski, M., & Kucharska, A. (2012). Cloud Business Intelligence for Smes Consortium. *Foundations of Management*, *4*(1), 105-122. https://doi.org/10.2478/fman-2013-0006

Santouridis, I., & Veraki, A. (2017). Customer relationship management and customer satisfaction: The mediating role of relationship quality. *Total Quality Management & Business Excellence, 28*(9-10), 1122-1133. https://doi.org/10.1080/14783363.2017.1303889

Siu, N. (2016). Customer Relationship Management and Recent Developments. *Administrative Sciences*, *6*(3), 7. https://doi.org/10.3390/admsci6030007

The State of CRM (2023). Retrieved from https://www.salesforce.com/resources/research-reports/state-of-crm/ on June 19, 2024.

Turban, E., Leidner, D., McLean, E., & Wetherbe, J. (2008). *Information Technology for Management Transforming Organizations in the Digital Economy*. 6th Edition. Hoboken: John Wiley & Sons (Asia) Pte Ltd.

Valsecchi, M., Renga, F.M., & Rangone, A. (2007). Mobile customer relationship management: an exploratory analysis of Italian applications. *Business Process Management Journal*, *13*(6), 755-770. https://doi.org/10.1108/14637150710834532

Wach, K. (2020). A Typology of Small Business Growth Modelling: A Critical Literature Review. *Entrepreneurial Business and Economics Review*, *8*(1), 159-184. https://doi.org/10.15678/EBER.2020.080109

Wang, Y., & Feng, H. (2012). Customer relationship management capabilities: measurement, antecedents and consequences. *Management Decision*, *50*(1), 115-12. https://doi.org/10.1108/00251741211194903

Wilson, H., Clark, M., & Smith, B. (2007). Justifying CRM projects in a business-to-business context: The potential of the Benefits Dependency Network. *Industrial Marketing Management*, *36*(6), 770-783. https://doi.org/10.1016/j.indmarman.2005.09.008

Yapanto, L.M., Diah, A.M., Kankaew, K., Dewi, A.K., Dextre-Martinez, W.R., Kurniullah, A.Z., & Villanueva-Benites, L.A. (2021). The effect of CRM on employee performance in banking industry. *Uncertain Supply Chain Management*, *9*(2), 295-306. https://doi.org/10.31219/osf.io/xbjns

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Use of Artificial Intelligence

The authors declare that the text is free of AI/GAI usage.

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