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Original Research Article

Twenty Years of CRM Implementation Research: An Investigation of CRM Critical Success and Failure Factors (CSFs and CFFs)

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The market competition urges companies to invest heavily in Customer Relationship Management (CRM) projects to gain a better understanding of the customers. Nevertheless, the successful implementation of CRM seems to be difficult to achieve. Researches show that less than 30 percent of organizations that implement a CRM technology have seen an improvement in organization performance. Hence, a more than 70 percent rate of failure for CRM projects is an alarm for organizations to provide the required arrangements prior to the CRM implementation. This paper aims to consider two research questions: How has CRM implementation research evolved over the past 20 years? What are the Critical Success Factors (CSFs) and Critical Failure Factors (CFFs) for CRM implementation? To answer these questions, the authors conducted an in-depth review of CRM implementation research for the last 20 years and analyzed the content of 214 selected papers (published from January 2000 to January 2020). Then CSFs and CFFs were classified and prioritized. Finally, the work proposes a covering definition of the success factors based on the literature review. Acknowledging the growth of studies on CRM implementation, this paper presents the latest picture of the discipline and hopes that understanding these 24 CSFs and 15 CFFs would help organizations to obtain the expected benefits of their CRM initiative.

Keywords: Customer Relationship Management (CRM), Critical Success Factors (CSFs), Critical Failure Factors (CFFs), Systematic Literature Review
JEL Classification: M10, M31

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1 Introduction

The challenging atmosphere in the competitive business era turns it a contest for companies to retain their customers. Customer relationship management (CRM) has become more widespread as an important concept in business. It gradually becomes a vital process for all businesses of different sizes and types. This course has developed swiftly due to the contribution of information technologies to business processes. These technologies evolved from simple client lists to sophisticated management systems that can store everything from client demographics and shopping behavior to data gathered from social media.

CRM is not a product or service. In this business strategy, customized and personalized services are provided to the customers in order to develop customer satisfaction and loyalty. By successfully implementing CRM into a company, they will not only benefit from it in the long run, but also increase the benefits of sales through superior market segmentation, superior product quality, customizing services and products, gaining access to employee satisfaction, and above all, ensuring customer loyalty and retention for a long time to come. (Almotairi, 2009). It has been demonstrated that effective implementation of CRM reduces operational costs, improves employee confidence, develops decision-making abilities, and enhances customer satisfaction (Reid and Catterall, 2005).

Since the introduction of CRM systems in the 1990s, the implementation failure rate for CRM projects has been too high. Therefore, many authors and researchers have focused on studying the reasons for failure and highlighting the critical success factors (CSFs) in CRM implementation. The availability of a suitable strategy in the company does not promise its success with CRM. It is vital to have a successful CRM implementation (Bohling et al., 2006).

The purpose of this work is to consider all published papers related to the research questions from 2000 to 2020. Therefore, the formation of this study is based on previous research in the field of CRM success and failure. This study will firstly define a background to illustrate the key issues of CRM implementation. Then, the authors extensively analyzed the content of 214 selected papers to identify the critical success factors (CSFs) and failure factors (CFFs) for CRM implementation. This paper aims to consider two research questions: How has CRM implementation research evolved over the past 20 years? What are the Critical Success Factors (CSFs) and Critical Failure Factors (CFFs) for CRM implementation? The paper finally comes with a discussion about each CSFs.

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2 Background

CRM nowadays assumes developing and maintaining long-term relationships with strategic clients of the company. Furthermore, CRM is a strategic marketing procedure whose aim is to analyze, comprehend, and anticipate consumer expectations. CRM enables a company to identify the most profitable clients, integrate organizational operations, build a competitive edge, and manage marketing campaigns in accordance with the specified goals and targets.

Customers have become more demanding these days, and they will be far less loyal if their needs are not met. Relationships have started growing more sophisticated, and companies could lose their customers if they don't adapt to the new situation generated by the recent COVID-19 pandemic. Thereby, they put their survival at risk if they just stand by (Fernández-Cejas et al., 2022).

Considering the timeline of the CRM concept evolution since the 1990s, the first generation of CRM has arisen and developed from the Sales Force Automation (SFA), and call center management (Kumar and Reinartz, 2008). After 1996, the second generation of CRM took advantage of an integrated customer-facing front end including customer analytics and web integration that in turn led to improvement in customer experience and more customer retention. By 2002, the third generation of CRM (called strategic CRM) was the fruit of moving from transactional marketing to relational marketing, which has dramatically highlighted the importance of the customers' economic value in the long-term. (Kumar and Reinartz, 2008).

2.1 CRM

Even with the widely accepted approach of benefiting from CRM, there is no entirely common and accepted definition for CRM. The reason is that CRM means different things to different people depending on their academic backgrounds and their understanding of CRM (Almotairi, 2008). Parvatiyar and Sheth (2001) believe CRM is a comprehensive strategy and process for maintaining, working with, and recruiting customers to increase customer and corporate value.

CRM is also viewed as the integrated customer management strategy of a firm to efficiently manage customers by providing customized goods and services and maximizing customers' lifetime values (Ko et al., 2008). Terziev and Banabakova (2017) introduced CRM as "an information system designed to manage and improve the service provided to the customer, use its contacts in targeted marketing campaigns, and organize information and interactions with its customers to create loyal customers and thus generate more income".

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This CRM definition highlights the significance of utilizing technology while interacting with consumers.

However, the high rate of CRM implementation failure prevents the expected results of the implementation process. According to Williams et al. (2016), statistics from seven previous studies between 2002 and 2012 found that 20 to 25 CRM efforts were successful. Other articles show that only 30 percent of organizations that implement a CRM technology have seen an improvement in organizational performance (Chang et al., 2010). Hence, the high rate of failure for CRM projects is an alarm for organizations to avoid poor decision-making in CRM investment.

2.2 Critical Success and Failure Factors (CSFs and CFFs)

The development of this methodology was based on the primary work by Daniel (1961), but little attention was gained at the time. Around two decades later, it received more recognition from an article by Rockart (1979). Critical Success Factors (CSFs) is a technique that focuses on identifying those factors that play a crucial role in an organization's success, and their absence might result in failure.

Leidecker and Bruno (1987) define CSF as the characteristics, conditions, or variables that can significantly affect a company in a competing industry provided that the variables, conditions or characteristics are well sustained or managed. Another definition described critical success factors (CSFs) as being necessary and sufficient for a victorious accomplishment; with each factor being important (Frakes and Terry, 1996). According to Al-Khouri (2012), a critical success factor should drive the strategy forward. It should make or break the success of the strategy.

Multiple researchers have attempted to construct an exhaustive list of CSFs that has a direct or indirect effect on CRM implementation (Goodhue et al. 2002; Mendoza et al., 2007; Almotairi, 2009; Cambra-Fierro et al., 2017; Chiguvi et al., 2019). Pan et al. (2007) defined CSFs as “the generic ingredient that has to be the essential part of any successful CRM implementation”. According to Almotairi (2009), CSFs serve as the media through which CRM is analyzed. Chiguvi et al. (2019) stated that these CSFs are the essential components for a successful CRM implementation inside a company.

A CSF can be considered a CFF if certain characteristics enhance the likelihood of failure. However, it should be made clear that not all CSFs are CFFs, and vice versa (Williams and Ramaprasad, 1996). Therefore, this research will address the CSFs and CFFs separately as shown in sections 4.5 and 4.6.

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Despite the large number of descriptions for critical success factors, there is no unified approach or standard procedure that gathers and analyses CSFs (Williams and Ramaprasad, 1996; Croteau and Li, 2003). Therefore, several research papers employ different approaches to discover these factors including interviews, questionnaires, literature reviews of the previous studies, etc. This study conducted an extensive and in-depth review of the CSFs and CFFs for CRM projects in the information technology disciplines as well as business fields to determine the critical factors for the successful implementation of CRM technology.

3 Methodology

Unless a literature review is comprehensive and fair, it is of little scientific value. This is the main rationale for undertaking systematic reviews. A systematic literature review (often referred to as a systematic review) identifies, evaluates, and interprets all available research pertinent to specific research questions, subjects, or phenomena of interest. Systematic literature review in any and all fields, let the researchers stand on the shoulders of giant (Kitchenham, and Charters, 2007).

with the purpose of recognizing the critical success and failure factors (CSFs and CFFs) associated with CRM implementation, this paper follows the guidelines and SLR methodology suggested by Weerakkody et al. (2015) and Taha et al. (2013). The approach introduced five main phases in conducting a systematic review as follows: defining research question(s), identifying research sources, conducting a keyword-driven search, gathering and analyzing data, and addressing research question(s).

3.1 Defining Research Questions

Specifying the research questions is the most important part of any systematic review. The review questions drive the entire systematic review methodology (Kitchenham, and Charters, 2007). It is important for the search and data extraction process to address the research questions. Finally, the review should be reported in such a way that the questions can be answered.

The literature review will base on the two specific research questions that aim to be considered by this paper: How has research on CRM implementation grown over the past two decades? What are the Critical Success Factors (CSFs) and Critical Failure Factors (CFFs) for CRM implementation?

To answer the first question, the publication trends and frequency of papers are analyzed. It illustrates which sources have most influenced the evolution of these areas for the period of 20 years. The second question involved

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examining selected papers in order to compile a list of reasons for CRM project failure (CFFs) and critical success factors (CSFs). The frequency of each factor will be calculated and demonstrated in an organized list.

3.2 Determining Research Sources and Keyword Usage

When the research question is defined, determining the sources is essential in creating the SLR. First, a list of databases was compiled, and afterward, as indicated in Table 1, a number of databases were assigned. The specified databases contain journals and conferences concentrating on CRM implementation, its CSFs, as well as the challenges and barriers associated with the implementation of CRM.

Table 1
The selected databases of research

Database	Address
Elsevier (Scopus, Science Direct)	scopus.com, sciencedirect.com
Emerald	emeraldinsight.com
Springer	link.springer.com
IEEE Xplore	ieeexplore.ieee.org
Taylor & Francis	tandfonline.com
SAGE	journals.sagepub.com
Wiley	onlinelibrary.wiley.com

Source: Research Findings

This work aims to consider all published papers related to the research questions from 2000 to 2020; hence, the date boundaries were put between January 2000 to January 2020. The search among selected databases' publications brings about a plentiful list of possible studies. A keyword-based search was applied to filter databases to look for more relevant papers to the research questions. The sources were refined by adding AND/OR operator. The selected search terms are:

- [“critical success factors” OR “success factor”] AND [“customer relationship management” OR “CRM” OR “CRM Systems” OR “CRM implementation” OR “CRM successful implementation”]
- [“critical failure factors” OR “failure factors” OR “failure” OR “risk factors” OR “challenges” OR “issues” OR “barriers” OR “problems”] AND [“customer relationship management” OR “CRM” OR “CRM

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Systems" OR "CRM implementation" OR "CRM successful implementation"]

3.3 Inclusion and Exclusion Measures

With the keywords to refine the publications, related papers are categorized as "studies found". Assessment of the paper's title will be the next phase. If the title is insufficient to determine whether or not a paper is a possible candidate, the abstract is then reviewed. If the paper's title and abstract are a good fit for the research questions, it will be downloaded for further study as "candidate studies". All of these publications will be thoroughly examined to determine if they answer the research question. These articles will be included in the research as "selected studies".

The exclusion measures were established to achieve qualified literature from trusted sources. The exclusion criteria for selecting the papers related to this review are:

- papers whose titles and abstracts were not related to the review focus
- papers whose topics were focused on information systems other than CRM
- papers whose other sections were not related to the scope of this review
- duplicate papers of the same study appeared in different sources

Based on the titles and keywords, the very first searches were refined to 8,200 publications. Then, based on the abstracts, 520 papers were examined to compile a list of 214 relevant papers for the final review including 194 journal papers and 20 conference papers published in conference proceedings.

4 Results and Discussions

At this phase of the SLR process, the paper extracts data through the selected studies to answer research questions and the purpose of this research.

4.1 Research Trends

The frequency of research published from 2000 to 2020 is illustrated in figure 1. As shown in this figure, the most productive years are 2003, 2004, 2005 which covers 28.5% of the published papers in two decades by 60 research papers out of 214.

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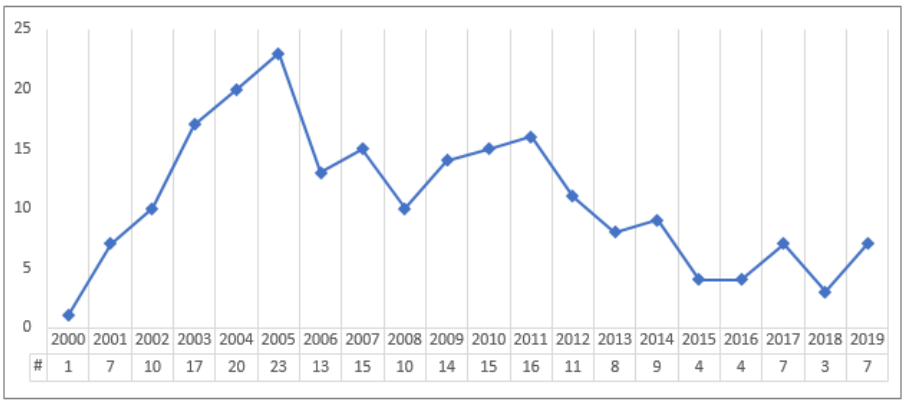

Figure 1. Frequency of published research from 2000 to 2020
Source: Research Findings

4.2 Research Types and Databases

The selected papers include both journal papers and conference papers. Among all the journals and conferences considered in this review, the name, type, number, and percentage of 32 sources with a frequency of 2 and more are shown in Table 2. These 32 sources count for 131 papers and 61.2% of all the selected papers. Each of the remaining sources, (including 69 journals and 14 conferences) has the frequency of 1 paper and covers the remaining 83 papers and 38.8% of all the selected papers in this review.

Table 2
Frequency of sources – Journal/conference

Name	Type	#	%
Journal of Database Marketing & Customer Strategy Management	Journal	13	6.07 %
Industrial Marketing Management	Journal	11	5.14 %
Journal of Personal Selling and Sales Management	Journal	9	4.21 %
Business Process Management Journal	Journal	8	3.74 %
Industrial Management & Data Systems	Journal	7	3.27 %
Journal of Strategic Marketing	Journal	7	3.27 %
European Management Journal	Journal	6	2.8 %
Decision Support Systems	Journal	5	2.34 %
Journal of Business Research	Journal	5	2.34 %
Journal of Marketing	Journal	5	2.34 %
Journal of Marketing Management	Journal	5	2.34 %
Hawaii International Conference on System Science	conference	4	1.87 %
International Journal of Electronic Customer Relationship Management	Journal	4	1.87 %
Expert Systems with Applications	Journal	3	1.4 %
International Journal of Information Management	Journal	3	1.4 %
The Service Industries Journal	Journal	3	1.4 %

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Name	Type	#	%
Total Quality Management & Business Excellence	Journal	3	1.4 %
European Journal of Marketing	Journal	2	0.93 %
Information & Management	Journal	2	0.93 %
International Conference on E-Business and E-Government	conference	2	0.93 %
International Journal of Contemporary Hospitality Management	Journal	2	0.93 %
Journal of Business & Industrial Marketing	Journal	2	0.93 %
Journal of Computer Information Systems	Journal	2	0.93 %
Journal of Information Technology Case and Application Research	Journal	2	0.93 %
Journal of Interactive Marketing	Journal	2	0.93 %
Journal of Management Studies	Journal	2	0.93 %
Journal of Marketing Research	Journal	2	0.93 %
Journal of Retailing and Consumer Services	Journal	2	0.93 %
Journal of Service Research	Journal	2	0.93 %
Journal of Services Marketing	Journal	2	0.93 %
Marketing Intelligence & Planning	Journal	2	0.93 %
Performance Improvement Quarterly	Journal	2	0.93 %
Total (out of 214)		13	61.2 %

Source: Research Findings

All of these researches were carefully chosen from selected databases of research that are shown in figure 2 by their names and frequency. Elsevier and Emerald have published more than half of all the research on the subject of CRM implementation success for the last two decades.

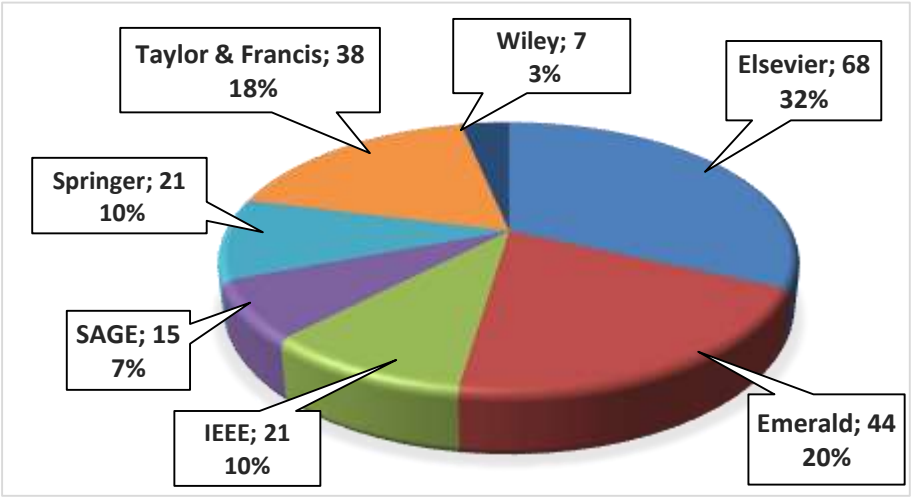

Figure 2. Frequency of research – Database
Source: Research Findings

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4.3 Productive Authors and Institutes

Analyzing the data about authors shows that there are a total of 469 authors contributing to the 214 selected papers. These authors are affiliated with 277 institutes/universities or companies from 42 countries. Some authors changed their affiliations in different papers. A detailed review of the authors' contributions, corresponding institutes, and their countries can be seen in figure 3, Table 3, and Table 4.

Figure 3 shows the name, frequency, and percentage of contribution for 13 authors (out of 469) who worked on 3 research papers and more. These prolific authors appear in 21% of selected papers for this review. 39 other authors contributed to writing 2 papers each, and the rest of 417 authors' names contributed to writing 1 paper each.

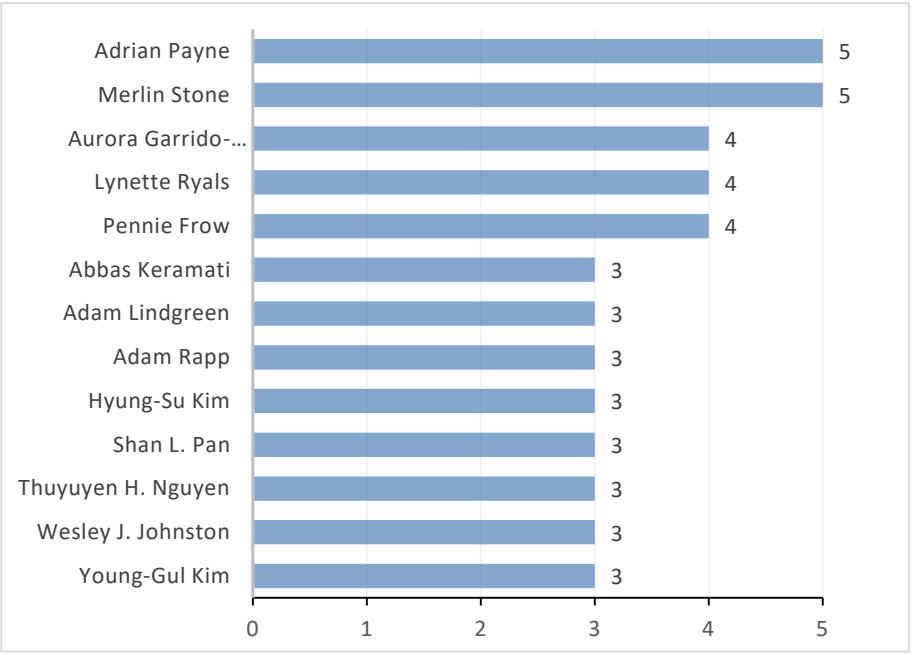

Figure 3. Most prolific authors (contributing to 3 or more papers)
Source: Research Findings

Among all 277 institutions contributing to research about CRM implementation, the most productive ones are Cranfield University (UK) with the frequency of 21, followed by Korea Advanced Institute of Science and

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Technology (Republic of Korea), and the University of Tehran (Iran) with the frequency of 9 each.

Table 3 shows the name, frequency, and percentage of the contribution for the 31 most productive institutions (out of 277) that are mentioned as authors' affiliations with a frequency of 4 and more. These productive institutions appear in 33% of affiliations for this review. 22 other institutions were mentioned with a frequency of 3. Some other 71 institutions were mentioned with a frequency of 2, and the rest of 153 institutions were referenced with a frequency of 1 each.

Table 3
Most productive institutions

Name	**Frequency**	**Percentage**
Cranfield University	21	3.9
Korea Advanced Institute of Science and Technology	9	1.67
University of Tehran	9	1.67
National University of Singapore	8	1.48
Georgia State University	7	1.3
University of Georgia	7	1.3
Athens University of Economics and Business	6	1.1
Eindhoven University of Technology	6	1.1
University of Malaga	6	1.1
American University of Sharjah	5	0.93
California State University	5	0.93
Cleveland State University	5	0.93
Curtin University of Technology	5	0.93
Drexel University	5	0.93
IBM	5	0.93
National Institute of Industrial Engineering	5	0.93
University of Maribor	5	0.93
University of Melbourne	5	0.93
University of Technology Malaysia	5	0.93
Brunel University	4	0.74
Iran University of Science and Technology	4	0.74
Miami University	4	0.74
National Chung Cheng University	4	0.74
Northumbria University	4	0.74
Universidad Simón Bolívar	4	0.74
University of Leeds	4	0.74
University of Nebraska-Lincoln	4	0.74
University of Pisa	4	0.74
University of Southampton	4	0.74
University of St. Gallen	4	0.74
University of Strathclyde	4	0.74

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Name	Frequency	Percentage
Total references (for 277 institutions) out of 538	177 times	32. 9

Source: Research Findings

Analyzing authors' affiliations according to countries is illustrated in Table 4. Among all 42 countries whose institutions and the authors' names are mentioned in research about CRM implementation, the most frequencies belong to the USA (144 times) and UK (93 times) followed by Australia (27), the Republic of Korea (27), and Iran (23). The first two countries on the list were totally mentioned 237 times and 43.8% of all selected papers.

Table 4
Authors' affiliations by countries

Name	Frequency	Percentage
USA	144	26.6 %
UK	93	17.2 %
Australia	27	5 %
Korea	27	5 %
Iran	23	4.2 %
Taiwan	17	3.1 %
Netherlands	16	3 %
Spain	14	2.6 %
China	11	2 %
Germany	11	2 %
India	11	2 %
Portugal	11	2 %
France	10	1.9 %
Greece	10	1.9 %
Malaysia	10	1.9 %
Hong Kong	9	1.7 %
Singapore	8	1.5 %
Turkey	8	1.5 %
Switzerland	7	1.3 %
Brazil	6	1.1 %
UAE	6	1.1 %
Slovenia	5	0.92 %
Denmark	4	0.74 %
Ireland	4	0.74 %
Italy	4	0.74 %
Jordan	4	0.74 %
Sweden	4	0.74 %
Venezuela	4	0.74 %
Bahrain	3	0.55 %
Canada	3	0.55 %

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Name	Frequency	Percentage
Israel	3	0.55 %
New Zeland	3	0.55 %
Saudi Arabia	3	0.55 %
Scotland	3	0.55 %
South Africa	3	0.55 %
Thailand	3	0.55 %
Lebanon	2	0.37 %
Lithuania	2	0.37 %
Mexico	2	0.37 %
Finland	1	0.18 %
Malta	1	0.18 %
Norway	1	0.18 %
Total: 42 countries	541	100 %

Source: Research Findings

4.4 Keyword Analysis

Analyzing 746 keywords showed that there are plenty of keywords regarding the research issue, method of research, industry, country in which the research has been conducted, etc. The 33 keywords with a frequency of 4 and more are shown in Table 5 as frequently used keywords by authors. Among data extracted from 214 papers in 7 databases, Customer Relationship Management (CRM) is the most frequently used keyword (144 times) followed by Critical Success Factors/CSFs/Success Factors (22), Information technology /IT (19).

The most frequently referred industry among the selected papers is the bank/banking sector (7 times) followed by Hotel Industry (6). Furthermore, case study (6) and Structural Equation Modeling/SEM (5) are among the top keywords as shown in Table 5.

17 other keywords were referred by the frequency of 3. Some other 31 keywords were mentioned with a frequency of 2, and the rest of 665 keywords were referenced with a frequency of 1 each.

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Table 5
Frequently used keywords by authors

Name	Frequency	Percentage
Customer Relationship Management/CRM	135	35.5 %
Critical Success Factors/CSFs/Success Factors	22	5.7 %
Information technology/IT	19	5 %
Customer relations	14	3.7 %
Relationship Marketing	14	3.7 %
Knowledge management /KM	13	3.4 %
Information system/IS	12	3.1 %
CRM implementation	11	2.9 %
Performance/Performance measurement	10	2.6 %
Implementation	9	2.3 %
Bank / Banking sector	7	1.8 %
Small and medium enterprises/SMEs	7	1.8 %
Strategy/Strategic management	7	1.8 %
Adoption/Adoption process	6	1.5 %
business process/business process reengineering/BPR	6	1.5 %
Case study	6	1.5 %
Customer satisfaction	6	1.5 %
Customer service management	6	1.5 %
ERP/ERP implementation	6	1.5 %
Hotels/Hotel industry	6	1.5 %
Change management	5	1.3 %
CRM strategy	5	1.3 %
Customer orientation	5	1.3 %
Factors/Factor Analysis	5	1.3 %
Structural Equation Modeling/SEM	5	1.3 %
Technology/Technology management	5	1.3 %
CRM success	4	1.0 %
Customer relationships	4	1.0 %
Integration	4	1.0 %
Management	4	1.0 %
Organizational learning	4	1.0 %
Organizational performance	4	1.0 %
Social media	4	1.0 %
Total: 33 frequent keywords	380 times	100 %

Source: Research Findings

4.5 Critical Success Factors (CSFs) for CRM Implementation

As mentioned in the methodology, after the keyword-based search and refining of the result by search operators, then inclusion and exclusion measures were put to reach the 214 selected papers. To extract the CSFs and CFFs related to the implementation of CRM systems, as the fourth step in conducting a Systematic Literature Review (SLR), the contents of all 214

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selected papers were analyzed. Some of them referred to the CSFs and CFFs directly, while others needed to be fully examined to uncover the purpose of the context. All the research was deeply reviewed to mark the factors by any labels or definitions.

The 24 most accepted CSFs are listed in Figure 4. As it is shown, "top management support" is the most referred factor followed by "Information Technology and System" and "Organizational Culture and Structure".

Figure 4. CSFs for CRM implementation
Source: Research Findings

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4.6 Critical Failure Factors (CFFs) for CRM Implementation

Considering the selected papers for this review, the Critical Failure Factors (CFFs) are much less noticed by authors than Critical Success Factors (CSFs). Figure 5 illustrates the 15 frequently used CFFs extracted from selected papers. Some factors are not mentioned due to their low frequency, such as "Lack of benchmarking of similar organizations" and "CEO's age".

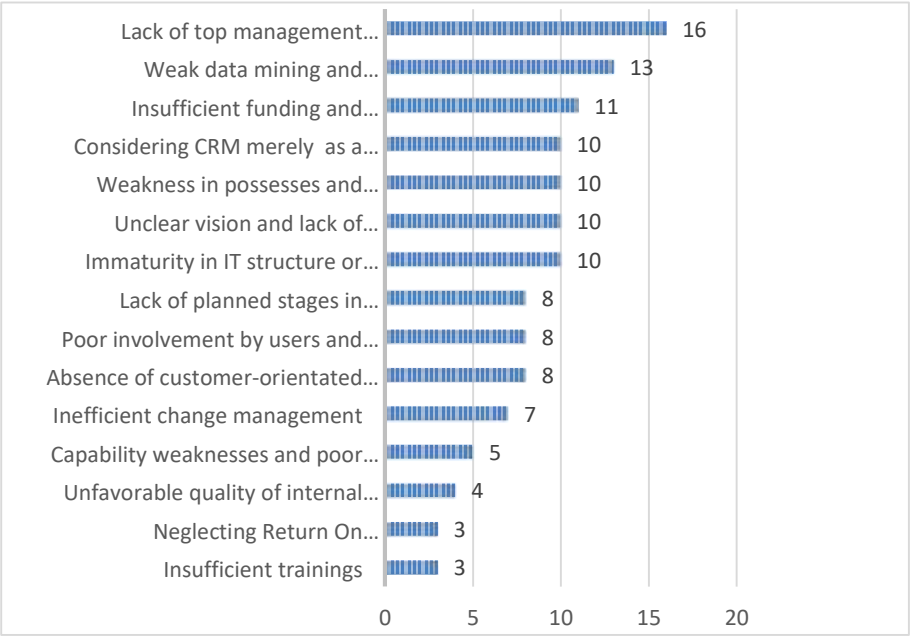

Figure 5. CFFs for CRM implementation
Source: Research Findings

4.7 Success Factors Explained By Previous Studies

A short explanation of the CSFs can help to understand how they are related to the CRM implementation by the previous research. The list of Critical Success Factors has been explained in their order of importance;

1) *Top management support*: This factor concentrates on the commitment and readiness of senior management to allocate adequate resources for CRM implementation initiatives. In terms of business planning, visioning, and goal-setting, top managers possess remarkable impact and authority.

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(Kurnia et al., 2019). Therefore, their involvement will greatly influence the company's CRM implementation success (Croteau and Li, 2003).

2) *Information Technology and System*: CRM essentially acts as an information management tool that is practiced to generate, characterize, store, represent, reproduce and translate information. It reveals the impact of information technology on organizational performance (Rafiki et al., 2019).
3) *Organizational Culture and Structure*: means an organization's ability to transform into a customer-oriented company and to consider applying CRM as the philosophy all over the company (Askool and Nakata, 2010). Organizations can exhibit a customer-centric culture in various ways including creating awareness about customer orientation, rewarding employees for customer satisfaction, etc. (John, 2017). Organizational culture can affect organizational readiness to implement CRM activities (Dah, et al., 2021).
4) *Incentives and Training*: can be defined as having qualified personnel and the capability to deliver training programs for CRM implementation (Da Silva and Rahimi, 2007). This includes suitable changes in the organizational incentive system, and proper training of employees (John, 2017).
5) *Data Quality and Data Management*: This element concentrates on data collection and analysis to get qualified information about customers (Almotairi, 2009). Then, data mining begins to work. Data mining will provide definitions for all information about customers (Mendoza et al., 2007).
6) *Clear vision/aim definition*: Without a clear identification of objectives, it is difficult to manage a CRM project or to classify project results as being successful (Pedron et al, 2016). Because they will have a significant impact on the implementation project's scope and will be closely tied to the project's budget and timeframe, goals and objectives must be defined clearly (Roberts et al., 2005).
7) *CRM Strategy*: Focuses on the formalization of a strategy, consistent with corporate business strategy, for steering the creation of value through CRM (Zerbino et al., 2018). Before adopting CRM systems, organizations must set their objectives for their adoption and they need to change their corporate strategy to focus more on the customer (Pedron et al, 2016).
8) *Knowledge Management*: Knowledge management is crucial to the success of CRM implementation. The knowledge must be created/found/gathered, communicated, and also used effectively (King

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and Burgess, 2008). Understanding CRM as a philosophy combined with a proper KM guarantees success in managing business relationships. (Cambra-Fierro et al., 2017).

9) *Inter-functional communication and interaction*: Inter-department integration is necessary to follow the organizational goals and the CRM implementation's objectives to finally succeed in CRM implementation project (Askool and Nakata, 2010). All the departments should work integrated into a CRM perspective (Mendoza et al., 2007).
10) *Evaluation and Feedback*: refers to supervising, controlling, and building measurement tools that are being used to measure the CRM implementation's performance, the implementation's impact on the business, and to have an appropriate feedback channel (Da Silva and Rahimi, 2007). Without the willingness of employees to provide feedback, technology is not very useful (Cambra-Fierro et al., 2017).
11) *Staff involvement and commitment*: To achieve the desired CRM outcomes general managers need to involve employees from different levels. All employees should be involved and engaged in the CRM project based on a two-way commitment (Rahimi, 2017).
12) *Organizational Process and process reengineering*: The integration of CRM technology in an organization includes the integration with existing IT system, and organizational business processes (Richard et al., 2007).
13) *Change Management*: Implementation of CRM needs to roll out an enterprise-wide program of change management to ease the transformation of the organizational culture into a customer-centric one (Faed et al., 2010). However, this transformation cannot be accomplished just by senior managers. Instead, every employee in the organization must engage (Roberts et al., 2005).
14) *Resource Allocation (Budget and Time)*: CRM implementation success is tied to adequate resources since it is a complicated and lengthy project that engages lots of end-users/staff/employees (Salomann et al., 2005).
15) *Appropriate software/provider selection*: System acceptance occurs if users are confident in the system's performance and dependability, and if the relevant testing phase has been completed (Da Silva and Rahimi, 2007). A solid relationship and complete support from vendors influence the effectiveness of CRM implementation since they foster the solutions of implementation-related issues (Kim and Kim, 2007). The application complexity can even affect CRM system quality indirectly (Suoniemi et al., 2022)

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16) *Project Management*: Due to their extensive impression, CRM projects require to be justified and it seems traditional assessment techniques are invalid for this kind of project (Wilson et al., 2007). In order to reduce the project's complexity, a project team needs personnel with a multidisciplinary background (Mendoza et al., 2007).
17) *Consultants/customers involvement*: SME's reliance on external parties is necessitated by their inability to effectively execute projects due to a lack of personnel, experience, and knowledge. The support of consultants and vendors, as well as their readiness to engage with SMEs, is deemed essential for the effective implementation of CRM (Kurnia et al., 2019). This component also emphasizes customer involvement and communication development. An organization will learn what, who, and how its customers are in order to make them loyal customers (Almotairi, 2009).
18) *Segmentation*: This factor in CRM implies the development of different marketing strategies to target distinct customer segments defined according to their value, needs, and customer lifecycle stages (Dalla Pozza et al., 2018). The focus of CRM is on a niche of customers rather than on the market segment as a whole (Galvao et al., 2018).
19) *CRM Champion*: this is the extent to which a champion or a top-level sponsor advocates CRM to ensure support and resources (Zerbino et al., 2018). A champion is a dependable person in whom all personnel have trust regarding CRM implementation (King and Burgess, 2008).
20) *Customer Satisfaction Measurement*: Refers to frequently and systematically measuring customer satisfaction, and responding quickly to negative customer satisfaction wherever it may occur (Jaber and Simkin, 2017).
21) *Willingness and tendency to share data*: Departmental practices need to be in place for directing how customer-level data are shared with those involved in the decision-making process. Unfortunately, information sharing between sales and marketing is often limited even though it improves performance (Peltier et al., 2013)
22) *Marketing/Sales/Service Automation*: Few scholars have analyzed the variety or effect of CRM features, such as Sales Force Automation, Customer Service Functions, and Marketing Automation (Richard et al., 2007). Internal clients must count on the best support possible in order for their job to translate into benefits for the clients (Mendoza et al., 2007).
23) *Organization size*: Larger organizations are more likely to adopt innovations because they have good risk management abilities, are

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relatively more resource-endowed, and have stronger infrastructural foundations (Abdul-Muhmin, 2012).

24) *Software customization*: This factor has also been identified as an influential CSF in the success stories analyzed. It means the vendor is willing and able to modify the software based on their company's specific needs without introducing significant additional costs (Kurnia et al., 2019). CRM system capability and quality mediate the effects of firm-level IT capability on organizational productivity gains and productivity gain discrepancy (Suoniemi et al., 2021).

5 Conclusion

The economic recovery after the COVID-19 pandemic drives businesses to reestablish their relationship marketing and recapture the customers' attention. There will be an intense competition to retain and expand market share as the customers flood the markets with discretionary incomes and savings. Utilizing CRM helps businesses to identify the real value of their customers and improve the management of their top clients.

These strategic opportunities will emphasize customer retention to the greatest extent possible. Relationship marketing and customer relationship management (CRM) are crucial tools that organizations utilize in these attempts, while information technology can facilitate the comprehensive realization of customer strategies. Knowing the Critical Success/Failure Factors will pave the way for companies to profit from emerging market opportunities.

The motivation of this research is to conduct a structured approach to systematic literature review (SLR) to present one of the most comprehensive updates at the time. Given the wide coverage of the databases analyzed, further review was done to include the best relevant papers to the objectives of the study. Non-relevant literature (such as ERP-focused research) was excluded for more reliable results. Other sources such as master and doctoral theses, reports, chapters, and cases, were not included.

This paper managed to extract 15 CFFs and 24 CFSs identified after examining 214 selected papers in the field. It aims to benefit not just scholars in their research of CRM implementation, but also practitioners in the field.

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