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# Social CRM in SMEs: A Systematic Literature Review

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#### Abstract

Small and medium-sized enterprises (SMEs) are the prime movers of economic progress. The pace of digital disruption enables SMEs to innovate and flourish by strategically combining social media use with customer engagement activities. In recent academic literature, this innovation phenomenon has been acknowledged as social customer relationship management, namely social CRM. Thus, given the importance of SMEs in the world economy and capability of social media to create business value, this paper aims to determine the status quo of research on social CRM adoption in SMEs and reveal any interpretable trends and patterns. This study contributes to theory and practice by systematically reviewing 22 articles published between 1 January 2014 and 30 April 2020. Using a CRM system life-cycle model proposed by Bibiano and Pastor [1], articles are classified according to the CRM life-cycle phases: adoption decision, acquisition, implementation, use and maintenance, evolution, and retirement.

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Keywords: Social Customer Relationship Systems; Social CRM Systems; SMEs

#### 1. Introduction

Small and medium-sized enterprises (SMEs) are a focal point in the structure of the world economy and make an essential contribution to the socio-economic development in multiple geographic regions and countries [2]. In

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accordance with global research report [3], titled 'Growing the Global Economy through SMEs', SMEs account for more than 95% of the business landscape worldwide. And they have a key role in ensuring economic health in both high and low income countries by reducing the unemployment problem as well as contributing to a gross domestic product (GDP) [3]. Specifically, according to the latest 'OECD SME and Entrepreneurship Outlook' [4], countries belonging to the Organization for Economic Co-operation and Development (OECD) are among those with the highest SME share of total enterprises, accounting for approximately 99% of all businesses and up to 60% of value-added. Likewise, the report of the annual 'Asia SME Finance Monitor' (ASM), published by the Asian Development Bank [5], reveals that micro small and medium firms account for an average of 96% of all enterprises and 62% of total employment across the 20 ASM countries in Asia and the Pacific, whilst contributing only 42% of the GDP on average. These macroeconomic indicators suggest that the value-added contribution produced by SMEs varies considerably between regions and countries. Whilst, SMEs play a vital role in generation of employment, they still need higher investment in skills, innovation and technology to further support inclusive growth, eliminate inequalities and mitigate the wage-productivity gap [5]. In order to accomplish this mission in today's global and ultra-competitive business environment, small firms are urged to maintain an appropriate balance between exploratory and exploitative processes [6] to enable dynamic capabilities. Thus, besides everything else, SMEs need to upgrade their technology stack, improve their strategic-leadership skills, and enhance their methods of data collection and analysis. In this context, social media phenomena facilitates numerous value creation opportunities for entrepreneurship and startups to innovate and flourish, as they now acquire unprecedented scope to adopt and exploit digital and emerging technologies to develop and implement innovative business models and extract business value from the social web (e.g. [7-9]). Moreover, due to the rising focus on customer engagement, social networking platforms and evolution from an "information asymmetry" to an "information democracy" [9], more and more SMEs will choose to adopt various social CRM technologies, namely social listening, social monitoring, social sales and marketing automation, community and collaboration, fan marketing and profile management tools to name a few [9].

According to the latest market research published by Global Industry Analysts, Inc. [10], overall global social CRM market is expected to grow by \$204.3 billion, with a compound annual growth rate (CAGR) of 52.8%. Consequently, in both academia and industry, social CRM has received increasing attention over the years. The amount of research being done in this domain is continuously increasing. More specifically, a number of social CRM literature reviews have been conducted (e.g. [11, 12]). These studies aimed to elicit the existing academic knowledge with particular emphasis on adoption factors and performance outcomes from a general point of view. On the contrary, inspired by Yawised, Ellis, and Wong [13], this paper attempts to view social CRM as a continuous multiple-stage process. In addition, given the importance of SMEs in the world economy, we determine SMEs as a unit of analysis in our study. Meanwhile, the existing research (e.g. [14, 15] suggests that small-sized organizations adopt and use social CRM differently in contrast to large-sized entities. Thus, special attention will be given to SMEs. In order to address this challenge, we adopted the CRM system life-cycle proposed by Bibiano and Pastor [1], which is based upon a previous model developed by Esteves & Pastor [16] for the classification of innovative IS research. More specifically, it allows to systematically review literature according to the life-cycle phases: adoption decision, acquisition, implementation, use and maintenance, evolution, and retirement. These are phases through which the CRM system goes during its lifespan. It is important to note that with this classification, we sought to cover the entire chain of social CRM life-cycle from the perspective of organization.

The objective of this paper is to present a systematic literature review and determine the extent to which the field of social CRM in SMEs research, published between 1 January 2014 and 30 April 2020, reveals any interpretable trends and patterns. The remainder of this paper is divided into four additional sections. First, we introduce research methodology and classification framework in Section 2. In Section 3, we draw on a model proposed by Bibiano and Pastor [1] to cogitate on the six phases of the CRM life-cycle and to present our main insights. Thereafter, discussion and avenues for future research are introduced in Section 4. In Section 5, we offer our conclusions and discourse on the practical research implications.

## 2. Research methodology

#### 2.1. Systematic literature review

The body of scientific knowledge builds on previously identified research gaps [17, 18]. The literature review is an important research method and essential for identifying empirical gaps and for developing proposals to guide future research [18]. This method permits to conduct incremental research by consolidating what is already known in a particular research discipline [19]. In their article 'Understanding the Role and Methods of Meta-Analysis in IS Research', King & He [17] introduced several techniques to literature review (Figure 1) and clearly acknowledged the meta-analysis as the most widely used research synthesis method in social sciences. Therefore, in this paper, we sought to review studies in a rigorous and quantitative manner by using meta-analysis. In comparison to qualitative research, meta-analysis is considered to be more accurate and credible [17]. Meta-analysis has also been most commonly accepted as much less judgmental and less exposed to subjectivity than other methods [17].

Qualittive	Narrative	Descriptive	Vote	Meta	Quantitative	
	Review	Review	Counting	Analysis		
<					>	

Fig. 1. Literature review methods on a qualitative-quantitative continuum Adapted from King and He [17].

Furthermore, our classification process was guided by the taxonomy-development method [20], wherein the CRM life-cycle model adopted in this research serves as a foundation. To ensure structured and pre-defined process, we followed the fundamental instructions for conducting literature review and specified the temporal and contextual boundaries on our research [19]. Whereby, as a contextual boundary, this paper reviews SMEs as the unit of analysis. Likewise, we use a timeline as a temporal limitation and present a systematic review of the academic literature published between 1 January 2014 and 30 April 2020.

The primary purpose of this paper is to present a comprehensive structured literature review, in order to aggregate empirical findings related to social CRM adoption among SMEs, help practitioners and researchers to make sense of rapidly expanding research domain and develop proposals for future research directions.

#### 2.2. The process of literature identification

The process of literature searching, and identification adopted in this review involved scanning by topic across major electronic databases. The search was conducted in the following electronic databases such as IEEE Xplore Digital Library, AIS Electronic Library (AISeL), ACM Digital Library, ScienceDirect and Google scholar. According to Schryen [18] these databases are among the most common for IS literature reviews, and contain topics related to information and communication technology. Subsequently, our research strategy was guided by a phased study selection process (Figure 2) adopted from Dybå and Dingsøyr [21]. In phase 1, we performed a multiple full-text database searches using different sets of keywords, such as 'Social Media', 'Social CRM', 'SME' and phrases such as 'Social Media Management', 'Social Customer Relationship Management', 'Small and Medium-Sized Enterprises', and possible word combinations of a given theme. This search strategy resulted in 53 manuscripts. In phase 2, the initial list of papers was subject to filtering based on titles, wherein the remaining 32 articles were kept for further assessment in the next phase. Subsequently, additional verification was done to eliminate papers if their focus was not related to SMEs in phase 3. This step excluded ten articles and has led to 22 articles eligible for further evaluation. The final phase involved empirical research evidence and research methodologies assessment as suggested by Dybå and Dingsøyr [21]. In total, 22 articles were considered for classification and further systematic analysis.

•	Stage 1	Identify relevant studies - search databases and conference proceedings	N = 54
 	Stage 2	Exclude studies on the basis of titles	N = 33
į Į	Stage 3	Exclude studies on the basis of abstracts	N = 23
     	Stage 4	Obtain primary papers and critically appraise studies	N = 22

Fig. 2. Stages of literature selection process. Adapted from Dybå & Dingsøyr [21].

#### 2.3. Classification framework

The social CRM phenomenon is still comparatively new and hence, classification schemes are vague and challenging. In order to keep accord with previous research, the sample articles were classified according to the CRM system life-cycle proposed by Bibiano and Pastor [1] and based upon a previous model developed by Esteves & Pastor [16], which has been used extensively in enterprise resource planning systems research (e.g. [22-24]). According to scholars, a well-defined cycle (Figure 3) serves as a solid foundation for researchers to propose future research agendas around CRM systems, as well as envision more specific research themes. This approach was previously adopted by Paulissen et al. [25] to review systematically the status of the traditional CRM. In addition, we mapped the results into a concept matrix [19] according to the following dimensions: research theories and frameworks, publications per year, research method and time orientation. The latter dimensions are presented in the Appendix at the end of the paper.

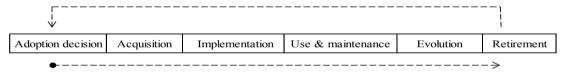


Fig. 3. CRM life-cycle model. Adapted from Bibano & Pastor [1].

#### 3. Findings

In this section, we report the coding results of our study based upon the research methodology and classification framework adopted in Section 2. This is to illustrate a knowledge synthesis that leads to identifying common themes and major areas of current research activity related to Social CRM in SMEs. Selected publications are being structured and categorized according to the various phases in the life-cycle model, proposed by Bibiano and Pastor [1], as shown in Figure 4.

Adoption Decision Phase. The adoption phase is the first stage of the CRM system life-cycle and encompasses a sequence of project-related activities such as strategic planning and environmental analysis, evaluation of critical business requirements and needs for adopting a CRM system, cost-benefit analysis as well as feasibility study in order to ascertain the likelihood of completing the project successfully.

Main topic researched. Several papers discussed social CRM adoption drivers in SMEs from different angles, albeit our findings illustrate the majority of scholars (e.g. [26-28]) were inspired by an extended Diffusion of Innovation (DOI) theory and Technological, Organizational and Environmental (TOE) framework as a theoretical lens in order to explore social CRM adoption among SMEs from an organization perspective. By proposing the Technology-Organization-Environment-Process (TOEP) adoption model, wherein additional information process factors enhance the traditional TOE adoption model, researches [26, 29] concluded that technological factors, such as cost of adoption, compatibility, complexity, and relative advantages have a positive association with social CRM adoption in Malaysian SMEs context. Furthermore, a significantly positive correlation has been reported between the adoption of social CRM and government support, competitive pressure and customer pressure. Likewise, the above studies revealed that IT/IS knowledge of employees and top management support, information capture, information

sharing, and information use have an effective influence on the adoption of social CRM. Similarly, a study by Hasani et al. [27] proposed and tested the model that hypothesizes the effects of environmental, technological, and organizational factors together with managerial characteristics on start-up companies' intention to adopt social CRM. This study concluded that compatibility, observability, perceived advantage elements, coupled with triability of social CRM solutions have a significant relationship to social CRM adoption in Malaysian SMEs. Furthermore, drawing upon aspects of the Technology Acceptance Model (TAM) and Technological, Organizational and Environmental (TOE) framework, another empirical study [30] proposed a framework to predict the adoption of social CRM in the context of Iranian SMEs. Meanwhile, a case study by Dewnarain, Ramkissoon, and Mavondo [31] sought to investigate potential benefits and key barriers associated with the implementation of social media application in the hospitality industry in Mauritius, east of Madagascar. This study has revealed that factors such as initial setup costs, trust, and lack of control may act as critical barriers in the adoption of social CRM strategy in the hospitality industry. Likewise, an exploratory study by Marolt et al. [28] attempted to investigate the tricky research phenomenon of social CRM adoption in Slovenian B2C SMEs context. In accord with previous research, this study integrated DOI theory with the TOE framework to discover the antecedents that influence the intensity of social CRM adoption in SMEs. In some studies [13, 32], scholars acknowledged that the key objectives for social CRM adoption by SMEs were increasing company's brand awareness, building trust-based relationships with customers and increasing customer engagement and interaction. In addition, these findings implied that social CRM adoption in Australian companies has been somewhat superficial and typically not focused on formal integrated strategy and policy framework.

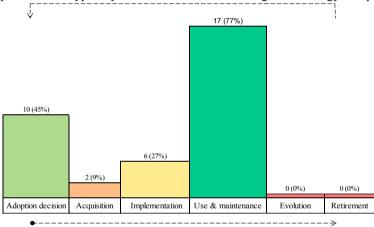


Fig. 4. Number of articles per CRM life-cycle phase.

Acquisition Phase. The second phase in the CRM system life-cycle corresponds to a sequence of project-related activities such as vendor and product evaluation, implementation consultant evaluation and analysis of the company's current tech stack.

Main topic researched. Few studies discussed methods of sourcing and implementing techniques in the context of social CRM in SMEs. The results of these studies [13, 32] signal a clear preference and reliance by Australian SMEs on leveraging in-house methods and resources for social CRM implementation. The majority (54%) of the social CRM adopters confirmed that system development and implementation occurred in-house; however, the in-house method was adopted more frequently by small firms compared to medium firms. On the contrary, only 26% used an application service provider. Less than one-fifth of SMEs employed consultants to plan and manage implementation of social CRM system, or outsourced vendor for developing an appropriate software package and subsequently had the application implemented by the in-house resources. Overall, the number of studies is not sufficient enough to create a body of knowledge in this area. This is supported by the fact that only two papers were identified in the course of the literature review, dealing with acquisition phase.

*Implementation Phase.* The fourth stage in the CRM system life-cycle corresponds to a sequence of project-related tasks such as implementation planning, organizational alignment, risk management and implementation process management.

Main topic researched. Using multiple theoretical perspectives, [33] explored the link between the barriers, organizational capabilities and outcomes of social CRM implementation in Australian SMEs. The results revealed that time and knowledge barriers, security and data privacy risks represent significant challenges for SMEs and can inhibit social CRM and limit acquisition of its benefits. Specifically, the findings suggest that SMEs, aiming to create value for customers through implementation of social CRM, should give priority in deployment of 'managerial support', 'proactive engagement' and 'learning and change management' capabilities. Meanwhile, a research carried out in Dutch industrial SMEs [34] investigated a CRM process reengineering along with strategy development process. The findings provided an important implication for management and recommended to focus and develop social on top of technical competencies. Other empirical studies in context of Australian SMEs [13, 14, 32] aimed to gain insights on social CRM implementation-related activities, as well as the benefits and constraints related to them. The studies acknowledged lack of time and skills of how to implement social CRM effectively as critical barriers to successful implementation by SMEs. Meanwhile, another study [35] proposed three main constructs affecting the success of the social CRM implementation in Indonesian SMEs, such as social media construct, CRM construct, and customer construct.

*Use and maintenance phase.* The fourth phase of the CRM system life-cycle corresponds to continuous use of the CRM system along with regular maintenance. This stage corresponds to a sequence of project-related activities such as user training, user adoption, implementation evaluation, social CRM impact as well as return on investment (ROI).

Main topic researched. Several studies were conducted to investigate the effect of social CRM adoption on firm performance in SMEs context. The study by Ahani et al. [26] revealed a positive correlation between social CRM adoption and SMEs performance in Malaysia. In addition, this manuscript clarifies that social media technology simplifies social CRM strategy for SMEs. Likewise, a study [36] investigated the association between the intensity of social media use for customer engagement activities and business performance satisfaction of micro-enterprises in Thailand. Results of another research [37] demonstrated that the social CRM activities in hotels in Ireland enhance hotel service innovation and lead to higher levels of financial performance. Similarly, an article [38] identified antecedents that impact the intensity of social CRM use, including compatibility, relative advantages, organizational culture, top management support, external pressure and technology readiness. Subsequently, authors confirmed patterns of the intensity of social CRM use and its positive correlation with performance outcomes. Likewise, another study [7] (confirms that social CRM can be viewed as a dynamic capability in context of SMEs, and suggests that "automated and sustained ways of collecting and integrating social data with CRM can assist Australian SMEs to realize the true benefits of social CRM, and thus outweigh their resource constraints in the long term". Similarly, a study by Garrido-Moreno et al. [39] proposed a theoretical framework to predict the pathway between social media use and organizational performance, in terms of profitability, sales and customer retention. A study by Kantorová & Bachmann [15] has brought new findings on the social customer engagement practices and confirmed the significant influence of organizational characteristics such as size and market orientation on social CRM use. In this context, the use of social media for marketing purposes is notably higher in B2C oriented firms, rather than B2B oriented. Inspired by the knowledge-based view, and capability and theories. Cheng and Shiu [8] acknowledged that "social media network and customer information processing capabilities enable Social CRM to enhance customer involvement using social media in SMEs" (p.38). The findings offered by another study [40] illustrated that customer's information management is crucial to perceived customer's value but it is not necessarily reimbursed in the form of s CRM benefits, such as profitability. Meanwhile, a recent study by Wantchami et al. [41] examined the connection between social media marketing and performance of small-scale enterprises in Buea, Cameroon. Their study reveals that, smallscale businesses can effectively utilize social media marketing to increase brand awareness, build customer relationships and reinforce sales.

**Evolution Phase.** The fifth phase corresponds to the extension of existing capabilities in the original CRM system to obtain additional value-added benefits, for instance integration with business intelligence (BI), supply-chain management (SCM), or ERP modules. This stage corresponds to a sequence of project-related tasks such as system maintenance, integration with other enterprise systems, migration.

*Main topic researched*. We did not find any publication related to the evolution phase and suggest that the evolution stage in terms of social CRM in SMEs does exist empirically.

**Retirement Phase.** Substitution technologies evolve at a rapid pace. The last phase corresponds to the stage when emerging disruptive technologies can displace an established CRM technology.

*Main topic researched*. We could not find any lines of empirical evidence related to the retirement phase; therefore, we suspect a gap in the literature as there is no study regarding social CRM retirement phase in the context of SMEs.

#### 4. Discussion

In this section, we discuss our main research insights presented in Section 3 and provide our future research recommendations structured in accordance with CRM life-cycle phases.

Adoption Decision Phase. The rapid and vast technological advancements in social media have considerably changed the way SMEs are managing business relationships and communication connection between their customers to create business value [29]. In contrast to the traditional CRM, social CRM broaden the scope of digital marketing with "connect-and-collaborate" principle [9], shifting the emphasis on the customers and their initiatives as the cornerstone of a firm's strategy. For this reason, at the initial stage of the project, it is crucial to comprehend factors underpinning strategic management of SMEs and antecedents that drive the adoption of social media strategy [9]. Moreover, at the initial stage of the project, executives and managers are calling for means of mitigating risk and sphere of uncertainty surrounding the CRM adoption process [42], thereby decision-making and planning activities need to be carried out to address "whether, why, and how" to participate in the enterprise system experience and to discern the pros and cons of undertaking a project before embarking on a CRM initiative [43].

Suggestions for future research. Adoption decision phase has been reasonably examined in current social CRM literature, representing 45% of the total amount of articles considered in our study. Even though existing manuscripts explored the role of various social CRM adoption factors in SMEs, still there is a gap in the knowledge in the field of legal and ethical issues, government social media policies [9] and their impact on social CRM adoption in SMEs. Further research could adopt Transaction Cost Economics (TCE) theory to shed light on laws and regulations and their impact on social CRM adoption decision. Likewise, more research on quantitative and qualitative factors to consider in cost benefit analysis could produce valuable research insights.

Acquisition Phase. Social CRM technology that has the tools and functionality [9] that address firm's critical business requirements, goals and objectives is a required prior condition for SMEs. Overall, we identified fewer articles than expected that address explicitly the acquisition phase. There were a scant number of papers [13, 32] that sought to explore methods of sourcing and implementing techniques in the context of social CRM in SMEs. While both manuscripts have brought to light a number of useful findings, the number of studies and their characteristics is not sufficient enough to create a body of knowledge in this area.

Suggestions for future research. Although we can easily acknowledge the critical importance of acquisition phase in social CRM adoption process, the scientific production in this domain is scarce. Thus, more research is needed in this area using empirical evidence to enable better understanding of the selection criteria, key factors and requirements for consideration during vendor and product evaluation [44, 45], and discover the best ways to manage successfully purchasing and sourcing activities when implementing social CRM solutions in SMEs. Further research could also address the importance of financial metrics [9], such as return on investment (ROI) and total cost ownership (TCO) [46], which SMEs should consider while selecting a social CRM product. Likewise, more research on technological issues such as vendor's reliability performance, disaster recovery, security planning and interoperability issues can also be helpful when planning social CRM implementation in SMEs.

**Implementation Phase**. Social CRM is a disruptive strategic innovation that makes a join between social networking technologies and CRM [33] in order to create and facilitate value creation within social CRM "ecosystem" [9]. However, the development and implementation of social CRM strategy is not straightforward, and is not solely dependent on technology [32]. According to [9], social media management is a "multidisciplinary approach" (p. 49) that should commence with the overall organizational strategy and bring together all social media CRM initiatives in order to generate business value. The whole company needs to be in sync when embarking on social CRM implementation journey.

Suggestions for future research. Although a few papers discussed social CRM implementation-related activities, existing guidelines for implementing social CRM in SMEs and evaluation of corresponding critical success factors (CSF) still lack empirical evidence. Our findings concur with Yawised et al. [32] and call for more research in this domain. More specifically, our study reveals a clear deficit of knowledge in the field of privacy and security planning, organizational alignment, as well as risk management during implementation of social CRM in SMEs.

Use and maintenance phase. A successful social CRM implementation process is followed by continuous usage and maintenance to achieve highest efficiency both performance and quality wise. Furthermore, another important activity is to measure the progress and evaluate how well the implementation of the CRM system is aligning social objectives with the corporate goals [44]. Usage strategy is not straightforward and should not only focus on technology use, but also incorporate strategic planning process, people and components of change management.

Suggestions for future research. While the incentives that social CRM have to offer SMEs have been widely reported in the literature, previous cross-sectional studies could still be improved by utilizing a longitudinal research design in order to examine how corresponding risks and benefits develop over prolonged period of time. Likewise, Cheng and Shiu [8] suggest that future studies could examine the differences between SMEs not using social media for their customer engagement activities and yearly adopters of social CRM. Furthermore, more empirical evidence on user adoption and change management can also be helpful when evaluating social CRM implementation in SMEs.

**Evolution Phase**. This phase is concerned with technological innovation capability to yield higher value and create competitive advantage in the context of a changing business environment. Previous research [47] recognized the dynamic nature of technological innovation capability in the sense that SMEs must continuously reconfigure existing resources to conform to the changing business context. Although we may be able to acknowledge the critical importance of technological innovation capability, a gap exists in the literature as there is no study exploring social CRM evolution in the context of SMEs.

Suggestions for future research. In order to engage the customer in a collaborative conversation and co-create mutually beneficial value, SME must maintain interactive communications with customers, but they must also be able to capture customer information on an ongoing basis and manage it. This process may incorporate: information capture; information integration, and information use [47]. Hence, social media are seen as big data in the sense that social CRM is about accumulation and analysis of data through social web [29]. Future research can explore how different customer information collected in social CRM can be further integrated and interpreted in order to measure the impact these data may have on SMEs and business value. More specifically, future research could investigate implementation of business intelligence practices in SMEs and how data mining for predictive social network analysis can supplement the social CRM [9]. Likewise, scholars could explore how information collected from social CRM support the development of social media strategy and enable the process of continuous optimization [44].

Retirement Phase. The world around us is constantly changing, driven by science and technology. There are new technologies being developed every day. The retirement phase corresponds to the stage when business strategy is no longer supported by established technology, e.g. failing to improve human interactions in a business environment [9]. At this moment, value creation by social CRM to the company may start to mitigate and CRM system can become inadequate to the company's vision and business goals. Developing a CRM technology replacement strategy is an essential task and needs to be planned in advance.

Suggestions for future research. Although switching from traditional CRM to social CRM may be seen as a key toward competitive advantage, empirical evidence is still lacking in this area, leaving it unclear 'how' and 'when' SMEs should switch to social CRM and what the critical factors are.

#### 5. Conclusion

The pace of digital disruption enables SMEs to innovate and flourish by strategically combining social media use with customer engagement activities. In recent academic literature, this innovation phenomenon has been acknowledged as social customer relationship management, namely social CRM. This strategy, driven by "information democracy", enhances customer engagement and co-creation of value. The implementation of social CRM is a complex task that is not only focused on technology use, but also incorporate strategic planning process, people and components of change management. Social CRM should be initiated with strategy to bring value-added benefits. However, the preliminary findings from our research reveal a lack of research on formal integrated strategy and implementation frameworks to assist SMEs in social CRM adoption process. This paper illustrates the majority of current social CRM literature in SMEs context tends to skew towards use & maintenance phase. In contrast, issues related to adoption decision, acquisition and implementation are significantly less well-represented. Likewise, our findings illustrate a gap in the literature as there are no studies regarding social CRM evolution and retirement phase in the context of SMEs.

It is important to note the limitations of this study. First, the number of manuscripts was limited to 22 publications. Second, as we performed database searches using specific sets of keywords and applied temporal and contextual boundaries, we may have missed some articles with useful insights. However, we believe this literature review reveals some valuable patterns for practitioners and researchers and establish the foundation for future research by proposing research gap areas.

## Appendix A. Research theories and frameworks

Conceptual approach	Adoption decision	Acquisition	Implementation	Use & maintenance	Evolution	Retirement
General Concepts	5	1	4	8	0	0
Technology-Organization-Environment Framework (TOE; Tornatzky & Fleischer, 1990)	4	0	0	1	0	0
Diffusion of Innovations Theory (DOI; Rogers, 1962, 1986, 2003)	3	0	0	1	0	0
Technology Acceptance Model (TAM; Davis, 1989)	2	0	0	0	0	0
The resource-based view managerial framework (RBV; Wernerfelt, Prahalad and Hamel,	2	1	2	5	0	0
Dynamic capabilities theory (DC; Teece, Pisano & Shuen, 1997)	0	0	0	2	0	0
Knowledge Based-View (KBV; Grant, 1996; Curado, Lupi & Lisboa, 2006)	0	0	0	1	0	0
Service-dominant logic a meta-theoretical framework (S-D; Vargo and Lusch, 2004)	0	0	0	1	0	0
Media naturalness theory (Kock, 2004, 2005)	0	0	0	1	0	0

#### Appendix B. Publications per year

Year of publication	Adoption decision	Acquisition	Implementation	Use & maintenance	Evolution	Retirement
2014	0	0	1	1	0	0
2015	0	0	0	0	0	0
2016	0	0	0	0	0	0
2017	5	1	3	4	0	0
2018	2	1	1	6	0	0
2019	1	0	1	4	0	0
2020	2	0	0	2	0	0

## Appendix C. Time orientation

Time orientation	Adoption decision	Acquisition	Implementation	Use & maintenance	Evolution	Retirement
Cross-sectional (single snapshot)	10	2	6	16	0	0
Cross-sectional (multiple snapshots)	0	0	0	0	0	0
Longitudinal (process traces)	0	0	0	1	0	0

#### Appendix D. Research method

Research method	Adoption decision	Acquisition	Implementation	Use & maintenance	Evolution	Retirement
Case study	2	0	1	3	0	0
Survey	6	2	4	11	0	0
Mixed	2	1	1	2	0	0
Conceptual paper	0	0	0	0	0	0
Literature review	0	0	0	0	0	0

## References

- [1] Bibiano, Luis H and Juan Antonio Pastor Collado. (2006) "Towards a Definition of a CRM System Life-cycle", in Proceedings of the European and Mediterranean Conference on Information Systems, EMCIS 2006.
- [2] Haddara, Moutaz and Ondrej Zach. (2011) "ERP systems in SMEs: A literature review", in System Sciences (HICSS), 2011 44th Hawaii International Conference on. IEEE.
- [3] D'imperio, R. (2015) "Growing the global economy through SMEs." Edinburgh Group, http://www.edinburghgroup.org/media/2776/edinburgh\_group\_research\_- growing\_the\_global\_economy\_through\_smes.pdf.
- [4] Publishing, OECD (2019) "OECD SME and entrepreneurship outlook 2019", in. Book OECD SME and entrepreneurship outlook 2019, Organisation for Economic Co-operation and Development OECD
- [5] Bank, Asian Development. Asia Small and Medium-sized Enterprise (SME) Finance Monitor 2014. 2015 [cited 2019 9, November]; Available from: https://www.adb.org/publications/asia-sme-finance-monitor-2014.
- [6] Cegarra-Navarro, Juan Gabriel, M Eugenia Sánchez-Vidal, and David Cegarra-Leiva. (2011) "Balancing exploration and exploitation of knowledge through an unlearning context." *Management Decision*.
- [7] Guha, Sushmita, Paul Harrigan, and Geoff Soutar. (2018) "Linking social media to customer relationship management (CRM): A qualitative study on SMEs." Journal of Small Business & Entrepreneurship. 30 (3): 193-214.
- [8] Cheng, Colin CJ and Eric C Shiu. (2019) "How to enhance SMEs customer involvement using social media: The role of Social CRM." *International Small Business Journal.* 37 (1): 22-42.
- [9] Looy, Amy Van (2016) "Social media management", in. Book Social media management, Springer
- [10] Global Industry Analysts, Inc., Social Customer Relationship Management (CRM) Market Analysis, Trends, and Forecasts. 2019.
- [11] Marolt, Marjeta, Andreja Pucihar, and Hans-Dieter Zimmermann. (2015) "Social CRM adoption and its impact on performance outcomes: A literature review."

- Organizacija. 48 (4): 260-271.
- [12] Küpper, Torben, et al. (2014) "Performance Measures for Social CRM: A Literature Review", in Bled eConference.
- [13] Yawised, Kritcha, Leonie Ellis, and Ming Chao Wong. (2018) "A framework for the adoption of social customer relationship management (scrm) by private sector." Asian Journal of Science and Technology. 9 (4): 7844-7851.
- [14] Yawised, Kritcha, Nuttaneeya Torugsa, and Wayne O'Donohue. (2017) "Exploring social customer relationship management in Australian small and medium enterprises." *International Journal of Globalisation and Small Business*. 9 (4): 222-251.
- [15] Kantorová, Kateřina and Pavel Bachmann. (2018) "Social customer relationship management and organizational characteristics." Information. 9 (12): 306.
- [16] Esteves, J and J Pastor. (1999) "An ERP lifecycle-based research agenda", in Published in: First International workshop in Enterprise Management and Resource. Planning: Methods, Tools and Architectures, EMRPS.
- [17] King, William R and Jun He. (2005) "Understanding the role and methods of meta-analysis in IS research." *Communications of the Association for Information Systems*. **16 (1)**: 32.
- [18] Schryen, Guido. (2015) "Writing qualitative is literature reviews—guidelines for synthesis, interpretation, and guidance of research." Communications of the Association for Information Systems. 37 (1): 12.
- [19] Webster, Jane and Richard T Watson. (2002) "Analyzing the past to prepare for the future: Writing a literature review." MIS Quarterly. xiii-xxiii.
- [20] Nickerson, Robert C, Upkar Varshney, and Jan Muntermann. (2013) "A method for taxonomy development and its application in information systems." *European Journal of Information Systems*. **22 (3)**: 336-359.
- [21] Dybå, Tore and Torgeir Dingsøyr. (2008) "Empirical studies of agile software development: A systematic review." Information and software technology. 50 (9-10): 833-859
- [22] Haddara, Moutaz and Henrik Moen. (2017) "User Resistance in ERP Implementation: A Literature Review." Procedia Computer Science, Elsevier.
- [23] Haddara, Moutaz and Ahmed Elragal. (2012) "ERP Lifecycle: A Retirement Case Study." Information Resources Management Journal (IRMJ). 26 (1): 1-11.
- [24] Haddara, Moutaz and Ahmed Elragal (2011) "ERP Lifecycle: When to Retire Your ERP System?", in M.M. Cruz-Cunha, et al., (eds). Communications in Computer and Information Science. Springer Berlin Heidelberg
- [25] Paulissen, Kristel, Koen Milis, and Malaika Brengman. (2005) "Customer relationship management systems research: Voids in the current literature." AMCIS 2005 Proceedings. 36.
- [26] Ahani, Ali, Nor Zairah Ab Rahim, and Mehrbakhsh Nilashi. (2017) "Firm performance through social customer relationship management: Evidence from small and medium enterprises", in 2017 International Conference on Research and Innovation in Information Systems (ICRIIS). IEEE.
- [27] Hasani, Tahereh, Jamil Bojei, and Ali Dehghantanha. (2017) "Investigating the antecedents to the adoption of SCRM technologies by start-up companies." Telematics and Informatics. 34 (5): 655-675.
- [28] Marolt, Marjeta, et al. (2020) "Exploring Social Customer Relationship Management Adoption in Micro, Small and Medium-Sized Enterprises." Journal of theoretical and applied electronic commerce research. 15 (2): 38-58.
- [29] Ahani, Ali, Nor Zairah Ab Rahim, and Mehrbakhsh Nilashi. (2017) "Forecasting social CRM adoption in SMEs: A combined SEM-neural network method." Computers in Human Behavior. 75: 560-578.
- [30] Farahani, Saeed, HamidReza Ahmadifar, and Azam Ahmadyan. (2018) "A Framework to Predict the Adoption of Social Customer Relationship Management in Small and Medium Enterprises." Journal of Soft Computing and Decision Support Systems. 5 (5): 49-54.
- [31] Dewnarain, Senika, Haywantee Ramkissoon, and Felix Mavondo. (2019) "Social customer relationship management in the hospitality industry." *Journal of Hospitality*. 1 (1): 1-14.
- [32] Yawised, Kritcha, Leonie Ellis, and Ming Chao Wong. (2017) "The role and nature of scrm in Australian private sector: an exploratory study", in Proceeding from the 2nd International conference on Advanced Research. Asia Pacific Institute of Advanced Research.
- [33] Yawised, Kritcha and Wayne O'Donohue (2019) "Social Customer Relationship Management in Small and Medium Enterprises: Overcoming Barriers to Success", in. Management Science. Springer
- [34] Elbeltagi, Ibrahim, Thijs Kempen, and Elaine Garcia. (2014) "Pareto-principle application in non-IT supported CRM processes." Business Process Management Journal
- [35] Setiawan, Mukhammad Andri and Yanuar Satrhio Insanaputra. (2017) "Understanding the Social CRM Strategy of Small Businesses in Captivating Younger Age Market in Indonesia". in KMIS.
- [36] Charoensukmongkol, Peerayuth and Pakamon Sasatanun. (2017) "Social media use for CRM and business performance satisfaction: The moderating roles of social skills and social media sales intensity." Asia Pacific Management Review, 22 (1): 25-34.
- [37] Diffley, Sarah, Patrick McCole, and Elena Carvajal-Trujillo. (2018) "Examining social customer relationship management among Irish hotels." *International Journal of Contemporary Hospitality Management*.
- [38] Marolt, Marjeta, Hans-Dieter Zimmermann, and Andreja Pucihar. (2018) "Exploratory study of social CRM use in SMEs." Engineering Economics. 29 (4): 468-
- [39] Garrido-Moreno, Aurora, et al. (2018) "The missing link: Creating value with social media use in hotels." *International Journal of Hospitality Management.* 75: 94-104.
- [40] Hassan, Siti Hasnah, Noor Mohamed Mohamed Haniba, and Noor Hazlina Ahmad. (2019) "Social customer relationship management (s-CRM) among small-and medium-sized enterprises (SMEs) in Malaysia." International Journal of Ethics and Systems.
- [41] Wantchami, Nengieh Lizzie, Kingsley Lyonga Ngange, and Babatunde Daphne-Carol Efosi. (2020) "Nexus of Social Media Marketing and Small Scale Businesses" Performance in Buea, Cameroon." Advances in Social Sciences Research Journal. 7 (2): 214-224.
- [42] Ocker, Rosalie J and Susan Mudambi. (2003) "Assessing the readiness of firms for CRM: a literature review and research model", in 36th Annual Hawaii International Conference on System Sciences, 2003. Proceedings of the. IEEE.
- [43] Markus, M and C Tanis. (2000) "The enterprise systems experience-from adoption to success." Framing the domains of IT research: Glimpsing the future through the past. 173: 207-173.
- [44] Lovett, John (2011) "Social media metrics secrets", in. Book Social media metrics secrets, John Wiley & Sons
- [45] Haddara, Moutaz and Angelo Constantini. (2017) "ERP II is Dead-Long Live CRM." Procedia Computer Science. 121: 950-959.
- [46] Haddara, Moutaz, ERP systems in SMEs: Exploring ERP lifecycle cost issues. 2013, Doctoral dissertation/M. Haddara.
- [47] Harrigan, Paul and Morgan Miles. (2014) "From e-CRM to s-CRM. Critical factors underpinning the social CRM activities of SMEs." Small Enterprise Research. 21 (1): 99-116.