

Community Embedded Customer Relationship Management in Rural MSMEs: A Systematic Literature Review

Hanin Tri Winata¹, Vitradesie Noekent²

¹Department of Management, Universitas Negeri Semarang, Semarang, Indonesia

²Department of Management, Universitas Negeri Semarang, Semarang, Indonesia

Abstract. Increasing business competition in the digital era requires Micro, Small, and Medium Enterprises (MSMEs) to build sustainable customer relationships despite limited technological resources. In rural contexts, Customer Relationship Management (CRM) practices often develop through social networks and community interactions. This study aims to examine the application of Community-Embedded Customer Relationship Management (CRM) in rural MSMEs as a form of social adaptation to limited digital resources. A Systematic Literature Review (SLR) approach was employed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. Literature was collected from Scopus, ScienceDirect, and Google Scholar databases covering publications from 2015 to 2025. The initial search identified 214 articles, which were screened using predefined inclusion and exclusion criteria, resulting in 30 articles selected for final analysis. The findings reveal that CRM practices in rural contexts are rooted in three main pillars: customer identification, customer attraction, and customer retention, which are supported by social relationships, community participation, and the use of simple digital communication platforms such as WhatsApp and Facebook. The results indicate that successful CRM implementation in rural MSMEs is determined not only by technology adoption but also by the strength of social networks that facilitate interactions between business actors and customers. Theoretically, this study extends Relationship Marketing Theory by proposing a Community-Embedded CRM framework that is relevant to rural social contexts and contributes to Sustainable Development Goal (SDG) 8 through inclusive local economic growth and business sustainability.

Keywords: community-embedded CRM; rural MSMEs; systematic literature review; customer loyalty; Indonesia; SDG 8

1 Introduction

Micro, Small, and Medium Enterprises (MSMEs) have an important role in the global and national economy. In Indonesia, the MSME sector contributes around 60–61% to the national Gross Domestic Product (GDP) and absorbs more than 95% of the workforce, making it the

¹Corresponding author: haninnata@students.unnes.ac.id

backbone of the economy and the main source of job creation (Tambunan, 2019). Recent statistical reports also indicate that MSMEs continue to dominate Indonesia's business sector and play a significant role in supporting local economic development and community livelihoods (*Kabupaten Pemalang Dalam Angka*, 2025). In the regional context, MSMEs also play an important role in encouraging local economic growth and expanding employment opportunities in the community. However, although the number of MSMEs continues to increase, many small businesses, especially in rural areas, still face various limitations, such as limited market access, low digital literacy, and limited resources in managing customer relationships systematically. This condition shows that strengthening customer relationship management strategies is important to increase the competitiveness and sustainability of MSMEs.

In the face of increasingly competitive business competition, companies and MSMEs need to build long-term relationships with customers as a strategy to maintain consumer loyalty. One of the most widely used approaches in modern marketing strategies is Customer Relationship Management (CRM). CRM is a business strategy that aims to manage customer information, build personalized communication, and create long-term mutually beneficial relationships between companies and customers (Guha et al., 2018; Kotler & Keller, 2016). Effective CRM implementation not only increases customer satisfaction, but is also able to strengthen customer loyalty, encourage repeat purchases, and increase word-of-mouth promotion (Fauziyyah & Khusna, 2022).

However, most research on CRM still focuses on large companies that have advanced digital technology support and complex data-driven customer management systems. This condition is different from rural MSMEs that often operate with limited technology resources and digital infrastructure (Sheth, 2002). In practice, many small MSMEs rely more on simple social media and instant messaging applications such as WhatsApp as a means of business communication, product promotion, and customer order management (Deku et al., 2024).

Along with the development of digital technology, a number of studies have begun to highlight the integration between social interaction and technology in customer relationship management. The concept of Social Customer Relationship Management (Social CRM) emphasizes that customer interactions do not only occur through technological systems, but also through social networks and digital communities that allow two-way communication between business actors and customers (Chatterjee et al., 2021; Trainor et al., 2014a). In the context of rural MSMEs, social relationships, trust, and community closeness are important factors that affect the success of a CRM strategy.

Previous studies have extensively examined Customer Relationship Management (CRM), Social CRM, digital marketing, customer loyalty, and customer engagement in SMEs. Research has shown that CRM contributes to customer satisfaction, loyalty, and business performance through the effective management of customer information and communication processes (Fauziyyah & Khusna, 2022; Reinartz et al., 2004). Other studies have emphasized the role of Social CRM and digital platforms in facilitating customer interaction and engagement through social media and online communication channels (Chatterjee et al., 2021; Guha et al., 2018; Trainor et al., 2014b). In addition, recent studies have highlighted the importance of digital marketing and social media adoption in improving the competitiveness and sustainability of SMEs in emerging markets (Deku et al., 2024).

Despite these contributions, limited attention has been given to how CRM practices operate in rural MSMEs, where customer relationships are strongly influenced by social trust, community participation, and local social networks. Existing studies tend to examine CRM technology, customer loyalty, social media utilization, and relationship marketing as separate constructs rather than as interconnected elements within a community-based business environment. Consequently, there remains a lack of an integrated conceptual framework explaining how social relationships, community networks, and accessible digital

communication tools collectively support customer relationship management in rural MSMEs. To address this gap, this study proposes the concept of Community-Embedded CRM, which integrates insights from Relationship Marketing Theory, Social CRM, social capital, and community participation. Through a Systematic Literature Review (SLR) supported by supplementary field observations in rural MSMEs, this study seeks to provide a more comprehensive understanding of customer relationship practices in community-based business settings.

Based on this background, this study aims to analyze the application of Community-Embedded Customer Relationship Management (CRM) in rural MSMEs through the Systematic Literature Review (SLR) approach. This study aims to identify research trends, factors influencing community-based CRM practices, as well as their contribution to the sustainability of the local economy. In addition, this research is also expected to expand the development of the concept of Relationship Marketing in the context of rural MSMEs and provide further research directions related to the development of CRM models that are more relevant to the social and economic conditions of local communities.

1.1 Literature Review

1.1.1 *Customer Relationship Management*

Customer Relationship Management (CRM) is a business strategy that focuses on managing long-term relationships between companies and customers with the aim of increasing customer satisfaction, loyalty, and value in the long run. CRM is not only understood as an information technology system, but also as a strategic approach that integrates business processes, customer data, as well as personalized communication to create an ongoing relationship between the company and the customer (Kotler & Keller, 2016). CRM allows companies to understand customer needs more deeply so that they can tailor products, services, and marketing strategies more effectively (Guha et al., 2018).

In practice, CRM also plays an important role in improving business performance, especially through increasing customer loyalty and repeat purchases. Effective CRM implementation can help companies strengthen relationships with customers, increase customer satisfaction, and create positive word-of-mouth promotions (Fauziyyah & Khusna, 2022). Therefore, CRM is one of the strategies widely used by companies to maintain a competitive advantage in an increasingly dynamic business environment.

According to Kracklauer & Alexander H. (2004), The CRM process can be understood through three main stages, namely customer identification, customer attraction, and customer retention. The customer identification stage is a company's process of recognizing and identifying potential customers through market analysis and customer segmentation. The customer attraction stage is related to the company's efforts to attract customer attention through various marketing strategies. Meanwhile, customer retention focuses on retaining existing customers through good customer service, loyalty programs, and ongoing communication (Reinartz et al., 2004).

1.1.2 *Relationship Marketing Theory*

The concept of CRM is inseparable from Relationship Marketing Theory, which emphasizes the importance of building and maintaining long-term relationships with customers as a key strategy in marketing. In contrast to traditional marketing approaches that focus on short-term transactions, long-term value creation through mutually beneficial relationships between companies and customers (Hunt et al., 2006).

In this theory, the success of marketing relationships is influenced by two main elements, namely trust and commitment. Trust arises when a customer is confident that the company is able to deliver on promises and provide consistent service, while commitment describes the customer's desire to maintain a long-term relationship with the company. Both elements play an important role in creating customer loyalty and reducing the likelihood of customers moving to competitors (Hunt et al., 2006).

In addition, marketing relationships are also influenced by effective communication factors, shared values, and cooperation between companies and customers. Repeated interactions between the two parties can strengthen the emotional connection and increase the chances of a repeat purchase. In the context of small and medium-sized businesses, social relationships and community closeness are often important factors in building customer loyalty (Sheth, 2002).

1.1.3 Social CRM and Digital Technology

The development of digital technology has expanded the concept of CRM to Social Customer Relationship Management (Social CRM) which utilizes social media as a means of interaction between companies and customers. Social CRM allows companies to interact directly with customers through various digital platforms such as social media and instant messaging apps. This approach provides an opportunity for companies to build more personal relationships with customers as well as increase customer engagement in the marketing communication process (Trainor et al., 2014).

Research shows that the use of social media can improve the quality of customer relationships as well as expand market reach, especially for small businesses that do not have a formal CRM system. Social media also allows two-way communication between business actors and customers which can improve customer experience and strengthen customer loyalty (Chatterjee et al., 2021).

However, the implementation of digital technology in MSMEs is often still limited to the use of the most accessible platforms such as WhatsApp or Facebook. This shows that digital technology does not always have to be complex to support customer relationship management strategies, but can be adjusted to the needs and capacity of resources owned by business actors (Astorquiza-Bustos & Quintero-Peña, 2023).

1.1.4 Community-Embedded CRM in Rural MSMEs

In rural MSMEs, customer relationship management practices often evolve through social interaction, local community networks, and informal communication channels. Unlike large firms that rely on sophisticated CRM systems and customer databases, rural MSMEs frequently manage customer relationships through personal interactions, trust-based exchanges, and community engagement. These characteristics suggest that customer relationship strategies in rural contexts are deeply embedded within local social structures.

Building upon Relationship Marketing Theory, which emphasizes trust, commitment, and long-term relational exchanges (Hunt et al., 2006), and Social CRM, which highlights the role of digital platforms in facilitating customer engagement (Chatterjee et al., 2021; Trainor et al., 2014b), this study proposes the concept of Community-Embedded CRM as a conceptual framework synthesized from the reviewed literature. Rather than being adopted from a single prior study, the framework integrates insights from relationship marketing, social CRM, social capital theory, and community participation perspectives to explain customer relationship practices in rural MSMEs.

Within this framework, social capital functions as a strategic resource that enables business actors to build trust, reciprocity, and long-term relationships with customers.

Community participation further strengthens these relationships by facilitating repeated interactions, information exchange, and collective support among community members. These mechanisms contribute to stronger customer engagement and increase the likelihood of customer retention and repeat purchases.

At the same time, simple digital technologies such as WhatsApp, Facebook, and other social media platforms complement community-based interactions by extending communication channels and improving customer responsiveness. Therefore, Community-Embedded CRM combines relational resources derived from local communities with accessible digital communication tools to support customer relationship management in resource-constrained environments.

The integration of social capital, community participation, and digital communication ultimately contributes to customer loyalty and business sustainability. Community-Embedded CRM provides a theoretical explanation of how rural MSMEs can maintain competitive advantage and sustainable growth despite limited technological resources. Furthermore, by strengthening business resilience, local economic participation, and employment opportunities, Community-Embedded CRM contributes to the achievement of Sustainable Development Goal (SDG) 8, which promotes inclusive and sustainable economic growth.

2 Methods

This study uses the Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize previous research related to the application of Customer Relationship Management (CRM) in Micro, Small, and Medium Enterprises (MSMEs), especially in the context of rural communities. The SLR method was chosen because it is able to provide a comprehensive overview of the development of research on a topic in a systematic and transparent manner. This approach follows guidelines developed by Schmeisser (2013) and using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to ensure that the literature selection process is carried out systematically. The research process is carried out through several main stages, namely article identification, screening process, eligibility, and inclusion selection.

2.1 Data Sources and Search Strategy

The first stage is the literature search process carried out on several scientific databases, namely Scopus, ScienceDirect, and Google Scholar. Literature searches were conducted using a combination of keywords such as "Customer Relationship Management", "CRM AND SMEs", "customer loyalty", "social CRM", and "community-based CRM". The time span of publication of the analyzed articles is limited to the period 2015–2025 to acquire literature relevant to the development of digital technologies and modern marketing practices.

2.2 Inclusion and Exclusion Criteria

Table 1 presents the inclusion and exclusion criteria applied during the literature selection process.

Table 1. Inclusion and Exclusion Criteria for Article Selection

Inclusion Criteria	Exclusion Criteria
Peer-reviewed journal articles	Conference abstracts without full papers
Published between 2015–2025	Editorials, opinion papers, and non-peer-reviewed reports

Discuss Customer Relationship Management (CRM), Social CRM, customer loyalty, or relationship marketing	Studies unrelated to CRM implementation or customer relationship strategies
Focus on SMEs/MSMEs, particularly rural business contexts	Studies focusing exclusively on large corporations
Written in English or Indonesian	Publications in other languages

2.3 Screening and Selection Process

The selection process followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Moher et al., 2009). The initial database search produced 214 articles related to CRM and SMEs. After removing duplicate records and screening titles and abstracts, 76 articles remained. A full-text assessment was then conducted based on the inclusion criteria, resulting in 30 articles that were selected for in-depth analysis.

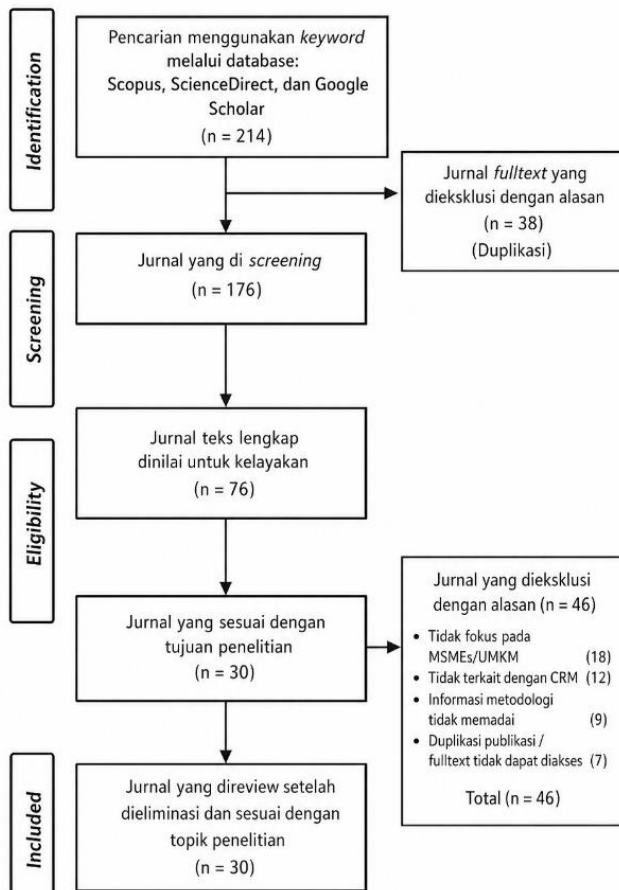


Fig 1. PRISMA Flow Diagram of the Literature Selection Process

2.4 Data Extraction and Analysis

The selected articles were imported into NVivo 12 Pro to facilitate systematic qualitative analysis. The unit of analysis consisted of textual content related to CRM practices, customer loyalty, social interaction, community participation, digital communication, and relationship marketing.

The analysis was conducted through several stages. First, open coding was performed to identify recurring concepts and keywords across the selected studies. Second, thematic coding was conducted to classify findings into the main CRM dimensions: customer identification, customer attraction, and customer retention. Additional codes related to social capital, community participation, Social CRM, and digital communication were also developed during the coding process.

Word Frequency Analysis was used to identify dominant concepts appearing across the literature. Matrix Coding Query analysis was then employed to examine relationships between CRM dimensions and supporting factors identified in the reviewed studies. Finally, Cluster Analysis was conducted to visualize similarities among themes and concepts based on coding patterns. These procedures enabled a systematic synthesis of the literature and supported the development of the proposed Community-Embedded CRM framework.

2.5 Supplementary Field Study

To complement the findings of the Systematic Literature Review (SLR), a supplementary field study was conducted in Watukumpul District, Pemalang Regency, Central Java, Indonesia. The field study was intended to provide contextual illustrations of Customer Relationship Management (CRM) practices among rural MSMEs and to support the interpretation of findings obtained from the literature review.

The study involved several MSMEs operating in different business sectors, including Sigendo, Vanara Cake, Azzalea Cake, Kopi Rojo, and Bongas Aren. These businesses were selected purposively because they actively engage in customer relationship activities through community interaction, personalized communication, and digital platforms such as WhatsApp and social media.

Data were collected through direct observation, informal interviews with business owners, and documentation of customer relationship practices. The field data were used solely as illustrative evidence and did not replace the primary findings derived from the SLR.

3 Results and Discussion

This section presents a thematic synthesis obtained from the Systematic Literature Review (SLR) as well as integrates empirical patterns visualized through Word Cloud Analysis, Matrix Coding Query, and Cluster Analysis using NVivo 12 Pro software. The combination of these analyses allows for a deeper understanding of how customer relationship management strategies are implemented in the context of rural MSMEs, particularly through community social interaction and utilization Simple digital technology. The thematic framework in this study follows the approach put forward by Snyder (2019) and Schmeisser (2013), thereby ensuring transparency and replicability in the process of synthesizing empirical as well as conceptual evidence.

3.1 Characteristics of the Reviewed Articles

This section provides an overview of the 30 studies selected through the PRISMA screening process. The reviewed articles were published between 2015 and 2025 and focus on

Customer Relationship Management (CRM), Social CRM, customer loyalty, relationship marketing, digital communication, and SME development. Table 2 summarizes the characteristics of the selected studies, including publication year, country or research context, methodological approach, source/database, research theme, and principal findings.

Table 2. Characteristics of the 30 Articles Included in the Systematic Literature Review

No	Author(s)	Country/Context	Method	Main Theme
1	(Guha et al., 2018)	SMEs	Qualitative	Social CRM
2	(Chatterjee et al., 2021)	India	Quantitative	AI-Integrated CRM
3	(Deku et al., 2024)	Emerging Markets	Empirical	Digital Marketing
4	(Fauziyyah & Khusna, 2022)	Indonesia	Case Study	CRM & Loyalty
5	(Fauziah et al., 2024)	Indonesia	Case Study	CRM in SMEs
6	Guerola-Navarro et al.	International	Literature Review	CRM & Entrepreneurial Marketing
7	(Guerola-Navarro et al., 2021)	Winery Sector	QCA	CRM & Innovation
8	(Hardcastle et al., 2025)	Customer Experience	Quantitative	AI Personalization
9	(Ilman et al., 2025)	Indonesia SMEs	Community Project	Digital Marketing
10	(Kakeesh et al., 2021)	Jordan SMEs	Qualitative	E-CRM & Loyalty
11	(Magatef et al., 2023)	Business Organizations	Quantitative	E-CRM
12	(Malki et al., 2024)	Marketing Context	Quantitative	Social CRM
13	(Meier et al., 2023)	SMEs	Qualitative	Social Media Adoption
14	(Sanca Vergara & Cárdenas Saavedra, 2021)	Peru	Case Study	Customer Acquisition
15	(Solomon et al., 2024)	Developing Countries	Empirical	Social Media Adoption
16	(Wiweko & Anggara, 2025)	Indonesia	Review	Digital Marketing in SMEs
17	(Bascur & Rusu, 2020)	Retail Industry	SLR	Customer Experience
18	(Ayyagari, 2019)	Business Organizations	Conceptual	Analytical CRM
19	(Ayu Okta Putri, 2022)	Indonesia	Case Study	Facebook Marketing
20	(von Pezold, 2024)	Mozambique	Qualitative	WhatsApp Commerce
21	(Allsop et al., 2022)	Research Methods	Methodological	NVivo Analysis
22	(Castleberry & Nolen, 2018)	Qualitative Research	Methodological	Thematic Analysis
23	(Nowell et al., 2017)	Qualitative Research	Methodological	Thematic Analysis
24	(Skjøtt Linneberg & Korsgaard, 2019)	Qualitative Research	Methodological	Coding Procedures
25	(Kaefer et al., 2015)	Content Analysis	Methodological	Qualitative Analysis
26	(Khan et al., 2023)	Business Research	Empirical	Customer Relationship Factors
27	(Curran & R. A. Blackburn., 2015)	SMEs	Conceptual	Local Networks

28	(Hardcastle et al., 2025)	Customer Experience	Quantitative	Customer Engagement
29	(Malki et al., 2024)	Marketing Context	Quantitative	Customer Loyalty
30	(Deku et al., 2024)	Emerging Markets	Empirical	SME Performance

3.2 Thematics Overview of Customer Relationship Management in MSMEs

The review identified 30 relevant peer-reviewed studies published between 2015–2025, and the synthesis was organized into three main themes: (1) customer identification, (2) customer attraction, and (3) customer retention as the core dimensions of Customer Relationship Management (CRM) in MSMEs. The findings indicate that many rural MSMEs rely on social relationships, community networks, and simple digital communication platforms such as WhatsApp and Facebook to manage interactions with customers and maintain long-term relationships. Several studies also highlight that CRM practices in small businesses are often informal and embedded in local social structures rather than supported by advanced technological systems. These findings are consistent with prior research emphasizing that effective CRM implementation in small enterprises depends not only on digital infrastructure but also on relational capabilities, trust, and personalized communication with customers (Chatterjee et al., 2021; Guha et al., 2018; Trainor et al., 2014).

3.3 Word Cloud Analysis: Customer Relationship Management Practices

Figure 2 presents the Word Cloud visualization generated from the reviewed literature and coded SLR themes related to Customer Relationship Management (CRM) practices in rural MSMEs. Dominant words such as “pelanggan,” “usaha,” “produk,” “order,” and “WhatsApp (WA)” indicate that customer interaction and communication activities are central to how MSMEs manage relationships with their customers. The visualization suggests that CRM practices in rural contexts are strongly associated with direct communication, personalized service, and simple digital platforms, rather than complex technological systems.

This pattern aligns with findings from previous studies indicating that small businesses often rely on informal communication channels and community-based relationships to maintain customer engagement. In many rural MSMEs, applications such as WhatsApp and social media platforms function as practical tools for managing orders, responding to customer inquiries, and maintaining long-term communication with customers. These practices reflect an adaptive approach in which entrepreneurs integrate digital communication with existing social networks to strengthen customer relationships.

International literature supports this interpretation. For instance, studies on Social Customer Relationship Management (Social CRM) highlight that small enterprises frequently build customer loyalty through personalized interactions and trust-based communication rather than formal CRM systems (Guha et al., 2018; Trainor et al., 2014). Similarly, research on digital engagement among SMEs suggests that social media platforms facilitate continuous interaction between businesses and customers, which contributes to stronger relational ties and improved customer retention (Chatterjee et al., 2021).

The visualization in Figure 2 therefore reflects a broader pattern in which CRM practices among rural MSMEs are embedded within social relationships and community interactions. Rather than relying on advanced data-driven systems, entrepreneurs utilize personal communication, social trust, and community networks as the primary mechanisms for managing customer relationships. This finding supports the concept of Community-Embedded CRM, where customer management practices are integrated with local social structures and supported by simple digital technologies.



Fig 2. Word cloud visualization results

3.4 Matrix Coding Query: Variations in CRM Implementation Practices

The results of the Matrix Coding Query show that customer retention is the most dominant dimension in the practice of Customer Relationship Management (CRM) in the MSMEs studied (see Figure 3). Customer retention strategies are generally done through the provision of simple incentives such as purchase bonuses, rebates, or special prices for repeat customers. For example, Sigendo provides bonuses for large purchases, while Vanara Cake offers special prices for reseller customers.

	A. Azhar Ghozali	B. Boery Awan	C. Ropi Pak Anah	D. Mulyadi Kertika	E. Rof Dina
1: Kreativitas dan Inovasi Daya Tarik Produk	5	5	5	5	5
2: Daya Tarik Visual Produk	5	2	0	4	4
3: Reka mendani dan Word-of-Mouth	2	1	0	5	3
4: Strategi Harga dan Penawaran Menarik	4	2	4	4	1
5: Pemanfaatan Media Sosial dan Platform Digital	0	0	0	0	0
6: Hambatan dan Keterbatasan Digital	1	1	1	0	0
7: Kanal Media Sosial yang Digunakan	4	12	7	5	4
8: Strategi Konten dan Interaksi Online	0	0	0	1	0
9: Strategi Promosi Langsung	0	0	0	0	0
10: Efektivitas Promosi Langsung	0	5	3	4	0
11: Intensitas dan Target Promosi	18	5	0	9	0
12: Pola Komunikasi Promosi	5	0	4	5	5
13: Analisis Target Pelanggan	0	0	0	0	0
14: Demografi & Komunitas	3	0	0	17	3
15: Jenis Pelanggan Utama	2	0	2	0	4
16: Tujuan Pembelian & Pola Order	5	7	1	1	5
17: Pemahaman Preferensi Pelanggan	0	0	0	0	0
18: Interaksi & Komunikasi Langsung	8	5	7	3	5
19: Metode Penggalian Preferensi	1	2	8	2	1
20: Penyesuaian Produk terhadap Preferensi	5	2	11	0	7
21: Segmentasi Pelanggan	0	0	0	0	0
22: Berdasarkan Lokasi	5	0	0	0	0
23: Berdasarkan Pola Konsumsi	0	0	2	3	0
24: Berdasarkan Usia & Minat	0	0	0	0	3
25: Manajemen Pengadaan & Umpam Balik	0	0	0	0	0
26: Penanganan Keluhan	5	7	8	7	7
27: Penciptaan & Ingatan terhadap Keluhan	0	2	3	3	3
28: Perbaikan Produk Berdasarkan Umpam Balik	1	5	0	0	0
29: Pendekatan Personal & Penawaran Khusus (One-to-One Marketing)	0	0	0	0	0
30: Penawaran atau Restorasi Harga	0	1	0	1	0
31: Penawaran Khusus untuk Pelanggan Tertentu	2	7	1	1	0
32: Respons Pelanggan terhadap Pendekatan Personal	1	3	1	1	1
33: Program Loyalti & Pelanggan	0	0	0	0	0
34: Bentuk Program Loyaltias	0	5	5	7	7
35: Dampak Program terhadap Kebiasaan Belanja	8	4	1	3	4
36: Pelikuanan Program dan Media Penjualan	3	2	4	2	2

Fig 3. Visualization results of matrix coding queries

3.5 Cluster Analysis: Typology of CRM Practices among MSMSs

The results of the Cluster Analysis in Figure 4 show the grouping of patterns of implementation of Customer Relationship Management (CRM) between MSMEs based on the similarity of characteristics of customer management practices. This analysis identifies several business groups that have relatively similar CRM strategies. For example, Azzalea Cake and Vanara Cake are in one cluster because they are both engaged in the field of cake products and implement customer retention strategies through special price offers, purchase bonuses, and promotional approaches that target local consumers. Meanwhile, Kopi Rojo and Bongas Aren formed their own clusters because they target a wider community of customers by using digital media more actively, such as promotion through social media and WhatsApp-based communication. This grouping pattern shows that the implementation of CRM in MSMEs is not uniform, but adjusts to product characteristics, target markets, and interaction patterns with customers. These findings confirm that CRM strategies in rural MSMEs are adaptive and contextual, where business actors combine personal communication, community social networks, and the use of simple digital technology to maintain customer loyalty.

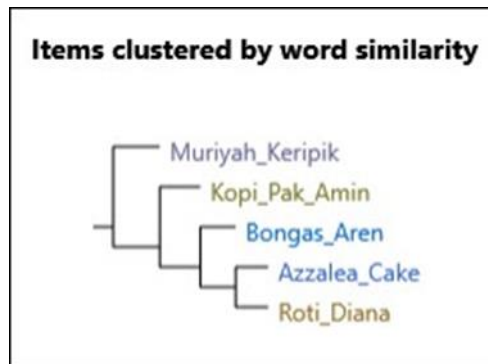


Fig 4. Visualization results of cluster analysis

3.6 Integration of Social Relationship and Digital Communication in CRM Practices

The SLR synthesis, supported by empirical findings, demonstrates that social relationships and simple digital communication platforms play complementary roles in shaping Customer Relationship Management (CRM) practices in rural MSMEs. Social interactions within local communities foster trust, personal connections, and long-term customer loyalty, while digital tools such as WhatsApp and social media provide efficient channels for communication, order management, and customer engagement. Previous studies emphasize that small businesses often rely on relational capabilities and personalized communication to sustain customer relationships, even in the absence of advanced CRM technologies (Guha et al., 2018; Trainor et al., 2014).

This interaction supports the concept of Community-Embedded CRM, where customer relationship strategies are integrated with existing social networks and community-based interactions. In this framework, social trust and repeated interpersonal interactions function as relational capital that strengthens customer retention and engagement. At the same time, the use of simple digital platforms enhances communication efficiency and expands market reach. The integration of these elements creates a reinforcing cycle: stronger social relationships improve customer loyalty, while digital communication tools facilitate continuous interaction that further strengthens long-term business relationships.

3.7 Comparative Insights and SLR Synthesis

A comparison between local empirical findings and international studies presented in Table 3 reveals several consistent patterns regarding the implementation of Customer Relationship Management (CRM) in rural MSMEs.

Table 3. Comparative Analysis of CRM Dimensions in Rural MSMEs

Theme	Empirical Finding (Watukumpul)	SLR Support (International Studies)	Key References
Customer identification	Customer segmentation based on community networks and personal interaction	SMEs identify customers through relational knowledge rather than formal analytics	(Guha et al., 2018; Kotler & Keller, 2016)
Customer attraction	Promotion through WhatsApp status, word-of-mouth, and local community networks	Social media engagement strengthens customer acquisition and interaction	(Chatterjee et al., 2021; Trainor et al., 2014)
Customer retention	Discounts, bonuses, and personalized communication for loyal customers	Relationship marketing increases customer loyalty and repeat purchases	(Fauziyyah & Khusna, 2022; Reinartz et al., 2004)

This synthesis strengthens the theoretical proposition that CRM practices in rural MSMEs are shaped by the integration of social relationships and simple digital technologies. Rather than relying on complex data-driven systems, small businesses leverage community trust, personal communication, and digital messaging platforms to maintain long-term customer relationships. These findings support the concept of Community-Embedded CRM, where customer relationship strategies are deeply integrated with local social networks and community interactions.

3.8 Community-Embedded CRM Framework and Implications for SDG 8

The findings of this review suggest that CRM practices in rural MSMEs differ from conventional CRM approaches commonly found in large organizations. Traditional CRM primarily relies on customer databases, advanced analytics, and technology-driven customer management systems. In contrast, Community-Embedded CRM emphasizes the integration of social relationships, trust, community participation, and simple digital communication tools within local business environments.

While Social CRM focuses on customer engagement through social media platforms, Community-Embedded CRM extends this perspective by recognizing the importance of local social capital and community networks as strategic resources for customer relationship management. In rural MSMEs, repeated social interactions, trust-based relationships, and community participation often function as the primary mechanisms for customer acquisition, retention, and loyalty development.

The results of the thematic synthesis are consistent with the NVivo visualizations. The Word Cloud Analysis highlights the prominence of customer interaction and communication-related concepts, while the Matrix Coding Query demonstrates the strong relationship between customer retention strategies and community-based interactions. Similarly, the Cluster Analysis reveals thematic connections among customer loyalty, social relationships, digital communication, and community engagement. Together, these findings support the proposed Community-Embedded CRM framework.

The practical implications of this framework are directly related to Sustainable Development Goal (SDG) 8, which promotes sustained, inclusive, and sustainable economic growth. By strengthening customer loyalty, improving business sustainability, supporting repeat purchases, and enhancing local economic participation, Community-Embedded CRM contributes to the long-term resilience of rural MSMEs. Furthermore, the integration of community networks and accessible digital technologies enables small businesses to remain competitive despite limited technological resources, thereby supporting inclusive economic development and employment opportunities within rural communities.

Table 4. Comparison between Traditional CRM, Social CRM, and Community-Embedded CRM

Aspect	Traditional CRM	Social CRM	Community-Embedded CRM
Main Focus	Customer Management	Customer Engagement	Community-Based Customer Relationships
Primary Resource	Customer Database	Social Media Interaction	Social Capital and Community Networks
Technology Dependence	High	Medium–High	Low–Medium
Communication Pattern	Organization–Customer	Interactive Digital Engagement	Community-Based and Trust-Oriented Interaction
Main Outcome	Customer Retention	Customer Engagement	Customer Loyalty and Business Sustainability
Relevance for Rural MSMEs	Limited	Moderate	High

As shown in Table 4, Community-Embedded CRM extends the principles of traditional CRM and Social CRM by incorporating social capital and community participation into customer relationship management practices. This characteristic makes the framework particularly relevant for rural MSMEs where interpersonal trust and local social networks play a central role in business sustainability.

4 Conclusion

This systematic literature review concludes that the implementation of Customer Relationship Management in rural MSMEs represents an adaptive strategy shaped by social relationships, community networks, and the use of simple digital technologies. The synthesis of thirty peer-reviewed studies demonstrates that successful CRM practices in rural contexts are not primarily driven by sophisticated technological systems, but rather by the integration of customer identification, customer attraction, and customer retention strategies embedded in everyday business interactions. In this regard, social trust and personal communication function as the relational infrastructure that sustains long-term customer relationships, while digital communication platforms such as WhatsApp and Facebook serve as practical tools that facilitate customer engagement and business continuity (Guha et al., 2018; Trainor et al., 2014)

The findings also indicate that rural MSMEs tend to prioritize customer retention strategies such as personalized communication, price incentives, and responsive service rather than relying solely on customer acquisition strategies. This relational approach reflects the importance of community-based interactions and trust-building mechanisms in maintaining customer loyalty. The integration of social networks and simple digital

communication tools creates a reinforcing cycle in which strong interpersonal relationships encourage repeat purchases while continuous communication strengthens long-term customer engagement.

From a theoretical perspective, this review extends the concept of Relationship Marketing by introducing the idea of Community Embedded CRM which emphasizes that customer relationship strategies in small businesses are deeply rooted in local social structures. In this framework relational capital such as trust, reputation, and community participation acts as a strategic resource that enhances customer loyalty and strengthens business sustainability. Rather than depending on complex data driven CRM systems rural MSMEs leverage social interaction and digital messaging platforms as alternative mechanisms for managing customer relationships.

Practically the findings highlight the importance of strengthening digital literacy and customer relationship capabilities among rural entrepreneurs. Support from universities local governments and business development institutions is essential in providing training programs that integrate digital marketing skills customer engagement strategies and simple CRM practices suitable for small businesses. Such initiatives can enhance the capacity of MSMEs to build stronger customer relationships while expanding their market reach through digital communication channels.

Overall, this study demonstrates that the sustainability of rural MSMEs is closely linked to their ability to integrate social relationships, community networks, and accessible digital technologies in managing customer relationships. The development of Community Embedded CRM not only strengthens customer loyalty and business resilience but also contributes to broader socioeconomic development. In this sense, strengthening relational-based CRM practices among MSMEs supports the achievement of Sustainable Development Goal 8, which promotes inclusive economic growth and sustainable employment opportunities.

References

- Allsop, D. B., Chelladurai, J. M., Kimball, E. R., Marks, L. D., & Hendricks, J. J. (2022). Qualitative Methods with Nvivo Software: A Practical Guide for Analyzing Qualitative Data. *Psych*, 4(2), 142–159. <https://doi.org/10.3390/psych4020013>
- Astorquiza-Bustos, B. A., & Quintero-Peña, J. W. (2023). Who can work from home? A remote working index for an emerging economy. *Telecommunications Policy*, 47(10), 102669. <https://doi.org/10.1016/j.telpol.2023.102669>
- Ayu Okta Putri.umk (2022). Pengaruh Media Sosial Facebook terhadap Penigkatan Omset Penjualan UMKM (Studi Kasus Pedagang Kuliner UMKM dikecamatan Ujungbatu). *Hirarki: Jurnal Ilmiah Manajemen Dan Bisnis*, 4(1), 568–578. <https://doi.org/10.30606/hirarki.v4i1.1476>
- Ayyagari, M. R. (2019). A Framework for Analytical CRM Assessments Challenges and Recommendations. *International Journal of Business and Social Science*, 10(6). <https://doi.org/10.30845/ijbss.v10n6p2>
- Bascur, C., & Rusu, C. (2020). Customer Experience in Retail: A Systematic Literature Review. *Applied Sciences*, 10(21), 7644. <https://doi.org/10.3390/app10217644>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815. <https://doi.org/10.1016/j.cptl.2018.03.019>
- Chatterjee, S., Chaudhuri, R., Vrontis, D., Thrassou, A., & Ghosh, S. K. (2021). Adoption of artificial intelligence-integrated CRM systems in agile organizations in India. *Technological Forecasting and Social Change*, 168, 120783. <https://doi.org/10.1016/j.techfore.2021.120783>

- Curran, J., & R. A. Blackburn. (1994). *Small Firms and Local Economic Networks: The Death of the Local Economy*. London: Paul Chapman.
- Deku, W. A., Wang, J., & Preko, A. K. (2024). Digital marketing and small and medium-sized enterprises' business performance in emerging markets. *Asia Pacific Journal of Innovation and Entrepreneurship*, 18(3), 251–269. <https://doi.org/10.1108/APJIE-07-2022-0069>
- Fauziah, S. N., Novel, N. J. A., & Wahyudi, D. (2024). Penerapan Customer Relationship Management (CRM) Pada UMKM Merdeka Sumedang Binaan Coca-Cola Europacific Partners Indonesia. *Fokus Bisnis Media Pengkajian Manajemen Dan Akuntansi*, 23(1), 128–140. <https://doi.org/10.32639/fokbis.v23i1.761>
- Fauziyyah, S., & Khusna, K. (2022). Implementation Of Customer Relationship Management In Order To Build Customer Satisfaction And Loyalty. *Jurnal Manajemen Indonesia*, 22(1), 13–22. <https://doi.org/10.25124/jmi.v22i1.2802>
- 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. <https://doi.org/10.1016/j.techfore.2021.120838>
- Guha, S., Harrigan, P., & Soutar, G. (2018). Linking social media to customer relationship management (CRM): a qualitative study on SMEs. *Journal of Small Business and Entrepreneurship*, 30(3), 193–214. <https://doi.org/10.1080/08276331.2017.1399628>
- Hardcastle, K., Vorster, L., & Brown, D. M. (2025). Understanding Customer Responses to AI-Driven Personalized Journeys: Impacts on the Customer Experience. *Journal of Advertising*, 54(2), 176–195. <https://doi.org/10.1080/00913367.2025.2460985>
- Hunt, S. D., Arnett, D. B., & Madhavaram, S. (2006). The explanatory foundations of relationship marketing theory. *Journal of Business and Industrial Marketing*, 21(2), 72–87. <https://doi.org/10.1108/10610420610651296>
- Ilman, I., Ramlan, P., Sofyan, W., Razak, M. R. R., & Hardianti, H. (2025). Digitalization of Pipang Product Marketing for Increasing SME Sales. *Golden Ratio of Marketing and Applied Psychology of Business*, 5(2), 509–516. <https://doi.org/10.52970/grmapb.v5i2.989>
- Kabupaten Pemalang dalam Angka* (Vol. 49). (2025).
- Kaefer, F., Roper, J., & Sinha, P. (2015). *A Software-Assisted Qualitative Content Analysis of News Articles: Example and Reflections*. <http://www.qualitative-research.net/>
- Kakeesh, D., Al-Weshah, G., & Al-Ma'aitah, N. (2021). Maintaining Customer Loyalty Using Electronic Customer Relationship Management (E-CRM): Qualitative Evidence from Small Food Businesses in Jordan. *Studies of Applied Economics*, 39(7). <https://doi.org/10.25115/eea.v39i7.4810>
- Khan, M., Tawiah, V., Usman, M., Wang, F., & Gyapong, E. (2023). Returnee directors and cost of debt. *Journal of Business Research*, 168, 114118. <https://doi.org/10.1016/j.jbusres.2023.114118>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management, 15th Edition* New Jersey: Pearson Prentice Hall, Inc.
- Kracklauer, & Alexander H. (2004). *Collaborative Customer Relationship Management* (A. H. Kracklauer, D. Q. Mills, & D. Seifert, Eds.). Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-24710-4>
- Magatef, S., Al-Okaily, M., Ashour, L., & Abuhussein, T. (2023). The impact of electronic customer relationship management strategies on customer loyalty: A mediated model. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 100149. <https://doi.org/10.1016/j.joitmc.2023.100149>

- Malki, D., Bellahcene, M., Latreche, H., Terbeche, M., & Chroqui, R. (2024). How social CRM and customer satisfaction affect customer loyalty. *Spanish Journal of Marketing - ESIC*, 28(4), 465–480. <https://doi.org/10.1108/SJME-09-2022-0202>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ*, 339(jul21 1), b2535–b2535. <https://doi.org/10.1136/bmj.b2535>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1). <https://doi.org/10.1177/1609406917733847>
- Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The Customer Relationship Management Process: Its Measurement and Impact on Performance. *Journal of Marketing Research*, 41(3), 293–305. <https://doi.org/10.1509/jmkr.41.3.293.35991>
- Sanca Vergara, M. N., & Cárdenas Saavedra, A. (2021). Customer Relationship Management and customer acquisition at JMA Soluciones, San Isidro 2020. *Journal of Business and Entrepreneurial Studie*, 5(2). <https://doi.org/10.37956/jbes.v5i2.198>
- Schmeisser, B. (2013). A Systematic Review of Literature on Offshoring of Value Chain Activities. *Journal of International Management*, 19(4), 390–406. <https://doi.org/10.1016/j.intman.2013.03.011>
- Sheth, J. N. (2002). The future of relationship marketing. *Journal of Services Marketing*, 16(7), 590–592. <https://doi.org/10.1108/08876040210447324>
- Skjott Linneberg, M., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal*, 19(3), 259–270. <https://doi.org/10.1108/QRJ-12-2018-0012>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Solomon, O. H., Allen, T., & Wangombe, W. (2024). Analysing the factors that influence social media adoption among SMEs in developing countries. *Journal of International Entrepreneurship*, 22(2), 248–267. <https://doi.org/10.1007/s10843-023-00330-9>
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-018-0140-4>
- Trainor, K. J., Andzulis, J. (Mick), Rapp, A., & Agnihotri, R. (2014a). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*, 67(6), 1201–1208. <https://doi.org/10.1016/j.jbusres.2013.05.002>
- von Pezold, J. (2024). Global China and everyday mediation in the Global South: Selling Chinese fashion in Mozambique via WhatsApp. *Global Media and China*, 9(1), 31–51. <https://doi.org/10.1177/20594364231222971>
- Wiweko, A., & Anggara, A. W. (2025). *A Review of Digital Marketing Practices among SMEs in Indonesia: Trends, Challenges, and Opportunities*. <https://doi.org/10.56472/25835238/IRJEMS-V4I5P140>