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# Designing a Customer Relationship Management Model in the Chain Retail Industry Based on Business Intelligence: A Grounded Theory Approach

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**Abstract**

Business intelligence is recognized as a powerful and essential tool across various industries, with the retail industry being particularly well-suited for its application due to the influx of vast volumes of data. In this context, business intelligence in the retail sector is capable of transforming complex and diverse data into understandable and actionable information in a precise and intelligent manner. Therefore, the primary aim of the present study is to design a customer relationship management (CRM) model in the chain retail industry based on business intelligence, using a grounded theory approach. This research, based on the type of data, is qualitative in nature and is categorized as fundamental and exploratory research due to its goal of designing a CRM model in the chain retail industry grounded in business intelligence. Participants in this study included managers and experts involved in the field of customer relationship management in retail stores. The data collection tool was a semi-structured interview, and the method of data collection was field-based. The study employed theoretical sampling, and the sample size reached 22 participants based on theoretical saturation. The qualitative data were analyzed using the grounded theory methodology. According to the results obtained from coding, the following were identified as causal conditions: a culture of business intelligence acceptance, strategic planning based on business intelligence application, understanding the business ecosystem, comprehension of digital transformation, and infrastructural platforms. The central phenomena included customer identification, customer acquisition, recognition of customer needs, reorganization of business processes, customer engagement, and customer dependency. The strategies consisted of inventory management and control, application of business intelligence tools, customer knowledge management, value network management, and analytical, collaborative, and operational CRM based on business intelligence. The intervening conditions were identified as the development of technical infrastructure, qualitative enhancement of software and hardware in database architecture, development of modern technical infrastructures, and localization of information systems. Contextual conditions included cultural factors, social factors, and senior management support. Finally, the identified outcomes of the model were financial performance, improved customer experience, process agility, and the creation of organizational value. Based on the results of the model design, it is recommended that to strengthen business intelligence-based customer relationship management, special attention should be given to the causal factors of the model.

**Keywords:** Customer Relationship Management, Business Intelligence, Retail, Grounded Theory.

## 1. Introduction

In today's business era, retailers possess dominant power to control or influence the decisions of other members in the supply chain. A retailer has the capability to deliver effective promotional effects such as price discounts and credit periods. Retailers often attempt to stimulate demand by offering price discounts, thereby addressing customer relationship management (CRM) to some extent. On the other hand, price discounts can enhance the economic benefits for consumers and influence their perceptions of the brand, which increases their purchase intentions (Thangam, 2021).



The retail sector plays a vital role in national economies, accounting for approximately 5.2% of the gross domestic product (GDP) in developed countries as of 2020. Over the past decade, retailers have experienced significant transformations through the adoption of emerging digital technologies, including the Internet of Things (IoT), artificial intelligence (AI), robotics, widespread internet use, and large-scale data capabilities. For the past 25 years, grocery stores have consistently constituted the major segment within the retail industry, ranking at the top (Mogale et al., 2023). In this regard, confronted with competitive environments, dynamic markets, rapidly evolving consumer demands, and price reductions, retail stores are compelled to continuously reinvent their business models and leverage business intelligence (BI) capabilities to respond to discontinuities, strategic disruptions, global convergence, and intense competition. Thus, retail stores have transitioned from traditional CRM systems to business intelligence- and AI-driven CRM systems (Sturm et al., 2023).

Customer needs and purchasing patterns have undergone substantial changes in recent years. Consequently, companies have increasingly adapted and implemented various customer-oriented marketing strategies to achieve competitive advantage. In this context, CRM is considered a comprehensive strategy and a sustainable business culture for attaining competitive advantage. It aims to classify and manage appropriate customers to optimize long-term customer value and capitalize on it for the organization. The chain retail industry is no exception. Customer value identification is a core component of success in chain stores and has gained growing attention. Chain stores interact with diverse customer groups and, given limited resources, must rank customers based on their value to allocate suitable portions of marketing resources to high-value customers and generate greater profit (Raisanen et al., 2021).

CRM, which enhances organizational capabilities and responsiveness toward customers, supports firms in achieving CRM and marketing objectives, including identifying, attracting, retaining, and upgrading customers. Due to intense market competition and the abundance of product and service options available to consumers, analyzing customer behavior is regarded as a critical factor for business survival. Among the most effective tools for examining customer behavior are CRM indicators (Kowalczuk et al., 2021).

Internet technologies, due to the growth of networked technologies and social information processes, have significantly affected customer lifestyles. With the emergence of "Internet +" e-commerce, traditional businesses must utilize internet platforms to open new markets and growth opportunities. In recent years, the expansion of various retail businesses has intensified competition in the industry. Given the high churn rates in the retail sector, business owners must seek strategies to reduce customer attrition, as retail success heavily depends on the retailer's ability to keep customers engaged over extended periods. Thus, CRM, with a focus on BI, can resolve this issue for retail industries (Shobana et al., 2023).

CRM can be considered a meta-structure composed of several constituent elements and represents the overall nature of the relationship between an organization and its customers. CRM may be defined as a set of intangible values that enhance products and services and result in mutually expected exchanges between buyer and seller. It also reflects customer expectations about how the entire relationship meets their needs, anticipations, objectives, and desires (Ahn & Toney, 2020).

On the other hand, with the growth of information technology in today's business environment—characterized by turbulence and complexity—attention has increasingly turned to the role of business intelligence in managing customer relationships. Business intelligence is a technology-driven process for analyzing data and delivering actionable information to senior and executive managers. This field of knowledge is a subdomain of information and communication technologies and represents the pinnacle of management information systems in the contemporary era. The objective of utilizing BI in organizations is to process and analyze large volumes of data to obtain useful information for enhancing decision-making, reducing costs, and discovering new business opportunities.

Given the significant importance of CRM and the rapid advancement of information technology—and with organizations increasingly seeking intelligent solutions to achieve their business goals—particularly in industries like chain retail that handle vast amounts of data, this issue has become more critical than ever. By implementing BI solutions, managers at all levels will

have real-time access to high-quality information. Moreover, analysts and specialists can use user-friendly tools to conduct marketing activities aimed at improving customer relationships and achieving competitive advantage (Akhgari et al., 2022).

Due to the computational and analytical capabilities of business intelligence, many researchers believe that BI has the potential to substantially enhance CRM performance and the success of retail companies. Accordingly, extensive attention has been devoted to BI applications, as they reveal new hidden patterns and insights that are particularly beneficial for CRM development (Tseng et al., 2022). In addition, BI comprises various technologies, applications, systems, and analytical techniques designed to help retail companies analyze customer and market data accurately (Huang et al., 2022). Although the relationship between BI and CRM performance is not yet entirely clear due to the novelty of the topic, it is evident that employing BI in CRM can precisely forecast customer value, innovation, and market dynamics.



Nonetheless, CRM is not a static variable over time; it evolves and transforms. This highlights the need for companies to focus deeply on the methods and mechanisms of engaging with customers. Achieving this effectively requires advanced analytical tools capable of integrating data and information collected from customers. Thus, the analytical capabilities of BI significantly contribute to understanding the dynamic nature of customer value (Alsaad et al., 2022).

Today, the growing interdependence and expansion of determining forces in the marketplace, the presence of numerous powerful competitors, the continuous and uninterrupted shift in customer preferences, and the rising levels of customer expectations have exposed companies to profound risks and challenges. Conversely, understanding customer behavior, possessing psychological and sociological insights, and establishing more communication play essential roles in developing customer relationships. In these relationships, the customer does not merely purchase products or services; rather, they acquire benefits, value, respect, trust, and other desired outcomes (Ramazani et al., 2020).

Therefore, CRM is investigated as a key structure in relationship marketing, indicating the extent to which each party can trust the other's promises (Raisanen et al., 2021). Based on the foregoing, the existing literature reveals no study that has designed a CRM model in the chain retail industry based on business intelligence. Until now, researchers have focused on defining and measuring CRM and extracting insights from its contextual dynamics, drivers, and outcomes. Most published studies explore CRM outcomes such as customer satisfaction or loyalty. In this regard, the present study aims to design a CRM model for chain retail stores based on business intelligence.

## 2. Methods and Materials

This study is classified as qualitative based on the type of data, and in terms of its objective, it is considered fundamental and exploratory research. The research aims to design a customer relationship management (CRM) model in the chain retail industry based on business intelligence (BI). The participants included managers and experts involved in CRM in retail stores. In selecting participants, efforts were made to choose the most knowledgeable and, in many cases, the most active individuals in the field of CRM within retail stores. The average interview duration ranged from 40 to 45 minutes. Some interviews were repeated to share preliminary findings, refine and validate the data. Follow-up questions were asked to direct discussions and to uncover categories related to the phenomenon under investigation.

The study employed theoretical sampling, a type of purposive sampling that helps the researcher generate or discover theories or concepts whose theoretical relevance to the emerging theory has been established. Since sampling continued until theoretical saturation was reached, the total number of participants was finalized at the end of the qualitative data collection phase, amounting to 22 individuals.

## 3. Findings and Results

Given the research objective of designing a CRM model in the chain retail industry based on business intelligence, the researcher employed the grounded theory method in the Strauss and Corbin style instead of conventional quantitative methods. This approach was developed as a response to functionalist and structuralist methodologies. Grounded theory is particularly useful for achieving direct theoretical insight from data and is among the most effective and widely used methods in qualitative research when the aim is to propose a theory. It is applicable in explanatory and exploratory studies of phenomena, especially when prior quantitative research exists.

In this study, the researcher began with purposive sampling and initiated interviews concerning the causal conditions of CRM in the chain retail industry based on BI. During axial coding, the relationships among categories were partially determined through comparative analysis of interview codes. In the final step of selective coding, selective sampling of categories was conducted, and based on the identified causal conditions, the participants were asked questions related to the core phenomenon, strategies, contextual conditions, intervening conditions, and outcomes. The final model was then completed in accordance with the literature in management science.



**Step One: Open Coding**

With the beginning of data collection through interviews, the coding process was also initiated. Open coding refers to breaking down the data into distinct conceptual units. Once specific phenomena are identified in the data, related concepts can be grouped accordingly. Concepts form the foundation for theory construction. In grounded theory, open coding involves identifying concepts and expanding them based on their properties and dimensions. Analytical techniques employed include questioning the data, comparing cases and incidents, and identifying similarities and differences.

Table 1 presents the open coding results for the causal conditions. To identify causal factors, the following question was posed: *"In your opinion, what are the causal conditions influencing BI-based CRM in the retail industry?"*

**Table 1. Open Coding Results – Causal Conditions of BI-Based CRM in the Retail Industry**

| Concepts | Open Codes | Concepts | Open Codes |
|---|---|---|---|
| Teamwork Culture | Empowerment, stakeholder alignment, internal/external interaction | Change-Oriented Culture | Change initiation, understanding marketing transitions, branding |
| | Team building, capability development | | Learning orientation, campaign usage |
| Knowledge and Information Sharing | Respecting core values, BI software infrastructure | Learning Culture | Strategic orientation, goals and vision |
| | Consensus and alignment, BI training | | BI hardware infrastructure planning |
| BI-Based Strategy Development | Goal-setting, interaction with executives, BI-supported planning | Technological Leadership | Cutting-edge tech, sales applications |
| BI-Based Strategy Execution | Leadership teams, BI data monitoring, resource utilization | Change Readiness | Market turbulence, rapid customer response |
| BI Strategy Evaluation | KPIs review, process engineering, benchmarking | | Assessment of ongoing processes |
| Supplier Relationship Management | Win-win relations with suppliers | Business Network Expansion | Weak/strong ties, sustainable communication |

Table 2 displays the open coding results related to the core phenomenon. To identify its dimensions, the following question was posed: *"In your opinion, what are the dimensions of BI-based CRM in the retail industry?"*

**Table 2. Open Coding Results – Core Phenomenon: Dimensions of BI-Based CRM in the Retail Industry**

| Concepts | Open Codes | Concepts | Open Codes |
|---|---|---|---|
| Identifying Individual Characteristics | Understanding customer personalities and behaviors | Human Resource Management | Hiring, empowerment, performance evaluation |
| Recognizing Customer Needs and Values | Identifying latent needs, readiness to respond, fulfillment | Strengthening Continuous Attachment | Switching costs, emotional bonding, satisfaction |
| Customer Past Experience | Noticing positive/negative shopping experiences | Organizational Resource Management | Process automation, resource optimization |
| Experience with Other Companies | Awareness of positive/negative experiences with other retailers | Cross-Selling and Pre-Sales | Upselling, product suggestions, discounts |
| Customer Segmentation and Profiling | Gender/interest/culture-based grouping | Shopping Basket Prediction | Data collection, analysis, forecasting |
| Direct Marketing | Product delivery, phone marketing, discount-based sales | Strengthening Emotional Bond | Customer loyalty and long-term retention |
| Loyalty Program Design | Points-based, membership-based, value-based programs | Customer Lifetime Value | Average retention time, purchase frequency, total value |
| Complaint Management | Complaint mechanisms, feedback loops, responsiveness | Normative Attachment | Loyalty ethics, continued commitment |
| One-to-One Marketing | Identification of actual/potential customers | Organizational Structure | Preparing for change, strategic vision, structural alignment |

These findings lay the groundwork for subsequent stages in grounded theory analysis and support the construction of a comprehensive BI-based CRM model in the retail sector.

**Step Two: Axial Coding**

Axial coding refers to a set of procedures through which, after open coding, the researcher connects categories in new ways, establishing relationships among them. This process allows for greater precision and sophistication in defining the characteristics of each category. Although open coding and axial coding involve different analytical approaches, researchers often move back and forth between them during the analysis process. In grounded theory, subcategories are linked to a main category by articulating causal conditions, the core phenomenon, contextual conditions, intervening conditions, strategies, and consequences.



**Table 3. Results of Axial Coding – Business Intelligence–Based Customer Relationship Management in the Retail Industry**

| Subcategories | Concepts | Subcategories | Concepts |
|---|---|---|---|
| Culture of BI Acceptance | Teamwork culture, adaptability, knowledge and information sharing, learning culture | Customer Knowledge Management | Acquiring/storing customer knowledge, competitive knowledge, organizational knowledge for customers, monitoring customer experiences |
| Strategic Planning Based on BI | Formulating, executing, and evaluating BI-based strategies | Value Network Management | Focusing on tangible and intangible value enhancement |
| Understanding the Business Ecosystem | Interactive supplier relationships, stakeholder coordination, network expansion | Analytical CRM Based on BI | Financial data analysis, sales and marketing analytics |
| Understanding Digital Transformation | Transitioning from traditional marketing, business model reengineering, change readiness, technology leadership | Collaborative CRM Based on BI | Managing customer interaction and communication channels |
| Infrastructure Platforms | Hardware/software platforms, IT infrastructure enhancement, network systems for customer access | Operational CRM Based on BI | Automation-based interaction, performance reporting |
| Customer Identification | Recognizing personal attributes, needs, expectations, past and external experiences, segmentation | Database Architecture Enhancement | Organizational data enrichment, memory development, updated data storage, knowledge base resource allocation |
| Customer Acquisition | Direct marketing, loyalty programs, complaint management, one-to-one marketing | Novel Technical Infrastructure Development | CRM process automation for efficiency and effectiveness |
| Understanding Customer Desires | Customer lifetime value, cross-selling, basket prediction | BI Application Implementation | CRM applications, customer dashboards, software update capabilities |
| Customer Engagement and Attachment | Emotional, normative, and continuous bonding | Localization of Information Systems | Software adaptation, benchmarking with foreign systems |
| Business Process Reorganization | Organizational structure, resource management, HR management | Cultural Factors | Digital mindset, innovation culture, collaborative-supportive culture |
| Inventory Management and Control | Planning for safety, complementary, and excess/expired inventory | Social Factors | Social responsibility, social values |
| Utilizing BI Tools | Organizational memory, knowledge integration and creation, knowledge presentation | Senior Management Support | Executive commitment, strategic support, financial resource allocation |
| Financial Performance | Profitability growth, cost reduction, productivity improvement | Customer Experience Enhancement | Brand experience, online experience, service delivery and post-service experience |
| Process Agility | Reducing time and space constraints, minimizing wait times, increasing touchpoints, personalization, decision-making improvement | Organizational Value Creation | Service innovation, relational value, strengthening loyal customer relationships |

These axial coding results synthesize the open-coded concepts into broader thematic categories and their interrelationships. Through these structured linkages, a theoretical model of Business Intelligence–Based CRM in the retail industry can be constructed, encompassing key causal drivers, central phenomena, strategic actions, contextual settings, and resultant outcomes.

**Step Three: Selective Coding**

In this step, based on the causes and reasons coded in the previous two stages—namely, open coding and axial coding—selective coding was conducted to explore strategies for managing these causal factors. Selective coding is the process of selecting the core category, systematically relating it to other categories, validating these relationships, and refining categories that need further development. Selective coding, building on the results of open and axial coding, represents the principal stage of theorizing. It involves linking the core category systematically to other categories, narrating these relationships in a coherent storyline, and modifying categories requiring improvement.

In this section, based on the findings from open and axial coding, a grounded theory–based model is presented. According to Strauss and Corbin (1998), selective coding in grounded theory is the process that integrates all categories and subcategories around the central category, thus enabling the emergence of the "storyline" or theory. However, as might be expected, Glaser (1992) disagrees with this view and clearly argues that selective coding confines the analysis to categories related to the core category. Keddy et al. (1996), in a discussion of grounded theory's application to feminist research, acknowledge that more than one storyline may emerge from the data. Therefore, a decision must be made about which storyline to develop.



The core category is critical because it ties the data together, explains the variations within the data, and thus generates a theory that describes the social processes surrounding the phenomenon. The integration of ideas from the literature and further sampling may help expand the theory. Subsequent interviews can validate and enhance this theoretical framework.

The outcome of selective coding is presented in Table 3:

**Table 3. Selective Coding – Business Intelligence–Based Customer Relationship Management in the Retail Industry**

| Core Category | Subcategories |
|---|---|
| Causal Conditions | Culture of BI acceptance |
| | Strategic planning based on BI application |
| | Understanding the business ecosystem |
| | Understanding digital transformation |
| | Infrastructure platforms |
| Core Phenomenon | Customer identification |
| | Customer acquisition |
| | Understanding customer demands |
| | Business process reorganization |
| | Customer engagement and dependency |
| Strategies | Inventory management and control |
| | Deployment of business intelligence tools |
| | Customer knowledge management |
| | Value network management |
| | Analytical CRM based on BI |
| | Collaborative CRM based on BI |
| | Operational CRM based on BI |
| Intervening Conditions | Technical infrastructure development |
| | Software and hardware quality enhancement of database architecture |
| | Development of modern technical infrastructure |
| | Localization of information systems |
| Contextual Conditions | Cultural factors |
| | Social factors |
| | Senior management support |
| Outcomes | Financial performance improvement |
| | Enhanced customer experience |
| | Process agility |
| | Organizational value creation |

Based on the results of open, axial, and selective coding, a model of Customer Relationship Management in the Chain Retail Industry Based on Business Intelligence was developed using the grounded theory approach and relevant literature in management science. This model is illustrated in Figure 1:

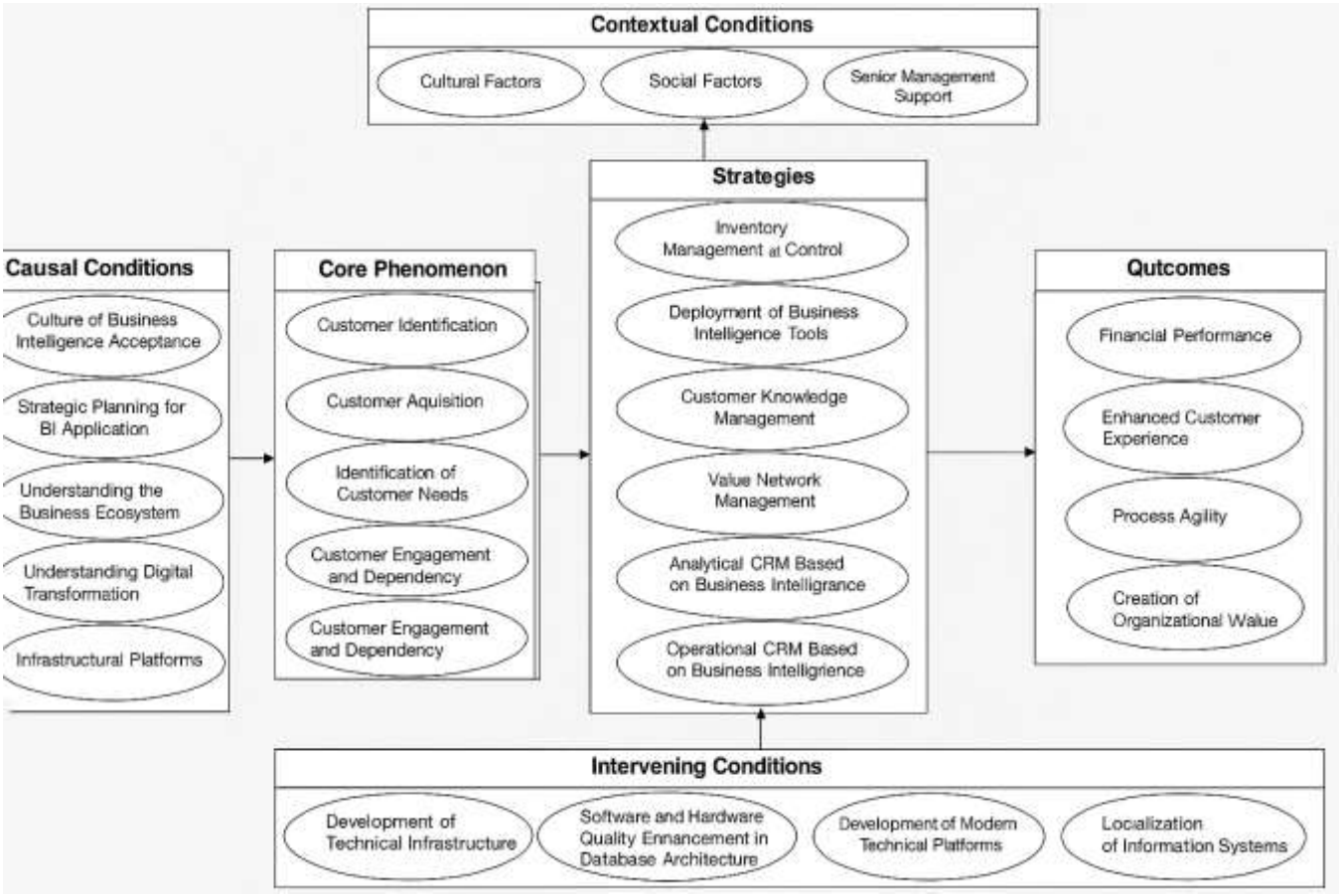


**Figure 1. Business Intelligence–Based CRM Model in the Chain Retail Industry Using the Grounded Theory Approach**.

## 4. Discussion and Conclusion

Undoubtedly, in today's increasingly complex and competitive landscape, customer relationship management (CRM) is regarded as a strategic necessity for all organizations. In the current business environment, senior managers invest in CRM systems as strategic tools for processing customer information to develop and strengthen customer relationships. CRM is both a practical and research-oriented domain that significantly improves customer relationship performance. These systems have become the backbone of customer relationship development, advancing in tandem with improvements in customer information processing capabilities. Although information processing is vital, its impact on CRM performance is partly contingent upon the quality of customer information—specifically its integration, timeliness, and usefulness.

Customer relationship maintenance is neither a new concept nor solely dependent on information technology. Numerous studies over the past decade have affirmed the importance of CRM as a key instrument in the digital transformation of modern society and globalized markets. The role of CRM is emphasized not only for its capacity to enhance current management practices but also for its potential in fostering innovation and exploratory capabilities. This potential positions CRM as one of the most powerful technology management solutions in modern business administration.

The marketing perspective on CRM theory highlights its significance as a technological management solution, particularly impactful in the marketing field—and especially in entrepreneurial marketing. Therefore, identifying the marketing approach most aligned with CRM theory is essential. A lack of attention to the fundamental principles and concepts of CRM within firms should be scrutinized. Addressing this gap, the current research aimed—through in-depth interviews and a grounded theory approach—to design a CRM model in the chain retail industry based on business intelligence (BI). Drawing on the results from identifying components and concepts, this section compares the findings with prior studies using relevant theoretical frameworks.

Javid et al. (2023) identified variables such as infrastructure, organizational environment, customer orientation, human resources, communication management, service quality, planning, strategic management, marketing, and performance, along with the use of modern technologies and appropriate organizational structure for CRM (Javid et al., 2023). The current study's findings—particularly on infrastructure, performance, and technical development—align with their research.

Seifollahi and Movahed (2022) highlighted customer knowledge and service quality as critical variables (Seifollahi & Movahed, 2022). This is consistent with the current research, which identifies customer knowledge as a key factor.

Andravaj et al. (2022) identified variables such as online CRM tactics, perceived green risk, and green support intention (Andravaj et al., 2022). The current study aligns with their identification of CRM dimensions.

Akhgari et al. (2022) demonstrated that BI influences CRM success through the mediating variable of knowledge management (Akhgari et al., 2022). Similarly, the current study identifies customer knowledge as a significant factor.

Cioppi et al. (2023) proposed a multidimensional framework combining digital transformation and marketing using content analysis, identifying macro themes related to adopted digital technologies and micro themes related to their marketing impacts (Cioppi et al., 2023). The current research's attention to digital transformation and marketing activities aligns with their findings.

Muhammad Sabbir et al. (2023) found that technological readiness positively correlates with ICT capabilities and AI-based CRM (Muhammad Sabbir et al., 2023). The current study similarly identifies IT infrastructure and CRM dimensions.

Sharifi et al. (2022) found that customer knowledge dimensions (knowledge of, for, and about the customer) influence organizational value creation (innovation, efficiency, customer retention, and complementary services), with the strongest impact stemming from knowledge *of* customers (Sharifi et al., 2022). The present study's focus on customer knowledge and value creation is aligned with their conclusions.

Bashardoust et al. (2022) emphasized the importance of customer segmentation in CRM (Bashardoust et al., 2022). The current study's identification and classification of customers align with this finding.

Gonu et al. (2023) found that CRM practices positively impact organizational performance, especially when mediated by customer satisfaction and loyalty in a hierarchical structure (Gonu et al., 2023). This supports the present study's findings on CRM and performance.

Sun et al. (2023) focused on customer lifetime value and segmentation, constructing a model based on customer lifecycle value theory (Sun et al., 2023). The present study aligns with this emphasis on segmentation and value measurement.

Rostamzadeh et al. (2021) identified influential factors in CRM implementation, including infrastructure capabilities, change readiness, user training, service quality, and knowledge management (Rostamzadeh et al., 2021). The current study's identification of infrastructure and knowledge factors aligns with these results.

Wolf and Stoel-Fisher (2022) addressed perceived channel characteristics, customer needs, and contextual factors (Wolf & Steul-Fischer, 2022). The current study's focus on segmentation parallels these dimensions.

Alqershi et al. (2022) demonstrated that all CRM dimensions significantly affect the performance of SMEs, with structural capital moderating the relationship between CRM dimensions (AlQershi et al., 2022). The current study similarly identifies CRM and performance as interrelated.

Nasehi Far et al. (2021) identified customer experience, electronic service tools, marketing factors, technological infrastructure, organizational structure, customer-related variables, industry factors, and macro-environmental influences in e-services (Nasehifar et al., 2021). The current study's focus on customer experience and infrastructure confirms these insights.

Wongsansukcharoen (2022) explored the indirect effects of key CRM success factors and relational marketing orientation on brand loyalty, mediated by customer interaction and brand trust (Wongsansukcharoen, 2021). This study aligns in its emphasis on customer interaction.

Zarei and Ahmadi Alvar (2021) found that organizational culture affects customer performance through BI and other mediators (Zarei & Ahmadi Alvar, 2021). The current study's identification of cultural acceptance and performance confirms this finding.

Like any research, this study is not without limitations. The first limitation lies in the use of grounded theory methodology; adopting other qualitative methods may lead to different model components. Therefore, future studies are encouraged to use other qualitative approaches, such as meta-synthesis or content analysis. A second limitation is the study's reliance solely on interviews, without incorporating quantitative data or statistics from chain retail stores regarding BI-based CRM implementation. Future research should apply content analysis approaches to mine textual and documentary data related to CRM implementation efforts in retail companies. This would help incorporate more practical, operational elements into the model.

## Ethical Considerations

All procedures performed in this study were under the ethical standards.

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## Conflict of Interest

The authors report no conflict of interest.

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## References

Ahn, J., & Toney, K. (2020). The role of customers' perceived values of integrated resort brands in destination. *Journal of Destination Marketing & Management*, *15*, 1-8. https://doi.org/10.1016/j.jdmm.2019.100403

Akhgari, N., Keshtkar, M., & Ahmadi Sharif, M. (2022). Investigating the impact of business intelligence on the success of customer relationship management using the mediating variable of knowledge management (Case study: Islamic Republic of Iran Shipping Company). *Industrial Technology Development*, *20*(48), 35-52. https://julistb.sinaweb.net/article_252593_28bf20c22365874483025d34e7cc4d2c.pdf

AlQershi, N., Mokhtar, S. S. M., & Abas, Z. (2022). The influence of structural capital on the relationship between CRM implementation and the performance of manufacturing SMEs. *International Journal of Systems Assurance Engineering and Management*, *13*, 1205-1218. https://doi.org/10.1007/s13198-021-01417-z

Alsaad, A., Selem, K. M., Alam, M. M., & Melhim, L. K. B. (2022). Linking business intelligence with the performance of new service products: Insight from a dynamic capabilities perspective. *Journal of Innovation & Knowledge*, *7*(4), 100262. https://doi.org/10.1016/j.jik.2022.100262

Andravaj, L., Zamanpour, O., & Ghasemi Hamedani, I. (2022). Online customer relationship management tactics and customer willingness to green support: The mediating role of perceived green risk (Case study: In Lorestan province). *Environmental Science and Technology*, *24*(6 (Serial 121)), 1-13. https://www.sid.ir/paper/1063726/fa

Bashardoust, O., Asgharizadeh, E., & Afshar Kazemi, M. A. (2022). Customer cluster analysis based on the WRFM model with an unsupervised data mining approach (Case study of health products). *New Research in Decision Making*, *7*(1), 198-223. https://journal.saim.ir/&url=http://journal.saim.ir/article_251293.html

Cioppi, M., Curina, I., Francioni, B., & et al. (2023). Digital transformation and marketing: a systematic and thematic literature review. *Italian Journal of Marketing*, 207-288. https://doi.org/10.1007/s43039-023-00067-2

Gonu, E., Okeniyi, J., & Agyapong, G. K. Q. (2023). Customer relationship management practices and organisational performance of commercial banks in Ghana: a mediation analysis. *Journal of Financial Services Marketing*. https://doi.org/10.1057/s41264-023-00226-8

Huang, Z., Xiong, S. K. S., & Zhong-jie, J. (2022). The Business Intelligence impact on the financial performance of start-ups. *Information Processing and Management*, *59*(1), 102761. https://doi.org/10.1016/j.ipm.2021.102761

Javid, M. R., Nematzadeh, S., & Ghasemi, B. (2023). Measuring the quality of customer relationship management for the development of digital marketing strategies in Shahr Bank. *Financial Economics (Financial Economics and Development)*, *17*(2 (Serial 63)), 313-334. https://journals.iau.ir/article_702195.html

Kowalczuk, P., Siepmann, C., & Adler, J. (2021). Cognitive, affective, and behavioral consumer responses to augmented reality in e-commerce: A comparative study. *Journal of Business Research*, 1-17. https://doi.org/10.1016/j.jbusres.2020.10.050

Mogale, D. G., Wang, X., Demir, E., & et al. (2023). Modelling and analysing supply chain disruption: a case of online grocery retailer. *Operations Management Research*. https://doi.org/10.1007/s12063-023-00405-9

Muhammad Sabbir, R., Surajit, B., Shivam, G., & Sivarajah, U. (2023). Technology readiness of B2B firms and AI-based customer relationship management capability for enhancing social sustainability performance. *Journal of Business Research*, *156*, 113525. https://doi.org/10.1016/j.jbusres.2022.113525

Nasehifar, V., Dehdashti Shahrokh, Z., Mohammadian, M., & Alahverdi, M. (2021). Measuring the customer experience management model in electronic banking services. *Business Management*, *13*(4), 974-1000. https://jibm.ut.ac.ir/article_86681.html

Raisanen, J., Ojala, A., & Tuovinen, T. (2021). Building trust in the sharing economy: Current approaches and future considerations. *Journal of Cleaner Production*, 1-11. https://doi.org/10.1016/j.jclepro.2020.123724

Ramazani, Y., Aref, M., & Shahtaghi, M. (2020). Customer retention in the medical tourism industry: Explaining the relationships between quality, satisfaction, trust and reasonable price. *Journal of Health Image*(1), 31-39. https://doi.org/10.34172/doh.2020.04

Rostamzadeh, R., Eskandari, K., & Orfai Jamshidi, S. (2021). Identification and prioritization of factors affecting the implementation of optimal customer relationship management in the General Directorate of Terminals Transportation. *Transportation Research Journal*, *18*(1 (Serial 66)), 145-164. https://www.trijournal.ir/article_77151_0.html?lang=fa

Seifollahi, N., & Movahed, S. M. R. (2022). Analyzing the effect of customer knowledge on improving the service quality of the hotel industry with the mediating role of customer relationship management. *Public Management Research*, *15*(55), 155-178. https://jmr.usb.ac.ir/article_7024.html?lang=fa

Sharifi, M., Sanaei, A., & Ansari, A. (2022). The impact of customer knowledge management on organizational value creation in B2C e-commerce. *Business Management*, *14*(2), 254-275. https://jibm.ut.ac.ir/article_88485.html?lang=fa

Shobana, J., Gangadhar, C., Arora, R. K., Renjith, P. N., Chincholkar, J. B., & Devidas, Y. (2023). E-commerce customer churn prevention using machine learning-based business intelligence strategy. *Measurement: Sensors*, *27*, 100728. https://doi.org/10.1016/j.measen.2023.100728

Sturm, M., Weking, J., Böhm, M., & et al. (2023). How two leading partners learn to tango: The case of IoT-based business model co-innovation between a retailer and an electronics supplier. *Electronic Markets*, *33*, 34. https://doi.org/10.1007/s12525-023-00645-4

Sun, Y., Liu, H., & Gao, Y. (2023). Research on customer lifetime value based on machine learning algorithms and customer relationship management analysis model. *Heliyon*, *9*(2), e13384. https://doi.org/10.1016/j.heliyon.2023.e13384

Thangam, A. (2021). Retailer's inventory system in a two-level trade credit financing with selling price discount and partial order cancellations. *Journal of Industrial Engineering International*, *10*(3). https://doi.org/10.1186/2251-712X-10-3

Tseng, H. T., Aghaali, N., & Hajli, D. N. (2022). Customer agility and big data analytics in new product context. *Technological Forecasting and Social Change*, *180*, 121690. https://doi.org/10.1016/j.techfore.2022.121690

Wolf, L., & Steul-Fischer, M. (2022). Factors of customers' channel choice in an omnichannel environment: a systematic literature review. *Management Review Quarterly*. https://doi.org/10.1007/s11301-022-00281-w

Wongsansukcharoen, J. (2021). Effect of community relationship management, relationship marketing orientation, customer engagement, and brand trust on brand loyalty: The case of a commercial bank in Thailand. *Journal of Retailing and Consumer Services*, *64*, 102826. https://doi.org/10.1016/j.jretconser.2021.102826

Zarei, A., & Ahmadi Alvar, Z. (2021). The impact of organizational culture on customer performance with an emphasis on the role of business intelligence. *Insurance Research Journal (Insurance Industry)*, *36*(4), 45-74. https://www.sid.ir/paper/986551/fa