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## **DIGITAL TRANSFORMATION STRATEGY OF THE CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM**

**Țirlea Mariana Rodica, Nataliia Trushkina, Oleh Harmash, Yuliya Shkrygun.** «*Digital transformation strategy of the customer relationship management system*». In the contemporary digital economy, customer relationship management is undergoing profound transformations driven by changes in consumer behavior, intensifying competition, and the rapid development of digital technologies, data analytics,

and artificial intelligence. Despite the widespread adoption of CRM systems, business practice still demonstrates a fragmented and instrumental approach to the digitalization of customer-related processes, which limits the ability to create long-term customer value and sustainable competitive advantages.

The purpose of this article is to substantiate and develop a digital transformation strategy for the customer relationship management system as an integrated managerial concept focused on the alignment of customer value, customer experience, business processes, data, digital technologies, and organizational change. The methodological framework of the study is based on systemic and process-oriented approaches, as well as methods of analysis and synthesis, structural-logical modeling, and the generalization of scientific publications and expert assessments in the field of digital transformation and CRM.

As a result of the study, a structural-logical model of the CRM digital transformation strategy is proposed, built on the principle of concentric levels with a vertical integrating axis, reflecting the interrelationships between customer value, customer experience, the process-and-data core of CRM, digital technologies, and the strategic and organizational management framework. It is demonstrated that effective digital transformation of CRM should be considered a continuous adaptive process aimed not only at automating customer interactions but also at transforming managerial practices, organizational culture, and the system of personnel competencies.

The scientific novelty of the research lies in the improvement of approaches to shaping a CRM digital transformation strategy through its interpretation as an integrated managerial architecture. The practical significance of the results consists in the possibility of applying the proposed model to the design and implementation of customer-oriented development strategies for enterprises operating in the digital economy.

**Keywords:** digital transformation; customer relationship management; CRM strategy; customer value; customer experience; omnichannel interaction; customer journey; data management; Big Data; data analytics; artificial intelligence; digital platforms; strategic management; organizational culture; digital competencies; customer orientation; sustainable development.

**Цирля Маріана Родіка, Наталія Трушкіна, Олег Гармаш, Юлія Шкригун. «Стратегія цифрової трансформації системи управління взаємовідносинами з клієнтами».** У сучасній цифровій економіці управління взаємовідносинами з клієнтами зазнає глибоких трансформацій, зумовлених змінами у поведінці споживачів, посиленням конкуренції та стрімким розвитком цифрових технологій, аналітики даних і штучного інтелекту. Попри широке впровадження CRM-систем, ділова практика й надалі демонструє фрагментарний та інструментальний підхід до цифровізації клієнтських процесів, що обмежує можливості створення довгострокової цінності для клієнтів і стійких конкурентних переваг.

Метою статті є обґрунтування та розроблення стратегії цифрової трансформації системи управління взаємовідносинами з клієнтами як інтегрованої управлінської концепції, орієнтованої на узгодження цінності для клієнта, клієнтського досвіду, бізнес-процесів, даних, цифрових технологій та організаційних змін. Методологічну основу дослідження становлять системний і процесно орієнтований підходи, а також методи аналізу й синтезу, структурно-логічного моделювання та узагальнення наукових публікацій і експертних оцінок у сфері цифрової трансформації та CRM.

У результаті дослідження запропоновано структурно-логічну модель стратегії цифрової трансформації CRM, побудовану за принципом концентричних рівнів із вертикальною інтегрувальною віссю, що відображає взаємозв'язки між цінністю для клієнта, клієнтським досвідом, процесно-даним ядром CRM, цифровими технологіями та стратегічно-організаційним управлінським каркасом. Доведено, що ефективну цифрову трансформацію CRM доцільно розглядати як безперервний адаптивний процес, спрямований не лише на автоматизацію взаємодії

з клієнтами, а й на трансформацію управлінських практик, організаційної культури та системи компетентностей персоналу.

Наукова новизна дослідження полягає в удосконаленні підходів до формування стратегії цифрової трансформації CRM шляхом її трактування як інтегрованої управлінської архітектури. Практична значущість результатів полягає у можливості застосування запропонованої моделі для проектування та впровадження клієнтоорієнтованих стратегій розвитку підприємств, що функціонують у цифровій економіці.

**Ключові слова:** цифрова трансформація; управління взаємовідносинами з клієнтами; CRM-стратегія; цінність для клієнта; клієнтський досвід; омніканальна взаємодія; шлях клієнта; управління даними; Big Data; аналітика даних; штучний інтелект; цифрові платформи; стратегічне управління; організаційна культура; цифрові компетентності; клієнтоорієнтованість; сталий розвиток

**Introduction.** In the modern conditions of the digital economy, customer relationship management acquires a qualitatively new meaning, which is due to the transformation of consumer behavior, increased competition and the rapid development of digital technologies. Customers increasingly expect personalized solutions, prompt response and seamless interaction through various communication channels, which significantly increases the requirements for customer relationship management systems and the logic of their development [1-3].

The relevance of the above-mentioned issues is confirmed by the results of international expert assessments and applied research. Thus, according to a survey by Accenture Digital [4] conducted among more than 13 thousand consumers, two thirds of customers change their service provider in case of unsatisfactory quality of service. Gartner [5] analysts note that about 90% of companies in the service sector compete primarily on the quality of customer interaction, while Salesforce [6] research shows that 76% of consumers expect companies to have a deep understanding of their individual needs and a personalized approach to communication.

Consulting and analytical reports also indicate the strategic nature of the digital transformation of customer processes. According to the results of a survey by IDG Communications [7], digital transformation is considered by management in 46% of cases

as a tool for improving the quality of customer service. Altimeter-Prophet [8] research showed that more than half of experts associate digital changes primarily with improving the system of contacts with consumers. At the same time, Econsultancy [9] experts emphasize that only 58% of companies integrate customer orientation into their digital strategies, while the majority is limited to the implementation of individual technological solutions.

An important argument in favor of a strategic approach is the economic effect of developing customer relationships. According to Bain & Company [10], up to 65% of companies' revenues are generated by existing customers, and increasing loyalty by even 5% can provide a significant increase in profitability. PwC studies [11] show that companies that invest in the digital transformation of customer processes demonstrate higher revenue growth rates compared to competitors focused exclusively on operational efficiency. At the same time, the practice of operating companies shows that the implementation of CRM systems and digital tools is often fragmentary and is not accompanied by the formation of a holistic digital transformation strategy. In such conditions, CRM is reduced to a technical platform for automating interaction with customers and does not perform the function of a strategic management tool [12]. This necessitates the transition from an instrumental approach to developing a strategy for the digital transformation of a

customer relationship management system that can provide long-term competitive advantage and sustainability of the business model.

**Literature and researches review.** In the scientific literature, the issue of customer relationship management is formed within the framework of an interdisciplinary discourse that combines marketing, strategic management, logistics and behavioral economics. Initial studies considered CRM mainly as a tool for supporting sales activities and automating customer contacts. In the works of P. Kotler, K. Keller [1], C. Grönroos [2], J.-J. Lambin [13], the emphasis is on the formation of long-term value relationships with consumers as a key condition for increasing the competitiveness of enterprises. The further evolution of approaches is associated with the transition to strategic management of customer assets. In particular, A. Payne and P. Frow [3] interpret CRM as an integrated system of strategic processes aimed at creating mutual value for customers and the company. A similar logic is traced in the works of R. Kumar, V. Reinartz [14], where customer relationship management is associated with customer lifecycle management and maximizing its long-term value.

With the development of digital technologies, CRM research is increasingly focused on the use of data, analytics, and intelligent algorithms. The works of T. Davenport, J. Harris [12] emphasize that analytics and data-driven approaches expand the possibilities of personalizing customer interactions, but do not replace the need for strategic integration of digital solutions into the management system. This led to the formation of the digital CRM direction, within which the role of omnichannel communications, platform solutions, and big data is analyzed [15].

In recent years, research has intensified on the impact of artificial intelligence on customer relationship management. The works of M. Ngai, E. Hu, Y. Wong [16] show the potential of machine learning for predicting

customer behavior and improving service quality. At the same time, bibliometric reviews show that most publications focus on the technological aspects of CRM, while the issues of strategic transformation of the customer relationship management system remain insufficiently systematized [17].

A separate area of research is related to the concepts of customer and digital customer experience. In the works of B. Schmitt, K. Lemon, P. Verhoef [19] CRM is considered as an infrastructural basis for customer experience management, covering all points of customer interaction with the company. At the same time, in studies of digital business transformation (D. Rogers [20], G. Westerman et al. [21]) CRM is usually considered as a functional element of the overall transformation, and not as an independent object of strategic management.

Thus, the analysis of scientific publications indicates the evolution of approaches to CRM from instrumental models to customer-oriented and digitally enhanced concepts. At the same time, the strategic dimension of the digital transformation of the customer relationship management system remains insufficiently disclosed, which forms a scientific gap and justifies the feasibility of further research in this direction.

**Aim and objectives.** The outlined problem determined the purpose of this article, which is to substantiate and develop a strategy for the digital transformation of the customer relationship management system as a holistic management concept that ensures the integration of digital technologies, customer-oriented processes and data management in the context of long-term development of enterprises.

Achieving the set goal involves solving a set of interrelated scientific tasks that logically follow from the chosen subject of research. In particular, the work summarizes modern scientific approaches to the interpretation of customer relationship management and digital transformation of business processes; justifies the feasibility of the transition from

instrumental use of CRM to strategic customer relationship management; formulates the author's interpretation of the strategy for the digital transformation of the customer relationship management system; develops a structural and logical model of the specified strategy; identifies key areas and practical recommendations for its implementation in the activities of enterprises, taking into account modern digital challenges [3; 12; 20].

The methodological basis of the study is a set of general scientific and special methods of cognition, the application of which ensures the comprehensive and systemic nature of the results obtained. In the process of the study, a systemic approach was used to consider the customer relationship management system as a multi-level dynamic system that is transformed under the influence of digital technologies and changes in the external environment. Methods of analysis and synthesis were used to generalize scientific approaches and identify key elements of the digital transformation of CRM, while induction and deduction allowed the formation of author's generalizations and theoretical conclusions [2; 15].

To identify the dominant scientific trends and evolution of research in the field of customer relationship management, methods of comparative analysis and generalization of the results of modern scientific publications were used. Structural and logical modeling was used to build an author's model of the strategy for the digital transformation of the customer relationship management system, which reflects the relationship between strategic, organizational, technological and customer-oriented components. Elements of expert analysis were used to interpret practical aspects of CRM digital transformation and formulate applied recommendations for management practice [16; 19].

The information base of the study consists of scientific publications of foreign and domestic scientists, analytical reports of international consulting companies, results of

expert surveys and research, as well as materials of open professional and scientific sources.

The use of the specified methodological tools allowed to ensure the validity of the obtained results, their scientific novelty and practical significance in the context of developing a strategy for digital transformation of the customer relationship management system.

**Results, analysis, and discussion.** In the digital era, the customer relationship management system ceases to be a set of isolated information solutions and is transformed into a multi-level managerial system integrated with the corporate development strategy of the enterprise. In this context, the digital transformation of CRM should be considered not as a technological project but as a long-term strategy of organizational, process-related, and behavioral change aimed at creating customer value and enhancing the resilience of the business model.

The analysis of contemporary scientific and applied approaches indicates that most enterprises focus on the implementation of digital tools for customer interaction while neglecting the strategic coherence of such solutions. As a result, digital initiatives in the field of CRM are often fragmented, insufficiently integrated into the managerial decision-making system, and unable to deliver long-term effects. Therefore, the digital transformation strategy of the customer relationship management system should be based on a systemic vision of CRM as a key element of managing the enterprise's customer capital.

Taking this into account, the article proposes an author's interpretation of the digital transformation strategy of the customer relationship management system, which is defined as an integrated managerial concept of the long-term development of CRM that involves the alignment of digital technologies, customer-oriented business processes, data management, and organizational change in order to ensure

personalized customer interaction, increase customer loyalty, and create sustainable competitive advantages for the enterprise.

Unlike traditional approaches, the proposed strategy is oriented not toward the automation of individual functions but toward transforming the entire logic of customer relationship management. It implies a transition from a reactive model of customer interaction to a proactive and predictive-analytical one based on the use of Big Data, intelligent analytics, and digital communication channels. In this context, CRM acts not only as an information platform but also as an institutional foundation for managerial decision-making.

The digital transformation strategy of CRM has a multidimensional nature and is implemented through the alignment of the enterprise's strategic goals with the customer strategy, organizational structure, digital infrastructure, and management culture. Its implementation involves the creation of a unified information space for customer interaction, the integration of data from multiple channels, ensuring transparency of customer-related processes, and establishing feedback mechanisms that allow managerial decisions to be promptly adapted to changes in consumer behavior.

An important component of the proposed strategy is the reconsideration of the role of customer experience in the customer relationship management system. Within the framework of digital transformation, customer experience is interpreted as the result of coordinated interaction among technological, process-related, and behavioral components rather than as a side effect of individual customer contacts. This implies that the digital transformation strategy of CRM should encompass all customer touchpoints and ensure their consistency and integrity.

The implementation of the digital transformation strategy of the customer relationship management system also requires the transformation of organizational and managerial practices. This includes changes in approaches to planning, monitoring, and evaluating customer-related performance, as well as the development of new personnel competencies in the fields of data handling, digital tools, and customer analytics. Without appropriate institutional support and employee engagement, the digital transformation of CRM risks remaining merely formal.

Thus, the digital transformation strategy of the customer relationship management system should be considered a comprehensive process that combines technological, organizational, and managerial changes and enables the transition to a customer-oriented, data-driven, and sustainable enterprise development model in the digital economy.

Accordingly, the proposed digital transformation strategy of the customer relationship management system is implemented as a multi-level managerial framework that integrates the strategic development priorities of the enterprise with operational mechanisms of customer interaction and analytical support for managerial decision-making. This approach makes it possible to avoid the fragmentation of digital initiatives and to ensure coherence between digital transformation objectives, organizational structure, business processes, and customer experience.

In this context, it is appropriate to distinguish the levels of implementation of the CRM digital transformation strategy, each of which performs a specific function while simultaneously forming part of a unified strategic framework (Table 1).

Table 1. Levels and Key Components of the Digital Transformation Strategy of the Customer Relationship Management System

Level	Content of Strategic Decisions	Key Components
Strategic	Formation of a customer-oriented vision of enterprise development and determination of the role of CRM in achieving long-term goals	Customer strategy; digital vision; value proposition
Managerial	Alignment of CRM with the corporate governance system and decision-making mechanisms	Customer management policies; KPIs; customer value management
Process	Transformation of customer interaction business processes based on digital solutions	Omnichannel processes; customer journey; channel integration
Technological	Provision of digital infrastructure for the implementation of the CRM strategy	CRM platforms; data analytics; artificial intelligence
Analytical	Development of data-driven management of customer relationships	Big Data; predictive analytics; personalization
Behavioral	Formation of a customer-oriented culture and digital competencies of personnel	Training; employee engagement; transformation of managerial practices

Source: developed by the authors based on analysis and generalization of [1; 2; 14; 20; 21; 22-27].

The identified levels are not isolated but operate in close interconnection, forming an integrated architecture of the CRM digital transformation strategy. The implementation of such a strategy implies a sequential transition from shaping a strategic vision to deploying specific digital solutions and transforming managerial practices. In this regard, it is appropriate to consider the stages of development and implementation of the digital transformation strategy of the customer relationship management system (Table 2).

The logic of phased implementation makes it possible to interpret the digital transformation of CRM as a continuous adaptive process rather than a one-time automation project. At this stage, the strategy moves from a declarative level to practical implementation and becomes an effective instrument for managing customer value.

To summarize the presented provisions and to visualize the interrelationships among key elements, it is appropriate to present a structural-logical model of the digital transformation strategy of the customer relationship management system (Figure).

Table 2. Stages of Development and Implementation of the CRM Digital Transformation Strategy

Stage	Content	Expected Results
Diagnostic	Assessment of CRM maturity, digital competencies, and customer-related processes	Identification of strategic gaps and growth points
Conceptual	Formulation of goals and principles of CRM digital transformation	Aligned strategic vision
Design	Development of a roadmap for digital transformation	Clear logic of change implementation
Implementation	Deployment of digital solutions and transformation of processes	Integrated customer management system
Analytical-Adaptive	Monitoring of results and strategy adjustment	Increased efficiency and adaptability

Source: developed by the authors based on analysis and generalization of [3; 12; 14; 18; 19; 22-27].

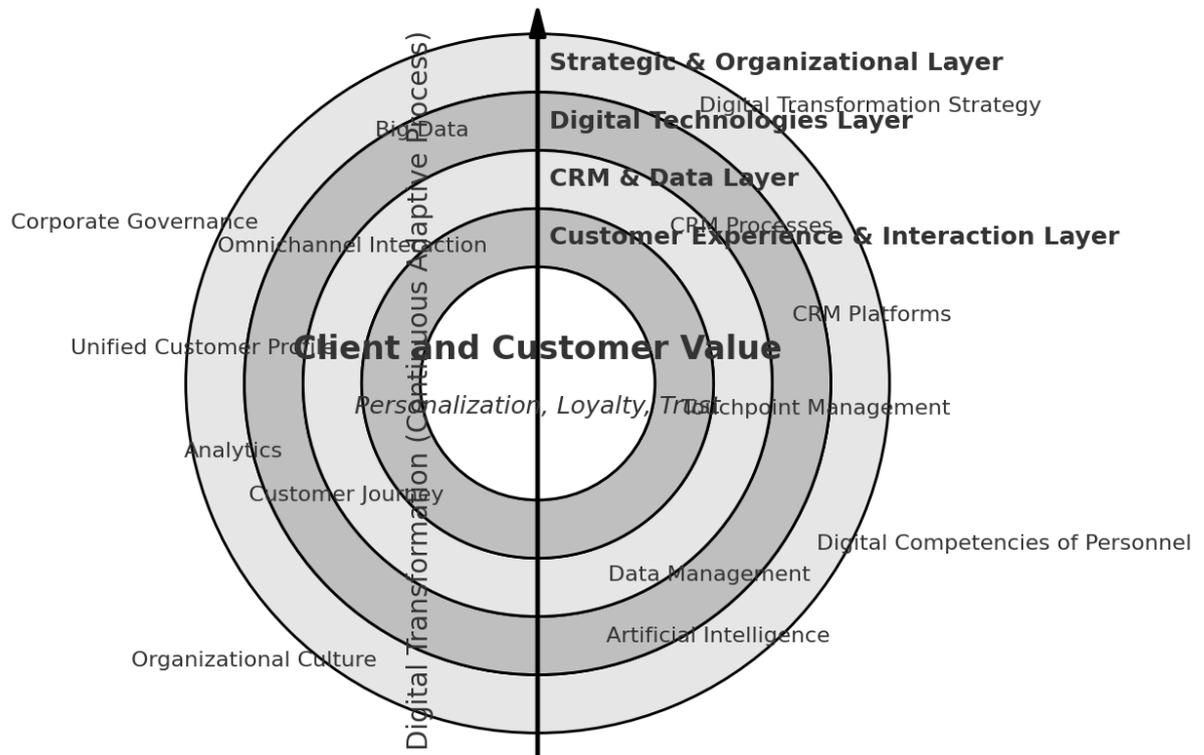


Figure 1 – Structural-Logical Model of the Digital Transformation Strategy of Customer Relationship Management System

Source: developed by the authors based on the results of their own previous research [22-27], using Artificial Intelligence tools.

The proposed figure visualizes a structural–logical model of the digital transformation strategy of the customer relationship management (CRM) system and is based on the principle of concentric levels supplemented by a vertical axis representing digital transformation as a continuous process. Such a configuration makes it possible to demonstrate that CRM digital transformation is not limited to the implementation of a software product but constitutes a coordinated architecture of strategic, organizational, process-related, and technological changes oriented toward the creation and reproduction of customer value.

At the center of the model is the customer and customer value as the key object of management. This implies that the

CRM digital transformation strategy should be derived not from the internal logic of automation but from the logic of the value proposition and the target effects for the customer. The specifying attributes of the core (personalization, loyalty, trust) indicate that the outcome of transformation should not be a “digitized contact” but the sustainable reproduction of behavioral and relational effects, such as customer retention, repeat purchases, recommendations, reduced price sensitivity, and tolerance for service failures. Thus, the core of the model defines the criterion for the overall effectiveness of the strategy, namely the system’s ability to increase the long-term value of the customer and for the customer.

The second concentric level forms the customer experience and interaction layer. Its immediate proximity to the core emphasizes that customers "encounter" the enterprise primarily through their experience at touchpoints; therefore, CRM management in the digital economy should begin with the design and alignment of the customer journey and omnichannel communication. Within this layer, three interrelated components are distinguished: omnichannel interaction, which ensures channel consistency, a unified service logic, and continuity of communication regardless of the channel; the customer journey as the logic of sequential customer steps (need → search → choice → purchase → use → support → repeat decision); and touchpoint management as a mechanism for ensuring service quality, speed, accessibility, personalization, and unified service standards. Consequently, this layer functions as an "interface" between the customer and the enterprise while simultaneously defining the requirements for processes, data, and technologies at subsequent levels.

The third level is process-analytical and demonstrates a fundamental idea: CRM is primarily a system of processes and data rather than merely a software product. This level comprises three basic pillars of manageability: CRM processes (customer acquisition, conversion, service, retention, reactivation, customer development, complaint handling, etc.); a unified customer profile resulting from the integration of data from all channels, departments, and interaction points (sales, service, logistics, marketing, support); and data management (quality, timeliness, completeness, accessibility, access rules, security, and compliance), which ensures the reliability of analytics and personalization. The logic of this layer lies in the fact that CRM digital transformation will be effective only when data and processes form a single manageable system in which interactions are not duplicated across departments, decisions are based on a single version of the data, and

customers perceive the company as an integrated entity rather than a set of fragmented contacts.

The fourth level reflects the technological foundation of digital transformation, including CRM platforms, Big Data, analytics, and artificial intelligence tools. Its position above the process-and-data core emphasizes that technologies should support processes and data rather than "replace" strategy. The functional role of this layer is to enable personalization (recommendation systems, segmentation, next best action/offer, personalized communication scenarios), forecasting (churn probability, customer lifetime value prediction, demand forecasting, communication response), automation (triggers, scenarios, chatbots, robotic assistants, automated task creation and lead management), and analytical support for management (dashboards, channel performance analytics, CX/CSAT/NPS measurement, attribution, etc.). Accordingly, digital technologies are interpreted in the model as an instrumental base for achieving objectives defined at the level of customer value and customer experience.

The outer level forms the governing framework that ensures the sustainability of transformation in the long term. This level includes the digital transformation strategy (goals, priorities, roadmap, initiative portfolio, metrics), corporate governance (responsibility allocation, product and data ownership, decision-making rules, change management), organizational culture (customer centricity, data culture, cross-functional interaction, readiness for experimentation), and digital competencies of personnel (analytics, CRM usage, service design, cyber hygiene, product and process management). It is precisely this framework that transforms digital transformation from a one-time IT project into an organizational capability for continuous adaptation, process renewal, experience enhancement, and scaling of data-driven solutions.

The vertical arrow intersecting all levels highlights that CRM digital transformation is

an end-to-end process integrating all elements of the model. It reflects the logic of a "continuous improvement cycle": strategic alignment → redesign of interactions and processes → data development → technological enhancement → measurement of effects → adjustment and scaling. Thus, the strategy does not end with the implementation of a CRM platform but continues through the monitoring of customer value indicators, experience quality, and process efficiency.

Overall, the figure demonstrates that the CRM digital transformation strategy integrates behavioral (value/loyalty/trust), process-related (customer journey/CRM processes), data-oriented (unified profile/data management), technological (AI/analytics/platforms), and organizational-managerial (strategy/culture/competencies) dimensions into a single coherent managerial architecture.

**Conclusions.** As a result of the conducted research, it has been established that in the context of the digital economy the customer relationship management system undergoes profound transformation that goes beyond the automation of individual functions and acquires a strategic nature. The digital transformation of CRM is increasingly determined not by the mere implementation of technological solutions but by the ability of enterprises to integrate customer value, customer experience, business processes, data, digital technologies, and organizational change into a single manageable system. The effectiveness of a customer-oriented development model and business resilience under conditions of intensifying competition and changing consumer behavior largely depend on the coherence of these elements.

The scientific novelty of the obtained results lies in the improvement of the scientific and methodological approach to shaping a digital transformation strategy for the customer relationship management system, which is based on interpreting CRM as an integrated managerial architecture rather than as a standalone tool or information

platform. The understanding of CRM digital transformation as a continuous adaptive process encompassing strategic, process-related, technological, and behavioral dimensions of management has been further developed. For the first time, a structural-logical model of the CRM digital transformation strategy has been proposed, built on the principle of concentric levels with a vertical integrating axis, which makes it possible to formalize the interrelationships between customer value, customer experience, the process-and-data core of CRM, digital technologies, and the strategic and organizational management framework.

The obtained results have significant practical value and can be applied by various stakeholder groups. For top management and business owners, the proposed strategy provides a methodological basis for transitioning from fragmented digital initiatives to an integrated customer-oriented development model, in which CRM serves as a tool for managing customer capital and a source of long-term competitive advantages. The use of the structural-logical model enables the alignment of enterprise strategic objectives with the customer strategy, the formation of a portfolio of digital initiatives, and the assessment of their effectiveness through indicators of customer value and customer experience quality.

For heads of functional units, including marketing, sales, service, and logistics, the research results provide a foundation for redesigning customer interaction business processes based on a unified customer journey logic and omnichannel interaction. The proposed process-and-data-oriented approach to CRM helps eliminate functional duplication, increase transparency of customer-related processes, and form a unified customer profile, which in turn creates prerequisites for service personalization and improves the effectiveness of managerial decision-making.

For IT departments and digital transformation specialists, the results of the study make it possible to reconsider the role

of digital technologies in CRM as instruments for supporting strategic and process-related changes. The proposed model emphasizes the necessity of combining CRM platforms, Big Data analytics, and artificial intelligence tools with clearly defined managerial objectives, data governance rules, and mechanisms of cross-functional integration. This reduces the risks of technological redundancy and increases the return on investment in digital solutions.

For enterprise personnel and specialists involved in customer interaction, the practical significance of the research lies in substantiating the role of organizational culture and digital competencies as critically important factors for the success of CRM digital transformation. The implementation of the strategy proposed in the article involves fostering a culture of customer orientation,

data-driven thinking, and cross-functional collaboration, which contributes to higher employee engagement and improved quality of customer service.

Prospects for further research are associated with the deepening of methods for the quantitative assessment of the effectiveness of CRM digital transformation strategies, particularly through the development of indicator systems for measuring customer value, customer experience, and the economic outcomes of digital change. Of particular scientific interest is the empirical testing of the proposed structural–logical model using data from enterprises of different industries and scales of activity, as well as the analysis of the impact of artificial intelligence tools on customer relationship management under conditions of high uncertainty.

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