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Implementation of AI for Solving Business Tasks

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Abstract- The study provides a comprehensive assessment of strategies and empirical results of implementing artificial intelligence-based solutions aimed at improving the efficiency of business processes in small and medium-sized enterprises (SMEs). The purpose of the work is to systematize and analyze the effectiveness of two key AI directions: conversational systems (conversational AI) and generative digital avatars in the context of lead generation, marketing communications, and customer service. The scientific novelty of the work lies in the proposal of a unified model for the synergistic integration of conversational and generative AI technologies, aimed at creating a seamless customer journey and maximizing marketing ROI while simultaneously increasing operational efficiency. Methodologically, the study is based on a review of relevant scientific literature from recent years. The conclusion confirms the initial hypothesis regarding a significant increase in operational efficiency and return on marketing investment when AI is strategically implemented. The work is of substantial practical and theoretical interest for SME executives, marketers, digital transformation experts, and researchers of applied aspects of artificial intelligence.

Keywords: artificial intelligence, business tasks, small and medium-sized business, AI assistants, generative AI, AI avatars, lead generation, marketing automation, conversion, digital transformation.

Introduction

In the context of rapid digital transformation, artificial intelligence has lost its status as the prerogative of exclusively large IT giants, becoming a publicly accessible, easily scalable, and highly efficient tool for solving a wide range of business tasks. The relevance of the study is driven by the rapid pace of AI adoption in operational and managerial processes, which has a

significant impact on marketing indicators, the quality of managerial decisions, and the customer experience. According to McKinsey's 2024 global study, 65% of companies already employ generative AI in at least one business function — almost twice as many as last year. At the same time, the share of organizations integrating AI simultaneously into several areas is growing, indicating a restructuring of operational and marketing practices under the influence of these technologies [14]. In parallel, BCG's 2024 report shows that 74% of enterprises face difficulties in scaling the AI-generated value, pointing to a gap between experimental initiatives and stable business results, and emphasizing the need for a systematic and phased approach to the implementation and evaluation of AI solutions [15]. In the field of marketing, AI serves as a key mechanism for personalization, accurate forecasting of consumer behavior, interaction automation, and improvement of customer experience quality, as confirmed by review studies and empirical data [1, 9, 11]. In particular, the use of AI in lead qualification, communication management via messengers, and digital advertising optimization reveals significant potential for increasing customer inflow and improving conversion rates.

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The author's hypothesis states that the purposeful and coordinated implementation of AI tools at key customer interaction points (initial contact, qualification, information provision) in service-oriented organizations can ensure a measurable increase in key performance indicators — such as conversion rate and request processing speed. The study aims to fill the existing gap by combining theoretical generalization of approaches with empirical analysis of practical cases, forming the basis for formalizing and replicating effective implementation strategies.

Materials and Methods

Contemporary research on the implementation of artificial intelligence (AI) for solving business tasks demonstrates two major directions: the strategic and technological contours of integration, as well as applied marketing and communication scenarios.

In the strategic block, the focus is placed on managerial approaches and organizational prerequisites. Thus, Csaszar F. A., Ketkar H., Kim H. [2] examine the influence of AI on the process of strategic decision-making by entrepreneurs and investors, relying on the behavioral theory of strategy. Ayinaddis S. G. [7] and Sánchez E., Calderón R., Herrera F. [10] analyze the dynamics of AI adoption in small and medium-sized enterprises (SMEs) through the lens of the TOE and DOI models, revealing that the key barriers are lack of competencies and organizational inertia. McKinsey [14] records a sharp increase in the use of generative AI in 2024, but notes difficulties in measuring the obtained value, while the BCG study [15] states that 74% of companies face challenges in scaling the achieved results. These works converge in the conclusion that technological readiness alone does not guarantee successful extraction of business value.

The second group of sources is devoted to the application of AI in marketing and the study of its impact on brand perception and consumer behavior. Kumar V., Ashraf A. R., Nadeem W. [1] provide a systematized picture of what, where, and how AI can transform marketing functions. Zhan Y. et al. [4] consider AI implementation in B2B marketing from the perspective of a social actor, identifying a correlation between technological innovativeness and shareholder response. Oliveira F. G. et al. [5] and Gerlich M. [6] study digital avatars and virtual influencers, demonstrating that emotional engagement and trust in a brand can be enhanced through realistic AI-generated characters. Vlačić B. et al. [9] propose a research agenda for the development of marketing functions in the AI era, while Labib E. [11] emphasizes the necessity of ethical and regulatory frameworks. Bashir T. et al. [12] specify how AI competencies can increase customer lifetime value in a B2B context.

The third thematic group is devoted to chatbots as a customer communication tool. Sidlauskiene J., Joye Y., Auruskeviciene V. [3] examine how AI chatbots influence price and product perception in conversational commerce. Urbani R., Ferreira C., Lam

J. [8] develop a managerial model for evaluating chatbot integration, combining factors of organizational readiness and technological complexity. Li M., Wang R. [13] show that the linguistic style of a chatbot has a direct impact on the customer's willingness to continue interaction and on brand perception.

Thus, the literature demonstrates an obvious discrepancy between expectations and actual results of AI implementation. Strategic-level studies highlight the importance of organizational readiness and competencies, while applied marketing works more often record positive effects of adoption. However, questions remain insufficiently covered regarding AI integration into complex cross-functional processes, metrics of long-term effect (especially beyond marketing), and AI interaction with corporate culture. The contradiction is also evident in that marketing studies focus on increasing engagement and loyalty, whereas strategic ones emphasize scaling difficulties and ROI uncertainty. This creates a research gap requiring an interdisciplinary approach that combines business strategy, change management, and technological architecture.

Results and Discussion

This section presents the results of a study on the implementation of artificial intelligence tools in the practice of small and medium-sized businesses, based on the integration of contemporary scientific publications and the author's own empirical observations. The analysis focuses on two central technological vectors: first, conversational AI assistants designed to automate interaction with the audience; second, generative AI systems used for creating marketing content.

The integration of conversational AI assistants into popular communication platforms (Telegram, WhatsApp, Instagram Direct) is characterized by high accessibility and a short payback period, which makes these solutions particularly relevant for SMEs. Their main function is the systematization and preliminary processing of incoming requests, which reduces the workload on staff, speeds up response time, and lowers the risk of losing potential customers at the early stages of the sales funnel. Analysis of implementations across various industries — from online foreign language courses and e-commerce to wellness services and the tourism sector — has revealed recurring patterns of improvement in key operational indicators and allowed for the assessment of the technology's contribution to business processes [4, 10].

As an empirical illustration, the experience of an online English school is considered. Before automation, all requests from social media advertising campaigns were processed manually by a single manager, which led to response delays and a decrease in the conversion rate from interest to qualified lead [2, 12]. After the implementation of a conversational assistant configured for initial qualification — determining language proficiency level, educational goals, and preferred schedule — the system processed 290 initial inquiries in the first month of operation, filtering out irrelevant ones and forwarding more than 50 hot leads fully prepared for scheduling a trial lesson to the manager. As a result, the conversion rate from application to qualified lead increased by 30% compared to the previous period. A comparison of key metrics before and after implementation is presented in Table 1.

Table 1. Comparative analysis of lead processing indicators before and after the implementation of the AI assistant (compiled by the author based on [2, 7, 11, 14]).

Indicator	Traditional method (manager)	Method with AI assistant	Change
Average time to first response	2–4 hours	< 1 minute	-99%
Percentage of processed requests (24/7)	~60% (during working hours)	100%	+67%
Conversion to qualified lead	12.4%	17.2% (+30% relative growth)	+4.8 pp

Cost of processing 1 lead	~2.5 USD	~0.5 USD	-80%

Illustratively, the influence of the AI assistant on the structure of the sales funnel is presented in Figure 1. It is evident that the most significant transformations occur at its upper stages: due to the automated preliminary filtering and qualification of incoming requests, the previously narrowed bottleneck of the funnel expands. As a result, leads with a higher level of readiness for interaction proceed to the subsequent stages, which contributes to an increase in conversion rates and a reduction of frictional losses at all following steps.

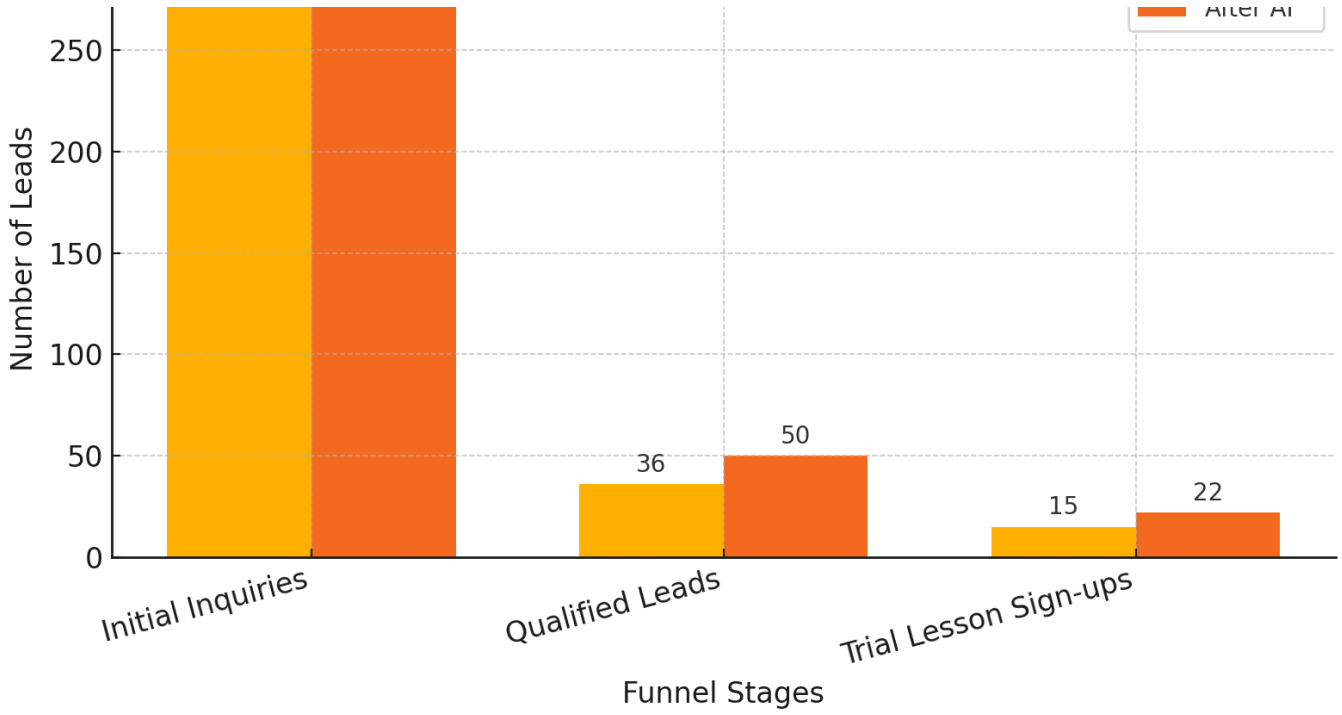

Fig. 1. The impact of the AI assistant on the lead generation funnel (compiled by the author based on [7, 14, 15]).

The second direction with high potential is the use of generative artificial intelligence models for the production of unique media content. In practice, the most notable application is the use of AI avatars — virtual presenters capable of reproducing predefined text scripts with realistic voice articulation, facial expressions, and gestures. For instance, in one advertising campaign for a Balinese real estate agency, such a digital host was integrated. This approach made it possible to avoid expenses associated with organizing traditional filming — hiring actors, renting equipment, and conducting complex post-production processing: compared to classical methods, the total cost savings amounted to approximately 70% [7]. In addition, the speed of adapting advertising materials increased: within a minimal time frame, it was possible to generate several versions of videos for A/B testing, varying the script, voiceover language, and the visual appearance of the avatar in accordance with the target audience segment. At the same time, without significant additional costs, the videos were localized into English, Chinese, and Russian, which expanded the target audience reach [2, 5].

Another example of the effective application of the technology is the creation of educational programs with AI avatars acting as teachers or lecturers. Virtual presenters make it possible to produce educational content faster and at lower cost compared to classical studio filming, while maintaining a high level of perception due to realistic interaction with the audience. This method is particularly in demand among developers and authors of online courses, including in modules dedicated to the design of AI avatars and the conduct of neuro-photoshoots, where the visualization of the technology itself becomes an integral part of teaching [5, 6]. The sequence of

algorithmized stages for preparing and integrating such a media product into the educational ecosystem is expedient to present in the form of a structural diagram (Figure 2).

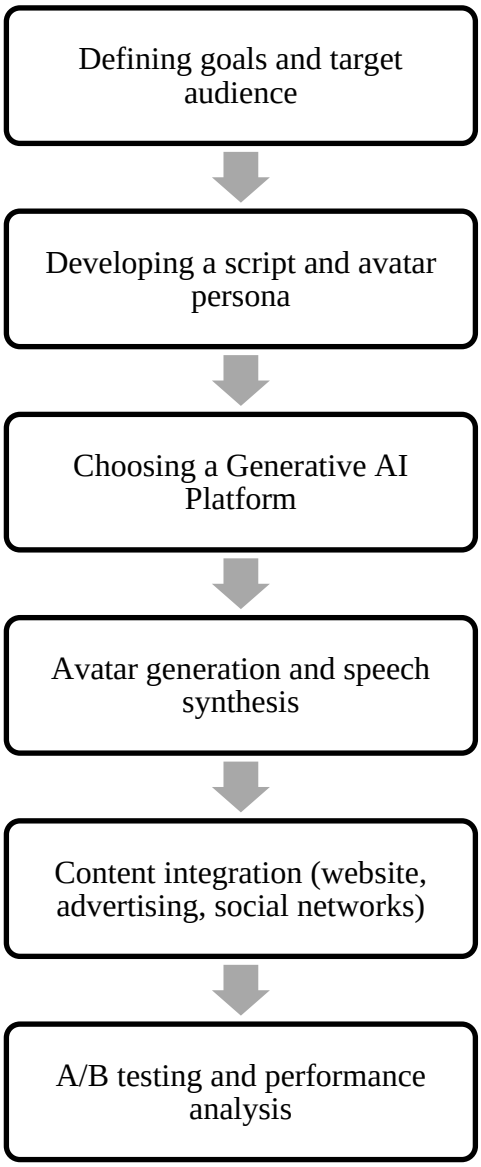

Fig. 2. Scheme of the process of creating and integrating marketing content using an AI avatar (compiled by the author based on [2, 5, 6]).

That is, maximum efficiency is achieved not through the fragmentary implementation of individual AI modules, but through their synchronized, coordinated integration into a unified platform environment. In this regard, the development of a synergistic architecture is substantiated, in which generative models and conversational assistants act as complementary components of the end-to-end Customer Journey. A conceptual representation of this architecture is shown in Figure 3.

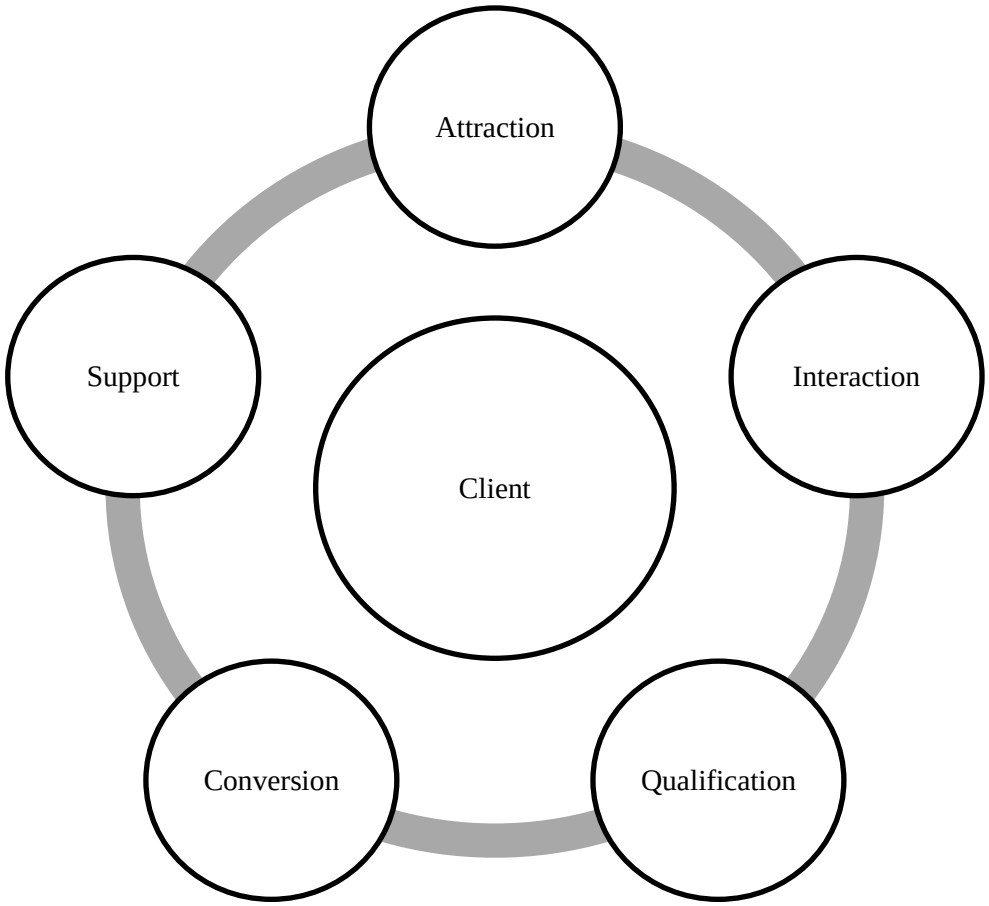

Fig. 3. Integrated AI-Driven Customer Journey Model for SMEs (compiled by the author based on [3, 8, 11]).

As can be seen from Figure 3, at the first stage (Attraction), advertising materials generated with the participation of an AI avatar are used—primarily video formats for social networks and banner advertising, which serve the function of initial capturing of the target audience's attention and induce the redirection of users to a messenger. At the second stage (Interaction), within the messenger, the AI assistant comes into play: it instantly responds to the initial communication, provides the user with generalized information generated on the basis of a combined AI knowledge base, and, through targeted clarifying questions, initiates the third stage (Qualification). After accumulating a comprehensive volume of data on the user's needs and context, the system proceeds to the fourth stage (Conversion), at which the "warmed-up" lead, together with the complete communication history, is transferred to a human manager for the final completion of the transaction or appointment booking. At the final fifth stage (Support), the same AI assistant continues to provide support: responding to typical inquiries and systematically accumulating feedback, thereby contributing to customer retention and increasing customer satisfaction [1, 13].

The integration of the listed stages into a single end-to-end model creates a synergistic effect that exceeds the total effectiveness of the isolated application of individual tools: thanks to the smooth transfer between stages and continuous work with the audience, losses at each level of the funnel are reduced.

Discussion of Results

The obtained data confirm the proposed hypothesis that targeted and systematic integration of artificial intelligence technologies leads to a significant improvement in key business performance indicators. The most striking example is a 30% increase in conversion in the language school project, achieved through the redistribution of tasks between employees and AI. The key factor here is not the innovative platform itself, but its proper integration into the existing operational and client landscape. The AI assistant did not replace the manager but assumed routine yet important functions of preliminary selection and qualification of requests, which allowed the staff to focus on interactions requiring empathy,

strategic thinking, and nuanced negotiation skills. This conclusion resonates with the findings of the study [11], which emphasizes the effectiveness of the hybrid human–AI model.

The formed synergistic model (Figure 2) eliminates the gap noted in the literature by combining previously disparate tools — from virtual avatars to chatbots — into a single end-to-end marketing and operational chain. The practical value of this scheme lies in its ability to scale and adapt to the specifics of various segments of small and medium-sized businesses: from educational projects to real estate agencies, ensuring coordinated interaction of communication channels and improving overall efficiency.

At the same time, the implementation of AI systems is accompanied by a number of limitations and risks. Even a relatively simple launch requires substantial resources — both financial investments and the development of technological infrastructure and staff competencies. Equally important, but often overlooked, is the stage of continuous support: monitoring work quality, regularly updating and retraining models. Without timely calibration, the AI assistant can produce erroneous or inappropriate responses, which negatively affects the client experience. In addition, excessive automation can undermine the perception of the brand's humanity, especially in services where personal interaction is critically important — for example, in a network of massage salons. Consequently, the optimal level of automation should be chosen individually, taking into account the company's value proposition and the expectations of its audience.

Thus, artificial intelligence possesses significant potential for the development of small and medium-sized businesses; however, this potential is realized only through a strategic rather than a fragmented approach to implementation. The main indicator of success is not the number of AI tools used, but the depth of their mutual integration and alignment with the overall corporate strategy.

Conclusion

The conducted work has made it possible to build a comprehensive and multidimensional analytical picture for assessing the effectiveness of using artificial intelligence technologies in solving key business tasks in the small and medium-sized enterprise (SME) segment. The research objective—based on a systematic review of contemporary scientific literature and the analysis of practical cases—was successfully achieved: a comprehensive evaluation of the effectiveness of implementing conversational and generative AI tools was carried out, and a model of their complementary application was proposed.

During the empirical analysis, a significant operational effect from the targeted implementation of AI assistants in lead generation processes and the initial processing of incoming customer inquiries was confirmed. Quantitative data from the author's practice demonstrate the possibility of increasing conversion rates by up to 30% while simultaneously reducing the cost of processing a single lead multiple times, which serves as evidence supporting the initial hypothesis.

Additionally, it was established that generative AI tools, in particular virtual avatars, significantly expand the potential of SMEs in creating marketing and educational content. This leads to a noticeable reduction in costs and an increase in the flexibility of production and communication processes.

The scientific novelty of the study lies in the development of an integrated AI-Driven Customer Journey model, designed to eliminate the gap identified in the review section between strategic approaches and the fragmented use of individual AI solutions. The proposed model covers the interrelated stages of customer attraction, engagement, qualification, conversion, and subsequent support through a coordinated set of AI tools, ensuring the reproducibility of the methodology and its scalability within the SME environment.

In conclusion, it is emphasized that despite the demonstrated effectiveness, the implementation of AI initiatives requires a comprehensive approach, encompassing not only technological transformations but also organizational changes, as well as the precise combination of automated processes and human involvement. Promising directions for further research include studying the long-term impact of AI solutions on customer loyalty and the formation of industry standards and benchmarks for an objective assessment of AI implementation effectiveness.

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