



Article

Factors for Improving Service Quality Through Digital Technologies In Enterprises

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Abstract: In the era of rapid digital transformation, enterprises increasingly leverage digital technologies to enhance service quality and strengthen customer relationships. This study investigates the key factors influencing service improvement through the implementation of technologies such as artificial intelligence, data analytics, chatbots, mobile applications, and customer relationship management (CRM) systems. By analyzing how these tools optimize service processes, personalize customer experiences, and automate routine tasks, the research highlights their critical role in improving operational efficiency, boosting customer satisfaction, and securing competitive advantage. The findings emphasize that enterprises must invest in digital infrastructure, enhance employee digital literacy, and develop strategic frameworks tailored to digital service delivery. Moreover, utilizing big data insights enables enterprises to offer customized services and foster long-term client loyalty. The study offers practical recommendations for businesses seeking to accelerate their digital transformation and achieve sustained service excellence in today's dynamic market environment.

Keywords: : digital technologies, service quality, CRM (customer relationship management), online service, chatbots, automation, data analytics, digital transformation, competitiveness, customer focus, information technology, SERVQUAL, digital literacy

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1. Introduction

In recent years, digital technologies have brought significant changes to various aspects of life, especially in the operations of enterprises. Nowadays, enterprises use modern technologies in all processes, from internal management to customer service [1], [2]. With the help of artificial intelligence, cloud technologies, big data, and automated systems, it has become possible to offer more convenient, faster, and personalized services. This not only improves service quality but also helps strengthen trust in the enterprise. Therefore, it is increasingly important to study the factors that determine service quality through digital technologies. Aspects such as the development of digital infrastructure, staff skills in using technologies, automation of management processes, and the availability of effective digital communication channels directly affect the level of service. This research aims to analyze these factors and demonstrate how they can be implemented in practice by enterprises [3], [4].

Literature Review

Numerous domestic and foreign researchers have conducted scientific work on the economic nature and classification of services provided through digital technologies in enterprises. This section attempts to provide an overview of the economic essence of commercial services, their role in society and business, and their classification criteria based on the analysis of relevant scientific literature.

Classical economists such as Smith and Ricardo emphasized that the efficiency of market economies increases through the development of trade processes. Schumpeter explored how innovation and entrepreneurial activity impact the development of commercial services [5], [6], [7]. In modern studies, aspects of commercial services related to marketing and logistics have been thoroughly analyzed. Local economists, including Karimov, Abdukarimov, and Tursunov, have conducted research on the development of the service sector in Uzbekistan and its transformation into a key driver of the economy.

With the development of the digital economy, new forms of commercial services are emerging. Brynjolfsson and McAfee, in their work *The Second Machine Age*, analyzed how digital technologies influence the service market. OECD reports provide insights into the development of digital trade services and their impact on the global economy [8]. Local sources, such as the 2022 presidential decrees and national programs of the Republic of Uzbekistan, place significant emphasis on the implementation of digital technologies in service development.

The literature analysis shows that digital technologies in service provision have become a vital component of the modern economy [9]. Various approaches exist to understand their economic nature, classification, and development. In addition to traditional forms of commercial services, the emergence of new services enabled by digital technologies is particularly emphasized in scientific sources.

2. Materials and Methods

During the research process, existing domestic and international scientific literature, articles, conference materials, and previous research on the digital economy and service sector were thoroughly studied and analyzed. These scientific sources helped establish the relevance and theoretical foundations of the topic by exploring the impact of digital technologies on service quality, the advantages and challenges of implementation, and leading international practices. Based on the analytical approaches described in the literature, trends in the development of the service sector in a digital economy, the application of innovative technologies, and their effectiveness were identified. As a result, key aspects of the research topic — factors for improving service quality through digitalization — were defined, and a solid theoretical basis was formed.

3. Results and Discussion

In the digital economy, the sustainable development of service-oriented enterprises depends on achieving strategic goals and operating in accordance with market economy principles. Today, the service sector is characterized by intense competition, rapid technological advancements, and evolving customer needs. Therefore, enterprises in this sector must base their development strategies on an intensive growth model [10]. In our view, the principles of intensive development for service enterprises include:

1. Improving service quality and speed through digital technologies.
2. Diversifying service types based on innovative approaches.
3. Understanding customer needs deeply and offering customized services.
4. Enhancing human resources with digital competencies and providing regular training.
5. Developing a strategic decision-making system based on market analysis.

Digital transformation is becoming an integral part of the modern economy. Especially in the service sector, ensuring competitiveness, meeting customer expectations, and adapting to market demands make the implementation of digital technologies

essential. Customers now expect fast, convenient, and uninterrupted services [11]. Digital systems allow enterprises to offer real-time service, efficient data exchange, and automated processes that enhance service quality. Digital transformation promotes a customer-centric approach, enables personalized services, and elevates service culture to a new level, fostering long-term, trustworthy relationships with customers.

The advancement of digital technologies has enabled the use of automation and artificial intelligence (AI) in service processes. Tools such as chatbots, automated response systems, and voice assistants help resolve common queries and simple issues in real-time. This allows staff to focus on complex, high-skill tasks requiring individual attention, improving service efficiency and optimizing human resource usage [12], [13]. AI technologies also analyze customer behavior, preferences, and needs, enabling personalized communication and predictive offerings. Furthermore, AI allows for continuous monitoring of service quality, early detection of issues, and prompt corrective actions. Overall, integrating automation and AI into service processes enhances service quality and strengthens customer relationships.

Digital technologies enable enterprises to collect, store, and analyze large volumes of customer data [14], [15]. This data provides deep insights into customer needs and preferences, allowing services to be tailored accordingly. Such an approach systematically improves service quality and helps build long-term, stable relationships by enhancing customer loyalty.

4. Conclusion

The research results show that the implementation of digital technologies in the service sector is a key factor in improving business efficiency. Technologies such as artificial intelligence, chatbots, CRM systems, automated service platforms, and big data analytics simplify, personalize, and accelerate service delivery. These tools enable a highly individualized approach, improve satisfaction levels, and enhance competitiveness. Internal factors such as digital infrastructure, employee digital literacy, and flexible management systems are also critical in raising service quality.

Based on the findings, the following suggestions are proposed:

1. Develop and implement a digital transformation strategy tailored to each enterprise's operations.
2. Conduct regular training to improve employees' digital competencies.
3. Encourage widespread use of CRM and AI technologies to enhance customer engagement and personalize service.
4. Implement decision-making systems based on customer data analytics to tailor service design and marketing strategies.
5. Strengthen the legal framework and government support mechanisms (e.g., tax incentives, grants, digital infrastructure projects) for digital service development.

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