

Technological Mechanisms for Assessing Service Quality and the Characteristics of Their Application in Georgia

Gela Mamuladze^a, Salome Mzhavanadze^b

^a<https://orcid.org/0000-0003-4194-7025>

^b<https://orcid.org/0009-0007-4620-7858>

Batumi Shota Rustaveli University, Batumi, Georgia

ARTICLE INFO

Keywords:

Service quality,
Service marketing,
Digital
transformation,
Quality assessment

ABSTRACT

Against the backdrop of global economic transformation in the twenty-first century, the service sector has emerged as the primary source of economic growth and competitive advantage. In recent years, service quality and its assessment have become significant challenges, driven by escalating consumer expectations, rapid advancements in digital technologies, and intensifying global competition. According to Service-Dominant Logic theory (Vargo and Lusch, 2016), the global economy has progressively transitioned from tangible goods toward intangible, service-oriented models, generating new imperatives for the assessment of service quality.

Service quality and digital technologies are today inextricably intertwined. The integration of digital technologies is fundamentally reshaping the mechanisms through which service quality is evaluated. The strategic significance of this domain is further underscored by the trajectory of investment in artificial intelligence within the marketing sector, which grew from \$191.5 million to \$1.38 billion between 2018 and 2024 (MasleJ *et al*, 2025).

The present study examines the role of service as a principal driver of economic activity, contemporary trends in international trade in services, and the modern digital mechanisms employed in service quality assessment, among other dimensions. The paper concludes with recommendation for enhancing and refining existing service quality assessment frameworks.

JEL classification:

Received: 29.04.2026

Revised: 25.06.2026

Accepted: 03.08.2026

O33, L80, M31.

<https://doi.org/10.46361/2449-2604.13.2.2026.41-53>

მომსახურების ხარისხის შეფასების ტექნოლოგიური მექანიზმები და მისი გამოყენების თავისებურებები საქართველოში

გელა მამულაძე^a, სალომე მჟავანაძე^b

^a<https://orcid.org/0000-0003-4194-7025>

^b<https://orcid.org/0009-0007-4620-7858>

ბათუმის შოთა რუსთაველის სახელმწიფო უნივერსიტეტი, ბათუმი, საქართველო

ინფორმაცია

აბსტრაქტი

სტატიის შესახებ

საკვანძო სიტყვები:

მომსახურების
ხარისხი,

XXI საუკუნის გლობალური ეკონომიკის ტრანსფორმაციის ფონზე
მომსახურების სექტორი გახდა ეკონომიკური ზრდისა და კონკურენტული

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

მომსახურების
მარკეტინგი,
ციფრული
ტრანსფორმაცია,
ხარისხის შეფასება

უპირატესობის მთავარი წყარო. ბოლო პერიოდში მომსახურების ხარისხი და მისი შეფასება მნიშვნელოვან გამოწვევად იქცა, რაც განპირობებულია: მომხმარებელთა მზარდი მოლოდინებით, ციფრული ტექნოლოგიების სწრაფი განვითარებით და გლობალური კონკურენციის გამწვავებით. მომსახურების დომინანტური ლოგიკის თეორიის მიხედვით (Vargo & Lusch (2016)), მსოფლიო ეკონომიკა თანდათან გადავიდა მატერიალური პროდუქტებიდან არამატერიალურ, მომსახურებაზე ორიენტირებულ მოდელზე, რაც ქმნის ახალ გამოწვევებს მომსახურების ხარისხის შეფასების სფეროში.

მომსახურების ხარისხი და ციფრული ტექნოლოგიები დღეს მჭიდროდ არის დაკავშირებული. ციფრული ტექნოლოგიების ინტეგრაცია რადიკალურად ცვლის მომსახურების ხარისხის შეფასების მექანიზმებს. აღნიშნული სფეროს სტრატეგიულ მნიშვნელობას ადასტურებს ის გარემოებაც რომ AI ტექნოლოგიებში ინვესტიციების ზრდა მარკეტინგის სფეროში 2018-2024 წლებში \$191.5 მილიონიდან \$1.38 მილიარდამდე გაიზარდა (Maslej *et al*, 2025).

წინამდებარე ნაშრომში გაანალიზებულია მომსახურების ადგილი, როგორც ეკონომიკის ერთ-ერთი მამოძრავებელი ძალა, მომსახურების საერთაშორისო ვაჭრობის თანამედროვე ტენდენციები, მომსახურების ხარისხის შეფასების ციფრული ინსტრუმენტების თანამედროვე მექანიზმები და სხვ. წარმოდგენილია დასკვნები მომსახურების ხარისხის შეფასების მექანიზმების სრულყოფის ღონისძიებების შესახებ.

O33, L80, M31.

JEL კლასიფიკაცია:

მიღებულია:

29.04.2026

რეცენზირებულია:

25.06.2026

დამტკიცებულია:

03.08.2026

<https://doi.org/10.46361/2449-2604.13.2.2026.41-53>

Introduction

In the context of the contemporary global economy, the service sector plays a leading role in determining the competitiveness of nations. The digital age is giving rise to a new paradigm in service quality assessment. The integration of artificial intelligence, machine learning, big data analytics, and Internet of Things technologies enables transformation encompasses not only the renewal of technological instruments but also a fundamental reconceptualization of methodological approaches.

Relevance of the Topic. The service sector today constitutes the principal driving force of the global economy. International trade in services is experiencing sustained and intensive growth (Our World of Data, 2024), reflection the broader global shift toward a service-based economy. The digital age is generating a new paradigm in service quality assessment, as the integration of artificial intelligence, machine learning, and big data analytics is radically transforming traditional approaches to quality evaluation. The growth of AI investment in the marketing domain attests to the strategic signification of these technologies (Our World in Data, 2025). Concurrently, the expansion of international service creates new challenges for quality assessment systems, which must account for cultural, linguistic, and religious differences across markets.

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

The distinctive characteristics of service: intangibility, inseparability, heterogeneity, and perishability, produce a complex environment in which traditional assessment criteria, including accessibility, quality and timeliness of service delivery, organizational reputation, reliability, safety, the interpersonal attributes of personnel (communication skills, courtesy), knowledge and competence, and staff responsiveness, are no longer sufficient for comprehensive quality evaluation. Organisations require effective instruments to achieve competitive advantage within a service economy. Understanding contemporary quality assessment mechanisms and implementing them appropriately is therefore critical to business success. In light of the above, the authors consider the examination of these issues to be of considerable scholarly and practical relevance.

Research Objectives and Task. The primary of this study is to evaluate the mechanisms of service quality assessment in contemporary markets, to identify existing challenges, and to draw corresponding conclusions regarding technological mechanisms for service quality assessment. The research tasks are defined as follows: a bibliographic review of theoretical issues in service quality assessment; an examination of trends in international trade in service; an analysis of both traditional methods and digital instruments for service quality assessment; a study of the peculiarities of technological development among enterprises in Georgia; and an investigation of the attitudes of Georgian companies toward service quality assessments mechanisms.

Literature Review. The assessment of service quality has been the subject of extensive academic inquiry. The body of research reviewed below collectively demonstrates that service quality assessment has progressively evolved from classical theoretical models toward approaches grounded in technological mechanisms. This evolution acquires particular significance in the context of the digital economy, where artificial intelligence and data-driven systems are becoming integral to quality management.

Gronroos (1984) was the first to distinguish between the technical quality of a service, what the customer receives, and its functional quality, how the service is delivered. Building on this foundation, Parasuraman, Zeithaml, and Berry (1985, 1998) developed the SERVQUAL methodology, which measures the gap between customer expectation and actual perceptions. Rust and Oliver (1994) extended the model to three dimensions, introducing the service environment as an independent component.

Within the context of digital transformation, Vargo and Lusch (2016) argued that quality management requires a paradigmatic reassessment. Huang and Rust (2021) and Kumal *et al* (2019) further demonstrate that the integration of AI technologies enables organisations to transition from assessment toward proactive, data-driven quality management.

Research Methodology. The study employs bibliographic research methods alongside data collection and analysis techniques, incorporating both quantitative and qualitative research approaches. The analysis draws on official data from international organisations, including Our World in Data (2023), as well as the National Statistics Office of Georgia.

Results

Service quality and its continuous improvement constitute one of the principal indicators of societal well-being and represent an essential precondition for the successful functioning of all business activity. It is for this reason that international trade in services has emerged as one of the most dynamically developing segments of the contemporary global economy, experiencing sustained and intensive growth. According to Our World in Data (2024), the share of service trade in GDP across the Europe and Central Asia region increased from 9% in 1975 to 28% by 2024, reflecting the growing significance of the service economy. This expansion has partly driven by rising investment in AI technologies within the marketing and digital advertising sectors, where investment grew from \$191.5 million to \$1.38 billion between 2018 and 2024 (Our World in Data, 2025).

The considerable influence of globalization on the service sector is further corroborated by international trade statistics, which have grown substantially over recent decades. The statistical data presented by Our World in Data (2024) (see Figure 1) appropriately captures the share of service trade in GDP across various regions for the period 1970-2024. This indicator is calculated as the ratio of the sum of services exports and imports to gross

domestic product (expressed in US dollars). The data presented in Figure 1 clearly demonstrate an increase in the share of service trade in GDP from 9% to 28% over the period 1975-2024. This trajectory reflects both the deepening of regional economic integration and the new opportunities for service delivery generated by technological advancement.

The data presented reveal that the most significant transformation was recorded in the Europe and Central Asia region. The intensive growth of international trade in service accelerated particularly after the 2000s, which is presumed to be associated with:

- The deepening of European Union integration (Baldwin, 2016);
- The development of financial services centres (London, Frankfurt, Zurich);
- The growth of digital transformation and IT service exports;
- The integration of past-socialist countries into markets economies.

The second highest indicator was recorded in the Middle East and North Africa approximately 23% by 2024. However, this region is characterized by a more volatile trend, which may be explained by:

- Fluctuations in oil and gas markets (Ross, 2012);
- The impact of regional conflicts;
- Instability in the tourism sector.

It is noteworthy that the global average for service trade has been gradually increasing, reaching 15% by 2024, indicating the general orientation of the world economy toward a service-based model (Francois and Hoekman, 2010). North America, East Asia and the Pacific, Latin America and the Caribbean, and Southern Africa demonstrate more moderate yet sustained growth within the 7-12% range.

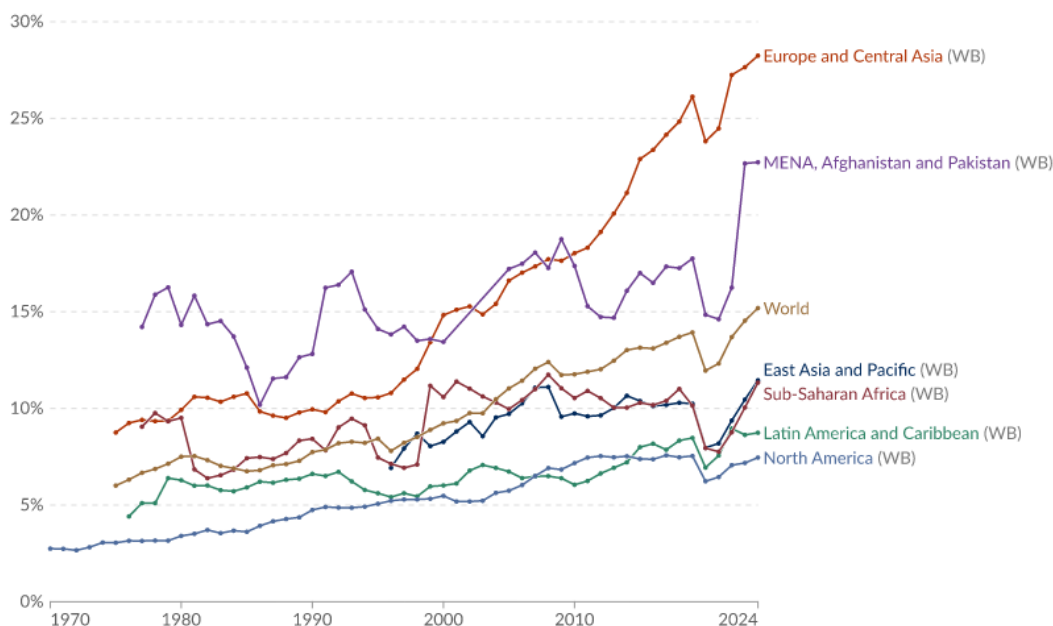


Figure 1: Trade in services (exports plus import) as a share of GDP

Source: Our World in Data (2024)

<https://ourworldindata.org/grapher/service-exports-and-imports-gdp>

Global service trade slowed considerably in the first quarter of 2024, a development linked to prevailing uncertainty in the world economy and heightened geopolitical tensions.

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

In the contemporary business environment, service quality assessment has become a determining factor of organizational success. A significant factor in the service sector is the delivery of services both as a process and as an outcome. Given that the share of international trade in service is continuously expanding, demand for improvement in service quality is correspondingly increasing. In modern business, service quality plays a pivotal role in determining customer satisfaction and in enabling the continuous improvement of service delivery. Accordingly, the assessment and enhancement of service quality constitutes an indispensable condition for the successful functioning of any business.

Through service quality assessment mechanisms, companies obtain customer feedback, evaluate service effectiveness, and plan development strategies. In Georgia, the adoption of these mechanisms contributes to enhancing business competitiveness and approximating international standards. As digital transformation accelerates, classical assessment methods are increasingly being integrated with technological instruments, creating a new paradigm in quality management. It is therefore important to analyse how service quality assessment mechanisms have evolved alongside societal development, with a view to addressing the complexities inherent in this domain.

In the academic literature, one of the earliest studies relating to service quality assessment was conducted by the Nordic School of Services Marketing and Management under the leadership of Gronroos, which made a significant contribution to the dimensions of functional and technical quality. Drawing on research findings, a distinction was drawn between the outcome of service delivery (what customers receive) and the process of service delivery (how customers receive it). This dual perspective influenced numerous subsequent quality assessment frameworks (Rust and Oliver, 1994), including hierarchical conceptualisations of perceived service quality that extended the model to incorporate multiple levels of consumer evaluation (Brady and Cronin, 2001).

Another significant contribution to service quality in the academic literature emerged in the 1980s through the foundational work of Parasuraman, Zeithaml, and Berry, which formulated and open theory of service quality. Their conceptualisation defined service quality as the discrepancy between customer expectations and perceptions of service delivery, thereby laying the groundwork for service quality measurement instruments. Service create a complex environment in which traditional methods of assessing the quality of tangible goods are no longer sufficient (Parasuraman *et al*, 1985). This is particularly relevant under conditions in which customer expectations are rising and quality assessment become a complex process of subjective perceptions and value co-creation (Prahalad and Ramaswamy, 2004). Indeed, customer requirements very in nature ranging from basic expected attributes to those that generate delight when present (Kano *et al*, 1984) a distinction that further complicates standardizes quality assessment.

The contemporary technological era is generating a new paradigm in service quality assessment (Kumar *et al*,2019), wherein traditional methods are being supplanted by digital instruments. This transformation enables organisations to transition from a reactive to a proactive approach and to obtain detailed analyses of customer satisfaction. The digital ecosystem of service quality assessment is built upon a multi-layered structure (Huang and Rust, 2021). The foundation of real-time collection comprises mobile applications providing instant ratings, IoT sensors for environmental monitoring, social media analytics, and chatbots for automated assessment. Operating above these data streams is a big data analytics layer, which provides predictive modelling, behavioural analysis, and pattern recognition.

Contemporary CRM system perform an integral role in service quality management (Reinartz *et al*, 2004). HubSpot Service Hub, integrated with CRM, connects service, sales, and marketing data. These systems provide centralized customer history management, automated storage of quality metrics, optimization of personalized service delivery, and real-time response to quality issues. The integration of this system creates a 360-degree view of customer satisfaction and service quality (Lemon and Verhoef, 2016). This digital transformation enables companies to adopt a more proactive approach to quality management, to identify potential issues in advance, and to ensure consistently high service quality.

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

For in-depth contextual analysis of service assessment, the integration of artificial intelligence and automated service technologies creates new possibilities, fundamentally transforming frontline service delivery (Wirtz *et al*, 2018; Choi *et al*, 2020). Contemporary technologies enable systems not only to collect customer feedback but also to analyse its emotional tone and contextual nuances. Modern AI technologies facilitate the application of complex algorithms capable of analysing large volumes of data and automating assessment processes, thereby significantly enhancing the accuracy, responsiveness, and predictive capacity of evaluations. The investment boom in AI technologies within the marketing and digital advertising sector represents a paramount indicator of the strategic significance of this domain. Machine learning algorithms enable quality prediction and proactive response, while computer vision systems perform visual assessment of service environments. Automated quality management systems integrate all of these elements into a unified, holistic platform.

In the era of digital transformation, the marketing industry is undergoing radical change as a result of the integration of artificial intelligence technologies. The contemporary marketing paradigm is oriented toward a data-driven approach, wherein AI algorithms deliver personalized customer experiences and optimized advertising campaigns (Kumar and Gupta, 2016; Brynjolfsson and McAfee, 2017). The transformative potential of segmentation and targeting to campaign optimization and performance measurement (Davenport *et al*, 2020).

A clear Understanding of AI's impact on the advertising industry and the corresponding investment trends is provided by the Our World in Data (2025) database for the period 2018-2024 (**see Figure 2**)

The statistical data provided by Our World in Data (2024) demonstrate a dramatic increase in private investment in artificial intelligence within the marketing and digital advertising between 2018 and 2024:

Key trends: in 2018, investment stood at approximately \$191.5 million; by 2024, this figure had grown to approximately \$1.38 billion, a sevenfold increase over six years.

Growth dynamics: 2018-2020; rapid early growth, from \$191.5 million to \$548.1 millions; 2021-2024: continued acceleration, with investment surpassing the \$1 billion threshold for the first time in 2022.

Most significant jumps: 2019-2020: from \$279.9 millions to \$548.1 million (a near-doubling in single year); 2021-2022: from \$773.4 million to \$1.03 billion. These figures reflect the growing importance of AI tools (Brown *et al*, 2020), which are employed in content creation, customer segmentation, and personalized advertising (Maslej *et al*, 2025).

Service quality assessment mechanisms are substantially dependent on a company's technological capabilities. Analysis of data from the National Statistics Office of Georgia (National Statistic Office of Georgia, 2020-2024) indicates that the technological development of enterprises in Georgia is characterized by stability. The share of improved technology acquisitions fluctuated between 66.1% and 71.6% during 2020-2024, while the share of new technologies ranged from 28.4% to 33.9%. In 2021, against the backdrop of the pandemic, the share of improved technologies reached its maximum (71.6%), indicating a strategy oriented toward risk minimization. With regard to technological renewal, significant differences exist according to enterprise size: 53.3% of large enterprises undertake technological renewal, compared to 39.0% of medium enterprises and only 15.9% of small enterprises (**see Figure 3**). This reflects the relationship between resource availability and technological capacity. The data indicate that enterprises prefer to improve existing technologies rather than adopt new ones. While this approach ensures stability, it may constrain the country's technological competitiveness.

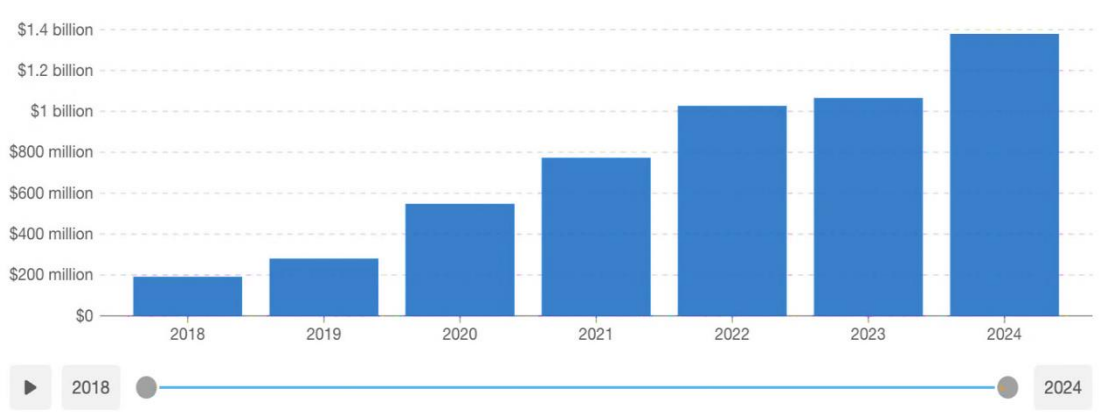


Figure 2: Annual private investment in artificial intelligence by focus area, marketing and digital advertising, 2013-2024

Source: Our World in Data (2024), based on Maslej *et al* (2024)

<https://archive.ourworldindata.org/20250909-093708/grapher/private-investment-in-artificial-intelligence-by-focus-area.html?country=~Marketing+and+digital+ads>

Regarding sectoral distribution, the highest innovative activity across all categories is recorded in the metallurgy sectors; ICT technology adoption reaches up to 90% while marketing and sales innovations reach up to 70% and marketing up to 60%. In the science and business domain, indicators are more variable, with ICT innovation ranging between 50-60% and organizational changes reaching up to 40-50%. The lowest activity is observed in the natural resources sector, where all innovation directions remain within the 20-30% range.

The leadership of ICT innovations across all sectors underscores the significance of digital transformation for service quality improvement. However, the shortage of qualified personnel represents a significant. Challenge for service quality management, as professional staff constitute the foundation of high-quality service delivery. The relatively low indicators in the areas of organizational structure and employee training across all sectors create gaps within the service quality system. The critically low innovation activity in the natural resources sector indicates an absence of service quality mechanisms in this domain.

With regard to service quality assessment mechanisms, the identified financial constraints directly impede the investments required for quality improvement; namely, the development of ICT systems and the modernization of customer service platforms. Uncertainty regarding market potential constrains the possibilities for strategic planning of service quality improvement, while limited access to technological information is associated with the difficult of adopting contemporary quality assessment methods.

The service sector, which has become the leading force of the global economy in the twenty-first century, requires assessment mechanisms that simultaneously ensure data accuracy, operational responsiveness, and analytical comprehensiveness. Accordingly, when examining service quality assessment mechanisms, the following contemporary instruments must not be overlooked: ICT innovations, CEM/CRM systems, and the SERVQUAL methodology.

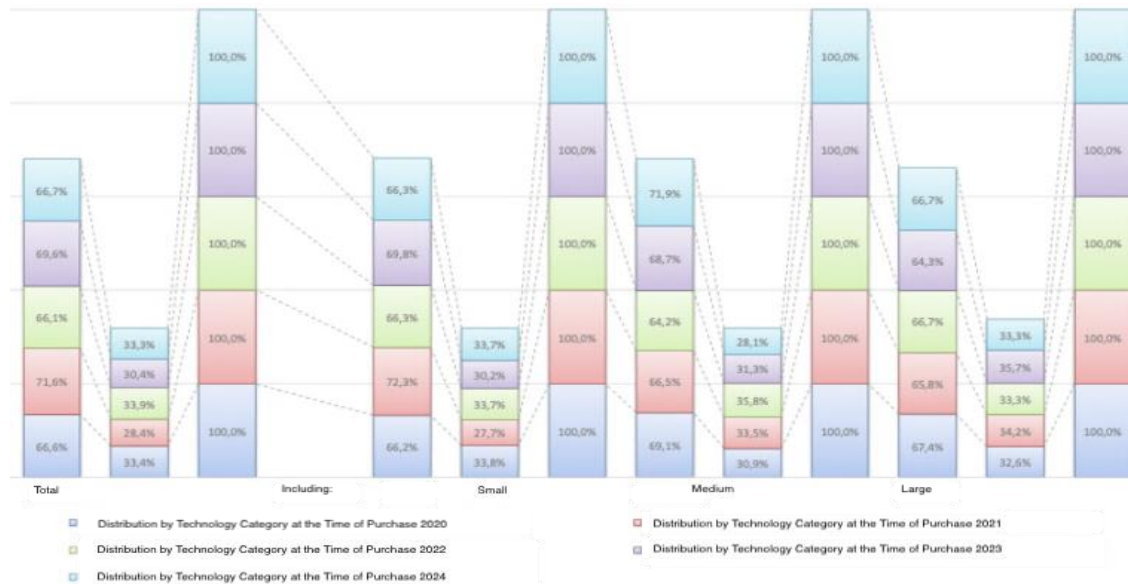


Figure 3: Acquisition of machinery, equipment or software by enterprises, %; distribution of acquisition cases by technology category

Source: National Statistics Office of Georgia

<https://www.geostat.ge/ka/modules/categories/108/inovatsiuri-aktivoba>

ICT (Information and Communication Technologies) refers to the ensemble of digital tools and systems that enable the collection, processing, and exchange of data. It occupies a particularly prominent place among contemporary service quality assessment mechanisms. The integration of digital platforms, mobile applications, and IoT sensors enables the real-time collection of customer feedback and the measurement of service speed, accessibility, and reliability. Social media analytics complements this system by enabling organisations to monitor customer sentiment and respond rapidly to quality issues, thereby significantly enhancing the operational responsiveness of assessment compared to traditional measurement methods.

CEM and CRM systems; the Customer Experience Management mechanism (CEM) and Customer Relationship Management systems (CRM); collectively create an integrated environment for service quality assessment. CRM systems provide centralized management of customer history, enabling organisations to deliver personalized and proactive service to each client. CEM, in turn, utilizes this data through comprehensive analysis to evaluate the customer's overall experience from the initial point of contact through to post-sale service, and to identify specific directions for quality improvement. IoT (Internet of Things) constitutes a component that collects objective data in real time through sensors and supplies it to the CRM system. CRM stores this data centrally and constructs the customer profile, while CEM continuously evaluates the customer's overall experience based on the consolidated data. Accordingly, all three components constitute elements of a unified functional chain: IoT for collection, CRM for storage, and CRM for analysis and assessment. CRM (Customer Relationship Management) is a software platform that centrally stores customer history, interactions, and service metrics. It represents a strategic approach oriented toward the assessment and improvement of the customer's overall experience from the first point of contact through to the post-sale stage.

SERVQUAL represents one of the most established instruments for service quality assessments, grounded in the measurement of the gap between customer expectations and actual perceptions. It evaluates service across five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. Today,

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

SERVQUAL is increasingly being integrated with digital instruments; IoT sensors, chatbots, and social media analytics; enabling it to transcend the boundaries of traditional survey methods and assess service quality continuously and in real time. SERVQUAL is a standardized service quality measurement instrument developed by Parasuraman, Zeithaml, and Berry (1988), which evaluates the gap between customer expectations and the service received across five dimensions: reliability, responsiveness, assurance, empathy, and tangibles.

In Georgia, where the service sector constitutes a significant share of GDP, the adoption of service quality assessment mechanisms remains a considerable challenge. As digital transformation accelerates, business organisations are increasingly confronted with the necessity of transitioning from traditional assessment methods toward contemporary instruments based on ICT, CRM, and AI. A comprehensive analysis of this issue necessitates an examination of the peculiarities and trends in the adoption and application of service quality assessment mechanisms by Georgia companies, alongside the formulation of corresponding recommendations. Accordingly, the objective of the present study was to assess the extent to which Georgia business organisations employ service quality assessment mechanisms and the degree of their readiness for the integration of digital instruments.

Conducting research in this direction is significant from both theoretical and practical standpoints. At the theoretical level, it will address the deficit of empirical material on the application of service quality assessment mechanisms in the academic literature. At the practical level, the research findings will enable companies to identify deficiencies within their quality management systems and to make evidence-based decisions regarding the adoption of digital instruments.

The research findings will provide business organisations with concrete reference points concerning the practical application of ICT, CRM and SERVQUAL instruments. Finally, the study will establish a foundation for further in-dept research, the results of which may inform the formulation of a long-term strategy for the technological development of the service market. The research finding may also be relevant to the development of public policy in the area promoting the technological modernization of service sector.

Within the scope of the study, it was first necessary to establish the extent to which companies employ service quality assessment mechanisms. The research revealed the following picture (see Figure 4).

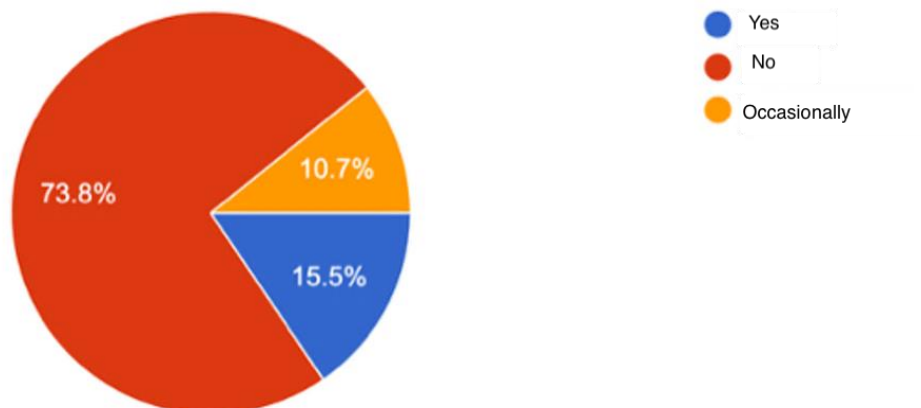


Figure 4: Application of service quality assessment mechanisms (CEM, CRM, SERVQUAL)

Source: Authors own research, 2026

As is evident from figure 4, 73.8% of surveyed respondents indicate that they do not use these instruments, 10.7% use them periodically, and only 15.5% use them systematically.

Within the scope of the study, it was also important to establish the extent to which companies employ AI technologies for service assessment purposes. According to the data revealed by the research (see Figure 5), 50% of respondents use them, 27.4% use them periodically, while 22.6% do not use them at all.

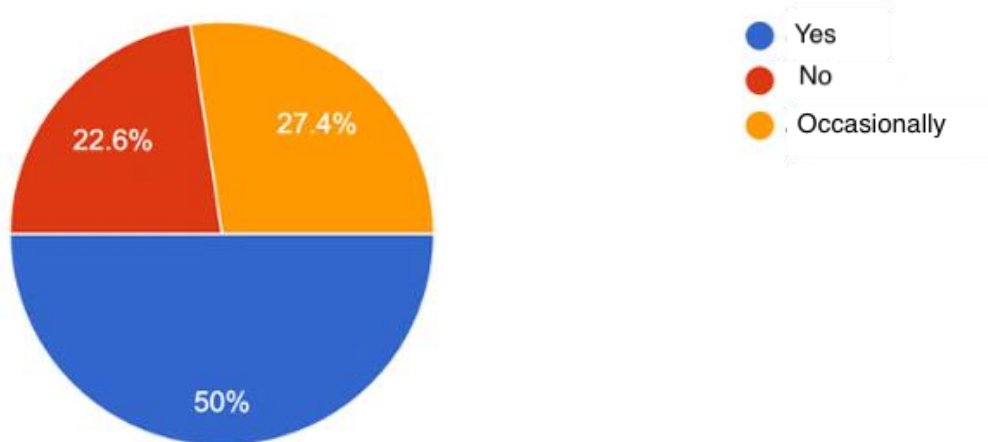


Figure 5: Rate of AI technology adoption by companies

Source: Authors own research, 2026

Since the success of technological transformation depends not only on infrastructural but also on organizational and strategic capabilities, it was important within the scope of the study to assess the institutional readiness of organisations for the integration of digital instruments (see Figure 6).

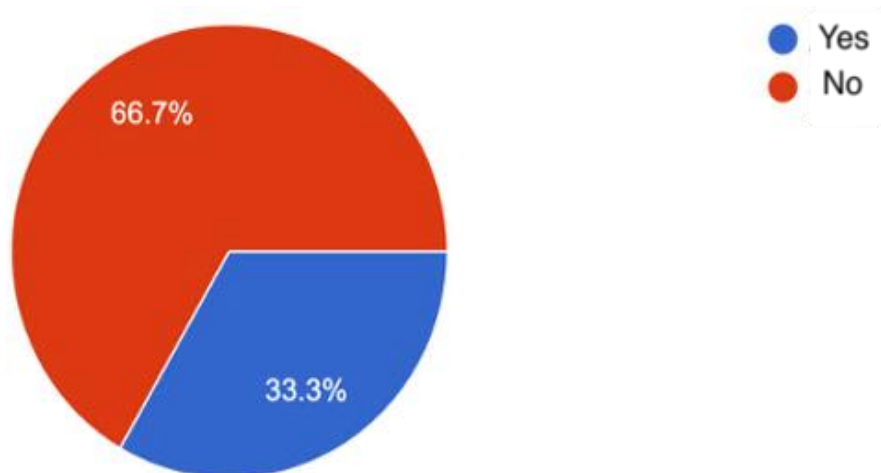


Figure 6: Organisational readiness for adoption of digital instruments

Source: Authors own research, 2026

According to the research finding, 66.7% of surveyed respondents are not ready for the adoption of digital instruments, while only 33.3% declare readiness. One of the research tasks was to identify the structural barriers that hinder organisations from implementing quality assessment mechanisms. The research findings reveal that the most significant obstacle identified was a shortage of qualified personnel at 62.5% followed by

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

consumer passivity in surveys at 43.8%, while uneven development of digital infrastructure, weakness of service quality assessment culture, and scarcity of resources among small and medium enterprises are each represented with an equal share of 37.5% (see Figure 7).

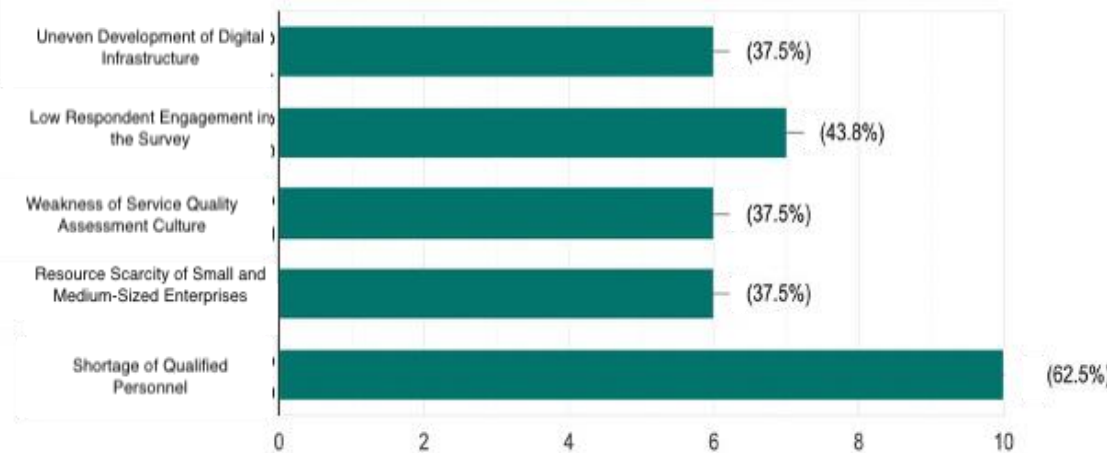


Figure 7: Primary barriers to the adoption of quality assessment mechanisms within companies

Source: Authors own research, 2026

The aggregate data obtained through the research make it evident that the digital transformation of service quality assessment in Georgia is at an early stage and faces challenges of structural nature.

Conclusions

In the contemporary world, the service sector has become the leading force of the economy. Today, service quality assessment is no longer merely a business practice but an integral component of the business process. Organisations monitor service quality through customer satisfaction, operational efficiency, and the integration of digital technologies. The development of digital platforms has revolutionised service quality assessment, creating transparent and accessible mechanisms worldwide. Digital transformation has generated new opportunities for real-time assessment and proactive quality management, enabling organisations to respond more rapidly and effectively to customer needs and expectations.

Contemporary AI technologies facilitate the application of complex algorithms capable of analysing large volumes of data and automating assessment processes, thereby significantly enhancing the accuracy, responsiveness, and predictability of evaluations. The investment boom in AI technologies within the marketing and digital advertising sector represents a paramount indicator of the strategic significance of this domain.

On the basis of the reviewed literature and the data obtained through the research, it may be concluded that service quality assessment mechanisms are today evolving and advancing rapidly. However, in order to further refine and improve service quality assessment mechanisms, particular attention must be directed to the following considerations:

The real-time adoption of service quality assessment mechanisms offers organisations a unique opportunity to achieve continuous and comprehensive monitoring of the customer experience. Contemporary instruments such as IoT systems, mobile applications, and social media, alongside the SERVQUAL methodology, must be integrated with AI-based analytics. Such a hybrid approach enables companies to benefit from both the established reliability of proven methodologies and the innovative capabilities of emerging technologies.

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

It is important for companies to adopt a comprehensive approach to quality mechanisms; encompassing the creation of financial support mechanisms for innovative activity, the development of personal training programs, the enhancement of accessibility to market research instruments, and the formation of an innovative ecosystem; all of which will ultimately contribute to the systemic improvement of service quality.

The development of long-term strategies for quality mechanisms constitutes a fundamental necessity for all companies. According, long-term technological strategies must be formulated and mechanisms for sharing international best practices must be established.

Finally, company leadership must continuously reflect on how the conditions for service delivery can be made progressively better. Every company must recognize that sincere and enduring relationships with each customer represent one of the most effective means of achieving competitive advantage in the long term.

Reference

- Baldwin, R. (2016) *The Great Convergence: Information Technology and the New Globalization*. Cambridge, MA: Harvard University Press.
- Brady, M.K. and Cronin, J.J. (2001) Some new thoughts on conceptualizing perceived service quality: a hierarchical approach. *Journal of Marketing* 65(3): 34-49. <https://journals.sagepub.com/doi/10.1509/jmkg.65.3.34.18334>
- Brynjolfsson, E. and McAfee, A. (2017) *Machine, Platform, Crowd: Harnessing Our Digital Future*. New York: W.W. Norton and Company. <https://wnnorton.com/books/machine-platform-crowd/about-the-book/reviews>
- Brown, T.B., Mann, B., Ryder, N., Subbiah, M., Kaplan, J., Dhariwal, P. *et al* (2020) language models are few-shot learners. *Advances in Neural Information Processing Systems* 33: 1877-1901. <https://arxiv.org/abs/2005.14165>
- Choi, Y., M., Oh, M. And Kim, S. (2020) service robots in hotels: understanding the service quality perceptions of human-robot interaction. *Journal of Hospitality Marketing and Management* 29 (6): 613-635. <https://www.tandfonline.com/doi/full/10.1080/19368623.2020.1703871>
- Davenport, T., Guha, A., Grewal, D. and Bressgott, T. (2020) How artificial intelligence change the future of marketing. *Journal of the Academy of Marketing Science* 48(1):24-42 <https://link.springer.com/article/10.1007/s11747-019-00696-0>
- Francois, J. and Hoekman, B. (2010) Service trade and policy. *Journal of Economic Literature* 48(3): 642-692. <https://www.aeaweb.org/articles?id=10.1257/jel.48.3.642>
- Gronroos, C. (1984) A service quality model and its marketing implications. *European Journal of Marketing* 18(4): 36-44. <https://doi.org/10.1108/EUM0000000004784>
- Huang, M.H. and Rust, R.T. (2021) A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science* 49(1): 30-50. <https://link.springer.com/article/10.1007/s11747-020-00749-9>
- Kano, N., Seraku, N., Takahashi, F. and Tsuji, S. (1984) Attractive quality and must-be quality. *Journal of the Japanese Society for Quality Control* 14(2): 147-156. <https://cir.nii.ac.jp/crid/1390282763101220736>
- Kumar, V., Rajan, B., Venkatesan, R. And Lecinski, J. (2019) Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review* 61(4): 135-155. <https://journals.sagepub.com/doi/10.1177/0008125619859317>
- Kumar, V. and Gupta, S. (2016) Conceptualizing the evolution and future of advertising. *Journal of Advertising* 45(3): 302-317. <https://www.tandfonline.com/doi/abs/10.1080/00913367.2016.1199335>
- Lemon, K.N. and Verhoef, P.C. (2016) Understanding customer experience throughout the customer journey. *Journal of Marketing* 80(6): 69-96. <https://journals.sagepub.com/doi/10.1509/jm.15.0420>

Corresponding author. mamuladze.gela@bsu.edu.ge



© Copyright, 2026 by the author(s)

- Maslej, N., Fattorini, L., Perrault, R., Gil, Y., Parli, V., Kariuki, N. *et al* (2025) Artificial Intelligence Index report 2025. Stanford, CA: Stanford University Human- Center Artificial Intelligence. <https://aiindex.stanford.edu/report/>
- Parasuraman, A., Zeitham, V.A. and Berry, L.L. (1985) A conceptual model of service quality and its implications for future research. *Journal of Marketing* 49(4): 41-50. <https://journals.sagepub.com/doi/10.1177/002224298504900403>
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988) SERQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing* 64(1): 12-40. <https://www.jstor.org/stable/1251483>
- Prahalad, C.K. and Ramaswamy, V. (2004) Co-creation experiences: the next practice in value creation. *Journal of Interactive Marketing* 18(3): 5-14. <https://journals.sagepub.com/doi/10.1002/dir.20015>
- Ross, M.L. (2012) *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*. Princeton, NJ: Princeton University Press.
- Reinartz, W., Krafft, M. and Hoyer, W.D. (2004) The customer relationship management process: its measurement and impact on performance. *Journal of Marketing research* 41(3): 293-305 <https://journals.sagepub.com/doi/10.1509/jmkr.41.3.293.35991>
- Rust, R.T. and Oliver, R.L. (1994) *Service Quality: New Directions in Theory and Practice*. Thousand Oaks, CA: Sage Publications. <https://sk.sagepub.com/book/edvol/service-quality/toc>
- Vargo, S.L. And Lusch, R.F. (2016) Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science* 44(1): 5-23. <https://link.springer.com/article/10.1007/s11747-015-0456-3>
- Wirtz, J., Petterson, P.G., Kunz, W.H., Gruber, T., Lu, V.N., Palunch, S. And Martins, A. (2018) Brave new world: service robots in the frontline. *Journal of Service Management* 29(5): 907-931. <https://www.emerald.com/josm/article/29/5/907/235589/Brave-new-world-service-robots-in-the-frontline>
- National Statistics Office of Georgia (2020-2024) *Business Statistics and Innovation Survey*. Tbilisi: Geostat. <https://www.geostat.ge/ka>
- Our World in Data (2024) *Annual Private Investment in Artificial Intelligence by Focus Area Marketing and Digital Ads*. Oxford: Global Change Data Lab. <https://archive.ourworldindata.org/20250909-093708/grapher/private-investment-in-artificial-intelligence-by-focus-area.html?country=~Marketing+and+digital+ads>
- Our World in Data (2024) *Trade in Services (Export Plus Import) as a Share of GDP*. Oxford: Global Change Data Lab. <https://ourworldindata.org/grapher/service-exports-and-imports-gdp>