

Measuring Customer Service Management Practices for Excellent Service Performance

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Article History	Abstract
Original Research Article	<i>Customer Service Management (CSM) is a strategic process aimed at enhancing customer satisfaction, loyalty, and business performance by delivering consistent and effective service experiences. This paper focuses on the measurement of CSM practices, highlighting key metrics such as Customer Satisfaction Score (CSAT), Net Promoter Score (NPS), Customer Effort Score (CES), and First Contact Resolution (FCR). While these metrics offer valuable insights, the study identifies several challenges that hinder effective measurement, including the intangibility of service quality, lack of standardized benchmarks, misalignment with customer expectations, and insufficient integration of employee perspectives. It further explores how companies are addressing these issues through balanced scorecards, AI-driven sentiment analysis, omnichannel tools, and Voice of Customer (VoC) programs. The paper also identifies critical research gaps, particularly in emotional intelligence measurement, cultural sensitivity, and real-time analytics. Suggestions for future research include the development of integrated and localized measurement models, the incorporation of employee and customer co-created metrics, and the modernization of classical frameworks such as SERVQUAL. Ultimately, improving the accuracy and relevance of CSM measurement is essential for enhancing service quality, ensuring customer satisfaction, and supporting organizational growth in an increasingly competitive and digital service environment.</i>
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Introduction

Customer Service Management (CSM) refers to the strategic process of designing, delivering, managing, and improving the way a company interacts with its customers to ensure their needs and expectations are met or exceeded (Bolumole et al., 2003). It encompasses all activities aimed at providing excellent support and service throughout the customer lifecycle — from pre-sale inquiries to post-sale support.

Key Components of Customer Service Management include Customer Support services, comprising handling inquiries, complaints, and technical issues through various channels (phone, email, chat, social media, etc.) (Bolumole et al., 2003). Second, Customer Relationship Management (CRM), which concerns using tools and data to manage interactions, personalize service, and build strong customer relationships (Buttle & Maklan, 2019), third, a service strategy that requires aligning customer service with

business goals to improve satisfaction, loyalty, and retention (Khan et al., 2022), fourth, Performance Measurement, which relates to tracking metrics like response time, resolution rate, Net Promoter Score (NPS), and Customer Satisfaction Score (CSAT) (Ivens et al., 2024), fifth, Training & Development that aims to ensure service staff are skilled, empathetic, and knowledgeable (Al-Hawari & Barham, 2021), and lastly, Technology Integration that concerns leveraging tools like helpdesk software, AI chatbots, and self-service portals to streamline support (Al-Hawari & Barham, 2021).

The goals of Customer Service Management include improving customer satisfaction and loyalty, enhancing customer experience (CX), reducing churn and complaints (Dzreke, 2025), increasing efficiency and responsiveness of service teams (Andrade & Tumelero, 2022), and supporting brand reputation and business growth (Khan et al., 2022).

This paper focuses on the Performance Measurement of customer service practices, tracking metrics such as response time, resolution rate, Net Promoter Score (NPS), and Customer Satisfaction Score (CSAT) so that the return from customer service management practices can be quantified.

Customer Service Measurement refers to the process of evaluating and quantifying how effectively a company delivers customer service (Mamakou et al., 2024). It involves using specific metrics, tools, and feedback methods to assess the quality, efficiency, and impact of customer interactions, to improve the overall customer experience. The purpose of Customer Service Measurement includes identifying strengths and weaknesses in service delivery (Vassilakopoulou et al., 2023), improving customer satisfaction and loyalty (Hsu & Lin, 2023), guiding employee training and performance improvements (Bhati et al., 2023), making informed decisions based on data (Kumar et al., 2013), and aligning service performance with business goals (Patti et al., 2020).

Common Customer Service Measurement Metrics comprise Customer Satisfaction Score (CSAT), which measures how satisfied customers are after a service interaction (Patti et al., 2020), usually collected via a short survey (e.g., "How satisfied were you with our service today?"). The next measure is Net Promoter Score (NPS), which measures customer loyalty (Baquero, 2022) by asking: "How likely are you to recommend our company to others?" The responses range from 0 (not likely) to 10 (very likely). The subsequent measure is First Contact Resolution (FCR), which reflects the percentage of issues resolved on the first interaction without the need for follow-up (Avdagić-Golub et al., 2022). The following measure is Average Response Time, which measures how quickly service agents respond to customer inquiries (Hsu & Lin, 2023). The Average Handle Time (AHT) measures the average time spent on handling customer interactions from start to finish (Dzreke, 2025). Customer Effort Score (CES) measures how easy it was for a customer to get their issue resolved (Celestin et al., 2024). The Service Level Agreement (SLA) Compliance tracks how well the service team meets predefined response and resolution time targets (Sissodia et al., 2024). Lastly, the Customer Retention Rate indicates the percentage of customers who continue doing business with the company over time (Reddy & Nalla, 2024).

Gathering customer service data can be done through the following methods, including surveys and feedback forms, CRM and helpdesk analytics, social media monitoring, call/chat transcripts analysis, mystery shopping, and customer interviews.

Issues in Measuring Customer Service Management (CSM) Practices

Measurement of Customer Service Management (CSM) practices is essential for improving service quality, customer satisfaction, and organizational performance. However, several critical issues can hinder effective measurement:

One of the significant challenges in measuring customer service management practices is the intangibility of service quality (Singh et al., 2023). Many crucial aspects of service, such as empathy, tone of voice, politeness, and emotional connection, are inherently subjective and difficult to quantify through standard metrics. Unlike tangible performance indicators like response time or ticket closure rate, these emotional and interpersonal elements depend heavily on individual customer perceptions and cultural expectations. For instance, evaluating how "welcoming" or "attentive" a service agent is may result in vastly different assessments from different customers, even if the interaction was objectively similar. This variability complicates efforts to standardize and accurately measure service quality, potentially leading to incomplete or skewed evaluations of customer experience. As a result, organizations often struggle to fully capture the effectiveness of their customer service interactions.

Another key challenge in customer service management (CSM) is the lack of standardized metrics (Patti et al., 2020). There is no universally accepted framework for evaluating CSM performance, leading organizations to adopt various tools such as Customer Satisfaction Score (CSAT), Net Promoter Score (NPS), and Customer Effort Score (CES). However, the application and interpretation of these metrics often vary significantly between organizations. For example, one company's CSAT benchmark may not be comparable to another's due to differences in scoring scales, survey methodologies, or customer interaction touchpoints. This inconsistency hampers cross-industry benchmarking and makes it difficult to establish clear, objective standards for assessing service quality.

Another significant issue in customer service management is the misalignment between measurement tools and actual customer expectations (Byrd et al., 2021). Often, organizations design evaluation metrics based on what they want to monitor, such as response time, call duration, or resolution speed, without fully considering what customers genuinely value. For instance, while a company may track and celebrate fast response times, customers may place greater importance on the quality and completeness of the resolution they receive. This disconnect can lead to misleading performance indicators, where high scores on

internal metrics do not necessarily reflect high levels of customer satisfaction or loyalty.

An over-reliance on quantitative data presents another limitation in terms of measuring customer service performance (Ashal & Morshed, 2024). Metrics such as response time, first contact resolution, and call duration are straightforward to collect and analyze, making them popular choices for performance monitoring. However, these numbers may not fully capture the quality of the customer experience. For example, a short call might be interpreted as efficient service, but it could also signal that the customer was rushed or received inadequate assistance. Focusing solely on measurable figures risks overlooking important qualitative aspects like empathy, clarity, or customer satisfaction, which are crucial for building long-term trust and loyalty.

Fragmented measurement across service channels is a common challenge in customer service management, particularly in today's multichannel environment (Gahler et al., 2023). Organizations interact with customers through various platforms such as phones, email, live chat, and social media, but often lack a unified system to track and assess service quality consistently across these touchpoints. This can lead to an incomplete or misleading picture of customer satisfaction. For instance, while email support metrics may indicate high satisfaction rates, unresolved complaints on social media might go unnoticed, skewing the overall assessment of service performance. Such fragmentation hinders a holistic understanding of the customer journey and may result in gaps in service improvement efforts.

A common limitation in customer service measurement is the lag between the service interaction and the collection of customer feedback (Ozuem et al., 2021). Typically, feedback is gathered after the customer experience has ended, which can introduce memory bias or reduce the accuracy of responses. Customers may forget specific details, especially if the survey is delayed, leading to vague or inconsistent feedback. For example, by the time a customer completes a post-service survey, they might not recall the nuances of the interaction, such as the agent's tone or the resolution process. This delay also limits the organization's ability to take timely corrective action, potentially diminishing the impact of service recovery efforts.

Balancing efficiency and effectiveness is a critical challenge in customer service management (Rana et al., 2025). While operational efficiency, measured through metrics like the number of tickets closed or average handling time, is essential for managing resources, it does not always reflect the quality or impact of the service provided. An overemphasis on speed and volume can lead

to superficial resolutions that fail to address the root causes of customer concerns. For example, a high-ticket closure rate might suggest strong performance, yet if issues are not thoroughly resolved or customers feel unheard, overall satisfaction and loyalty may remain low. True service success requires aligning efficiency with meaningful, customer-centered outcomes.

Addressing the Issues regarding the Measurement of Customer Service Management Practices

To address the challenges in measuring Customer Service Management (CSM) practices, companies are adopting a mix of strategic, technological, and human-centered approaches.

Developing balanced scorecards is an effective strategy for improving customer service management (CSM) by integrating a mix of financial, operational, and customer-centric key performance indicators (KPIs) (Ahmed & Abd El-Razeek, 2023). This approach provides a more comprehensive and accurate picture of service performance, helping organizations move beyond narrow metrics and consider the broader customer experience. For instance, a balanced scorecard might track both response time and customer emotion analysis, combining efficiency data with insights into how customers feel about their interactions. By aligning various performance dimensions, organizations can make more informed decisions, prioritize improvements effectively, and ensure that service strategies support both business goals and customer satisfaction.

Using standardized metrics with custom adaptations allows organizations to benefit from widely recognized evaluation tools like CSAT, NPS, and CES while tailoring them to fit their specific context and industry needs (Gastezzi et al., 2024). This approach ensures consistency in measurement while enhancing relevance and accuracy. For example, a hospital might adapt Customer Effort Score (CES) to account not only for the ease of administrative procedures but also for reducing patients' emotional stress during care. Meanwhile, a bank may interpret CES in terms of how clearly and quickly customers can complete transactions or understand financial products. Such adaptations make standardized metrics more meaningful, leading to more actionable insights and better alignment with customer expectations.

Deploying Voice of Customer (VoC) programs is a powerful way to capture real-time, multi-touchpoint feedback that reflects the actual customer experience (Harshitha & Devapictahi, 2025). These programs gather insights through various channels such as surveys, online reviews, and social listening tools, enabling organizations to understand customer sentiments and needs more accurately. For example, companies might use post-call

SMS surveys or send follow-up emails immediately after a service interaction to collect timely feedback. At the same time, the experience is still fresh in the customer's mind. This immediate and diverse input allows businesses to identify service gaps quickly, respond proactively, and continuously refine their customer service strategies based on authentic customer voices.

Integrating AI and sentiment analysis into customer service management enables organizations to better understand and respond to the emotional dimensions of customer interactions (Endla et al., 2025). By analyzing tone, language, and emotional cues from chat transcripts, voice calls, and online reviews, AI tools can identify patterns that indicate dissatisfaction, frustration, or delight. For instance, a chatbot equipped with sentiment analysis can detect emotionally charged languages such as anger or confusion and automatically flag the conversation for escalation to a human agent for more personalized attention. This real-time emotional insight helps organizations address issues proactively, improve customer satisfaction, and build stronger, more empathetic relationships.

Implementing omnichannel measurement tools is essential for gaining a unified and accurate view of customer service performance across all communication platforms (Gahler et al., 2023). These tools centralize data from various channels—including phone, email, chat, and social media—into a single system, enabling organizations to monitor and assess customer interactions holistically. For example, customer relationship management (CRM) systems like Zendesk, Salesforce, or HubSpot offer integrated multichannel analytics that track customer journeys, response times, satisfaction scores, and engagement levels in one place. This consolidated approach not only improves reporting accuracy but also helps teams identify trends, resolve issues more effectively, and deliver a seamless, consistent customer experience across all touchpoints.

Encouraging continuous feedback loops allows organizations to gather more frequent, real-time insights into customer experiences, making it easier to identify and address issues promptly (Okeke et al., 2024). Instead of relying solely on periodic surveys, continuous feedback mechanisms—such as quick thumbs-up/down buttons embedded in live chats or help articles—enable customers to express their satisfaction or frustration immediately. This ongoing input provides a steady stream of actionable data, assisting teams in making timely adjustments to processes, content, or service delivery. By fostering a culture of constant listening and improvement, organizations can enhance customer satisfaction, adapt quickly to changing expectations, and drive long-term loyalty.

Linking metrics to customer outcomes elevates the value of customer service measurement by connecting day-to-day performance indicators with long-term business results (Mtau & Rahul, 2024). Rather than focusing solely on immediate service metrics like response time or CSAT, organizations can track how these indicators influence customer loyalty, retention, and customer lifetime value (CLV). For example, a consistently high Net Promoter Score (NPS) can be correlated with increased repeat purchases or contract renewals over a 6–12-month period. This approach helps businesses understand the actual impact of their service efforts, ensuring that metrics not only reflect operational success but also drive meaningful and sustainable customer relationships.

The Research Gaps in Measuring Customer Service Management Practices

Research on measuring Customer Service Management (CSM) practices has made significant progress, but several critical gaps remain, especially in the context of evolving technology, human behavior, and service complexity.

A significant gap in customer service measurement lies in the limited tools and validated frameworks available to assess subjectivity and emotional intelligence (Chen et al., 2022). Core emotional elements such as empathy, trust, attentiveness, and emotional connection play a critical role in shaping customer satisfaction and long-term loyalty. Nevertheless, they are often under-measured or overlooked in standard metrics. Current tools primarily focus on operational efficiency, neglecting the human factors that profoundly influence customer perceptions. This gap presents a vital opportunity to develop mixed-methods approaches that combine technologies like sentiment analysis with qualitative methods such as interviews or open-ended surveys. By capturing both the emotional tone and the contextual richness of interactions, organizations can gain a more complete understanding of the customer experience and enhance their service delivery in more meaningful, emotionally intelligent ways.

An ongoing challenge in customer service management is the inconsistent use of metrics across sectors, with limited comparative research examining how tools like CSAT, NPS, and CES perform in different industries, cultures, and service contexts (Dzeke, 2025). This lack of standardization can undermine the validity and reliability of these metrics when they are applied generically without accounting for sector-specific dynamics. For example, what defines satisfaction in healthcare may differ significantly from expectations in retail or finance. As a result, the insights drawn from these metrics may be misleading or insufficient. This gap highlights the need for cross-industry benchmarking studies and the development of tailored CSM measurement models that reflect the unique

characteristics of each sector. Doing so would improve the relevance, accuracy, and usefulness of customer service evaluations across diverse settings.

A key gap in customer service measurement lies in the imbalance between organization-centric and customer-centric metrics (Shahi & Sinha, 2021). Much of the existing research and practice emphasizes indicators that serve operational goals, such as speed, volume, and cost-efficiency, while overlooking the aspects of service that customers truly value, such as emotional support, clarity, and problem resolution. This disconnect can result in companies optimizing internal performance at the expense of customer satisfaction and loyalty. To bridge this gap, there is a growing opportunity to co-create customer service evaluation frameworks with direct customer input, using methods such as participatory audits or collaborative feedback sessions. These approaches ensure that what is being measured aligns more closely with customer expectations and perceived value, leading to more meaningful improvements in service quality.

A notable limitation in current Customer Service Management (CSM) measurement models is the limited integration of the employee experience (EX), despite its critical impact on service delivery (Gustafsson et al., 2024). Frontline employees play a direct role in shaping customer interactions, and their engagement, morale, and readiness significantly influence customer satisfaction and outcomes. However, most frameworks focus solely on customer-facing metrics, neglecting the internal conditions that enable quality service. This creates an incomplete picture of performance and misses opportunities for systemic improvement. To address this, organizations should explore dual-perspective models that assess both employee service readiness and customer experience simultaneously. By aligning EX with CSM metrics, businesses can foster a more supportive service environment and ultimately enhance both employee and customer satisfaction.

There is a significant gap in the ability to measure customer service across multichannel and omnichannel environments effectively (Gahler et al., 2023). Existing models often fail to capture the whole customer journey, as they are not designed to evaluate interactions consistently across touchpoints like social media, live chat, email, phone, and in-store experiences. This fragmented approach results in incomplete data, making it challenging to understand overall satisfaction or identify pain points. As customers increasingly engage with brands across multiple platforms, the need for integrated CSM metrics is becoming more urgent. The opportunity lies in developing real-time, cross-platform measurement systems that can track and analyze customer interactions holistically, providing a seamless and comprehensive view of the entire service experience.

A significant gap in customer service measurement is the lack of real-time and predictive capabilities, as most studies and tools focus on post-event analysis rather than ongoing service quality or forward-looking models (Immadisetty, 2024). This reactive approach limits an organization's ability to respond promptly to emerging issues or to enhance service delivery proactively. Delayed insights hinder agility and may result in missed opportunities to prevent dissatisfaction or service breakdowns. To close this gap, there is significant potential in leveraging AI, machine learning, and big data analytics to build predictive CSM models. These technologies can analyze patterns in real time, forecast customer behavior, and identify service risks or opportunities before they escalate, enabling more responsive and strategic customer service management.

A critical gap in customer service measurement is the cultural and contextual insensitivity of many existing tools, which are predominantly developed and validated in Western contexts (Dang & Li, 2025). These models often fail to account for the diverse service expectations, communication styles, and customer behaviors found in regions such as Asia, the Middle East, and emerging economies. As a result, applying these tools without adaptation can lead to inaccurate assessments and misguided strategies. This underscores the importance of developing contextualized frameworks that reflect local cultural norms, values, and service preferences. Tailoring CSM measurement to regional contexts not only improves accuracy and relevance but also ensures more meaningful engagement with diverse customer segments.

A significant gap in customer service research is the limited evidence showing how improvements in CSM metrics translate directly into business performance gains (Swetha et al., 2024), such as return on investment (ROI), customer retention, or customer lifetime value (CLV). While many organizations invest in tracking metrics like CSAT or NPS, few studies have established a clear, causal relationship between these indicators and bottom-line financial outcomes. This lack of linkage makes it challenging for businesses to justify continued investment in customer service initiatives. To address this, there is a strong opportunity to conduct longitudinal studies that track CSM performance alongside financial KPIs over time, providing concrete evidence of the value that effective customer service brings to overall business success.

Theoretical framework limitations present a notable gap in current customer service measurement research, as there is an over-reliance on traditional models like SERVQUAL and customer satisfaction theories. While these frameworks have been foundational, they may no longer fully capture the complexities of today's dynamic, digital, and AI-driven service environments. Modern customer interactions

involve real-time data, automation, and emotional engagement across various platforms, which older models were not designed to address. This gap highlights the need to apply or develop newer, more adaptable theories such as Service-Dominant Logic, Social Exchange Theory, or Experience Economy Theory. These perspectives offer richer, more flexible foundations for understanding and measuring customer service in evolving technological and experiential contexts.

Suggestions for Future Research

Based on the identified research gaps in measuring Customer Service Management (CSM) practices, the following are well-justified suggestions for future research. These suggestions aim to advance theoretical understanding, improve practical measurement tools, and increase the contextual relevance of CSM evaluations:

To advance the effectiveness of customer service measurement, there is a strong need to develop and validate integrated CSM models that combine both quantitative and qualitative data (Olsson & Bosch, 2015). Traditional metrics such as CSAT and NPS provide valuable insights into performance, but they often overlook the emotional and contextual aspects of customer experiences. By incorporating qualitative inputs like sentiment analysis, customer narratives, and open-ended feedback, researchers can create a more balanced and comprehensive framework that captures both operational efficiency and emotional engagement. This can be achieved through mixed-methods research that blends surveys, in-depth interviews, and AI-based analytics to generate richer, more actionable insights. Such integrated models would enable organizations to understand the full scope of service interactions better and make more informed decisions to enhance customer satisfaction and loyalty.

To improve the relevance and accuracy of customer service measurement, it is essential to localize and contextualize CSM frameworks for specific markets, cultures, and service types (Patti et al., 2020). Many existing models lack cultural sensitivity, making them less effective in regions with distinct social norms and customer expectations, such as those influenced by Islamic service values or Asian collectivism. Developing context-specific CSM models ensures that measurement tools align with local values, communication styles, and service behaviors. The research aim is to create culturally appropriate and meaningful metrics that reflect the actual customer experience in diverse settings. This can be achieved through methodologies such as case studies or the Delphi method, engaging local service experts and customers to co-develop and validate the frameworks. Such approaches strengthen

the cultural adaptability and practical impact of CSM measurement.

Incorporating the Voice of Employee (VoE) into Customer Service Management (CSM) metrics presents a valuable opportunity to enhance service evaluation by recognizing the critical role of employee engagement and service readiness in shaping customer outcomes (Aggarwal, 2021). While customer-centric data dominates current models, employee well-being, motivation, and feedback are often overlooked, despite their direct influence on service quality and consistency. The research aim is to strengthen CSM frameworks by integrating employee experience (EX) as a core component of performance measurement. This can be achieved through methods such as structural equation modeling or longitudinal studies that explore the linkage between EX indicators, like engagement and job satisfaction, and customer experience (CX) metrics. By aligning internal and external perspectives, organizations can develop more holistic and practical approaches to service management.

To keep pace with evolving digital and hybrid service environments, there is a pressing need to innovate the theoretical approaches underpinning Customer Service Management (CSM) measurement (Singh et al., 2024). Traditional models often fall short in addressing the complexities of modern service delivery, particularly those shaped by technology, personalization, and co-creation. Applying contemporary theories such as Service-Dominant Logic (SDL), Social Exchange Theory, the Experience Economy, and the Technology Acceptance Model (TAM) can expand the conceptual foundation of CSM and offer deeper insights into customer and employee behaviors. These frameworks are especially relevant for understanding AI-driven tools, CRM systems, and emotionally rich service interactions. The research aim is to modernize CSM theory to better reflect current realities, enabling more adaptive, meaningful, and predictive measurement practices that align with technological advancements and shifting customer expectations.

To effectively evaluate modern customer experiences, it is essential to explore multichannel and omnichannel measurement by developing models that capture interactions across diverse touchpoints (Gahler et al., 2023), including call centers, email, chatbots, mobile apps, and social media. Customers today engage with organizations through both digital and physical channels, expecting consistent service regardless of platform. However, most current measurement approaches fail to account for this complexity, leading to fragmented insights. The research aim is to assess the consistency and quality of customer experience across channels, ensuring seamless service delivery. This can be achieved through customer

journey mapping combined with multichannel data analytics, enabling a comprehensive view of the end-to-end service experience. Such models will support organizations in identifying gaps, enhancing integration, and delivering more cohesive and satisfying customer journeys.

Advancing real-time and predictive measurement tools is crucial for transforming Customer Service Management (CSM) from reactive to proactive (Singh, 2025). By researching the application of AI, machine learning, and predictive analytics, organizations can monitor CSM performance continuously and anticipate service issues before they escalate into customer complaints. These technologies enable the detection of patterns, anomalies, and early warning signals, allowing for timely interventions and improved service delivery. The research aim is to empower businesses with tools that support proactive decision-making and real-time responsiveness. This can be pursued through experimental design or real-time analytics simulations, testing how predictive models perform under various service scenarios. Such innovation holds the potential to enhance customer satisfaction, loyalty, and operational efficiency significantly.

Co-creating metrics with customers through participatory measurement approaches offers a powerful way to ensure that Customer Service Management (CSM) tools reflect real customer needs and expectations (Elgetti et al., 2024). Traditional metrics are often developed internally, leading to a disconnect between what organizations measure and what customers truly value. By actively involving customers in the design of evaluation criteria, such as through participatory audits, focus groups, or co-design workshops, organizations can develop more relevant, valid, and impactful metrics. The research aim is to align service measurement with authentic customer experiences, increasing both trust and service effectiveness. Participatory action research (PAR) provides a suitable methodology, enabling collaborative inquiry that empowers customers as partners in shaping how service quality is understood and assessed.

Linking Customer Service Management (CSM) measurement to business outcomes is essential for demonstrating the strategic value of customer service (Bustamante et al., 2025). Despite widespread use of metrics like CSAT and NPS, there remains a lack of empirical evidence connecting these indicators to financial performance, customer retention, or brand equity. To strengthen the business case for investing in customer service, research should focus on correlating CSM metrics with key business results. The research aims to demonstrate how improvements in customer experience directly contribute to profitability and long-term growth. This can be achieved through longitudinal studies using regression

analysis or return on investment (ROI) models, providing data-driven insights that justify and guide customer service strategies.

There is a growing need to re-examine and modernize traditional service quality measurement tools such as SERVQUAL and the RATER model, which were developed in an era of face-to-face, human-delivered services (Agariya & Tikoria, 2023). With the rise of AI agents, self-service platforms, and remote support, these classical models may no longer fully capture the complexities of today's digital and hybrid service environments. Research aims to critically evaluate and update these frameworks to ensure their relevance and applicability in contemporary contexts. This could involve expanding dimensions to include digital responsiveness, automation quality, and user trust in AI-driven interactions. Methods such as comparative model testing or theory adaptation studies can be used to assess performance across traditional and modern service channels, ultimately leading to more accurate and meaningful customer service evaluation tools.

Creating sector-specific measurement frameworks is essential for enhancing the precision and relevance of Customer Service Management (CSM) evaluations across diverse industries (Silva & Crispim, 2024). Generic models often fail to account for the unique service dynamics, regulatory requirements, and customer expectations present in sectors such as healthcare, banking, education, e-commerce, and public services. To address this, the research aim is to design tailored CSM models that reflect the distinct operational realities and service priorities of each industry. This can be achieved through detailed case study analysis combined with model development in sector-specific contexts, allowing researchers to identify key performance indicators, customer touchpoints, and service quality dimensions that matter most within each field. Such frameworks will enable more accurate assessments, drive targeted improvements, and support better alignment between service delivery and customer expectations.

Conclusion

Effective measurement of Customer Service Management (CSM) is crucial for improving service quality, customer satisfaction, and long-term success. While tools like CSAT, NPS, CES, and FCR are widely used, they often fall short in capturing emotional, cultural, and contextual elements of the customer experience. Key challenges include the intangibility of service quality, fragmented multichannel data, and limited feedback participation. There is also an overemphasis on operational metrics at the expense of customer-centric and employee-informed insights. To overcome these issues, organizations are adopting

technologies such as sentiment analysis, real-time data tracking, and customer journey mapping. There is also a shift toward adapting metrics to local cultures and involving both customers and staff in the evaluation process. From a research perspective, opportunities lie in developing hybrid models that integrate quantitative and qualitative data, refining industry-specific benchmarks, and updating frameworks like SERVQUAL for digital and omnichannel contexts. Future studies should explore the link between CSM measurement and business outcomes while incorporating emotional intelligence and predictive analytics. Enhancing the precision and relevance of CSM metrics is essential for delivering high-quality, meaningful customer service in an increasingly complex service landscape.

REFERENCES

1. Agariya, A. K., & Tikoria, J. (2023). SERVQUIX: A tool for service quality measurement in Indian banks. *International Journal of Services and Operations Management*, 46(4), 520-539.
2. Aggarwal, A. (2021). Recipe for a great customer experience: the three voices—voice of customer (VoC), voice of employee (VoE) and voice of process (VoP). In *Crafting Customer Experience Strategy: Lessons from Asia* (pp. 65-90). Emerald Publishing Limited.
3. Ahmed, N. S., & Abd El-Razeek, M. H. (2023). The impact of balanced scorecard on customer relationship management performance: Evidence from Egypt. *المجلات العلمية وال تجارية*, 4(2), 1-36.
4. Al-Hawari, F., & Barham, H. (2021). A machine learning based help desk system for IT service management. *Journal of King Saud University-Computer and Information Sciences*, 33(6), 702-718.
5. Andrade, I. M. D., & Tumelero, C. (2022). Increasing customer service efficiency through artificial intelligence chatbot. *Revista de Gestão*, 29(3), 238-251.
6. Ashal, N., & Morshed, A. (2024). Balancing data-driven insights and human judgment in supply chain management: The role of business intelligence, big data analytics, and artificial intelligence. *Journal of Infrastructure, Policy and Development*, 8(6), 3941.
7. Avdagić-Golub, E., Goran, N., Memić, B., Begović, M., & Karahodža, B. (2022, November). A New evaluation method for call rating in contact center. In *2022 30th Telecommunications Forum (TELFOR)* (pp. 1-4). IEEE.
8. Baquero, A. (2022). Net promoter score (NPS) and customer satisfaction: relationship and efficient management. *Sustainability*, 14(4), 2011.
9. Bhati, D., Deogade, M. S., & Kanyal, D. (2023). Improving patient outcomes through effective hospital administration: a comprehensive review. *Cureus*, 15(10).
10. Bolumole, Y. A., Knemeyer, A. M., & Lambert, D. M. (2003). The customer service management process. *The International Journal of Logistics Management*, 14(2), 15-31.
11. Bustamante, J. C., Sosa-Varela, J. C., Bullemore-Campbell, J., & Monje-Cueto, F. (2025). Leveraging CRM capabilities for enhanced relationship maintenance and performance: Empirical insights from Latin America's Business-to-Business sector. *Journal of Relationship Marketing*, 1-34.
12. Buttle, F., & Maklan, S. (2019). *Customer Relationship Management: Concepts and technologies*. Routledge.
13. Byrd, K., Fan, A., Her, E., Liu, Y., Almanza, B., & Leitch, S. (2021). Robot vs human: Expectations, performances, and gaps in off-premise restaurant service modes. *International Journal of Contemporary Hospitality Management*, 33(11), 3996-4016.
14. Celestin, M., Vasuki, M., Sujatha, S., & Kumar, A. D. (2024). How businesses create personalized experiences to boost customer retention: The role of technology and human interactions in customer satisfaction. *International Journal of Applied and Advanced Scientific Research*, 9(2), 75-80.
15. Chen, Q., Gong, Y., Lu, Y., & Tang, J. (2022). Classifying and measuring the service quality of an AI chatbot in frontline service. *Journal of Business Research*, 145, 552-568.
16. Dang, Q., & Li, G. (2025). Unveiling trust in AI: The interplay of antecedents, consequences, and cultural dynamics. *AI & SOCIETY*, 1-24.
17. Dzurek, S. S. (2025). Developing holistic customer experience frameworks: Integrating journey management for enhanced service quality, satisfaction, and loyalty. *Frontiers in Research*, 2(1), 90-115.
18. Elgeti, L., Kleinaltenkamp, M., Prohl-Schwenke, K., & Pollicino, G. (2024). From

- acquisition to retention: A single case study exploring the adaptation of customer value propositions in a subscription business. *SMR-Journal of Service Management Research*, 8(1), 13-28.
19. Endla, P., Suresh, K., Devi, P. P., Chellam, J. R., Vurukonda, N., & Kumararaja, K. (2025, May). Emotionally intelligent AI-powered customer experience optimization with deep learning based sentiment analysis and engagement metrics. In *International Conference on Sustainability Innovation in Computing and Engineering (ICSICE 2024)* (pp. 565-575). Atlantis Press.
 20. Gahler, M., Klein, J. F., & Paul, M. (2023). Customer experience: Conceptualization, measurement, and application in omnichannel environments. *Journal of Service Research*, 26(2), 191-211.
 21. Gastezzi, C. E. B., Rodríguez, M. M. F., & Castillo, A. (2024). Theoretical foundations on Customer Experience (customer experience, NPS, CSAT, CES, Service Balcony, Journey Map). *Journal of Business and Entrepreneurial Studies*, 8(2).
 22. Gustafsson, A., Caruelle, D., & Bowen, D. E. (2024). Customer experience (CX), employee experience (EX), and human experience (HX): introductions, interactions, and interdisciplinary implications. *Journal of Service Management*, 35(3), 333-356.
 23. Harshitha, T., S, P., & Devapictahi, J. J. (2025). Frictionless shopping in the digital era: A comprehensive analysis of instant gratification, ethical considerations, and future prospects. *Marketing Intelligence, Part A: Understanding Customers in the Era of Digitalization*, 73-89.
 24. Hsu, C. L., & Lin, J. C. C. (2023). Understanding the user satisfaction and loyalty of customer service chatbots. *Journal of Retailing and Consumer Services*, 71, 103211.
 25. Immadisetty, A. (2024). Real-time data analytics in customer experience management: A framework for digital transformation and business intelligence. *Int. J. Sci. Res. Comput. Sci. Eng. Inf. Technol*, 10, 1280-1288.
 26. Ivens, B., Kasper-Brauer, K., Leischnig, A., & Thornton, S. C. (2024). Implementing customer relationship management successfully: A configurational perspective. *Technological Forecasting and Social Change*, 199, 123083.
 27. Khan, R. U., Salamzadeh, Y., Iqbal, Q., & Yang, S. (2022). The impact of customer relationship management and company reputation on customer loyalty: The mediating role of customer satisfaction. *Journal of Relationship Marketing*, 21(1), 1-26.
 28. Kumar, V., Chattaraman, V., Neghina, C., Skiera, B., Aksoy, L., Buoye, A., & Henseler, J. (2013). Data-driven services marketing in a connected world. *Journal of Service Management*, 24(3), 330-352.
 29. Mamakou, X. J., Zaharias, P., & Milesi, M. (2024). Measuring customer satisfaction in electronic commerce: The impact of e-service quality and user experience. *International Journal of Quality & Reliability Management*, 41(3), 915-943.
 30. Mtau, T. T., & Rahul, N. A. (2024). Optimizing business performance through KPI alignment: A comprehensive analysis of key performance indicators and strategic objectives. *American Journal of Industrial and Business Management*, 14(1), 66-82.
 31. Okeke, N. I., Alabi, O. A., Igwe, A. N., Ofodile, O. C., & Ewim, C. P. M. (2024). AI in customer feedback integration: A data-driven framework for enhancing business strategy. *World J. Advanced Res. Reviews*, 24(1), 3207-3220.
 32. Olsson, H. H., & Bosch, J. (2015). Towards continuous customer validation: A conceptual model for combining qualitative customer feedback with quantitative customer observation. In *International Conference of Software Business* (pp. 154-166). Cham: Springer International Publishing.
 33. Ozuem, W., Ranfagni, S., Willis, M., Rovai, S., & Howell, K. (2021). Exploring customers' responses to online service failure and recovery strategies during the COVID-19 pandemic: An actor-network theory perspective. *Psychology & Marketing*, 38(9), 1440-1459.
 34. Patti, C. H., van Dessel, M. M., & Hartley, S. W. (2020). Reimagining customer service through journey mapping and measurement. *European Journal of Marketing*, 54(10), 2387-2417.
 35. Rana, S., Singh, S. K., & Chandel, A. (2025). AI in customer service automation: Balancing efficiency with human touch. In *AI, Corporate Social Responsibility, and Marketing in Modern*

Organizations (pp. 173-194). IGI Global Scientific Publishing.

36. Reddy, V. M., & Nalla, L. N. (2024). Personalization in e-commerce marketing: Leveraging big data for tailored consumer engagement. *Revista de Inteligencia Artificial en Medicina*, 15(1), 691-725.
37. Shahi, C., & Sinha, M. (2021). Digital transformation: Challenges faced by organizations and their potential solutions. *International Journal of Innovation Science*, 13(1), 17-33.
38. Silva, S., & Crispim, J. (2024). Performance measurement and management in complex environments: A system of systems approach for the public sector. *Production Planning & Control*, 1-21.
39. Singh, J. (2025). Driving aftermarket services in manufacturing via predictive CRM analytics. *Journal of Computer Science and Technology Studies*, 7(5), 621-628.
40. Singh, V., Sharma, M. P., Jayapriya, K., Kumar, B. K., Chander, M. A. R. N., & Kumar, B. R. (2023). Service quality, customer satisfaction, and customer loyalty: A comprehensive literature review. *Journal of Survey in Fisheries Sciences*, 10(4S), 3457-3464.
41. Singh, Y., Bansal, E., & Chanana, N. (2024). Innovating services: Navigating the digital frontier. In *Innovative Technologies for Increasing Service Productivity* (pp. 1-26). IGI Global Scientific Publishing.
42. Sissodia, R., Rauthan, M. S., & Barthwal, V. (2024). Service level agreements (SLAs) and their role in establishing trust. In *Analyzing and Mitigating Security Risks in Cloud Computing* (pp. 182-193). IGI Global Scientific Publishing.
43. Swetha, N., Harshavardhan, P., Kusuma, T., & Raja, M. C. (2024). Measuring marketing effectiveness and return on investment. In *Predictive Analytics and Generative AI for Data-Driven Marketing Strategies* (pp. 216-224). Chapman and Hall/CRC.
44. Vassilakopoulou, P., Haug, A., Salvesen, L. M., & Pappas, I. O. (2023). Developing human/AI interactions for chat-based customer services: Lessons learned from the Norwegian government. *European Journal of Information Systems*, 32(1), 10-22.