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Logistics Service Quality Research from 1992 to 2025: A Bibliometric and Conceptual Review

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ABSTRACT

Logistics service quality (LSQ) research has moved from early work on physical distribution service quality and customer service measurement to a wider field. This article reviews the developments using a bibliometric and conceptual analysis of 280 peer-reviewed English-language journal articles indexed in Scopus and published between 1992 and 2025. The bibliometric analysis was carried out in R using bibliometrix, with keyword mapping prepared in VOSviewer. The bibliometrics reports publication growth, source concentration, author and country contributions, keyword patterns, citation structure, and network relationships. The conceptual review uses the clusters, highly cited studies, and recent articles to explain the LSQ measurement, application, and extension through digital visibility, recovery capability, and sustainability credibility. The VOSviewer keyword map shows five connected areas of research: (a) core logistics service quality and behavioural outcomes, (b) operational logistics and supply chain service quality, (c) service quality with loyalty and performance, (d) e-commerce with customer satisfaction and last-mile delivery, and (e) SERVQUAL based evaluation with perception and sustainability concerns. The article contributes by connecting bibliometric structure with theory-building opportunities and by setting out a research agenda for logistics service quality in digitally enabled and sustainability oriented service systems.

1. Introduction.

Logistics service quality (LSQ) has become one of the ways through which customers judge the firm's performance against their promise. This is important especially when the order delivery becomes the "moment of truth" because the customers rarely see the full supply chain but directly experience the marketing promises through timely, safe, reliable delivery of the goods. These experiences shape satisfaction in consumer markets and trust in Business-to-business relationships. The notable early literature adopted the SERVQUAL model (Parasuraman et al., 1988), "physical distribution service quality" (Bienstock et al., 1997), and "nine-dimensional segment-customised process" (Mentzer et al., 1999, 2001). Later studies extended the discussions into third party logistics, maritime transport, online retailing, and freight forwarding services. This research field now covers a wider set of areas, especially COVID-19 pandemic brought resilience, recovery and reliability into the research area. Even though the LSQ research expanded from service gap frameworks to more broader synthesis, much of the literature still repeats direct effect models in single settings. This paper addresses the gap by combining bibliometric analysis with conceptual review. Thus the remaining sections of this manuscript are research aim, questions, and contribution, literature review, methodology, Bibliometrics, conceptual review of the thematic structure, integrated LSQ service-system conceptual framework, and conclusion.

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2. Research Aim, Questions, and Contribution.

This study maps the development of logistics service quality research from 1992 to 2025 using Scopus metadata, identifies the main intellectual and thematic structures of the field through citations, journals, keywords, countries, and develops a conceptual framework and research agenda to support future empirical and theoretical work.

Four research questions guide the review:

RQ1. What is the publication trajectory of logistics service quality research from 1992 to 2025?

RQ2. Which sources, cited works, and countries structure the field?

RQ3. Which themes explain the field and its recent movement?

RQ4. In what way can these themes be integrated into a future research agenda?

3. Literature Review.

The LSQ literature has shifted from basic delivery performance towards context-specific service systems. Early logistics studies treated quality mainly as the condition, availability, accuracy, and timeliness of physical distribution, but later work connected these operational dimensions with relationship quality, technology use, sectoral context, and post-purchase behaviour. Durvasula et al. (1999, 2002) showed that ocean freight customers evaluate service through both operational dependability and relationship-facing service encounters, while Rafiq & Jaafar (2007) extended LSQ into third-party logistics by examining customer perceptions of logistics providers. Maritime logistics research then added sector-specific dimensions. Thai (2008, 2013) and Thai et al. (2014) treated maritime and tramp shipping quality as a multi-dimensional construct involving resources, outcomes, processes, management, image, customer focus, and social responsibility. These developments show that LSQ cannot be measured with one fixed scale across all logistics contexts. The quality expected in different domains of logistics such as freight forwarding, port services, shipping, e-commerce fulfillment, halal logistics, healthcare distribution, and last-mile delivery differ according to the service risk, customer type, infrastructure, regulation, and visibility of the service process. Recent developments in online and omni-channel studies even widened the field of research in this domain. Rao et al. (2011) linked electronic logistics service quality with purchase satisfaction and retention; Murfield et al. (2017) showed that omni-channel retailing makes logistics performance part of the customer experience. Earlier, Richey et al. (2007), one of the important studies, introduced technological readiness into LSQ research. Later, sustainability and recovery have also become stronger parts of the field. Several other heterogeneous approaches of LSQ also emerged during the study period. Some of the most noticeable concepts are - Zailani et al. (2018) adoption of LSQ to halal logistics, and conceptualising compliance and assurance have operational and ethical meaning; Arabelen & Kaya's (2021) identification of customer obsession and corporate social responsibility as relevant LSQ attributes; Dabees et al.'s (2023) introduction of reverse logistics service quality with economic, environmental, and social concerns; and Dovbischuk's (2022) resilience perspective by examining innovation - oriented dynamic capabilities among logistics service providers during the COVID-19 disruption. These studies suggest that current LSQ research moved from on-time arrival and performance efficiency to marketing promises, visibility, responsibility, and sustainability dimensions. This review therefore treats LSQ as a service-system construct rather than as a single measurement scale.

4. Methodology.

A total of 696 English language journal articles from the business, decision sciences, social sciences, and economics were retrieved from Scopus on 15 February 2026. Each record was checked for topic fit and the final corpus after removing articles that were not relevant contained 280 peer-reviewed journal articles published between 1992 and 2025. Further, the bibliometric analysis was carried out in R using the bibliometrix package (Aria & Cuccurullo, 2017) and the results of the bibliometric analysis are presented in the next section.

5. Bibliometrics of Logistics Service QualityFigure 1: Bibliometric Dashboard.

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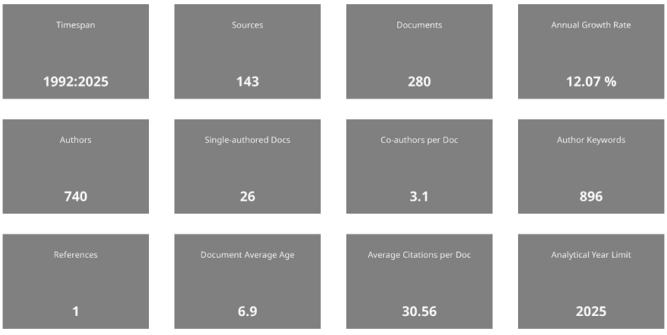


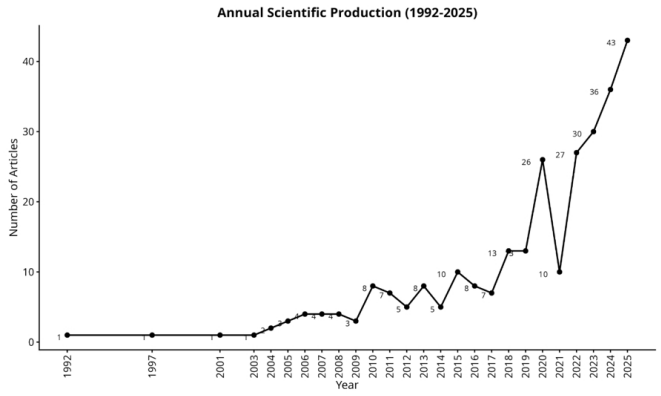
Source: Authors.

The descriptives (Figure 1) of the LSQ dataset infer that the 280 journal articles published between 1992 and 2025 were drawn from 143 source titles. The field has grown at an annual rate of 12.07%. The average document age is 6.9 years, which points to a literature with a strong recent component. So, we can say that the rise of work in the LSQ domain is relatively recent.

The authorship pattern also shows that the corpus includes 740 authors, while only 26 documents are single-authored. The average of 3.1 co-authors per document suggests that LSQ studies are highly collaborative in nature. The 896 author keywords reflect the heterogeneity of research in this field. The average citation count is 30.56 citations per document, which shows that the corpus includes both established foundational studies and newer papers that are still building their citation record.

5.1. Annual Scientific Production.

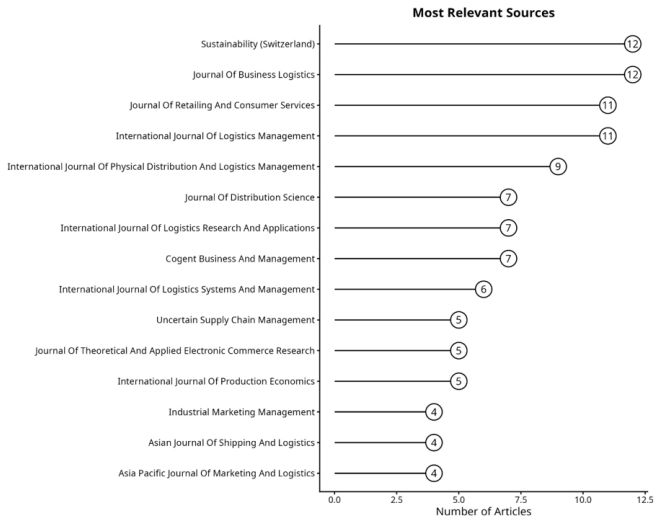
Figure 2: Annual Scientific Production.



Source: Authors.

The annual scientific production (figure 2) of research in this domain has gained momentum since 2015. However, the growth become more prominent since COVID - 19 pandemic with a sharp increase of 27, 30, 36, and 43 articles in 2022, 2023, 2024, and 2025 respectively.

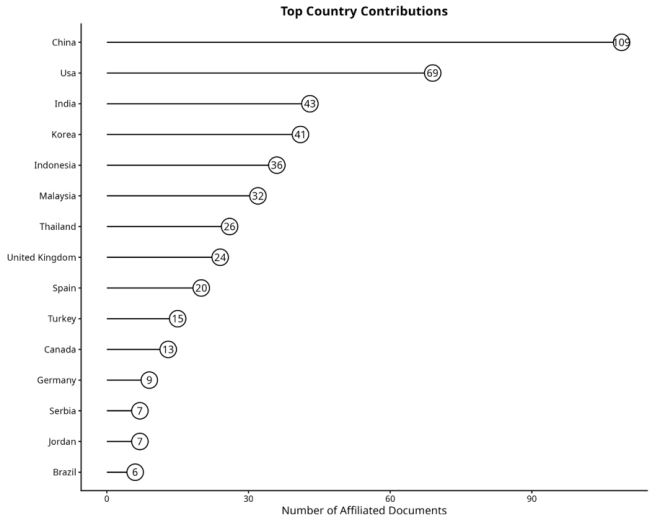
Figure 3: Most Relevant Sources.



Source: Authors.

The most relevant sources (Figure 3) reveals that "Sustainability (Switzerland)" and the "Journal of Business Logistics" recorded the highest number of articles, with 12 each. The "Journal of Retailing and Consumer Services" and the "International Journal of Logistics Management" followed with 11 articles each. "The International Journal of Physical Distribution and Logistics Management" also remained an important outlet, with nine articles.

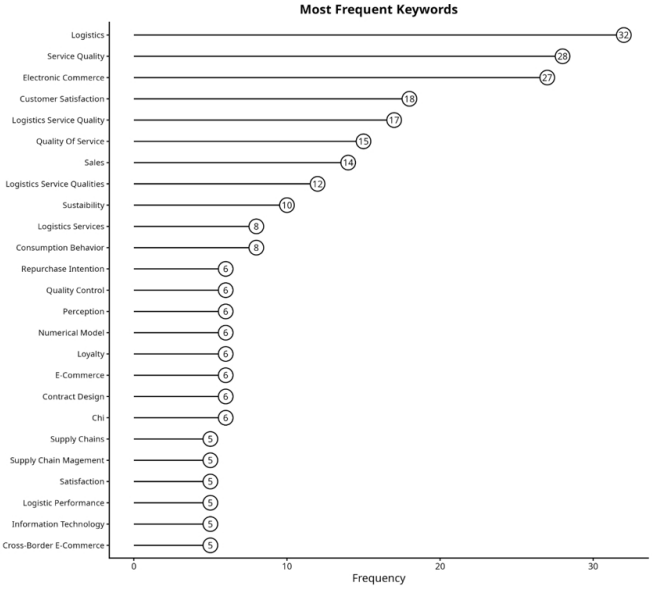
Figure 4: Top Country Contributions.



Source: Authors.

The top country contribution results (Figure 4) show strong participation from China, USA, India, Korea, Indonesia, Malaysia, and Thailand with 109, 69, 43, 41, 36, 32, and 26 documents respectively. Thus, we can say that the growth in LSQ research is concentrated around the countries that adopted globalisation.

Figure 5: Most Frequent Keywords.

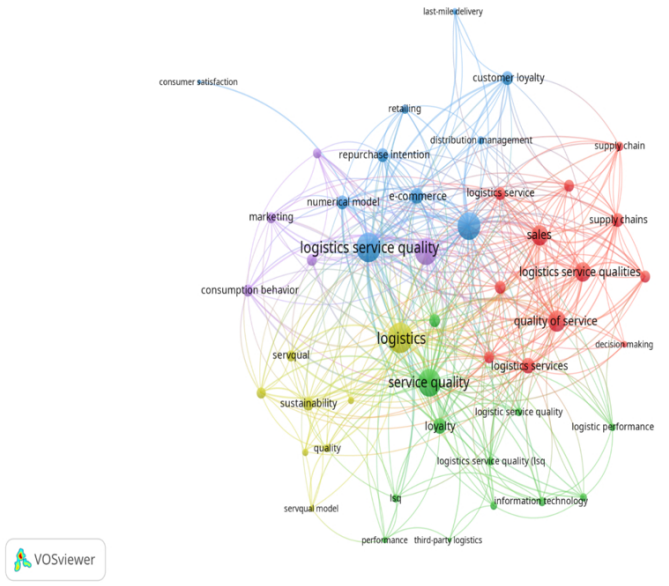


Source: Authors.

"Logistics service quality," "service quality," and "customer satisfaction" are the most frequent keywords (figure 5) in LSQ literature. These terms confirm that most studies still connect logistics performance with customer evaluation. Terms such as "e-commerce," "customer loyalty," "repurchase intention," and "last-mile delivery" show the growing link between LSQ and online retail. Operational terms such as "Supply chain manage-

ment," "distribution management," "logistics service providers," and "logistics services" are also some of the most frequent keywords. The presence of "SERVQUAL," "SERVQUAL model," "structural equation modelling," and "LSQ" shows that scale-based survey modelling remains common.

Figure 6: Keyword Co-occurrence Network.



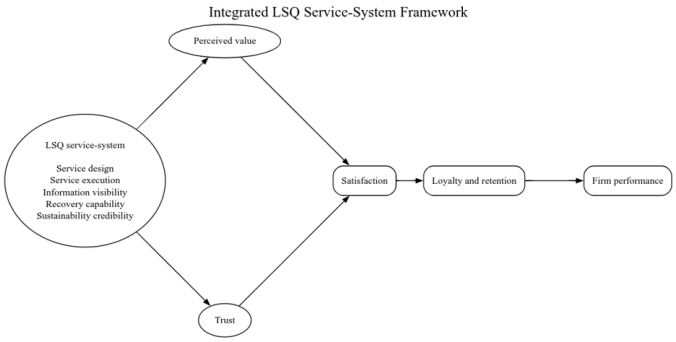
Source: Authors.

The VOSviewer map (van Eck & Waltman, 2007) (Figure 6) revealed five broad thematic areas. The first area is the LSQ's connection with marketing, consumption behaviour, and repurchase intention that focus on customer response and post-purchase behaviour. A second area links logistics service, quality of service, supply chains, sales, and decision-making reflecting operational and supply-chain service quality work. A third area connects service quality with loyalty, information technology, third-party logistics, and performance. This group focuses on provider capability and business outcomes. A fourth area brings together e-commerce, retailing, customer loyalty, distribution management, and last-mile delivery. This is the clearest sign of the shift towards online and omni-channel logistics. A fifth area links logistics with SERVQUAL, perception, quality, and sustainability. This group shows that older measurement traditions still matter, although newer sustainability concerns have entered the field.

6. Integrated LSQ Service-system Framework.

The conceptual review revealed five service layers namely (a) service design, (b) service execution, (c) information visibility, (d) recovery capability, and (e) sustainability credibility. So, this research conceptualises the LSQ as a service-system construct (figure 7). A detailed service layer, key indicators, and their role in LSQ service system is provided in table 1.

Figure 7: Integrated LSQ Service-system Conceptual Framework.



Source: Authors own based on literature findings.

Table 1: LSQ and its service layers.

Service layer	Key indicators	Role in the LSQ service-system
Service design	Delivery promises, service coverage, channel design, provider choice, inventory positioning, and return policy.	Shapes the service expectations formed by customers and shippers before delivery begins.
Service execution	Timeliness, order accuracy, product condition, product availability, documentation accuracy, flexibility, and responsiveness.	Shows whether the logistics provider delivers the promised service dependably and efficiently.
Information visibility	Tracking accuracy, status updates, delivery-time information, disruption alerts, and transparent communication.	Reduces uncertainty and helps customers or shippers monitor service progress.
Recovery capability	Complaint handling, compensation, problem solving, return handling, and corrective action.	Restores confidence when the original service promise is not fully met.
Sustainability credibility	Verified green action, reverse logistics quality, responsible packaging, social responsibility, and resilience.	Strengthens LSQ when customers or shippers expect responsible logistics practices to be visible, credible, and verifiable.

Source: Authors.

The model also treats perceived value and trust as mediators between the LSQ service-system and customer outcomes. These mediators further shape the satisfaction, which then supports loyalty and retention; contributing to firm performance.

Conclusions.

This review examined logistics service quality research using a Scopus-based corpus of 280 peer-reviewed journal articles published between 1992 and 2025. The bibliometric results show that LSQ has emerged as an active field with strong recent growth. Publication activity increased sharply in the later years of the corpus, with 27 articles in 2022, 30 in 2023, 36 in 2024, and 43 in 2025. This growth reflects the rising heterogeneous nature of LSQ based on the complex evolution of the industry and its vertical and horizontal integration for covering factory to door delivery.

The source and country results show that LSQ research is dispersed across all major countries that are actively involved in globalisation. The keyword and VOSviewer results show that the field remains centred on "logistics service quality", "service quality", and "customer satisfaction". At the same time, the network map shows that LSQ has widened into five connected areas: behavioural outcomes, operational logistics and supply chain service quality, loyalty and performance, e-commerce and last-mile delivery, and SERVQUAL-based evaluation. So, we conclude that the LSQ should be treated as a five-layer service system constructs that changes across logistics contexts. We also conceptualise that these five layers shape perceived value and trust (PVT). PVT then affects satisfaction, which supports loyalty and retention, and later contributes to firm performance.

Future this study recommends that LSQ studies should move beyond repeated direct-effect models in single settings. The review has limitations. It relies on Scopus, English-language journal articles, and final publication-stage records within selected subject areas. Relevant work outside Scopus, in other languages, or in conference and industry sources may therefore be missing. Keyword maps also depend on author and index keyword choices, so repeated variants such as "LSQ," "logistics service quality," and "logistic service quality" can split related concepts. Despite these limits, the review offers a current map of LSQ research and a simpler conceptual model that can guide future work on logistics quality in digitally enabled and sustainability-oriented service systems.

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