Mapping the landscape of e-service quality: a retrospective review

Manish Kumar Dubey (Corresponding author)
Department of Commerce, Delhi School of Economics, University of Delhi, Delhi, India
mkdubey@ss.du.ac.in

Hamendra Kumar Dangi
Department of Commerce, Delhi School of Economics, University of Delhi, Delhi, India
hkdangi@commerce.du.ac.in

Abstract

E-service quality has been a significant research area in e-commerce, online marketing, and information systems. Many researchers have investigated various aspects of e-service quality to understand its dimensions, scales, and impact, and to explore how it can be further improved. E-service quality has become a pivotal aspect of the digital landscape, profoundly impacting customer satisfaction, online business performance, and competitive advantage. This research paper primarily focuses on a comprehensive bibliometric review of e-service quality literature and a systematic analysis of the state of knowledge in this domain. This study uses 681 documents extracted from the Scopus database after a filtration and screening process for systematic analysis. It employs bibliometric techniques to examine publications and citation trends, identify influential contributors and countries, and map key research themes in e-service quality. The analysis reveals a consistent rise in the total number of publications over the years, indicating the growing significance of e-service quality in the digital age, with this trend becoming more pronounced during COVID times. This study presents a network of authors' keyword co-occurrences, an author co-citation analysis, and bibliographic coupling of documents and countries. Furthermore, the study identifies leading authors, institutions, and countries that have made substantial contributions to this field, shedding light on the global landscape of "e-service quality" research.

Keywords: *E-service quality, Bibliometric analysis, TAM, Customer satisfaction, Customer loyalty.*
JEL Classification: *C88, L81, M30, O33*

Suggested Citation:
Dubey, M. K. & Dangi, H. K. (2026). Mapping the landscape of e-service quality: a retrospective review. *International Journal of Accounting, Business and Finance, 5*(2), 46-68. https://dx.doi.org/10.55429/ijabf.v5i2.266

1. Introduction

Marketing of services has evolved, as has the concept of service quality. Both the idea of service quality and service marketing have changed throughout time. Since the 1980s, service quality has been extensively studied and discussed in the marketing field. Firstly, the research focused on how to measure the construct (Parasuraman A. et al., 1988). Consequently, few studies have examined the implications of service quality and its relationship to other relevant marketing concepts, such as satisfaction and loyalty (Zeithaml et al., 1996). Over time, researchers developed various models and measurement scales.

With advances in the internet and technology, consumer behavior has also changed. A consumer now has access to all the major services through online channels. There is rapid, increasing growth in the delivery of services such as travel and tourism, financial services, educational services, and healthcare online, alongside traditional channels. Therefore, the quality of service in customers' experience on online channels becomes a more critical and significant aspect. So, with the rapid growth, affordability, and advancement of the Internet and e-commerce in recent decades, service quality gained new impetus, with the focus shifting from service quality to electronic service (e-service) quality. Therefore, owing to these changes, researchers and managers shifted their focus towards developing measures and strategies to improve e-quality. For instance, SERVQUAL was adopted for the electronic services context as E-SQUAL (Parasuraman et al., 2005).

This article is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.
Copyright © 2026 Authors

Table 1. Summary of review articles on e-service quality

Document	Source Title	Focus
(Yang & Fang, 2004) "Online service quality dimensions and their relationships with satisfaction"	"International Journal of Service Industry Management"	Uses content analysis of online reviews to identify e-service quality dimensions and their impact on satisfaction.
(Barrutia & Gilsanz, 2009) "e-Service quality: overview and research agenda"	"International Journal of Quality and Service Sciences"	Provides a critical review of e-service quality literature and proposes future research directions.
(Kalia, 2017) "Service quality scales in online retail: methodological issues"	"International Journal of Operations & Production Management"	Reviews 30 studies to identify flaws in sampling, item development, and dimensionality in e-service quality scales. Highlights the need for robust, context-specific models.
(Stamenkov & Dika, 2019) "Quo vadis, (e-)service quality? Towards a sustainability paradigm"	"Total Quality Management & Business Excellence"	Advocates for a shift toward sustainability-focused service quality paradigms, emphasizing relationship-building and long-term value over traditional SERVQUAL approaches.
(Ali et al., 2021) "Everything is Going Electronic, so do Services and Service Quality: Bibliometric Analysis of E-Services and E-Service Quality"	"International Journal of Interactive Mobile Technologies (IJIM)"	Results revealed that Total Quality Management and Business Excellence ranked among the most productive journals. Chang W.-I. and Yuan S.-T. were found to be the leading authors. The United States was found to be the leading country.
(Mahadevan & Joshi, 2021) "A bibliometric analysis of trends in electronic service quality research over two decades"	"International Journal of Integrated Supply Management"	Bibliometric Review of existing data from 1999 to 2019, where trends and network diagrams were presented. Electronic commerce and banking are the key industries for research in this area.
(Khadim & Islam, 2022) "A Review of Literature on the Evaluation of Customer Satisfaction Patterns in Mobile Banking"	"International Journal of Professional Business Review"	Reviews recent studies (2016–2022) on customer satisfaction in Iraqi mobile banking, where service quality, trust, and ease-of-use were the major influencers.
(Kanwal et al., 2022) "Systematic review of gender differences and similarities in online consumers' shopping behavior"	"Journal of Consumer Marketing"	Systematically examines gender-specific differences and similarities in online shopping behavior using 61 articles, focusing on trust, payment, and e-service quality.
(Singh & Basu, 2023) "Online consumer shopping behaviour: A review and research agenda"	"International Journal of Consumer Studies"	A systematic literature review using the TCCM framework, identifying research gaps in theory use, context, and methodology related to online shopping behaviors.
(Thanasi-Boçe & Kulakli, 2023) "Dimensions and outcomes of electronic service quality in the GCC countries"	"International Journal of Quality and Service Sciences"	Identifies outcomes of e-service quality in the GCC region, focusing on user satisfaction and behavioral intentions. Suggests the need for localized models.
(Dhaigude & Mohan, 2023) "Logistics Service Quality in Online Shopping: A Bibliometric Analysis"	"Journal of Internet Commerce"	This study reviews articles related to the logistics quality of online shopping and presents a bibliometric analysis.
(Jiang et al., 2024) "Total Quality Management & Business Excellence: a 33-year overview using bibliometric and content analysis"	"Total Quality Management & Business Excellence"	Bibliometric and content analysis of TQM&BE journal (1990–2022); analyses publication patterns, themes, citations, and geographic trends using CiteSpace and VOSviewer on the area of e-service quality.
(Puiteng et al., 2025) "E-Service Quality and Customer Satisfaction: Insights and Trends from a Bibliometric Analysis"	"International Journal of Academic Research in Business and Social Sciences"	The study identifies the most influential articles, authors, and research patterns shaping this field. Key themes were website usability, service reliability, security, customer loyalty, and trust, which emerged as essential factors driving customer satisfaction in e-commerce.

Source: Authors' elaborations
Notes: This table summarises the current review papers in the e-service quality literature.

The term e-service quality has been defined as the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery (Parasuraman et al., 2005). Further, e-service quality is "the beginning to the end of the transaction, including information search, website navigation, order, customer service interactions, delivery, and satisfaction with the ordered product" (Wolfinbarger & Gilly, 2003). Although there was similarity in the services offered, the quality of e-services differs significantly from brick-and-mortar services; e-services do not include face-to-face interaction and may present to customers more privacy risk concerns and perceived danger during service consumption and delivery (Bitner et al., 2000)

The digitalization of services has changed the way organizations engage with their customers, shifting traditional face-to-face service encounters to virtual platforms. In this context, electronic service quality (e-service quality or e-SQ) has emerged as a central determinant of customer satisfaction, trust, loyalty, and behavioral intention in online environments. E-service quality (e-SQ), defined as the customer's evaluation of the quality of services delivered through electronic channels (Parasuraman et al., 2005; Zeithaml, 2002), encompasses both technical and functional attributes, including website usability, responsiveness, reliability, privacy, personalization, and system efficiency. Conceptually, e-service quality is often linked to user experience, interface design, and information systems theories, with many studies employing models such as the Technology Acceptance Model (TAM) (Davis, 1989). Whereas early research focused primarily on adapting traditional service quality models, such as SERVQUAL and E-S-QUAL, recent work has extended the literature by incorporating contemporary behavioral constructs (e.g., emotional satisfaction, e-trust, engagement), technological features, and user experience paradigms. The increasing reliance on technology-mediated interactions has shifted scholarly attention toward not only functional aspects of service quality—such as reliability and system availability—but also affective and relational outcomes, including emotional engagement, trust, e-loyalty, and repurchase intention (Bhattacharya & Mulay, 2024). Methodologically, the field has been dominated by quantitative survey-based approaches using structural equation modeling (SEM); however, a gradual diversification in methods—such as fuzzy AHP, multi-criteria decision-making (MCDM), and exploratory scale development—signals an evolving empirical landscape.

Some of the researchers have contributed to the existing literature by reviewing e-service quality and related terminology, as shown in Table 1. Of the 13 papers, only 5 have conducted bibliometric reviews that cover different aspects. Jiang et al. (2024) focused on papers published from 1990–2022 in the area of e-service quality in the TQM & BE journal, analyzing publication patterns, themes, citations, and geographic trends. Another bibliometric paper, Puiteng et al. (2025), focuses solely on e-service quality in relation to customer satisfaction, adopting a narrower scope. In contrast, the present study adopts a broader scope, covering consumer behavioral outcomes, e-service quality scales, and related dimensions. Apart from these, another bibliometric analysis by Dhaigude and Mohan (2023) examined the quality of online services, covering data from 2001 to 2021 and limited to logistics services only. The literature (Ali et al., 2021) and (Mahadevan & Joshi, 2021) covers data up to 2019. Still, there is a surge in the existing literature on e-service quality during and post-COVID, spanning a period of five years, which is duly covered by this study. Therefore, considering the time span, scope, area, and keyword coverage, this study stands out from existing studies.

This study attempts to visualize the domain of e-service quality using a bibliometric approach, presenting current insights into e-service quality research and outlining future research directions. The following are the main research questions (RQs) that we have explored in the present study:

RQ1. *What is the annual citation and publication trend of the literature available on e-service quality?*

RQ2. *Which publications (journals, articles) have had the greatest impact on e-service quality research during the study period?*

RQ3. *What are the most productive countries, authors, and institutions publishing articles on e-service quality?*

RQ4. *Where does the existing literature of e-service quality stand (i.e., themes, topics), and what are the key and potential areas where future researchers can delve and investigate to deepen understanding of e-service quality?*

The other parts of this paper, namely Section 2, discuss the research methodology followed; Section 3 presents the results of the bibliometric analysis; thereafter, Section 4 explains the clusters that were created using bibliometric coupling, and the study's outcome and summary are presented in the final section.

2. Research methodology

Over time, various methods have been developed and are widely used to review the existing literature in a particular domain. Bibliometric analysis, a quantitative literature review technique, has become increasingly popular in recent years (Donthu et al., 2020; Donthu, Kumar, Pandey, et al., 2021). In recent years, the development, accessibility, and availability of scientific databases such as Scopus and Web of Science, as well as bibliometric tools like VOSviewer, Biblioshiny, and Gephi, have contributed significantly to the popularity of bibliometric analysis (Donthu, Kumar, Mukherjee, et al., 2021).

The researchers prefer bibliometric analysis over traditional analysis tools for a variety of reasons: firstly, bibliometric analysis can handle large volumes of scientific data; secondly, it presents emerging trends in the area under review through performance metrics, science mapping, and visualizing the results in the form of network diagrams (Lal et al., 2023). The performance analysis presents trends in the influence and productivity of the article, author, journal, country, and organization. On the other hand, the science mapping (network analysis) includes co-authorship analysis, citation analysis, keyword co-occurrence analysis, co-citation analysis and bibliographic coupling analysis (Baker et al., 2021). The advantage that bibliometric analysis offers over other review techniques is that it is a more comprehensive approach that uses statistical tools, technology, and qualitative data to explore the portion of the domain that has remained unexplored (Khan et al., 2022; Mukherjee et al., 2022).

For this study, we have used the Scopus database, as it is one of the large-scale, high-quality journal databases comprising multidisciplinary, high-ranking peer-reviewed journals. The other databases, such as Web of Science, are not used in this study, as they are less comprehensive and have lower journal coverage than Scopus (Bar-Ilan, 2010; Norris & Oppenheim, 2007). The data mining was done through Scopus using the document search option. Figure 1 shows the procedure we used to search the data using every potential term in the title, abstract, and keywords, taking a combination of all possible keywords: “e-service quality” or “electronic service quality” or “e-services quality” or “quality of e-services” or “online services quality” or “quality of online services” using the search option in the Scopus database. After the initial search results were obtained, the documents were further refined using Scopus filters for coverage years, subject area, language, and document type. The results were limited to relevant subject categories such as Business Management, Economics, Econometrics, and Finance, since the current study is focused on e-services, which are primarily covered in these subject categories. The language filter was limited to English. Also, a document-type filter was applied to include articles, review articles, and conference proceedings (Kraus et al., 2022; Lal et al., 2023; Paul et al., 2021). The total number of

documents extracted from Scopus was further reduced through title and abstract review (Jaiswal et al., 2024; Lal et al., 2023; Pandey et al., 2024). A total of 681 articles were screened, found useful, and included in the bibliometric analysis.

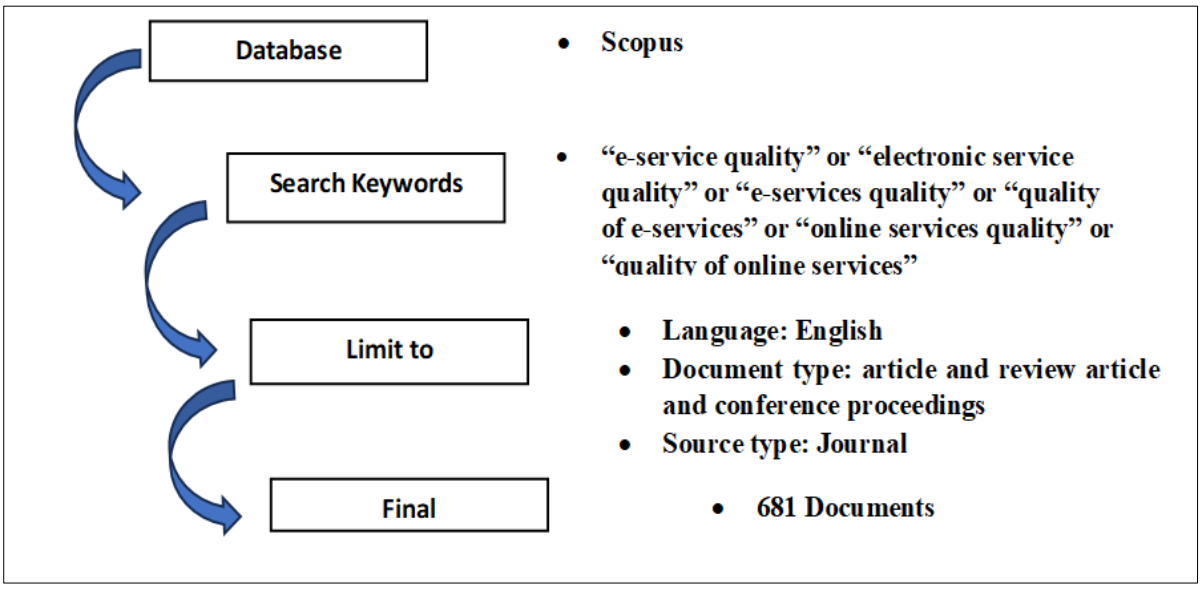


Figure 1. Details of data search string used, screening steps, and delimiting process
Source: Authors' elaboration

3. Results and discussion

3.1. Descriptive analysis

Using descriptive analysis, a study assesses the impact and productivity of an article, author, journal, organization, and country by examining the number of publications and citations.

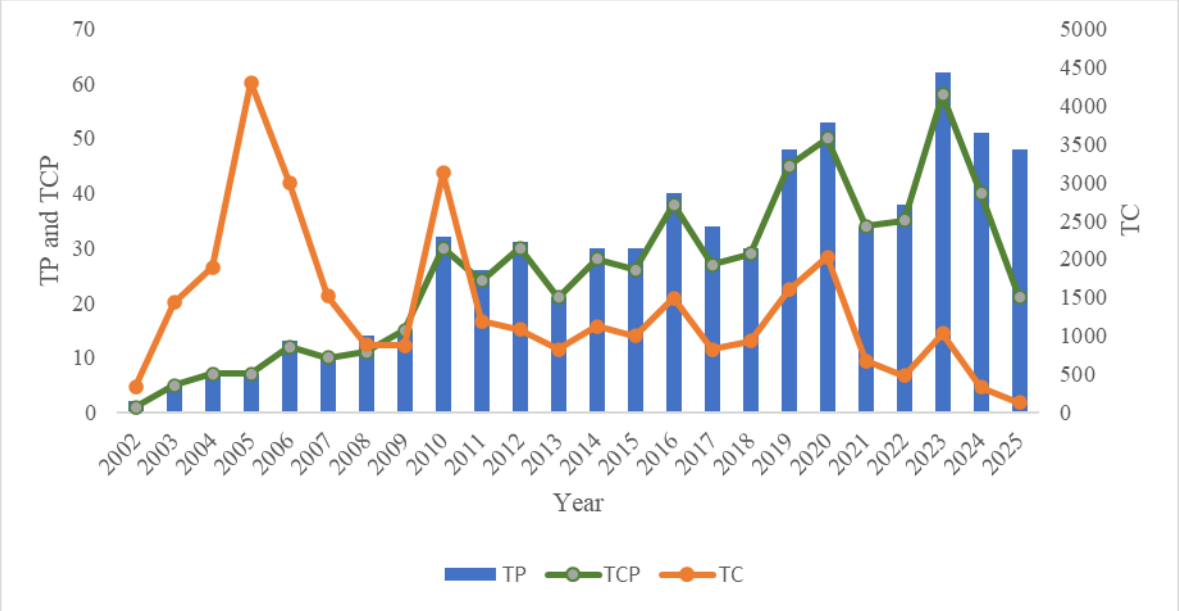


Figure 2. Year-wise total publications and total citations.
Source: Authors' elaborations

Productivity is measured by the total number of publications, whereas influence is gauged by the sum of citations and the average number of citations per article (Bhaskar et al., 2022; Rai et al., 2024). The descriptive analysis in this research reveals that 681 articles were

published between 2002 and 2025. During this time frame, these articles received a noteworthy 32,021 citations, indicating substantial growth over the years.

Table 2. The publication and citation trend in the domain of e-service quality

Year	TP	TC	TCP	AC	ACP	≥200	≥100	≥50	≥20	≥10	≥5	≥1
2002	2	334	1	167.00	334.00	1	1	1	1	1	1	1
2003	5	1430	5	286.00	286.00	1	3	5	5	5	5	5
2004	7	1891	7	270.14	270.14	4	5	6	7	7	7	7
2005	7	4304	7	614.86	614.86	2	4	5	6	7	7	7
2006	13	2994	12	230.31	249.50	6	6	8	9	10	10	12
2007	10	1512	10	151.20	151.20	2	4	6	7	8	9	10
2008	14	877	11	62.64	79.73	1	3	7	9	9	10	11
2009	15	871	15	58.07	58.07	1	2	4	9	9	10	15
2010	32	3118	30	97.44	103.93	5	10	15	19	23	26	30
2011	26	1188	24	45.69	49.50	1	3	6	12	19	20	24
2012	31	1079	30	34.81	35.97	0	3	8	17	23	25	30
2013	21	819	21	39.00	39.00	0	1	8	11	16	18	21
2014	30	1119	28	37.30	39.96	1	3	5	13	20	24	28
2015	30	999	26	33.30	38.42	1	1	7	15	19	21	26
2016	40	1488	38	37.20	39.16	2	5	7	12	21	29	38
2017	34	820	27	24.12	30.37	1	1	4	11	17	20	27
2018	30	928	29	30.93	32.00	0	2	6	16	20	23	29
2019	48	1599	45	33.31	35.53	1	4	11	18	28	34	45
2020	53	2027	50	38.25	40.54	1	6	10	28	35	41	50
2021	34	668	34	19.65	19.65	0	0	2	12	20	27	34
2022	38	475	35	12.50	13.57	0	0	2	9	15	19	35
2023	62	1030	58	16.61	17.76	1	1	4	15	24	40	58
2024	51	325	40	6.37	8.13	0	0	0	4	10	20	40
2025	48	126	21	2.63	6.00	0	0	0	1	5	9	21
Total	**681**	**32021**	**604**	**47.02**	**53.01**	**32**	**68**	**137**	**266**	**371**	**455**	**604**
%	**100**		**88.69**			**4.70**	**9.99**	**20.12**	**39.06**	**54.48**	**66.81**	**88.69**

Source: Authors' elaborations
Notes: TP- total publications, TC- total citations, TCP- total cited publications, AC- citations per publication, ACP- citations per cited publication. ≥ indicates citations greater than or equal to that value.



Figure 3. Distribution of the authors' collaborations.
Source: Authors' elaborations

3.1.1. Annual citation and publication trend

The publication analysis in this study covers the related literature from 2002 to 2025. The total number of publications ranged from 1 to 10 per year between 2002 and 2005; thereafter, it exceeded 10 per year from 2006 to 2025. The publication and citation trends of e-service quality literature are shown in Table 2. In contrast, Figure 2 presents a graphical view of the total publications, total cited publications, and citation trend of e-service quality

literature. We observed a 548% increase in the literature from 2011 to 2025 compared with the period from 2002 to 2010. This growth can be attributed to advancements in e-commerce, mobile-based online services, and growing dependence on e-services over the last decade. In 2025, we found a total of 48 publications. Table 2 also presents the citation structure for year-wise articles, showing the articles receiving at least 1, 5, 10, 20, 50, 100, and 200 citations. The authors' collaboration trend is shown in Figure 3, where most articles have only one, two, or three authors. Of 681 publications, 595 are collaborative, and 86 are single-authored.

Table 3. Top ten most influential documents using total citations

R	Authors	Title	Source	TC	AC	C
1	Parasuraman A.; Zeithaml V.A.; Malhotra A.	(Parasuraman et al., 2005) "E-S-QUAL: a multiple-item scale for assessing electronic service quality"	"Journal of Service Research"	2966	141.24	9.26
2	Santos J.	(Kappil & Santhi, 2025) "E-service quality: A model of virtual service quality dimensions"	"Managing Service Quality: An International Journal"	998	43.39	3.12
3	Lee G.; Lin H.	(Lee & Lin, 2005) "Customer perceptions of e-service quality in online shopping"	"International Journal of Retail and Distribution Management"	845	40.24	2.64
4	Han H.; Kim Y.	(Han & Kim, 2010) "An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior"	"International Journal of Hospitality Management"	801	50.06	2.50
5	Collier J.E.; Bienstock C.C.	(Collier & Bienstock, 2006) "Measuring service quality in E-retailing"	"Journal of Service Research"	754	37.70	2.35
6	Cristobal E.; Flavián C.; Guinalíu M.	(Cristobal et al., 2007a) "Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty"	"Managing Service Quality"	680	35.79	2.12
7	Bauer H.H.; Falk T.; Hammerschmidt M.	(Bauer et al., 2006) "eTransQual: A transaction process-based approach for capturing service quality in online shopping"	"Journal of Business Research"	644	32.20	2.01
8	Ribbink D.; Streukens S.; Van Riel A.C.R.; Liljander V.	(Ribbink et al., 2004) "Comfort your online customer: Quality, trust and loyalty on the internet"	"Managing Service Quality: An International Journal"	632	28.73	1.97
9	Fassnacht M.; Koese I.	(Fassnacht & Koese, 2006) "Quality of electronic services: Conceptualizing and testing a hierarchical model"	"Journal of Service Research"	409	20.45	1.28
10	Yang Z.; Fang X.	(Yang & Fang, 2004) "Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services"	"International Journal of Service Industry Management"	395	17.95	1.23

Source: Authors' elaborations.
Notes: The top ten most influential and cited articles are shown in this table, along with the year of publication and the source. This comprises the citation (TC), the citation percentage (C), and the average citation per year (AC).

3.1.2. Most influential articles

The influence of the article is determined by its citations by different publications (Cancino et al., 2018). Table 3 presents the top 10 highly cited articles. The article "E-S-QUAL:

A multiple-item scale for assessing electronic service quality" has ranked first with 2966 (9.26%) citations and 141.24 average citations, followed by the article "E-service quality: A model of virtual service quality dimensions," which ranks second in terms of total citations of 998 (3.12%) and an average of 43.39 citations. The article "Customer perceptions of e-service quality in online shopping" ranks third in terms of total citations, with 845 (2.64%) and an average of 40.24. The article "An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior" ranks fourth, with a total of 801 citations (2.50%) and an average citation of 50.06.

3.1.3. Highly influential and productive sources and authors

The most influential and productive sources and authors are shown in Table 4. The sources with at least 5 documents and 100 citations have been selected. The journal "Total Quality Management and Business Excellence" has ranked first in publications, with 20, and sixth in citations, with 990. "Journal of Retailing and Consumer Services" has ranked second, with a total of 18 documents, and ranks first based on total citations of 1935. The Journal "Managing Service Quality" ranked third with 10 documents and second in total citations (1635), followed by "Journal of Service Marketing," ranked fourth with 9 documents and 1098 citations. The top contributing authors are also listed in Table 4, each with at least 3 publications and 50 citations. Kim J.H. has ranked first with 8 publications; Marimon F. has ranked second with 7 publications; and Kim M., Carlson J., O'Cass, and Kumar A. have ranked third with equal publication counts of 5 articles. In terms of citations, Yang Z. ranks first with 1147 citations, followed by Jun M. with 941 citations.

Table 4. Top ten most influential and productive authors and sources

Rank	Author	TP	TC	AC	Source	TP	TC	AC
1	Kim J.-H.	8	514	64.25	"Total Quality Management and Business Excellence"	20	990	49.50
2	Marimon F.	7	406	58.00	"Journal Of Retailing and Consumer Services"	18	1935	107.50
3	Carlson J.	5	584	116.80	"Managing Service Quality"	10	1635	163.50
4	O' Cass A.	5	584	116.80	"Journal of Services Marketing"	9	1098	122.00
5	Kumar A.	5	66	13.20	"International Journal of Quality and Reliability Management"	9	437	48.56
6	Yang Z.	4	1147	286.75	"Journal of Internet Commerce"	8	316	39.50
7	Jun M.	4	941	235.25	"Service Industries Journal"	8	282	35.25
8	Van Riel Allard	4	905	226.25	"Industrial Management and Data Systems"	8	427	53.38
9	Lennon S.J.	4	347	86.75	"Managing Service Quality: An International Journal"	7	2421	345.86
10	Kim M.	4	346	86.50	"Journal of Business Research"	7	1233	176.14

Source: Authors' elaborations.
Notes: The ten most important writers and sources are listed in this table. This comprises the average number of citations annually (AC), the total number of publications, and the total number of citations (TC).

3.1.4. Highly influential and productive organizations and countries

The top 10 highly influential and productive organizations and countries are shown in Table 5. The countries with 10 publications and 50 citations are shown in the table. India ranked first with 90 publications, followed by the United States and Indonesia, ranking second and third with 86 and 68 publications, respectively. Considering total and average citations, this study reveals that the United States ranked first, with 10133 total citations and an average of 117.83 citations. Taiwan and the UK ranked second and third with 3097 and 2747 citations,

respectively, while the UK ranked second with an average citation score of 98.11, followed by Taiwan with 64.52.

Table 5. The most prominent top 10 countries and organizations

R	Country	TP	TC	C/TP	Organization	TP	TC	C/TP
1	India	90	1844	20.49	"Department of Marketing, City University of Hong Kong"	4	1147	286.75
2	United States	86	10133	117.83	"Department of Retailing, College of Hospitality, Retail and Sport Management, University of South Carolina"	4	107	26.75
3	Indonesia	68	480	7.06	"Department of Marketing, Faculty of Economics and Business Administration, Maastricht University, Maastricht, Netherlands"	3	816	272.00
4	China	62	2418	39.00	"College of Management and Economics, Tianjin University, Tianjin, China"	3	223	74.33
5	Taiwan	48	3097	64.52	"School of Medicine and Health Management, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China"	3	61	20.33
6	Malaysia	51	1214	23.80	"Institute of Business Management, GLA University, Mathura, India"	3	57	19.00
7	Spain	35	2215	63.29	"Department of Information Management, National Taiwan University of Science and Technology, Taipei, Taiwan"	2	1054	527.00
8	United Kingdom	28	2747	98.11	"Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia"	2	407	203.50
9	Jordan	24	340	14.17	"Hailey College of Banking and Finance, University of The Punjab, Lahore, Pakistan"	2	407	203.50
10	Greece	22	846	38.45	"School of Business and Management, The University of Newcastle, Callaghan, Australia"	2	319	159.5

Source: Authors' elaborations.
Notes: The ten most influential nations and institutions are listed in this table. This comprises the average number of citations annually (AC), the total number of publications, and the total number of citations (TC).

Table 5 also exhibits the top 10 organizations with at least 2 publications and 40 citations each. In terms of publications, "Department of Marketing, City University of Hong Kong" and "Department of Retailing, College of Hospitality" have ranked first and second, with 4 publications each, followed by the "Department of Marketing, Faculty of Economics and Business Administration, Maastricht University, Maastricht, Netherlands," which ranked third. In terms of average citations, the "Department of Marketing, City University of Hong Kong" has ranked first with a total of 1147 citations, followed by the "Department of Information Management, National Central University," which has ranked second with 1054 citations. In terms of average citations, the "Department of Information Management, National Central University" has ranked first with an average citation of 527, followed by the "Department of Marketing, City University of Hong Kong" with an average citation of 286.75.

Table 6. Authors' keywords co-occurrences with at least five keywords

Keywords	Occurrence	PGRK	Keywords	Occurrence	PGRK
Cluster 1: Service quality dimensions, TAM, SEM			**Cluster 3: Measurement and Behavioral outcomes**		
Website Design	7	0.065365	Word of Mouth	5	0.036661
Security	6	0.025843	Online Service Quality	21	0.017434
Technology Acceptance Model	14	0.019068	Repurchase Intention	9	0.014849
Responsiveness	6	0.017185	Purchase Intention	17	0.013506
E-Service Quality	309	0.013337	Mobile Banking	5	0.008438
Reliability	5	0.012007	Gender	8	0.007575
Privacy	6	0.011485	Intention	5	0.007493
PLS-SEM	12	0.010065	E-Satisfaction	43	0.006856
Online Banking	8	0.009817	E-WOM	9	0.006694
Marketing	9	0.009807	E-Loyalty	35	0.006589
Perceived Usefulness	5	0.009793	E-Trust	22	0.006443
Malaysia	9	0.008965	Attitude	6	0.004851
Jordan	9	0.00855	Customer Experience	5	0.004851
Internet Banking	14	0.008404			
Information Quality	7	0.007616	**Cluster 4: Market Context and Service Relationships**		
E-Servqual	10	0.006651	Trust	33	0.069729
Efficiency	6	0.006303	Website	7	0.040265
E-Customer Satisfaction	13	0.005865	Satisfaction	37	0.024095
Ease of Use	7	0.005273	Perceived Value	25	0.013693
Higher Education	5	0.005088	Online Shopping	27	0.011895
E-Customer Loyalty	7	0.004851	Loyalty	31	0.010759
Consumer Satisfaction	6	0.004851	Perceived Risk	10	0.008082
Cluster 2: Customer Satisfaction & Behavioral Outcomes			India	10	0.007922
Service Quality	99	0.065638	Behavioral Intentions	5	0.004851
Website Quality	7	0.031577			
Value	8	0.029825	**Cluster 5: Digital Loyalty & Post-Purchase Behavior**		
Servqual	11	0.028449	Structural Equation Modeling	21	0.026705
Retailing	11	0.020499	Customer Satisfaction	107	0.008701
Quality	17	0.020184	Relationship Quality	7	0.006957
Scale Development	16	0.015657	Relationship Marketing	6	0.006347
User Satisfaction	5	0.01379	E-Retailing	10	0.00616
Measurement	5	0.01053	Confirmatory Factor Analysis	5	0.005195
Retail	5	0.009454	Customer Loyalty	44	0.005081
E-Service	40	0.009228	Banks	8	0.004851
Internet	26	0.008461			
E-Commerce	90	0.007467			
Internet Shopping	5	0.006388			
E-Banking	10	0.006335			
Customer Services Quality	26	0.006073			
Public Services	5	0.005843			
Customer Service	8	0.005244			
Covid-19	7	0.005081			
Consumer Behaviour	14	0.004851			
E-Government	13	0.004851			
Banking	9	0.004851			

Source: Authors' elaborations

Note: This table exhibits five clusters based on the occurrence of author keywords and respective PageRanks (PGRK).

3.2. Network analysis

Network analysis plays a significant role in bibliometric studies by visualizing patterns of co-authorship, co-citation, and keyword co-occurrence, enabling researchers to identify influential actors, intellectual clusters, and emerging research fronts within a field (Pandey et al., 2023; Zupic & Čater, 2015).

3.2.1. Author keyword co-occurrence analysis

Author keyword co-occurrence analysis is a key bibliometric technique used to identify thematic structures and intellectual trends within a research field. This method analyses how frequently specific keywords, provided by authors, co-occur across publications, thereby revealing conceptual linkages and research clusters (Donthu, Kumar, Mukherjee, et al., 2021; Zupic & Čater, 2015). In this study, we have included author keywords that occur at least 5 times in this analysis. Afterward, a total of 74 keywords were found to be connected and divided into five clusters. In cluster 1, the main keywords by occurrence are "e-service quality", "internet banking", and "e-customer satisfaction".

In contrast, in terms of page ranks, the main keywords are "website design" and "security". The presence of "website design," "security," and "privacy" highlights a strong emphasis on the technical and perceptual components of digital service platforms, particularly for sectors like online banking. Whereas cluster 2 focuses on "service quality", "e-commerce", and "e-services" in terms of occurrence. It reflects studies that investigate how e-service quality affects behavioral intentions and emotional responses, often in e-commerce or e-service contexts.

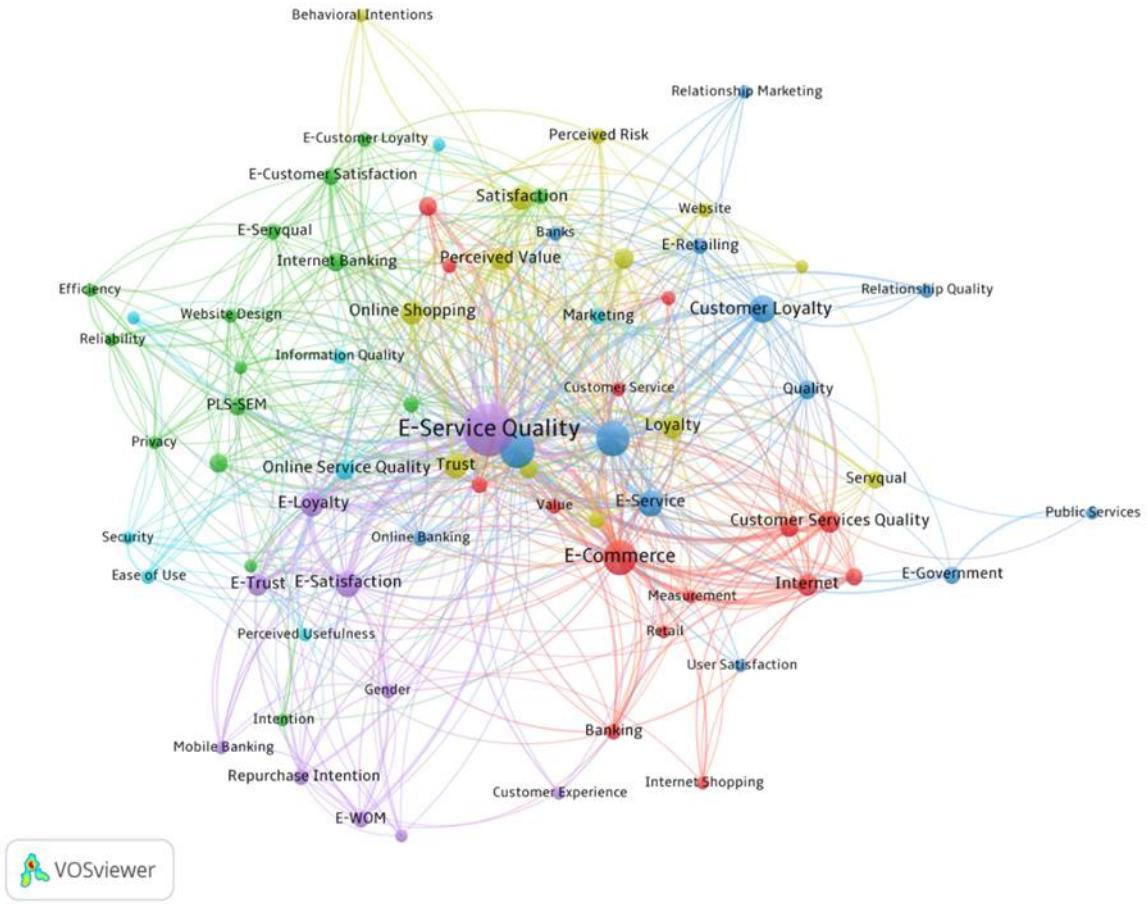


Figure 4. Author keywords with at least five co-occurrences
Source: Authors' elaborations

Cluster 3 focuses, in terms of occurrence, on behavioral outcomes such as "e-satisfaction, "e-loyalty," and "e-trust." Cluster 4 emphasizes "trust," "website," and "perceived value" in terms of occurrence. Cluster 5 shows "structural equation modeling," "relationship quality," and post-purchase behavioral outcomes such as satisfaction and loyalty. Table 6 presents the cluster-wise list of keywords, along with their occurrences and relative page ranks. Page rank is used in link analysis, which is based on authors' keywords' relative links and strengths(Lal et al., 2023). The analysis was conducted using VOSviewer software and visualized as shown in Figure 4, where e-service quality is significantly connected to customer satisfaction, customer loyalty, e-trust, and e-WOM. Customer satisfaction is connected with e-services, banking, e-commerce, service quality, and perceived value. E-trust is connected with e-loyalty, e-satisfaction, e-service quality, e-WOM, and privacy.

3.2.2. Co-citation analysis

Co-citation analysis is a widely used bibliometric technique that examines the frequency with which two documents are cited together by a publication. It reflects the intellectual structure of a research field by identifying clusters of papers that are perceived as related by the academic community (Small, 1973). The underlying assumption is that when two articles are frequently co-cited, they are likely to share thematic, methodological, or conceptual similarities (Chen, 2006). We performed co-citation analysis for authors using VOSviewer and found that Malhotra A. is highly co-cited with Berri LL, Gilli M.C., and Santosh J.; Berry L.L. is highly co-cited with Malhotra A., Zeithaml V.A., and Gronroos C. At the same time, Zeithaml is highly co-cited with Malhotra A. and Berry LL, followed by Oliver. In contrast, Parsuram is highly co-cited with Malhotra and Berry LL, followed by Zeithaml.

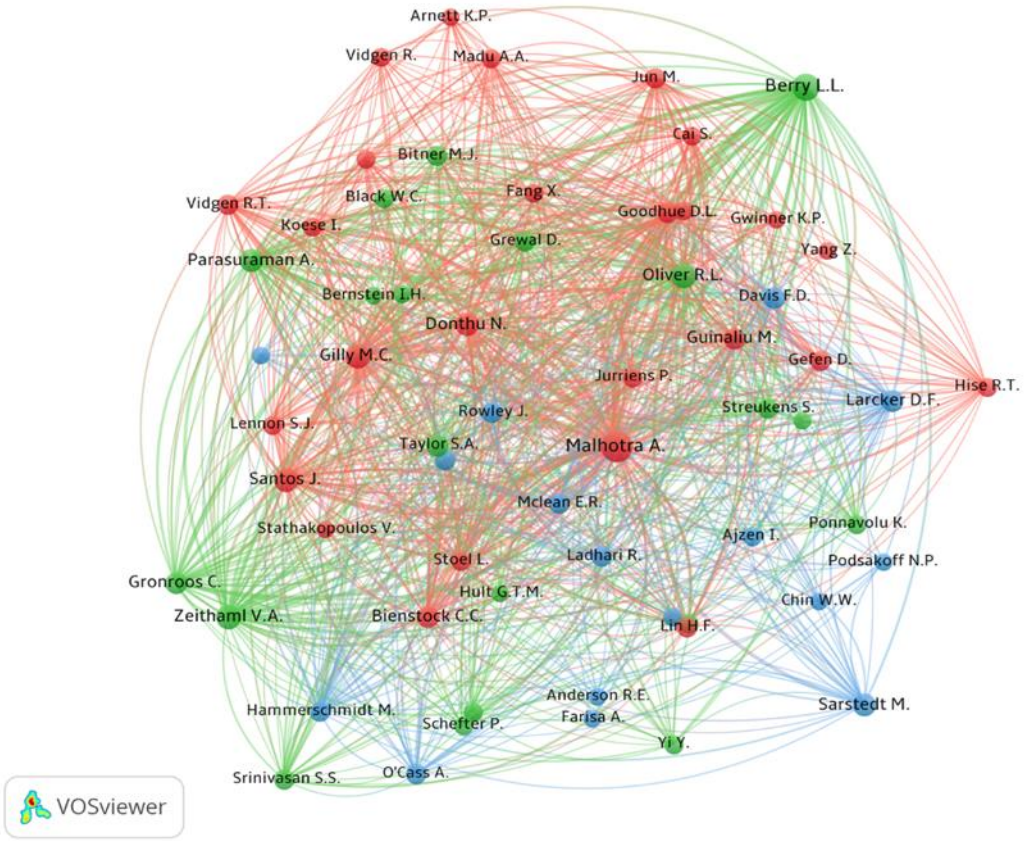


Figure 5. Co-citation analysis of authors with at least fifty citations each
Source: Authors' elaborations

3.2.3. Bibliographic coupling

Bibliographic coupling is a bibliometric technique that measures the degree of similarity between two documents based on the number of shared references in their bibliographies. If two articles cite the same prior works, they are bibliographically coupled, suggesting they may address similar topics or theoretical frameworks (Kessler, 1963). Unlike co-citation analysis, which captures the retrospective structure of research by analyzing how documents are cited together over time, bibliographic coupling offers a forward-looking perspective, highlighting recent contributions grounded in a shared knowledge base (Boyack & Klavans, 2010). The bibliographic coupling of articles published in this area is exhibited in Figure 6. We used a threshold of 50 citations per article; 137 met this threshold, but only 135 formed a bibliographic couple.

Figure 7 presents bibliographic coupling of the authors' affiliated countries. For this analysis, we set a threshold of 5 articles and 5 citations per author; 35 countries met this threshold, and 35 bibliographic couples were formed. Among these countries, the United States, Taiwan, the United Kingdom, China, Spain, India, and Australia are the most highly cited. India, the US, Spain, Taiwan, Malaysia, the United Kingdom, and China have the highest total link strength. The United States has strong connections with India, Spain, Taiwan, China, and Malaysia.

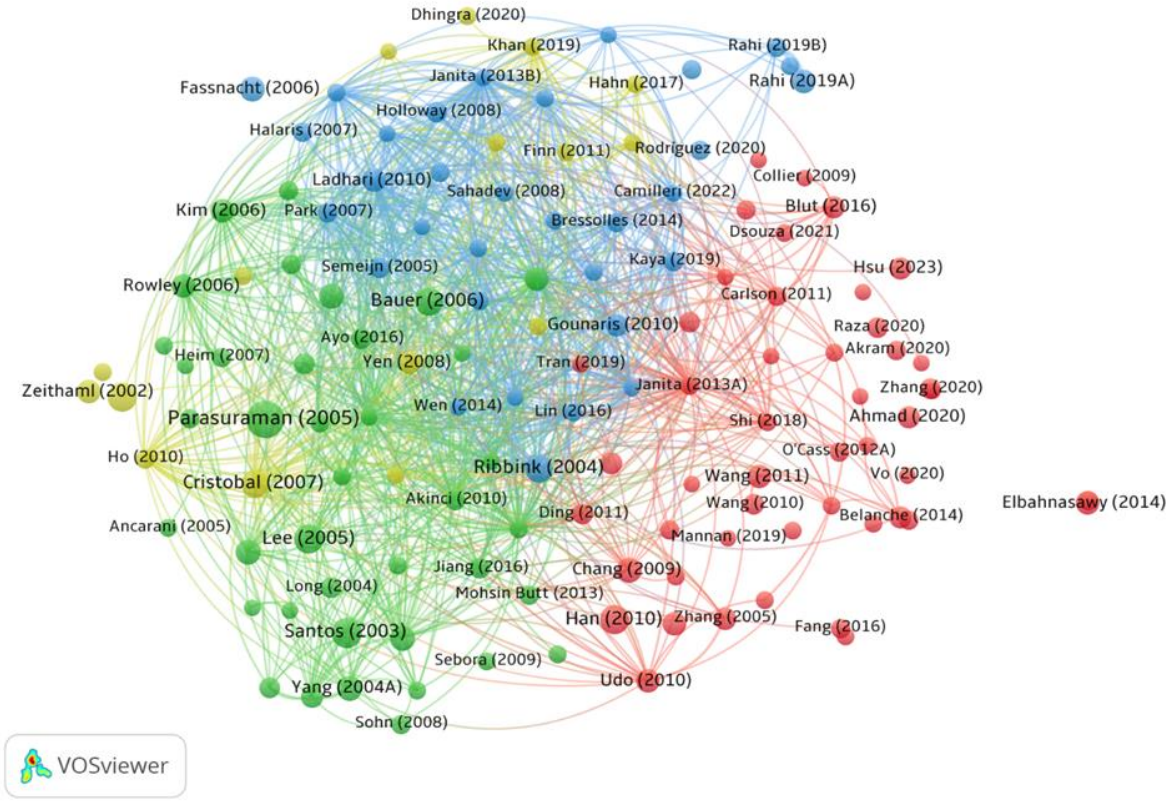


Figure 6. Bibliographic coupling of articles with at least 50 citations each
Source: Authors' elaborations

4. Clusters based on bibliographic coupling

Using bibliographic coupling analysis, 135 documents were coupled and divided into four clusters. For each cluster, five highly cited articles were further selected and presented in Table 7, along with the title, major area explored, topics, cluster focus, total publications, year, and total citations.

Cluster 1: This cluster includes 48 publications with 7058 citations, ranking 1st in publications and 2nd in citations. The main focus of this cluster is on customer satisfaction, e-service quality, consumer behavior, and intention to adopt. Of these 48 papers, Han and Kim (2010), Chang et al. (2009), Udo et al. (2010), Wang et al. (2011), and Elbahnasawy (2014) are the most-cited publications with 801, 370, 336, 310, and 278 citations, respectively. Han and Kim (2010) extended the theory of planned behavior towards e-service quality by incorporating a critical construct in consumer behavior. Further, this study found a mediating effect of satisfaction and attitude in customer decision-making. Chang et al. (2009) focused on testing the interrelationships among perceptions of e-service quality, consumer satisfaction, and customer loyalty, and examining the moderating effect of customer perceived value. Udo et al. (2010) examined the dimensions of website service quality based on e-customers' expectations and perceptions, operationalized a set of web service quality constructs, and analyzed their relationships with customer satisfaction and behavioral intention. Wang et al. (2011) used a hierarchical model to examine two dimensions of web aesthetics, i.e., aesthetic appeal and aesthetic formality. These two dimensions influence online consumers' psychological reactions. Elbahnasawy (2014) measured the curbing of corruption through e-governance and internet adoption.

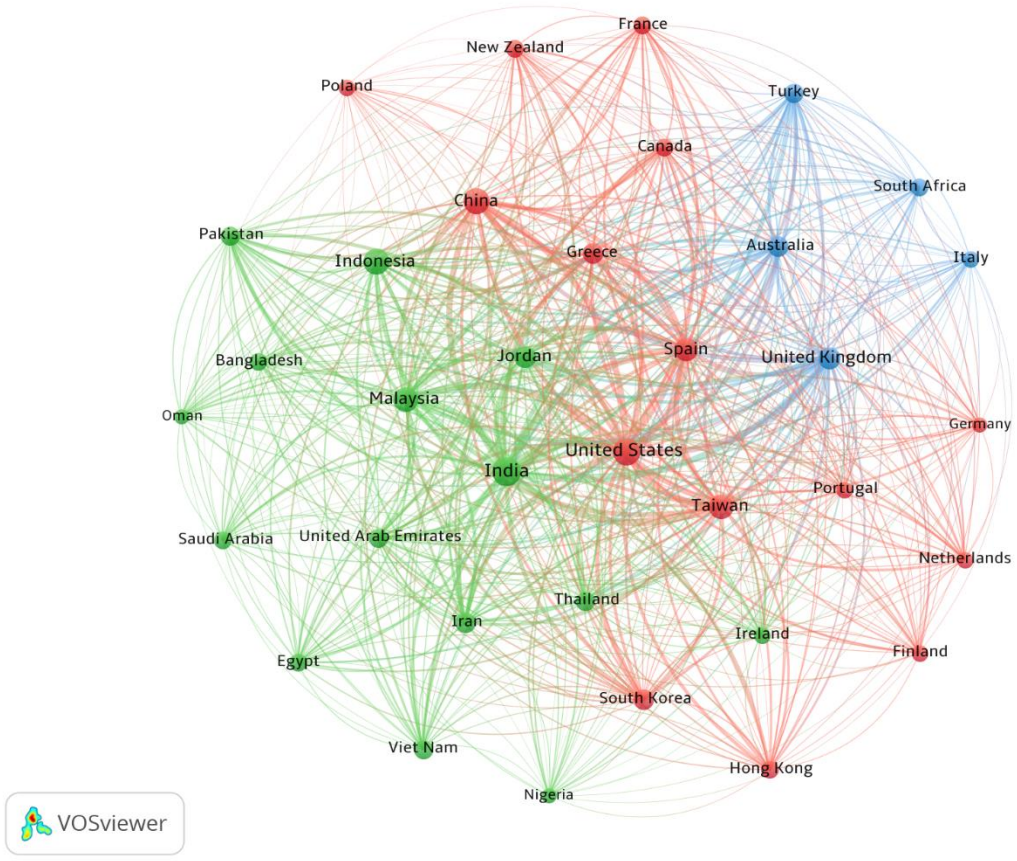


Figure 7. Bibliographic coupling of countries with at least 5 documents and 5 citations
Source: Authors' elaborations

Cluster 2: This cluster includes the 39 publications with 10768 citations, ranking 1st in citations and 2nd in publications. The main focus of this cluster is on e-commerce, e-service quality scale development, and service quality dimensions. Of these 39 papers, Parasuraman et al. (2005), Santos (2003), Lee and Lin (2005), Bauer et al. (2006), and Yang and Fang (2004) are the most-cited publications with 2966, 998, 845, 644, and 395 citations, respectively. Parasuraman et al. (2005) developed a 33-item scale, divided into 7 dimensions, to measure e-

service quality. Santos (2003) conceptualized a model of e-service quality that includes incubative and active dimensions to measure "*hit rates, stickiness, and customer retention*". Lee and Lin (2005) used structural equation modeling (SEM) to test how website design, reliability, trust, and responsiveness affect e-service quality and customer behavior. Bauer et al. (2006) identified five quality dimensions, namely design, reliability, enjoyment, responsiveness, and process, to measure their impact on perceived value and customer satisfaction. Yang and Fang (2004) identified 52 items across 16 dimensions of service quality through content analysis, which led to online customer satisfaction.

Cluster 3: This cluster includes 32 publications with 4,385 citations, ranking 3rd in both publications and citations. The main focus of this cluster is on e-service quality dimensions, customer satisfaction, TAM, and UTAUT. Of these 32 papers, the most-cited publications are Ribbink et al. (2004), Fassnacht and Koese (2006), Rahi et al. (2019), Ladhari (2010), and Gounaris et al. (2010), with 632, 409, 311, 303, and 236 citations, respectively. Ribbink et al. (2004) empirically investigated the impact of service quality on customer satisfaction and trust in the context of e-commerce-based services, including the mediating effect of loyalty. Fassnacht and Koese (2006) developed a hierarchical model to measure the quality of e-services across three dimensions and nine sub-dimensions. Rahi et al. (2019) integrated the UTAUT model to check the influence of internet banking quality on customers' intention to adopt banking services. Ladhari (2010) reviewed the existing literature on e-service quality scales and their related dimensions. Gounaris et al. (2010) examined the effects of service quality and satisfaction on three behavioral intentions related to e-shopping: WOM, purchase intention, and website revisit.

Cluster 4: This cluster includes 16 publications with 2,945 citations, ranking 4th in both publications and citations. The main focus of this cluster is banking services, customer behavior, and the measurement of service quality. Of these 16 papers, the most-cited publications are Collier and Bienstock (2006), Cristobal et al. (2007), Zeithaml (2002), Yen and Lu (2008), and Ho and Lin (2010), with 754, 680, 334, 209, and 121 citations, respectively. Collier and Bienstock (2006) extended existing work on e-service quality by incorporating outcome and recovery quality, in addition to website and process quality, beyond previous studies. Cristobal et al. (2007a) suggested that perceived quality is a multidimensional construct containing customer service, assurance, web design, and order management. Satisfaction is influenced by perceived quality and, in turn, shapes consumer loyalty. Zeithaml (2002) discussed the conceptualization and measurement of service quality in electronic services and proposed a future research agenda for the e-service quality domain. Yen and Lu (2008) found that e-service quality dimensions such as efficiency, contact, responsiveness, privacy, and fulfillment significantly influence buyer dissatisfaction. This disconfirmation is positively associated with buyer satisfaction and loyalty. Ho and Lin (2010) identified five dimensions comprising 17 items to measure the service quality of online banking services. These dimensions are customer service, assurance, web design, information, and preferential treatment.

Existing literature presents various service quality scales developed over time, comprising different sets of items and dimensions to measure the quality of different service types. Studies mainly focused on the quality of banking services, internet banking, e-commerce-based services, and e-retailing. They measured their impact on customer satisfaction, customer loyalty, and WOM, with perceived value, perceived usefulness, and trust as mediating variables (Kappil & Santhi, 2025; Kuzey et al., 2024; Patel et al., 2024; Pooja et al., 2025). Certain areas are underexplored, such as developing scales to measure the quality of quick commerce, ride-hailing services, Fintech app-based services, Edu-tech services, and

other e-services. Further, the impact of e-service quality in these services can be examined in relation to users' satisfaction and behavioral intentions, considering mediating and moderating variables such as security, trust, and perceived usefulness (Shaikh et al., 2023; Venkatakrishnan et al., 2023; Zyberi & Polo, 2021).

5. Summary and conclusion

This study has conducted a bibliometric analysis of 681 articles on e-service quality, with 32,021 citations, from 2002 to 2025. There is a considerable 548% increase in the literature from 2011 to 2025 compared with 2002 to 2010. This growth can be attributed to advances in e-commerce, mobile-based online services, and increasing reliance on e-services over the last decade. In 2025, we find 48 publications. A prominent number of articles published during this period, i.e., 87.30%, are collaborative works, with the largest share involving two or three authors. The highly cited document by Parasuraman et al. (2005) has received 2966 citations.

The most influential and productive source is "Journal of Service Research," followed by "Managing Service Quality: An International Journal" and "International Journal of Retail and Distribution Management." The most prominent contributing and influential author is Kim J.H., followed by Marimon F., Carlson J., and O'Cass A. Among authors' affiliated countries, India is the most prominent, with a total of 13.2% of articles, followed by the United States, with 12.6%, and Indonesia, with around 8%. The most influential organization is "Department of Marketing, City University of Hong Kong," followed by "Department of Retailing, College of Hospitality, Retail and Sport Management, University of South Carolina," and "Department of Marketing, Faculty of Economics and Business, University of Zagreb."

The authors' keyword co-occurrence analysis presents a significant link among articles with the keyword e-service quality. A total of 74 keywords were found connected and divided into five clusters. Cluster 1 includes keywords related to the user interface, system reliability, and perceived security, which are commonly discussed in the context of Technology Acceptance Models (TAM) and PLS-SEM modeling. Cluster 2 focuses on consumer behavior outcomes, such as trust, purchase intention, and loyalty, as well as the modeling frameworks (like SEM) used to study them. Cluster 3 focuses on development and validation of e-service quality measurement models, such as SERVQUAL and E-S-QUAL. Cluster 4 emphasizes geographical contexts in India, public services, and relationship dynamics. Cluster 5 centers on customer retention, with terms such as "repurchase intention", "e-loyalty", and "word of mouth (WOM)".

The bibliographic coupling divides the articles into 4 clusters. The present study, based on bibliographic coupling, reveals that the United States, Taiwan, the United Kingdom, Spain, China, Malaysia, and India are the most highly cited. The United States has a strong connection with Taiwan, Indonesia, China, India, the United Kingdom, Spain, and Jordan. In conclusion, this study, using keyword co-occurrence, co-citation, and bibliographic coupling analyses, provides insights into the theme, enabling all stakeholders to gain a comprehensive and detailed understanding of the subject. However, the topic of electronic service quality remains underexplored in terms of theoretical diversity; there is little cross-disciplinary presence, such as AI ethics, digital well-being, or cognitive psychology, suggesting an opportunity for future studies to adopt broader theoretical lenses, especially in emerging areas like AI-driven services or Fintech services. The literature shows strong representation from developing and emerging economies. Over 50% of the studies originate from India, the US, China, Malaysia, the UK, and Indonesia. However, studies are sparse in Africa and Latin America, and few papers focus on rural digital adoption or low-infrastructure environments.

Table 7. Clusters based on bibliographic coupling

Cluster	Cluster Focus	Major Topics Explored	TP	Cluster citation	Title	Authors	Source Title	Year	TC
1	Customer Satisfaction, E-Services quality, consumer behavior and Adoption intention	Dimensions of e-service quality, impact upon consumer satisfaction, loyalty and adoption	48	7058	(Han & Kim, 2010) "An investigation of green hotel customers' decision formation: developing an extended model of the theory of planned behavior"	Han H.; Kim Y.	"International Journal of Hospitality Management"	2010	801
					(Chang et al., 2009) "The impact of e-service quality, customer satisfaction and loyalty on e-marketing: moderating effect of perceived value"	Chang H.H.; Wang Y.-H.; Yang W.-Y.	"Total Quality Management and Business Excellence"	2009	370
					(Udo et al., 2010) "An assessment of customers' e-service quality perception, satisfaction and intention"	Udo G.J.; Bagchi K.K.; Kirs P.J.	"International Journal of Information Management"	2010	336
					(Wang et al., 2011) "Aesthetics and the online shopping environment: understanding consumer responses"	Wang Y.J.; Minor M.S.; Wei J.	"Journal of Retailing"	2011	310
					(Elbahnasawy, 2014) "E-Government, Internet Adoption, and Corruption: An Empirical Investigation"	Elbahnasawy N.G.	"World Development"	2014	278
2	E-Commerce, E-service Quality Scale Development, Service Quality Dimensions	Scale development for measuring service quality of e-commerce, internet services, and online services, measuring customer perception	39	10768	(Parasuraman et al., 2005) "E-s-qual a multiple-item scale for assessing electronic service quality"	Parasuraman A.; Zeithaml V.A.; Malhotra A.	"Journal of Service Research"	2005	2966
					(Santos, 2003)"e-service quality: a model of virtual service quality dimensions"	Santos J.	"Managing Service Quality: An International Journal"	2003	998
					(Lee & Lin, 2005) "Customer perceptions of e-service quality in online shopping"	Lee G.; Lin H.	"International Journal of Retail and Distribution Management"	2005	845
					(Bauer et al., 2006) "E-transqual: a transaction process-based approach for capturing service quality in online shopping"	Bauer H.H.; Falk T.; Hammerschmidt M.	"Journal of Business Research"	2006	644
					(Yang & Fang, 2004) "Online service quality dimensions and their relationships with satisfaction: a content analysis of customer reviews of securities brokerage services"	Yang Z.; Fang X.	"International Journal of Service Industry Management"	2004	395

3	E- service quality dimensions, customer satisfaction, TAM, UTAUT	Testing Hierarchical model, Integration of UTAUT and TAM identifying determinants for banking services, quality measurement scales	32	4385	(Ribbink et al., 2004) "Comfort your online customer: quality, trust and loyalty on the internet"	Ribbink D., Allard C.R., Riel V., Liljander V., Streukens S.	"Managing Service Quality: An International Journal"	2004	632
					(Fassnacht & Koese, 2006) "Quality of electronic services: conceptualizing and testing a hierarchical model"	Fassnacht M.; Koese I.	"Journal of Service Research"	2006	409
					"Integration of UTAUT model in Internet Banking Adoption Context: The mediating role of performance expectancy and effort expectancy"	Rahi S., Mansoor M., Alghizzawi M., Alnaser F.M.	"Journal of Research in Interactive Marketing"	2019a	311
					(Ladhari, 2010) "Developing e-service quality scales: A literature review"	Ladhari R.	"Journal of Retailing and Consumer Services"	2010	303
					(Gounaris et al., 2010) "An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping"	Gounaris S.; Dimitriadis S.; Stathakopoulos V.	"Journal of Services Marketing"	2010	236
4	Banking Services, Customer behavior, Measurement of Service Quality	Perceived e-service quality measurement, developing scales for banking services, Service excellence in electronic channel	16	2945	(Collier & Bienstock, 2006) "Measuring service quality in e-retailing"	Collier J.E.; Bienstock C.C.	"Journal of Service Research"	2006	754
					(Cristobal et al., 2007a) "Perceived e-service quality (pesq): measurement validation and effects on consumer satisfaction and website loyalty"	Cristobal E.; Flavián C.; Guinalíu M.	"Managing Service Quality"	2007	680
					(Zeithaml, 2002) "Service excellence in electronic channels"	Zeithaml V.A.	"Managing Service Quality: An International Journal"	2002	334
					(Yen & Lu, 2008) "Effects of e-service quality on loyalty intention: an empirical study in online auction"	Yen C.H., Lu P.H.	"Managing Service Quality: An International Journal"	2008	209
					(ho & Lin, 2010)"Measuring the service quality of internet banking: scale development and validation"	Ho C.B., Lin W.	"European Business Review"	2010	121

Notes: This table shows bibliographic coupling among 135 articles across four clusters.
Source: Authors' elaboration

Several studies adopt multi-dimensional quality scales, such as E-S-QUAL or sector-specific tools, to measure e-service quality across different types of services, such as banking, e-commerce, and government services, and to examine their impact on consumer behavioral outcomes. For instance, Kaur and Malik (2019) examined the factors influencing the behavioral intentions of Indian customers who use internet banking, employing the extended TAM. Kuzey et al. (2024) provided the subdimensions and their effects on trust, loyalty, and word of mouth.

Bernardo et al. (2012) distinguished between aspects of functional and hedonic quality in hotel bookings. Similarly, O'Cass and Carlson (2012) proposed a customized framework for e-retailing to measure the impact of website quality on trust, loyalty, and word of mouth. Moderators and mediators such as trust (Cristobal et al., 2007a), reputation (Han & Kim, 2010), and consumer demographics (Wang et al., 2011) are often integrated into structural models. However, only a few papers conceptualize modern service issues such as AI transparency, Fintech, and digital overload, indicating potential for richer behavioral and cognitive modeling in future studies. The methodological choices are dominated by quantitative approaches. Most of the studies used cross-sectional surveys and analyzed them via SEM (Structural Equation Modeling) using tools such as SmartPLS, AMOS, and SPSS. Some papers incorporate multi-criteria decision-making techniques, such as Fuzzy AHP (Udo et al., 2010) or the Delphi method, especially in public-sector or municipal service contexts. This suggests a major methodological gap, and a future direction could involve leveraging big data, machine learning, and real-time usage tracking to validate or enhance perception-based models.

This study highlights current and upcoming issues for researchers while providing a broad overview of the subject, presenting existing trends and future themes, and an agenda for emerging researchers. Although the data for the present study were obtained from the Scopus database, the study still has significant implications for stakeholders and researchers. Future studies may also include databases such as Web of Science. Additionally, this study provides a quick reckoner for researchers to gather insights from the existing literature, offers potential directions for e-service quality research, and suggests ways to add more insights to the unexplored areas in the existing literature of e-service quality.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding information

The authors declared no financial support for the research, authorship, and/or publication of this article.

Acknowledgments

The authors are grateful to the chief editor, the editorial team, and anonymous reviewers for their valuable comments and suggestions, which significantly improved the quality of this article.

References

Ali, J., Jusoh, A., Idris, N., Abbas, A. F., & Alsharif, A. H. (2021). Everything is Going Electronic, so do Services and Service Quality: Bibliometric Analysis of E-Services and E-Service Quality. *International Journal of Interactive Mobile Technologies (IJIM)*, *15*(18), 148. https://doi.org/10.3991/ijim.v15i18.24519

Baker, H. K., Kumar, S., & Pandey, N. (2021). Thirty years of Small Business Economics: a bibliometric overview. *Small Business Economics*, *56*(1), 487–517. https://doi.org/10.1007/s11187-020-00342-y

Bar-Ilan, J. (2010). Citations to the "Introduction to informetrics" indexed by WOS, Scopus and Google Scholar. *Scientometrics*, *82*(3), 495–506. https://doi.org/10.1007/s11192-010-0185-9

Barrutia, J. M., & Gilsanz, A. (2009). e-Service quality: Overview and research agenda. *International Journal of Quality and Service Sciences*, *1*(1), 29–50. https://doi.org/10.1108/17566690910945859

Bauer, H. H., Falk, T., & Hammerschmidt, M. (2006). eTransQual: A transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*, *59*(7), 866–875. https://doi.org/10.1016/j.jbusres.2006.01.021

Bernardo, M., Marimon, F., & Alonso-Almeida, M. D. M. (2012). Functional quality and hedonic quality: A study of the dimensions of e-service quality in online travel agencies. *Information and Management*, *49*(7–8), 342–347. https://doi.org/10.1016/j.im.2012.06.005

Bhaskar, R., Hunjra, A. I., Bansal, S., & Pandey, D. K. (2022). Central Bank Digital Currencies: Agendas for future research. *Research in International Business and Finance*, *62*, 101737. https://doi.org/10.1016/j.ribaf.2022.101737

Bhattacharya, I., & Mulay, R. (2024). Perception of Indian customers towards e-service quality and its effect on consumer happiness, retention, and loyalty. *Cogent Business and Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2413374

Bitner, M. J., Brown, S. W., & Meuter, M. L. (2000). Technology Infusion in Service Encounters. *Journal of the Academy of Marketing Science*, *28*(1), 138–149. https://doi.org/10.1177/0092070300281013

Boyack, K. W., & Klavans, R. (2010). Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately? *Journal of the American Society for Information Science and Technology*, *61*(12), 2389–2404. https://doi.org/10.1002/asi.21419

Cancino, C. A., La Paz, A. I., Ramaprasad, A., & Syn, T. (2018). Technological innovation for sustainable growth: An ontological perspective. *Journal of Cleaner Production*, *179*, 31–41. https://doi.org/10.1016/j.jclepro.2018.01.059

Chang, H. H., Wang, Y.-H., & Yang, W.-Y. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total Quality Management and Business Excellence*, *20*(4), 423–443. https://doi.org/10.1080/14783360902781923

Chen, C. (2006). CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature. *Journal of the American Society for Information Science and Technology*, *57*(3), 359–377. https://doi.org/10.1002/asi.20317

Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in E-retailing. *Journal of Service Research*, *8*(3), 260–275. https://doi.org/10.1177/1094670505278867

Cristobal, E., Flavián, C., & Guinalíu, M. (2007a). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, *17*(3), 317–340. https://doi.org/10.1108/09604520710744326

Cristobal, E., Flavián, C., & Guinalíu, M. (2007b). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality*, *17*(3), 317–340. https://doi.org/10.1108/09604520710744326

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319–340. https://doi.org/10.2307/249008

Dhaigude, S. A., & Mohan, B. C. (2023). Logistics Service Quality in Online Shopping: A Bibliometric Analysis. *Journal of Internet Commerce*, *22*(1), 157–188. https://doi.org/10.1080/15332861.2021.2011598

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070

Donthu, N., Kumar, S., Pandey, N., & Lim, W. M. (2021). Research Constituents, Intellectual Structure, and Collaboration Patterns in *Journal of International Marketing* : An Analytical Retrospective. *Journal of International Marketing*, *29*(2), 1–25. https://doi.org/10.1177/1069031X211004234

Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of Journal of Business Research: A bibliometric analysis. *Journal of Business Research*, *109*, 1–14. https://doi.org/10.1016/j.jbusres.2019.10.039

Elbahnasawy, N. G. (2014). E-Government, Internet Adoption, and Corruption: An Empirical Investigation. *World Development*, *57*, 114–126. https://doi.org/10.1016/j.worlddev.2013.12.005

Fassnacht, M., & Koese, I. (2006). Quality of electronic services: Conceptualizing and testing a hierarchical model. *Journal of Service Research*, *9*(1), 19–37. https://doi.org/10.1177/1094670506289531

Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, *24*(2), 142–156. https://doi.org/10.1108/08876041011031118

Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management*, *29*(4), 659–668. https://doi.org/10.1016/j.ijhm.2010.01.001

Ho, C.-T. B., & Lin, W.-C. (2010). Measuring the service quality of internet banking: Scale development and validation. *European Business Review*, *22*(1), 5–24. https://doi.org/10.1108/09555341011008981

Jaiswal, J. K., Pandey, D. K., & Kumar, B. (2024). Green and sustainable finance research in BRICS countries: Review and research agenda. *Development and Sustainability in Economics and Finance*, *1*, 100008. https://doi.org/10.1016/J.DSEF.2024.100008

Jiang, Y., Zhou, J., Li, Z., & Zhu, Y. (2024). Total Quality Management & Business Excellence: a 33-year overview using bibliometric and content analysis. *Total Quality Management and Business Excellence*, *35*(5–6), 631–669. https://doi.org/10.1080/14783363.2024.2328252

Kalia, P. (2017). Service quality scales in online retail: methodological issues. *International Journal of Operations and Production Management*, *37*(5), 630–663. https://doi.org/10.1108/IJOPM-03-2015-0133

Kanwal, M., Burki, U., Ali, R., & Dahlstrom, R. (2022). Systematic review of gender differences and similarities in online consumers' shopping behavior. *Journal of Consumer Marketing*, *39*(1), 29–43. https://doi.org/10.1108/JCM-01-2021-4356

Kappil, F. T., & Santhi, P. (2025). Navigating the digital wave: an in-depth analysis of service quality and user satisfaction in e-banking. *Humanities and Social Sciences Communications*, *12*(1). https://doi.org/10.1057/s41599-025-05968-5

Kaur, A., & Malik, G. (2019). Examining factors influencing Indian customers' intentions and adoption of internet banking: Extending TAM with electronic service quality. *Innovative Marketing*, *15*(2), 42–57. https://doi.org/10.21511/im.15(2).2019.04

Kessler, M. M. (1963). Bibliographic coupling between scientific papers. *American Documentation*, *14*(1), 10–25. https://doi.org/10.1002/asi.5090140103

Khadim, N., & Islam, M. K. (2022). A review of literature on the evaluation of customer satisfaction patterns in mobile banking services. *International Journal of Professional Business Review*, *7*(3). https://doi.org/10.26668/businessreview/2022.v7i3.534

Khan, A., Goodell, J. W., Hassan, M. K., & Paltrinieri, A. (2022). A bibliometric review of finance bibliometric papers. *Finance Research Letters*, *47*, 102520. https://doi.org/10.1016/j.frl.2021.102520

Kraus, S., Breier, M., Lim, W. M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Piñeiro-Chousa, J., Liguori, E., Palacios-Marqués, D., Schiavone, F., Ferraris, A., Fernandes, C., & Ferreira, J. J. (2022). Literature reviews as independent studies: guidelines for academic practice. *Review of Managerial Science*, *16*(8), 2577–2595. https://doi.org/10.1007/s11846-022-00588-8

Kuzey, C., Dinc, M. S., & Gungormus, A. H. (2024). E-service quality subdimensions and their effects upon users' behavioural and praising intentions in internet banking services. *International Journal of Business Innovation and Research*, *35*(3), 412–428. https://doi.org/10.1504/IJBIR.2024.142305

Ladhari, R. (2010). Developing e-service quality scales: A literature review. *Journal of Retailing and Consumer Services*, *17*(6), 464–477. https://doi.org/10.1016/j.jretconser.2010.06.003

Lal, M., Kumar, S., Pandey, D. K., Rai, V. K., & Lim, W. M. (2023). Exchange rate volatility and international trade. *Journal of Business Research*, *167*, 114156. https://doi.org/10.1016/J.JBUSRES.2023.114156

Lee, G.-G., & Lin, H.-F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail and Distribution Management*, *33*(2), 161–176. https://doi.org/10.1108/09590550510581485

Mahadevan, K., & Joshi, S. (2021). A bibliometric analysis of trends in electronic service quality research over two decades. *International Journal of Integrated Supply Management*, *14*(2), 131. https://doi.org/10.1504/IJISM.2021.115684

Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, *148*, 101–115. https://doi.org/10.1016/j.jbusres.2022.04.042

O'Cass, A., & Carlson, J. (2012). An e-retailing assessment of perceived website-service innovativeness: Implications for website quality evaluations, trust, loyalty and word of mouth. *Australasian Marketing Journal*, *20*(1), 28–36. https://doi.org/10.1016/j.ausmj.2011.10.012

Pandey, D. K., Hassan, M. K., Kumari, V., Zaied, Y. Ben, & Rai, V. K. (2024). Mapping the landscape of FinTech in banking and finance: A bibliometric review. *Research in International Business and Finance*, *67*, 102116. https://doi.org/10.1016/J.RIBAF.2023.102116

Pandey, D. K., Hunjra, A. I., Hassan, M. K., & Rai, V. K. (2023). Venture capital financing during crises: A bibliometric review. *Research in International Business and Finance*, *64*, 101856. https://doi.org/10.1016/j.ribaf.2022.101856

Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, *7*(3), 213–233. https://doi.org/10.1177/1094670504271156

Parasuraman A., Zeithaml V.A, & Berry L.L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, *64*, 12–40.

Patel, R., Mishra, A. K., Chishti, M. Z., & Modi, T. M. (2024). Relationship Between Internet Banking Service Quality, e-Customer Satisfaction, and Loyalty: A Comparative Study of India and Pakistan. *Journal of Central Banking Theory and Practice*, *13*(2), 213–228. https://doi.org/10.2478/jcbtp-2024-0019

Paul, J., Lim, W. M., O'Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, *45*(4). https://doi.org/10.1111/ijcs.12695

Pooja, P., Verma, P., & Singh, J. (2025). Does reality congruence determine e-commerce customer's engagement? Role of service quality, trust and commitment. *TQM Journal*, *37*(8), 2528–2550. https://doi.org/10.1108/TQM-03-2024-0123

Puiteng, C., Fam, S.-F., Choryuin, T., & Wahjono, S. I. (2025). E-Service Quality and Customer Satisfaction: Insights and Trends from a Bibliometric Analysis. *International Journal of Academic Research in Business and Social Sciences*, *15*(2). https://doi.org/10.6007/IJARBSS/v15-i2/24534

Rahi, S., Othman Mansour, M. M., Alghizzawi, M., & Alnaser, F. M. (2019). Integration of UTAUT model in internet banking adoption context: The mediating role of performance expectancy and effort expectancy. *Journal of Research in Interactive Marketing*, *13*(3), 411–435. https://doi.org/10.1108/JRIM-02-2018-0032

Rai, V. K., Bruna, M. G., Hunjra, A. I., Pandey, D. K., & Lal, M. (2024). COVID-19 literature in Elsevier finance journal ecosystem. *Economics Letters*, *243*, 111905. https://doi.org/10.1016/j.econlet.2024.111905

Ribbink, D., Streukens, S., Van Riel, A. C. R., & Liljander, V. (2004). Comfort your online customer: Quality, trust and loyalty on the internet. *Managing Service Quality: An International Journal*, *14*(6), 446–456. https://doi.org/10.1108/09604520410569784

Santos, J. (2003). E-service quality: A model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, *13*(3), 233–246. https://doi.org/10.1108/09604520310476490

Shaikh, A., Banerjee, S., & Singh, B. (2023). The Differential Impact of e-Service Quality's Dimensions on Trust and Loyalty of Retail Bank Customers in an Emerging Market. *Services Marketing Quarterly*, *44*(2–3), 121–141. https://doi.org/10.1080/15332969.2022.2161811

Singh, K., & Basu, R. (2023). Online consumer shopping behaviour: A review and research agenda. *International Journal of Consumer Studies*, *47*(3), 815–851. https://doi.org/10.1111/ijcs.12899

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, *24*(4), 265–269. https://doi.org/10.1002/asi.4630240406

Stamenkov, G., & Dika, Z. (2019). Quo vadis, (e-)service quality? Towards a sustainability paradigm. *Total Quality Management and Business Excellence*, *30*(7–8), 792–807. https://doi.org/10.1080/14783363.2017.1338521

Thanasi-Boçe, M., & Kulakli, A. (2023). Dimensions and outcomes of electronic service quality in the GCC countries. *International Journal of Quality and Service Sciences*, *15*(3–4), 239–258. https://doi.org/10.1108/IJQSS-02-2023-0016

Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, *30*(6), 481–492. https://doi.org/10.1016/j.ijinfomgt.2010.03.005

Venkatakrishnan, J., Alagiriswamy, R., & Parayitam, S. (2023). Web design and trust as moderators in the relationship between e-service quality, customer satisfaction and customer loyalty. *TQM Journal*, *35*(8), 2455–2484. https://doi.org/10.1108/TQM-10-2022-0298

Wang, Y. J., Minor, M. S., & Wei, J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, *87*(1), 46–58. https://doi.org/10.1016/j.jretai.2010.09.002

Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, *79*(3), 183–198. https://doi.org/10.1016/S0022-4359(03)00034-4

Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management*, *15*(3), 302–326. https://doi.org/10.1108/09564230410540953

Yen, C.-H., & Lu, H.-P. (2008). Effects of e-service quality on loyalty intention: An empirical study in online auction. *Managing Service Quality*, *18*(2), 127–146. https://doi.org/10.1108/09604520810859193

Zeithaml, V. A. (2002). Service excellence in electronic channels. *Managing Service Quality: An International Journal*, *12*(3), 135–139. https://doi.org/10.1108/09604520210429187

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, *60*(2), 31. https://doi.org/10.2307/1251929

Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and Organization. *Organizational Research Methods*, *18*(3), 429–472. https://doi.org/10.1177/1094428114562629

Zyberi, I., & Polo, A. (2021). Impact of service and E-Service quality, price and image on the trust and loyalty of the electronic banking customers. *Regional Science Inquiry*, *13*(1), 59–68. https://www.scopus.com/pages/publications/85107576951?origin=resultslist