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Customer Satisfaction Based on Kano & Quality Management Model: A Bibliometric Analysis of Global Publications

Rochmad Agung Widodo¹, Mokh Suf², Achmad Affandi³

Abstract

The study reveals a direct and significant relationship between economic impact and tourism reactivation in wholesale travel agencies in Peru. It highlights the importance of economic growth strategies for the revival of tourism. In addition, a moderate relationship is identified between social impact and tourism reactivation, highlighting the importance of promoting a positive social impact. A significant correlation is observed between sustainable development practices and tourism recovery, highlighting the importance of an effective organizational culture. This original correlational design study evaluates the relationship between sustainable development and tourism recovery in travel agencies in Peru. It implies that sustainable practices and a focus on economic and social impact are crucial for agency success and sustainable tourism growth. Further research on specific sustainable development strategies and cultural factors is suggested for future research. This study analyzes global publication trends related to customer satisfaction using the Kano model and quality management frameworks through bibliometric analysis. The use of the Kano model in measuring customer satisfaction has gained importance across various sectors, yet no comprehensive study has explored the evolution of research in this field. Therefore, this study uses the Scopus database to analyze 244 articles published between 1994 and 2025. Methods such as citation analysis and co-occurrence analysis are employed to identify key themes, authors, countries, and emerging research trends. The findings reveal a significant increase in publications since 2010, with a focus on three main thematic clusters: 1) Kano Model & Customer Insights, 2) Quality Management and Decision-Making Tools, and 3) Product Development and Customer-Centric Design. Countries such as China, Taiwan, and the United States emerge as major contributors. The study also identifies potential future research directions, including integrating the Kano model with emerging technologies like AI and IoT, as well as exploring cross-cultural studies and social responsibility in customer satisfaction. The implications suggest that while research in this area has advanced, there is still considerable room for further exploration, especially in practical applications and the integration of new technologies to enhance real-time customer satisfaction analysis.

Keywords: Kano, Quality Management Model, Customer Satisfaction, Bibliometric Analysis, VOSviewer.

Introduction

The critical role of customer satisfaction in today's highly competitive markets has been widely acknowledged as a key determinant for business sustainability and growth. Organizations increasingly recognize that maintaining high levels of customer satisfaction not only enhances customer loyalty but also contributes significantly to brand reputation and long-term profitability. Central to achieving superior customer satisfaction are Quality Management Systems (QMS), which provide structured frameworks and methodologies to ensure that products and services meet or exceed customer expectations. Among various approaches to quality management, emerging methodologies such as the Kano model have gained prominence

¹ Interdisciplinary School of Management Technology, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia, Email: rochmadagungwi@gmail.com. (Corresponding Author).

² Interdisciplinary School of Management Technology, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

³ Interdisciplinary School of Management Technology, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia.



for their ability to capture nuanced consumer needs and preferences, offering a robust means to categorize product and service attributes based on how they influence customer satisfaction. The Kano model, by distinguishing characteristics into must-be, one-dimensional, and attractive attributes, enables organizations to prioritize features that can substantially enhance customer delight. This model's flexibility and intuitive appeal have led to its growing adoption across diverse industries, where it functions as a diagnostic tool to evaluate and enhance customer satisfaction and loyalty systematically (Khalsiah, 2018).

Previous studies have extensively applied the Kano model to analyze customer satisfaction across various sectors, emphasizing its adaptability and effectiveness in different contexts. For instance, research investigating emerging technologies in passenger cars utilized the Kano model to identify specific technological attributes that influence consumer satisfaction, revealing complex categorizations of features such as auto gear shift systems and premium surround sound as attractive elements, contrasting with indifferent attitudes towards alternative energy vehicles (Kohli, 2020). Similarly, in service-oriented domains, the model has been employed to assess service quality in charitable organizations, where attributes related to morality, responsiveness, and empathy were segmented into Kano's satisfaction categories, yielding insights to improve the quality of aid delivery (Khalsiah, 2018). Postal services have also leveraged the Kano model to delineate essential and optional service attributes, accommodating demographic variations such as gender and age, thus tailoring service improvement strategies more effectively (Rostasova et al., 2020). Hospitality industry studies underscore the model's relevance in identifying key drivers of customer loyalty and service quality, integrating both physical and psychological factors that affect guest satisfaction (Gobbilla & Shree, 2021). Beyond isolated applications, scholars have advocated for the integration of the Kano model with complementary management tools like Quality Function Deployment (QFD), Importance-Performance Analysis (IPA), and fuzzy logic-based approaches to enhance the precision and applicability of quality improvement initiatives (Tandiono & Rau, 2022). Quantitative modifications of the Kano analytical framework have also been proposed to mitigate subjectivity inherent in traditional qualitative assessments, with case studies in logistics services and smart car technologies demonstrating objective categorization and prioritization of customer satisfaction factors (Back & Chang, 2016).

Despite the robust body of application-focused research, a discernible gap exists in the literature regarding comprehensive bibliometric analyses that specifically address the intersection of the Kano model and quality management frameworks in enhancing customer satisfaction. Current studies largely concentrate on empirical investigations within particular industries or application domains without providing an overarching synthesis or mapping of the knowledge domain. There is a need for systematic bibliometric assessments to elucidate research trends, influential publications, and thematic clusters that highlight how the Kano model has evolved as a critical tool within quality management to impact customer satisfaction outcomes. Such analyses can uncover methodological advancements, integration patterns, and emerging interdisciplinary collaborations that are otherwise dispersed across fragmented studies. Moreover, bibliometric evaluations are scarce in addressing these aspects through sophisticated techniques that combine citation analysis, co-authorship networks, and thematic mapping to provide a comprehensive understanding of the field's trajectory and future directions (Puiteng et al., 2025; Salam et al., 2021; Zhang et al., 2021).

This study aims to fill the identified gap by conducting a thorough bibliometric analysis to map the research developments concerning the Kano model and quality management models focused

on improving customer satisfaction. Through this approach, the study seeks to identify the most influential publications, key authors, prominent research themes, and collaborative networks that have shaped this domain. By integrating both qualitative and quantitative applications of the Kano model with diverse quality management methodologies, this research intends to offer a structured overview of the evolving knowledge landscape. Additionally, it highlights emerging trends and interdisciplinary approaches that provide valuable insights for academics and practitioners alike, enabling them to optimize satisfaction measurement and management strategies effectively. Ultimately, the contribution of this paper lies in guiding future research and practice by elucidating the synergy between Kano's framework and holistic quality management paradigms within a dynamic, customer-centric market environment. Thus, this bibliometric study aims to describe 1) how the performance of kano & quality management model in customer satisfaction publications is based on authors, papers, sources, affiliations, and countries, 2) what the main research themes of kano & quality management model in customer satisfaction publications, and 3) what the future research direction is related to kano & quality management model in customer satisfaction.

Methods

This study utilizes bibliometric and content analysis to provide a comprehensive overview of global publication trends concerning ship collisions and to identify areas requiring further exploration. The bibliometric method is especially valuable as it offers a quantitative evaluation of research output, acting as an impartial measure of academic interest and influence in ship collision research. Techniques such as citation analysis and co-occurrence mapping were employed to systematically chart publication networks and identify patterns. Citation analysis emphasizes the importance of specific articles, authors, and journals, while co-occurrence mapping identifies emerging themes and possible future research directions based on authors' chosen keywords. These combined approaches minimize researcher bias and offer a clear and objective summary of the research landscape (Kumar et al., 2020).

Data Collection

The bibliometric analysis was performed using the Scopus database, chosen for its comprehensive coverage of citations and abstracts across various disciplines, particularly in STEM (Science, Technology, Engineering, and Mathematics) (Fahimnia et al., 2015; Phuong et al., 2022). This database provides a comprehensive overview of global scientific research output and is widely acknowledged within the scientific community as a primary source of research data (Mansour et al., 2022). Scopus is highly esteemed for its strict indexing standards, guaranteeing the inclusion of only high-quality, peer-reviewed journals, thereby enhancing the credibility of our research. It has been widely used in bibliometric studies due to its reliable and comprehensive data (Abuhassna et al., 2023; Akpan & Ezeume, 2022; Fahimnia et al., 2015). Due to its reliability, extensive coverage, and frequent use in bibliometric research, Scopus is regarded as a foundational resource by the international scientific community, justifying our choice to rely on it exclusively for this analysis. We implemented a keyword-based search strategy aligned with our research questions to identify relevant documents on ship collisions. Specifically, the TITLE field in Scopus was utilized, as it enables a more targeted retrieval of documents directly related to our topic, minimizing the inclusion of unrelated studies that might arise from broader field searches. The search query used in the Scopus database was as follows:

(TITLE (Kano OR "quality function model" OR qfd) AND TITLE (satisfaction OR need OR requirement)) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (

The initial search yielded 431 documents, and to ensure the quality and relevance of our sources, we applied several inclusion criteria. First, we limited the search specifically to peer-reviewed journal articles, excluding conference proceedings, book series, and books, as peer-reviewed articles are generally more credible and have undergone rigorous evaluation by experts in the field. This ensures the validity and scientific standards of the sources. Conference proceedings and book series, while valuable, often contain preliminary findings or less detailed information, making them less suitable for a thorough bibliometric analysis. Furthermore, we selected only documents published in English to maintain consistency and accessibility. English is the predominant language of international scientific literature, allowing for a broader scope of sources that are widely accessible and understandable to a global academic community. By applying these criteria, we ensure that the sources used in our analysis are both reliable and relevant. Through this rigorous filtering process, 187 articles were excluded, leaving 244 articles for in-depth analysis. Figure 1 illustrates each step of the search and filtering workflow visually, following the structure depicted in the diagram.

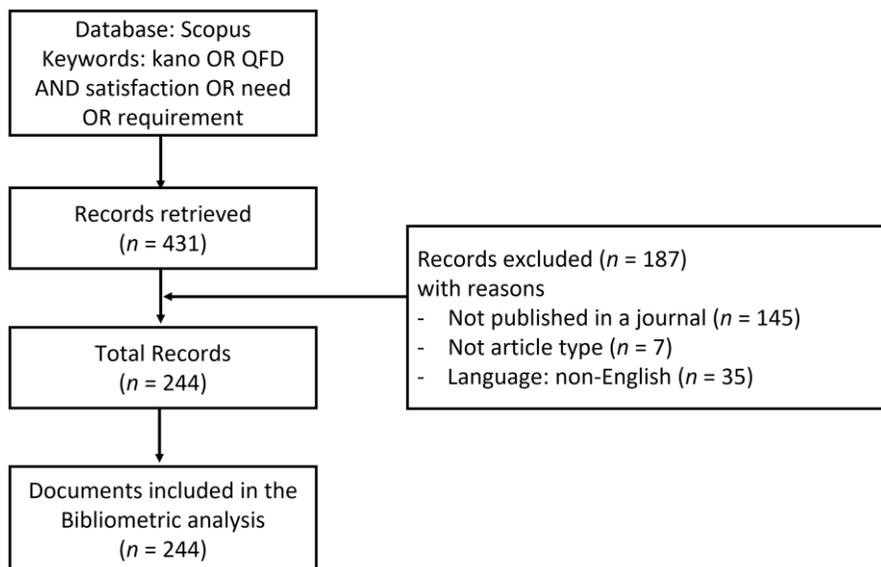


Figure 1. The Stages of Data Filtering

Prior to initiating our analysis, we performed data cleaning and harmonization, which are essential steps in bibliometric research to guarantee the accuracy and reliability of the data (Punj et al., 2023), with a specific focus on keywords. To address inconsistencies within the dataset, we utilized the Thesaurus function in VOSviewer to refine and standardize the keywords, an important step for performing precise co-occurrence analysis. The process began by downloading the Scopus data in .csv format, selecting the relevant files, and carefully editing key columns using clustering functions to group similar terms. The Thesaurus function was particularly valuable for aligning keywords, ensuring consistency and accuracy across a diverse range of research outputs. This approach provided a strong foundation for analyzing co-occurrence patterns and trends in the following stages of the study.

Data Analysis

This study utilizes bibliometric methods, incorporating both citation and co-occurrence analysis, to thoroughly address the research question. Citation analysis assesses the impact of documents, sources, authors, and affiliations through citation counts, which helps identify influential contributions and emerging trends, as highlighted by Ellegaard & Wallin (2015). Simultaneously, co-occurrence analysis was performed to map key topics, trends, and potential future research directions based on author keywords, uncovering interrelationships among various research components. Following the framework established by Donthu et al. (2021), we employed MS Excel and Publish or Perish to calculate frequencies, percentages, and measures of publication impact and performance based on selected metrics. For co-occurrence analysis, VOSviewer Van Eck and Waltman (2014) played a crucial role in visualizing bibliometric networks, facilitating an in-depth exploration of the structural connections within the research field. Together, these methods provide a comprehensive and nuanced understanding of the intellectual landscape in this area of study.

Results

The publication and citation trend shows significant fluctuations in research related to customer satisfaction based on the Kano model and quality management. Although there was a notable surge in publications in 2024 (29 publications with 92 citations), publication trends have generally declined after 2021. Overall, while there was relatively low publication volume in the early years (such as 2005 and 2006), there was a substantial increase in citations in certain years, particularly in 2019 with 723 citations. This indicates a growing interest in the topic over time, although recent publications have not reached the same level as those in earlier years. The high total citations (7859) highlight the long-term relevance and impact of the research published in this field.

Year	TP	TC
2025	11	4
2024	29	92
2023	13	120
2022	18	171
2021	19	362
2020	15	184
2019	19	723
2018	11	105
2017	16	337
2016	6	261
2015	14	274
2014	10	256
2013	12	339
2012	7	112
2011	7	223
2010	8	473
2009	4	541
2008	3	312

Year	TP	TC
2007	2	29
2006	2	50
2005	1	187
2004	3	273
2003	5	546
2001	3	248
1999	1	68
1998	1	825
1995	1	79
1994	2	280
1993	1	385
Total	244	7859

Table 2. Publication and Citation by Year

Note: TP=total number of publications; TC=total citations

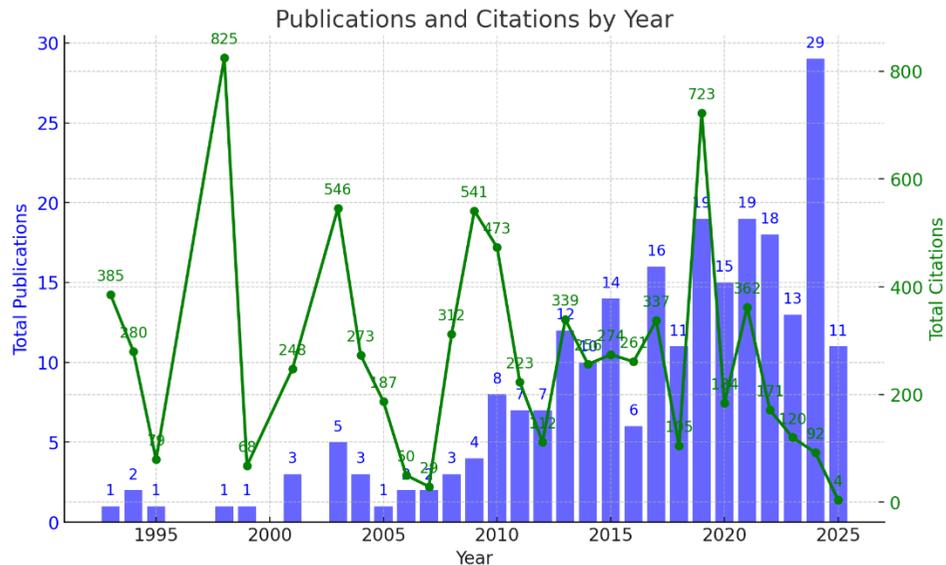


Figure 2. Publications and Citations Trend

Most Productive and Influential Authors

The table lists the top authors with at least seven publications in the field of customer satisfaction based on the Kano and Quality Management model. The authors are affiliated with institutions across various countries, including Italy, Iran, Taiwan, China, Slovakia, and Malaysia. Notably, Franceschini, F. from Politecnico di Torino (Italy) has the highest citation count with 209, despite having only 4 publications. Similarly, Shahin, A. from the University of Isfahan (Iran) has 4 publications but significantly fewer citations (69). Chen, M.C. and Hsu, C.L. from National Yang Ming Chiao Tung University and Fu Jen Catholic University (both in Taiwan), as well as Li, Y. from Liaoning University (China), each have 3 publications and comparable citation counts ranging from 133 to 159, indicating significant academic impact. Conversely, Zhang, D.

from Qufu Normal University (China) has only 3 publications and the lowest citation count (38), suggesting less visibility or impact in the field.

Full Name	Current Affiliation	Country	TP	TC
Franceschini, F.	Politecnico di Torino	Italy	4	209
Shahin, A.	University of Isfahan	Iran	4	69
Chen, M.C.	National Yang Ming Chiao Tung University	Taiwan	3	133
Hsu, C.L.	Fu Jen Catholic University	Taiwan	3	133
Li, Y.	Liaoning University	China	3	159
Madzík, P.	Univerzita Komenského v Bratislave	Slovakia	3	51
Maisano, D.	Politecnico di Torino	Italy	3	130
Ming, X.	Shanghai Jiao Tong University	China	3	71
Zhang, D.	Qufu Normal University	China	3	38
Akmal, S.	Universiti Teknikal Malaysia Melaka	Malaysia	2	4

Table 3. Top 10 Authors with at least 7 Publications

Note: TP=total number of publications; TC=total citations

Most Productive and Influential Countries

The table presents the top 10 countries with at least 10 publications in the field of customer satisfaction based on the Kano and Quality Management model. China leads with 65 publications and a significant 1207 citations, demonstrating both high research output and academic impact. Taiwan follows with 21 publications and 999 citations, reflecting substantial contribution and visibility in the field. The United States ranks third with 20 publications, but it has the highest citation count at 1563, indicating the strong influence of its research. Other notable contributors include Iran (19 publications, 215 citations), India (16 publications, 353 citations), and South Korea (15 publications, 290 citations), all from Asia. Germany and Italy represent Europe, with Italy having a strong citation count (1111) despite the same number of publications as Germany (10). Malaysia and Nigeria round out the list with 10 publications each, with Malaysia having notably more citations (422) compared to Nigeria (95). This reflects the global scope and varied impact of research on customer satisfaction across different regions. Overall, Asia dominates the field of customer satisfaction research, with the highest number of publications and citations, particularly driven by China, Taiwan, and Iran.

Country	Continent	TP	TC
China	Asia	65	1207
Taiwan	Asia	21	999
United States	North America	20	1563
Iran	Asia	19	215
India	Asia	16	353
South Korea	Asia	15	290

Germany	Europe	10	59
Italy	Europe	10	1111
Malaysia	Asia	10	422
Nigeria	Africa	10	95

Table 4. Top 10 Countries with at least 10 Publications

Note: TP=total number of publications; TC=total citations

Most Active Source Titles

The table highlights the most active source titles in the field of customer satisfaction based on the Kano and Quality Management model, with at least six publications. International Journal of Production Research and Total Quality Management and Business Excellence lead the list, both publishing 8 articles and receiving 648 and 278 citations, respectively, earning a Q1 quartile ranking, which indicates their high impact and relevance in the field. Sustainability Switzerland, also a Q1 journal, published 7 articles with 162 citations, while International Journal of Quality and Reliability Management (Q2) and International Journal of Productivity and Quality Management (Q3) published 7 and 6 articles, respectively. Journals with a Q1 quartile rank such as Expert Systems with Applications, TQM Journal, and IISE Transactions reflect strong contributions with impactful citation counts, particularly IISE Transactions, which has 1077 citations despite only 3 publications. The diversity in quartile rankings across the journals suggests a range of influence, from top-tier sources to those with niche, though still valuable, contributions in the area.

Source Title	Publisher	T P	TC	Quarti le
International Journal of Production Research	Taylor & Francis	8	648	Q1
Total Quality Management and Business Excellence	Routledge	8	278	Q1
International Journal of Quality and Reliability Management	Emerald	7	416	Q2
Sustainability Switzerland	MDPI	7	162	Q1
International Journal of Productivity and Quality Management	Inderscience	6	109	Q3
Expert Systems with Applications	Elsevier	4	257	Q1
TQM Journal	Emerald	4	71	Q1
IISE Transactions	Taylor & Francis	3	1077	Q1
International Journal of Contemporary Hospitality Management	Emerald	3	96	Q1
Journal of Intelligent Manufacturing	Springer	3	123	Q1

Table 5. Most Active Source Titles With At Least 6 Publications

Note: TP=total number of publications; TC=total citations

Highly Cited Documents

The table showcases the top 10 most highly cited papers in the field of customer satisfaction based on the Kano model, with citations ranging from 825 to 144. The paper by Matzler and Hinterhuber (1998) stands out with a remarkable 825 total citations and a high citation rate of 3056 citations per year (C/Y), reflecting its significant impact on the integration of Kano's model into product development and quality function deployment. Other notable works include Kwong and Bai (2003) paper on fuzzy AHF and QFD, with 414 citations and a C/Y rate of 1882, and Wasserman (1993) research on prioritizing design requirements, with 385 citations. The diversity in research topics, from customer needs analysis to employee satisfaction, highlights the broad application of Kano's model in various contexts. Xu et al. (2009) and Chen and Chuang (2008) are also significant contributors, with 329 and 281 citations, respectively, demonstrating the continuing relevance of Kano's model in understanding customer satisfaction in design and service industries.

Furthermore, if we look more closely at the top 10 highly cited papers, they reveal several key themes in the application of Kano's Model across diverse fields. A significant focus is on integrating Kano's model with other methodologies like Quality Function Deployment (QFD) and Analytic Hierarchy Process (AHP) to prioritize customer requirements and enhance product design. Several studies emphasize modeling customer satisfaction, with emerging trends in using data-driven approaches like neural networks and big data analytics to analyze customer needs, including applications to employee satisfaction and online reviews. This body of work reflects the growing intersection of Kano's model with machine learning and multi-criteria decision-making, illustrating its versatility in improving customer-centric design and satisfaction across industries.

No.	Author(s)	Title	TC	C/Y
1	Matzler and Hinterhuber (1998)	How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment	825	3056
2	Kwong and Bai (2003)	Determining the importance weights for the customer requirements in QFD using a fuzzy AHF with an extent analysis approach	414	1882
3	Wasserman (1993)	On how to prioritize design requirements during the qfd planning process	385	1203
4	Xu et al. (2009)	An analytical Kano model for customer need analysis	329	2056
5	Chen and Chuang (2008)	Integrating the Kano model into a robust design approach to enhance customer satisfaction with product design	281	1653

No.	Author(s)	Title	TC	C/Y
6	Armascost et al. (1994)	An AHP framework for prioritizing customer requirements in QFD: An industrialized housing application	278	897
7	Bhattacharya et al. (2005)	Integrating AHP with QFD for robot selection under requirement perspective	187	935
8	M atzler et al. (2004)	Employee satisfaction: Does Kano's model apply?	185	881
9	Bi et al. (2019)	Modelling customer satisfaction from online reviews using ensemble neural network and effect-based Kano model	179	2983
10	Wang and Ji (2010)	Understanding customer needs through quantitative analysis of Kano's model	144	960

Table 6. Top 10 Highly Cited Papers

Note: TC = total citations; C/Y = total citations per year

The Most Frequent Keywords Based on Publications

Keywords describe an article's topic, central idea, or critical topic of a particular research field Ranjbari et al. (2021). After cleaning, we had 728 keywords; we combine 15 keywords which are inconsistent written but have the meaning such as "analytic network process" and "analytic network process (anp)", "qfd", "quality function deployment" and "quality function deployment (qfd)" and minimum number of occurrence of a keyword is three. Thus, Figures 3 and 4 were resulted to show co-occurrence analysis based on network and evolution of publications. The circles (nodes) represent specific keywords or topics, and the size of the circles (nodes) shows the number of co-occurrences, while the link size shows the number of networks.

Based on Figure 3, the ten keywords with the highest co-occurrence frequency are: kano model (114), qfd (36), ais (58), customer satisfaction (53), customer needs (40), service quality (13), user satisfaction (8), anp (7), house of quality (6), ipa (6) and online reviews (6). These keywords are grouped into specific themes, or clusters based on their relatedness. Figure 3 shows three clusters of these publications, each marked by red, green, and blue, dotted circles, representing different thematic areas within the research.

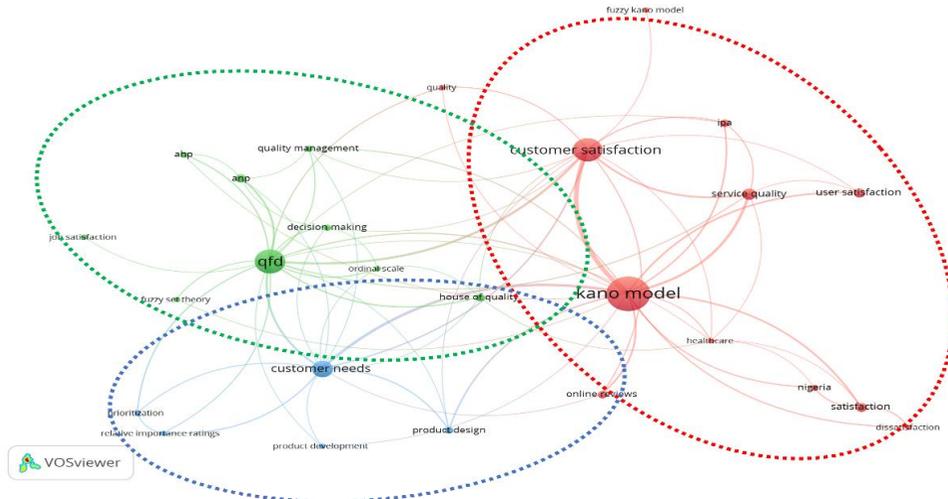


Figure 3. Network Visualization

The visualization overlay on the Vosviewer mapping results (Figure 4) shows the publication trend of keywords based on the year of appearance. The lighter the color of the link and circle, the more recent the publication. Keywords from recent publications, such as user satisfaction, online reviews, service quality, healthcare, anp, ipa and dissatisfaction,

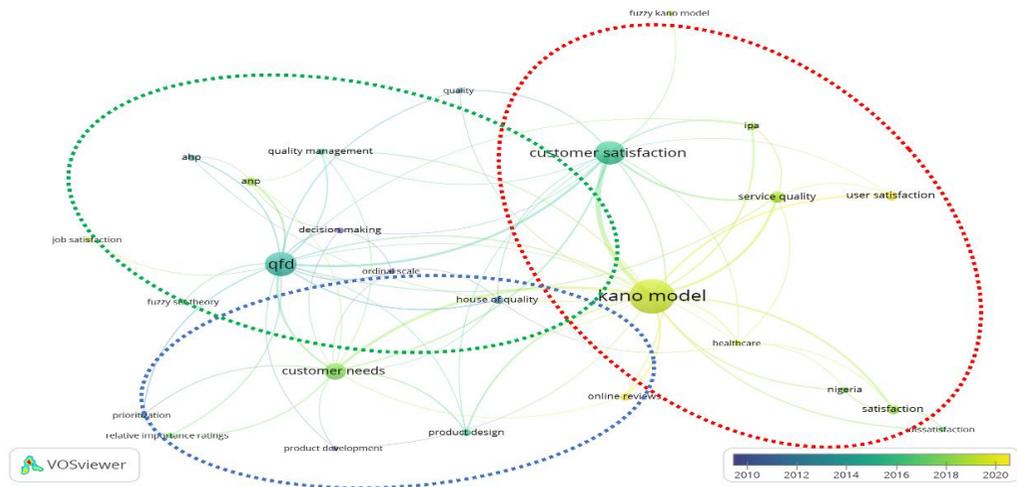


Figure 4. Overlay Visualization

Discussion

This study aimed to provide a comprehensive bibliometric overview of global research on customer satisfaction utilizing the Kano model and quality management frameworks. By analyzing 244 articles indexed in Scopus, several important insights emerged regarding the evolution of publication trends, dominant research themes, and potential directions for future

Publication Trends and Growth of the Field

The first research question examined the performance and temporal evolution of publications. The findings indicate that interest in this field has progressively expanded over the past three decades, with a notable surge in publications between 2010 and 2024. Although there was a decline in the number of publications after 2021, the field's cumulative citation count remains substantial, reflecting the enduring influence of earlier seminal works. Specifically, the peak in citations in 2019 suggests the presence of highly impactful papers that have shaped subsequent research trajectories. The prominent contributions from China, Taiwan, the United States, and Italy demonstrate the field's global character and the cross-regional relevance of Kano-based approaches in measuring and improving customer satisfaction.

Thematic Clusters and Knowledge Structure

Regarding the second research question on major research themes, the co-occurrence and cluster analyses revealed three principal thematic clusters:

- Cluster 1 is labeled as Kano Model & Customer Insights. This cluster represents the interplay between the Kano Model and factors influencing customer satisfaction in the context of service quality (Materla et al., 2019). The Kano Model, used to analyze customer expectations and satisfaction, is combined with a fuzzy approach to address uncertainty in service quality assessments (Albuquerque et al., 2024). Additionally, online reviews play a crucial role in providing direct customer feedback that can be used to improve services. Overall, this cluster demonstrates how perceived service quality can be predicted and enhanced through more dynamic, data-driven analysis, including customer reviews shared online.
- Cluster 2 is labeled as Quality Management and Decision-Making Tools. This cluster explores the intersection of quality management and decision-making methodologies, particularly focusing on Quality Function Deployment (QFD), a systematic approach to product development that translates customer needs into engineering characteristics (Chan & Wu, 2002). Complementing QFD, the cluster also highlights the application of Analytical Hierarchy Process (AHP) and Analytic Network Process (ANP), two decision-making techniques used to evaluate and prioritize factors in complex scenarios (Kamvysi et al., 2024; Paltayian et al., 2024). These methods, often integrated within quality management systems, help in optimizing processes and ensuring that products or services meet both customer expectations and organizational standards. Together, these concepts form a robust framework for improving quality through structured decision-making and strategic planning.
- Cluster 3 is labeled as Product Development and Customer-Centric Design. This cluster focuses on the interrelated processes that drive effective product development, with a central emphasis on understanding and addressing customer needs (Das et al., 2024). This cluster also highlights the critical stages of designing and creating products that align with market demands (Burke et al., 2023). A deep understanding of customer needs is essential for shaping product design, ensuring that the final product not only meets functional requirements but also resonates with the target audience. Effective product development then involves prioritizing these needs, balancing innovation with feasibility, and adapting designs to achieve competitive advantages. By prioritizing customer needs, organizations can streamline the product development process, ensuring both customer satisfaction and market success.

Future Research Directions

Answering the third research question, several opportunities emerge for further exploration. First, the integration of Kano's model with emerging technologies, such as advanced artificial intelligence, sentiment analysis, and Internet of Things (IoT) platforms, presents promising avenues to enhance the granularity and real-time nature of customer feedback analysis. Second, while many studies focus on functional and performance attributes, future research could investigate how environmental and social responsibility factors influence customer satisfaction, exploring how these can be systematically incorporated into Kano-based models. Third, there is a need for cross-cultural and comparative studies, as the global distribution of publications indicates that cultural variations in customer expectations and perceptions have not been sufficiently explored. Addressing this gap could provide deeper insights into how attribute classification varies across regions and demographics. Lastly, linking Kano's model with concepts like service-dominant logic and value co-creation, particularly within digital service ecosystems, offers an exciting area for further research. Overall, this study highlights that while the field has matured significantly, there are still many untapped possibilities to extend and refine the application of Kano and quality management frameworks in the ever-evolving landscape of customer satisfaction research.

Conclusions

This bibliometric analysis presents a comprehensive overview of global research on customer satisfaction based on the Kano model and quality management frameworks. Through the examination of 244 peer-reviewed articles indexed in Scopus, the study highlights significant trends in publication, influential authors, and key themes in the field. The results indicate a steady increase in interest over the past decades, particularly from 2010 to 2024, with notable contributions from countries like China, Taiwan, and the United States. Three primary research clusters emerged from the analysis: Kano Model & Customer Insights, Quality Management and Decision-Making Tools, and Product Development and Customer-Centric Design. These clusters reflect the broad application of Kano's and quality management model in various domains, from service quality enhancement to product design optimization. This study contributes to the literature by offering the first extensive bibliometric analysis of global research on the Kano model and quality management in the context of customer satisfaction. It provides a valuable synthesis of the trends, influential authors, and key thematic areas, offering insights into the evolution of the field. Additionally, it maps the research landscape, highlighting emerging topics that can guide future academic inquiry. By employing both citation and co-occurrence analysis, this study enhances the understanding of how Kano's and quality management models has been applied across various industries, providing a clear foundation for future research directions.

Despite its contributions, this study has several limitations that suggest avenues for future research. First, the analysis is based solely on publications indexed in the Scopus database, which may not encompass all relevant research, particularly studies published in non-indexed or local journals. Future research should expand the scope of bibliometric analysis by including additional databases, such as Web of Science or Google Scholar, to ensure a more comprehensive view of global research. Second, the study focuses exclusively on articles published in English, potentially overlooking valuable research in other languages. To address this, future research should include studies published in various languages to provide a more

inclusive understanding of the research landscape, especially in regions where the Kano model is applied but underrepresented in English-language journals. Third, while bibliometric methods provide a quantitative assessment of the field, they do not allow for a deep qualitative analysis of the content within the papers. Future research should complement bibliometric analysis with qualitative methods such as content analysis or case studies, which could offer richer insights into the practical applications and theoretical developments surrounding the Kano model. Lastly, the current study primarily examines academic literature and does not explore the practical implementation of the Kano model in industry settings. Future research should consider empirical studies that investigate how organizations apply the Kano model to improve customer satisfaction and make strategic decisions, providing a direct link between theory and practice.

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