

Customer Satisfaction: A Bibliometric Analysis

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Abstract. Customer satisfaction has become a very important topic in marketing theory and is based on the idea that profits are earned through satisfying customer demands. Customer satisfaction has become an achievement target for large and small companies. Customer satisfaction is the goal of the organization or company. Realizing the importance of customer satisfaction and continuously monitoring the level of customer satisfaction is an activity that must be done because customers are the main source for most companies. Customer satisfaction is a prerequisite and is the key to growing profits and company performance. The data analyzed is more than 1722 Scopus-indexed research publication documents. The exported data is then processed and analyzed using the R Biblioshiny application program to find out the bibliometric map of developments. The results of the study show that the number of publications on the development of the role of leadership research continues to increase.

Keywords: customer satisfaction, bibliometric, quality services

1. Introduction

High customer satisfaction ratings are often regarded as the best measure of a business's potential profitability [1]. An increasing number of businesses are utilizing customer happiness as a diagnostic tool to assess the effectiveness of their products and services, and they frequently associate employee and executive compensation with customer satisfaction scores. In general, satisfaction can be defined as an assessment of the quality of a product or service made after purchase, taking into account pre-purchase or pre-buy expectations [1].

The factors that contribute to customer satisfaction are demonstrated by [2] through the provision of high-quality services, accessibility, competence, information services, understanding of consumers, friendliness of service, attitudes and behavior, attention to detail, and physical facilities. Several scholars have suggested additional variations to emphasize the significance of customer happiness for the long-term viability of the business or organization.

Consumers are a major source of revenue for companies that need to be understood on a regular basis. The important role of consumers in companies has attracted the attention of academics and industry professionals to the concept of customer satisfaction. It is generally accepted that the greatest way to predict a company's future profitability is to look at its customer satisfaction rating. Therefore, this study aims to review the municipal bond literature by providing an extensive bibliometric analysis. In addition, our study also intends to update previous bibliometric analyses. To our knowledge, no bibliometric analysis has been conducted to analyze the customer satisfaction literature in the last decade.

2. Related Works

Several names for the kind of study done to evaluate the literature on customer satisfaction include systematic reviews, bibliometric analyses, scientometrics, and even traditional literature reviews. There is currently a dearth of bibliometric analysis, particularly in the study of regional bonds. This part gives us the opportunity to assess a few of the earlier research projects using bibliometric analysis in the customer satisfaction literature.

[1] demonstrate that customer satisfaction and reputation are positively correlated. The information was obtained from Quaid-e-Azam Medical College, an Islamic university situated in the Bernama neighborhood of Bahawalpur, Pakistan. Simple regression was used to process the data using SPSS (Statistical Package for Social Science). Reputation and customer satisfaction showed positive results in the poll, which involved 150 users of certain items.

[3] investigate a conceptual model of customer loyalty and CSR image that addresses the shortcomings of the previous model and incorporates the most recent theories put forth by academics regarding these realities. This research employs a quantitative methodology based on surveys completed by 648 clients to assess fourteen short-term savings banks and 476 clients to assess seven commercial banks. The results validate the effect hierarchy model's theoretical contribution, which holds that customer loyalty is impacted by a company's reputation for corporate social responsibility. The results of this study indicate that customer-centered CSR images are very relevant to generating identification and satisfaction among savings bank customers and commercial bank customers.

Because of the nature of the bibliometric analysis, our study was, therefore, extremely thorough, looking at a wide range of research outlets (journals) and reviewing the entire body of literature. Additionally, we take into account that customer satisfaction is a multidisciplinary field that encompasses a variety of media platforms. As a result, another goal of our research is to update earlier bibliometric analyses. To the best of our knowledge, no bibliometric analysis has been done in the past ten years to examine the literature on customer satisfaction. This study's objective is to review the literature on regional bonds by offering a thorough bibliometric analysis in order to respond to the following research questions (RQ).

Table 1. Research Question

Research Question

RQ 1	Who are the most relevant authors for customer satisfaction research?
RQ 2	Who is the most cited author on customer satisfaction?
RQ 3	What is the most relevant affiliate about customer satisfaction research?
RQ 4	Which country is the most cited for customer satisfaction research?
RQ 5	What are the most relevant sources for customer satisfaction research?
RQ 6	Mostly Cited Local Sources (from Reference List) for customer satisfaction research?
RQ 7	What is the most dominant word for research with the theme of Customer satisfaction?
RQ 8	How to analyze document keywords in research with the theme of Customer satisfaction?
RQ 9	Relevant words on research related to the theme?

This study's bibliometric analysis adhered to a number of essential review process protocols. Other researchers can replicate the process because it is methodical and follows

defined steps. Mind mapping is another method that can be used for bibliometric analysis to illustrate the limits of knowledge. Numerous academic fields frequently employ bibliometric analysis, which focuses on quantitative research found in books, journal articles, and other written publications. Figure 1 illustrates the five main steps of bibliometric analysis that will be performed in this study: selecting search terms, validating preliminary search results, enhancing search results, gathering relevant information, and concluding data analysis.



Figure 1: Five Major Steps of Bibliometric Analysis

3. Bibliometric Analysis

3.1 Determining Search Keywords

On October 1, 2022, a search was carried out using relevant customer satisfaction keywords in the form of search strings. The search is based on the title, keyword, and abstract of the article. Information is obtained through the process of looking for articles in electronic databases using preset keywords. Since Scopus is the most extensive and reliable scientific database currently in use and offers a wide range of peer-reviewed journal articles, it was chosen as the electronic database for this study.

3.2 Preliminary Search Results

A preliminary keyword search produced 1552 Scopus documents. Since the goal of this study is to map the evolution of research (state of the art) with the theme of regional bonds as a whole, there is no time limit on the search period for articles.

3.3 Refinement of Search Results

We first obtained preliminary results, after which we used the inclusion criteria outlined in this study to screen all articles. To narrow down the search results, two inclusion criteria were applied: (i) IC1: The original study was written in English; (ii) IC2: The only source type for articles was peer-reviewed journals. Therefore, the dataset does not contain proceedings (conference papers), book chapters, books, newspapers, letters, or editorials. This is done in order to source excellent scientific contributions from peer-reviewed journals. If duplicate articles are discovered, those articles are also deleted. The outcomes are then stored as a file with the RIS extension when the necessary repairs have been made. Additional data analysis was done using the RIS file that was produced.

TITLE-ABS-KEY (customer satisfaction) AND (LIMIT-TO (SUBJAREA, "BUSINESS") OR LIMIT-TO (SUBJAREA, "ECONOMIC"))

3.4 Compilation of Data Statistics

As previously indicated, an RIS file is used to store the information gathered following the search results for repairs. The file is then processed to finish the metadata of the articles obtained, including the name of the author, title, abstract, and journal description (journal name, year of publication, volume, publication, page), with the aid of Mendeley's reference manager (RMS) software. When there is missing data, the dataset is checked, and the necessary information is added. Next, using the verified dataset as a basis, the search result data is examined and categorized.

3.4.1 VOSviewer Analysis

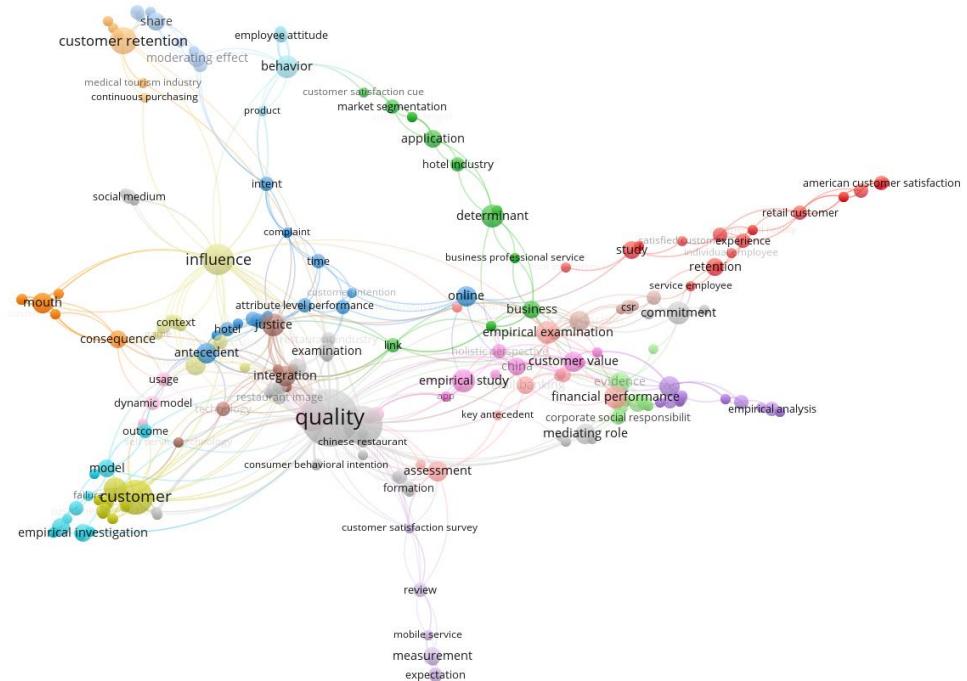


Figure 2. VOSviewer Analysis

VOSviewer offers cluster results based on the keyword "customer satisfaction" that illustrate the connections between various topics. The data network from the VOSviewer results is shown in Figure 2 using the customer satisfaction keyword. Visualization of variables pertaining to research topics on customer satisfaction. Since they occur more frequently, variables are becoming more and more significant. The item's size is determined by how frequently it occurs. The variable is more significant and frequently occurs when the circle is larger. Quality appears to be the most important factor, as evidenced by the fact that it is the keyword that appears most frequently in the customer satisfaction topic.

3.4.2 Most Relevant Authors

Based on each author's degree of relevance to the subject of customer satisfaction, the number of research articles they have published is displayed in the figure below. The figure

shows a blue bar chart with the number of articles published along with a list of the authors' names. The more publications that are published on the subject of customer satisfaction, the darker the blue. The published articles written by the 20 authors range from 6 to 19 articles. The author with the greatest publications on the subject of customer satisfaction is Li Y. Li Y has authored 19 articles in total about the subject of customer satisfaction.

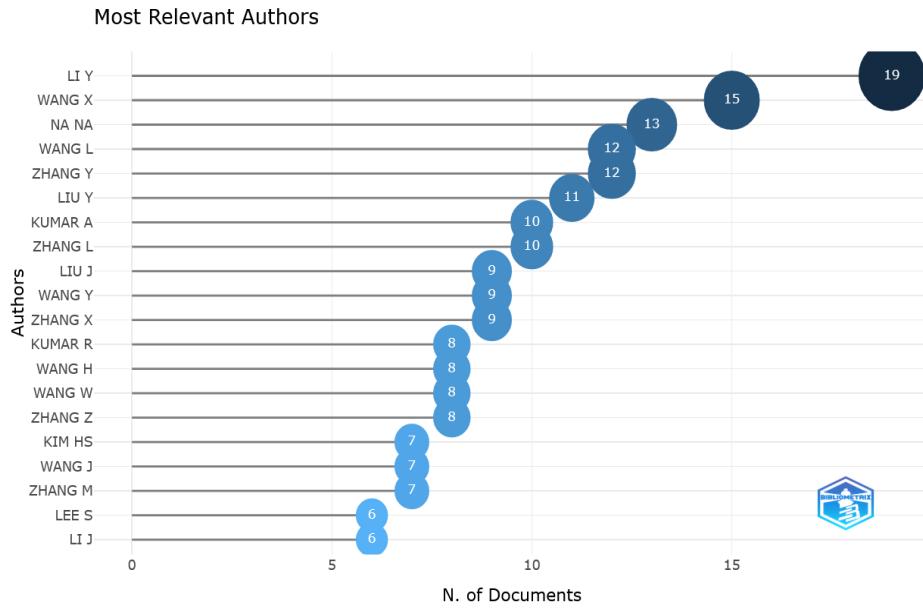


Figure 3. Most Relevant Authors

3.4.3 Most Local Cited Authors

Not all visualizations are based on the authors of customer statistics articles that are published. Additionally, a visualization of local writers whose works were most frequently referenced in articles about customer statistics was done. The author who is cited the most in the above bar chart is indicated by the darker blue color. With a total of 11 citations, Kim Ho Sik is the most frequently cited local author, according to Figure 4. Kim Ho Sik teaches at Kangwon National University in South Korea's Department of Public Administration. Customer statistics are the subject of frequent articles written and published by Kim Ho Sik.



Figure 4. Local Cited Authors

3.4.4 Most Relevant Affiliations

The author's affiliation is inextricably linked to every article published. The affiliates who write the most articles about customer satisfaction are displayed in the image above. It is evident from the image above that there are nine to thirty articles published by various affiliates. The affiliate that publishes the greatest articles about customer satisfaction is Islamic Azad University. Islamic Azad University released thirty articles about consumer data. Private university Islamic Azad University is based in Tehran, Iran. Kambiz Heidarzadeh Hanzaee is one of the writers from Islamic Azad University who writes about customer satisfaction.

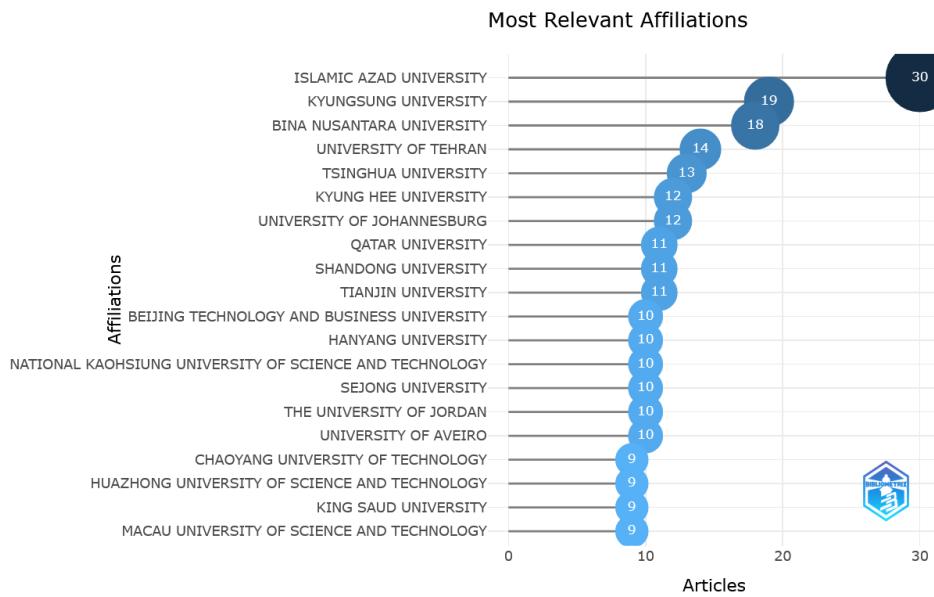


Figure 5. Most Relevant Affiliations

3.4.5 Most Cited Countries

Figure 6 shows the number of research documents published and cited by each country based on their level of relevance to customer satisfaction. The blue bar chart shows the list of top publishing and citing countries and the interval of the number of documents. The greater the number of cited documents relevant to the topic of customer satisfaction, the darker the blue color. Based on the most relevant data source, the number of published articles cited by all countries ranges from 16 to 235 documents, with 20 countries listed on the source. Based on Figure 6, the country with the highest number of citations is China, with 235 citations.

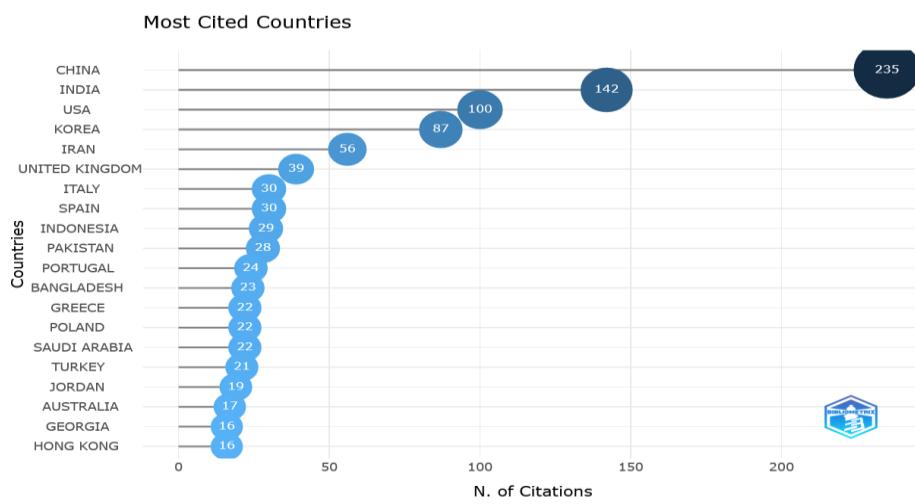


Figure 6. Most Cited Countries

3.4.6 Most Relevant Sources

Figure 7 illustrates the publication statistics of various journals with regard to their relevance to the topic of customer satisfaction. The graph displays a list of leading journals and a range of document counts using a blue bar graph. The intensity of the blue color signifies the quantity and relevance of research in a particular theme. The number of publications across journals ranged from 10 to 67 documents, with the most relevant data source showing a total of 20 journals. Notably, the Switzerland-based Sustainability Journal took the top spot, with a dark blue bar graph representing 67 publications, surpassing the bars of other journals.

An advanced forum for research on sustainability and sustainable development is offered by the international, cross-disciplinary, open-access Journal of Sustainability (Switzerland). The journal focuses on environmental, cultural, economic, and social human sustainability. In order to support scientific prediction and impact assessment of global change and development, this journal aims to encourage scientists to publish experimental and theoretical research related to the natural sciences, social sciences, and humanities in as much detail as possible. One of the many sections in the Swiss journal Sustainability (Suisse) covers business and economics, with a recurring focus on the subject of customer satisfaction.

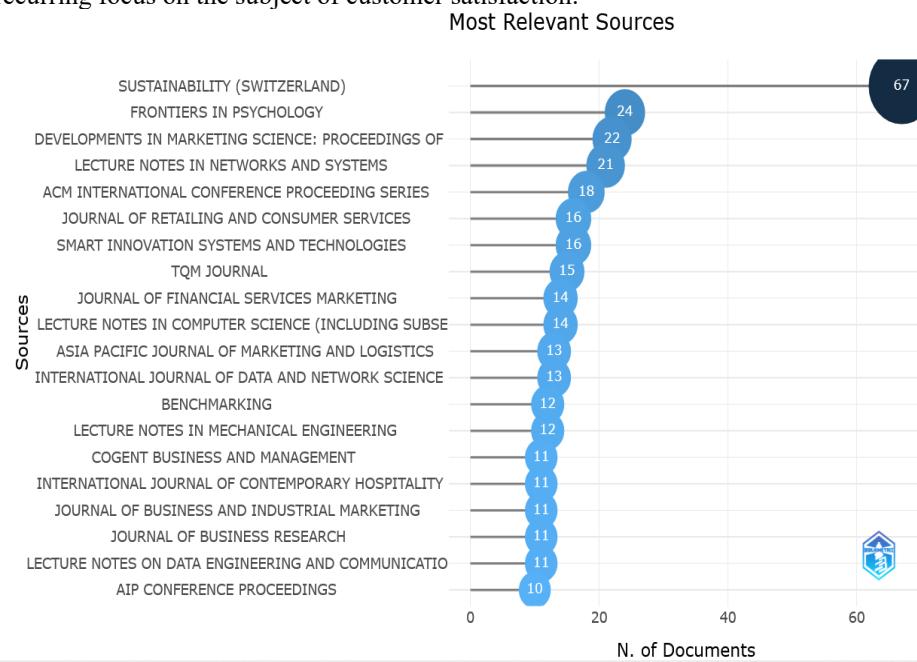


Figure 7. Most Relevant Sources

3.4.7 Most Local Cited Sources (from Reference Lists)

The number of local quotes based on each source from different journals that address customer satisfaction is depicted in the image above. The figure shows a blue bar chart with a list of the top published journals along with the quantity of local citations. It is evident from the image that the more local citations or quotations are used, the darker the blue color on the graph. The range of citations that can be obtained from different journal sources is 388–1928.

The Marketing Journal has become the journal that discusses other customer satisfaction and has the greatest number of citations from other prestigious journals. There were up to 1928

citations in the set of citations taken from the Journal of Marketing. The reason for this is that the research goals align with the theme published in the Journal of Marketing. The goal of this journal is to create and share knowledge on practical marketing issues that will benefit academics, instructors, managers, policymakers, consumers, and other global social stakeholders. The main objective of the journal is to publish the most significant and innovative substantive research in the field of marketing. Good performance and marketing strategies can bring up a tendency from customers to make customers more familiar with the products being marketed. A positive trend can correspond to the emergence of satisfaction from customers.

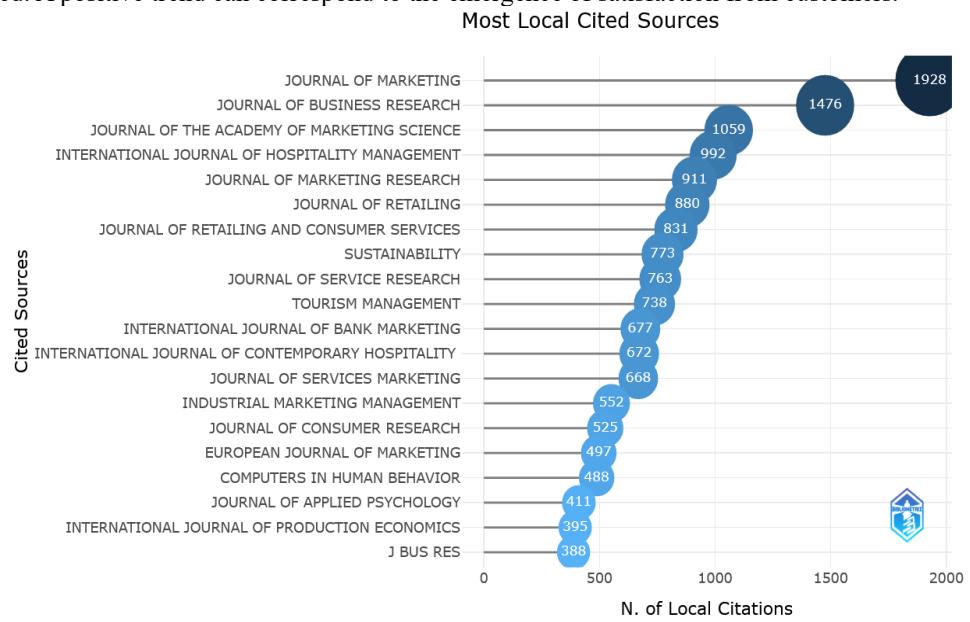


Figure 8. Most Local Cited Sources (from References List)

3.4.8 Most Frequent Words

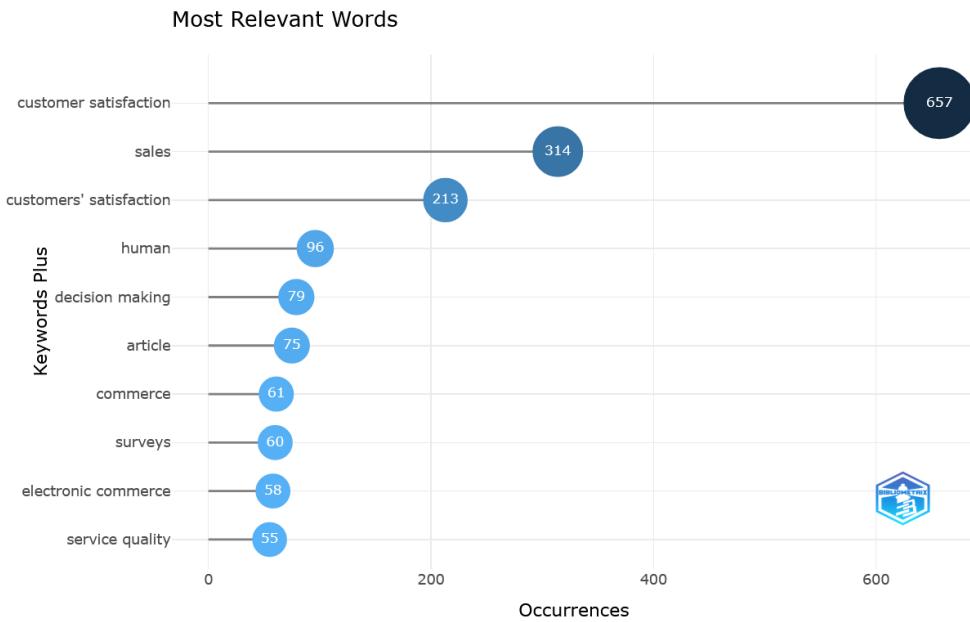


Figure 9. Most Frequent Words

The words that are most frequently used and pertinent to the theme of customer satisfaction are displayed in the image above. The data uses a blue bar chart as a visualization to show a list of the most frequently occurring words. The word appears more frequently in the research theme, the darker the blue color. The total number of words that are deemed most relevant is 10, and the number of occurrences in words related to the theme ranges from 55 to 657 words. Not only is "customer satisfaction" the primary theme but it was also discovered that the word "sales" is the one that is most frequently used in discussions of customer satisfaction. A search for "sales" turned up to 314 events. This shows that "sales" is very important in supporting customer satisfaction. The use of the word "sales" also corresponds to the frequently cited journal "Journal of Marketing." The journal discusses marketing where, in a sale, good marketing is needed. Therefore, in achieving good customer satisfaction, it is necessary to pay attention to "sales," or good sales, with a marketing strategy as a supporting factor.

3.4.9 Word Cloud

A word cloud is a visual representation of frequently occurring terms within a research paper's data, specifically those associated with the research title's theme, "customer satisfaction." The size of each word in the cloud corresponds to its frequency in the data. Typically, the words in a word cloud are randomly placed, but the most common terms are centered and displayed in a larger font size for enhanced visibility. This word cloud was generated by analyzing document titles related to the study.



Figure 10. Results of Words Cloud

The most common terms associated with the theme "customer satisfaction" according to the image of the document title analysis are: sales, human, article, decision making, service quality, surveys, quality control, and electronic commerce. The word "Sales" continues to be the one that appears the most frequently among the several dominant words. This conversation has demonstrated that a strong sales factor is also required to increase customer satisfaction. "The Role of Customer Satisfaction in Increasing Sales in The Service Sector" is one of the many studies on "Customer Satisfaction". The study aims to explain the role of customer satisfaction in the service sector, particularly in the hospitality and banking industries and the ways in which customer satisfaction can be measured and improved.

3.4.10 Tree Map

Relevant research terms pertaining to the "customer satisfaction" theme may be shown in this section. The words utilized are taken from the abstract document as a word tree map. The Word Tree Map shows words that frequently occur in boxes that resemble regions or areas on a map, with the square area growing as the number of words that appear increases. The word tree map for the "customer satisfaction" theme looks like this.

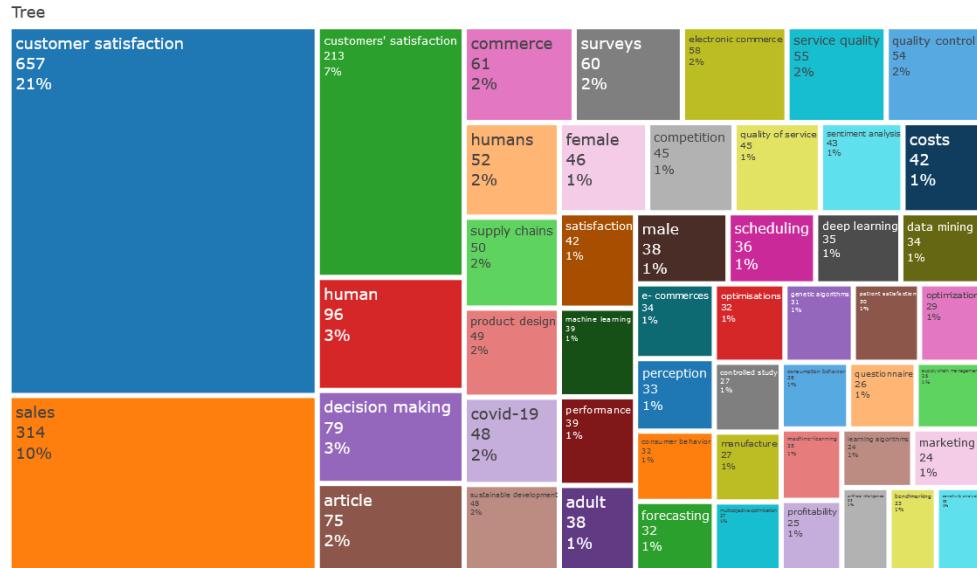


Figure 11. Tree Map

Based on the image of the document title analysis, it was discovered that the word "customer satisfaction" is not the most prevalent or related to the theme because it is the primary topic, along with sales, human decision-making, articles, commerce, surveys, electronic commerce, service quality, and quality control. The word "Sales" continues to be the one that appears the most frequently among the several dominant words. With 314 instances, the word "Sales" accounted for 10% of all words found. This conversation has demonstrated that a strong sales factor is also required to increase customer satisfaction.

Studies on "customer satisfaction" have been conducted, such as "customer satisfaction and retail sales performance: an empirical investigation." The purpose of this study is to quantify the relationship between customer satisfaction and sales performance, as well as the relationship between perceptions of store attributes and customer satisfaction.

4. Conclusions

Based on the designed inclusion criteria, 1552 articles were screened for Scopus indexed research publications. Analysis of the main studies revealed that research related to Sustainability Reporting focuses on 9 topics and trends: Customer Satisfaction, Sales, human, article, decision making, service quality, surveys, quality control, electronic commerce. The results show that the number of publications on the development of the role of customer satisfaction research continues to increase.

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