Research Article

A Systematic Literature Review: Determinants Analysis of Purchase Decision

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Abstract.

This study aimed to identify factors that influence purchasing decisions using the systematic literature review (SLR) analysis method. The software utilized to conduct the SLR includes Publish or Perish, VOSviewer, and Bibliometrics. The researchers conducted searches in the electronic database of Scopus, which is one of the leading scientific databases providing peer-reviewed journal articles. The originality of this study lies in the approach of employing the SLR method to examine the factors influencing purchasing decisions, using the aforementioned software tools. Several factors identified as determinants in purchasing decisions based on this research include sales, electronic commerce, decision-making, cost, purchasing, consumer behavior, commerce, and profitability.

Keywords: purchase decision, sales, decision-making consumer behavior, systematic literature review

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1. Introduction

Purchase decision refers to the process of decision-making by consumers in choosing to buy a product or service. It involves evaluating various factors such as needs, preferences, product information, price, brand, quality, and experience before ultimately Deciding on whether or not to proceed with a purchase. Purchase decision, or purchasing decision, refers to the mental process and concrete Consumer behaviors when selecting and buying a product or service. It involves a series of steps, starting from recognizing needs or desires, searching for information, evaluating alternatives, to choosing a specific product or service. Purchasing decisions can be influenced by various factors, including personal motivation, product perception, past experience, social factors, and market conditions. In making purchasing decisions, consumers will consider benefits, price, quality, brand, company reputation, and other relevant factors to meet their needs and preferences [1]. A purchaser's choice is additionally affected by individual traits like age and stage of life, job, financial status, way of life, character, and self-perception.

According to Meitiana [2], Consumer buying behavior is impacted by cultural, social, individual, and psychological attributes. Among these, cultural factors wield the most extensive and profound impact on consumer conduct.Top of Form

According to Koesoemaningsi [3], the process of consumer decision-making involves a series of steps taken by consumers when they decide to purchase goods or services. Essentially, a purchasing decision occurs when someone becomes interested in a product and wants to buy, try, use, or own it. In the process of buying goods, often more than two parties are involved, such as manufacturers and consumers, engaging in an exchange or transaction. Manufacturers employ various strategies to encourage consumers to buy their products. The purchasing decision is the consumer's action in deciding whether or not to purchase the product. Kotler and Keller [4] states that purchasing decisions involve the selection and interest in acquiring the preferred brand from various different brands. Kotler and Keller elaborate that there exist five stages within the buying decision process, comprising recognition of an issue, seeking information, assessing options, making the purchase decision, and post-purchase actions.

In the initial stage, purchasing decisions are triggered by needs or desires perceived by the consumer. These needs can be functional or psychological. Subsequently, consumers engage in information search to identify options that fulfill those needs. They seek information from various sources such as friends, family, advertisements, and the internet to gain knowledge about available products or services. After gathering information, consumers evaluate the existing alternatives. They compare products based on important criteria such as price, quality, brand, features, and benefits offered. Consumer perception of the brand or company also influences their evaluation. The evaluation methods employed can vary, ranging from comparing product features and advantages, reading reviews, to seeking recommendations from others, with the goal of making a rational purchasing decision. In the final stage, after evaluating alternatives, consumers will choose the product or service that best fits their needs and preferences. This purchasing decision can be influenced by factors such as price, quality, brand, promotion, as well as social influence and consumer perception of the product or brand [5].

Purchase intention is a stage that occurs between evaluating various options and making a decision to make a purchase. After consumers evaluate the available options, they demonstrate an intention to purchase the offered product or service. According to Abzari et al. [6], there are several factors that serve as indicators in determining purchase intention, namely transactional interest, reference interest, preference interest, and exploration interest.

In another study conducted by Yusuf and Sunarsi [7], it was revealed that the promotion variable has a significant impact of 41.1% on Purchase Decision. Similarly, the price variable also has a significant impact of 41.1% on Purchase Decision. Additionally, the promotion and price variables, when considered simultaneously, have a positive impact of 51.9% on the Purchase Decision. This study seeks to explore the factors that impact purchasing decisions within companies through a systematic review of existing literature. It will employ methods like VOSViewer and Bibliometrics software, which help analyze search engine results, bibliographic databases, and scientific publications relevant to the research topic.Bibliometrics is a method that can be used to analyze and depict bibliographic data, such as publications, citations, authors, and specific research fields. With the help of bibliometrics, we can gain a better understanding of the relationships between these elements. The information generated from bibliometric analysis can assist In the advancement of research, strategic decision-making, and the assessment of scholarly performance. With a deeper understanding of bibliographic data, companies can utilize this information to formulate effective strategies in confronting difficulties within the worldwide market. Consequently, this research titled "Determinants Analysis of Purchase Decision" is expected to serve as a framework for future research regarding the factors influencing Purchase Decision.

2. Literature Review

2.1. Systematic literature review (SLR)

SLR is a term This term refers to a particular research and development approach used to gather and assess studies associated with a precise subject in decision-making. [8]. The collected data includes findings from original research articles published in national journals. Data collection is done through registered and indexed electronic databases such as Google Scholar, Semantic Scholar, ERIC, and direct web links from national journal publications. SLR is conducted with various objectives, such as identifying, reviewing, evaluating, and interpreting all available research in the field of an interesting phenomenon, with relevant research questions. SLR is often required in setting research agendas, as part of dissertations or theses, and is an integral part of research grant applications.

According to Khan et al. [9], there are five stages in conducting a Systematic Literature Review (SLR):

Formulating the research question: This stage involves clearly defining the research question or objective that the SLR aims to address.

Searching for articles: In this stage, a comprehensive search is conducted to identify relevant articles and publications related to the research question. Various databases, search engines, and other sources are utilized to gather a broad range of literature.

Evaluating the articles: Once the relevant articles are identified, a systematic evaluation is performed to assess their quality, relevance, and reliability. This stage often involves the use of predefined inclusion and exclusion aimed at guaranteeing the selection of top-tier studies.

Summarizing the articles: In this stage, the selected articles are thoroughly reviewed and summarized. Key findings, methodologies, and conclusions are extracted and synthesized to provide an overview of the literature.

Interpreting the findings of the articles: The final stage involves analyzing and interpreting the findings of the reviewed articles in relation to the research question. Patterns, trends, and relationships between the studies are examined to derive meaningful insights and conclusions.

2.2. Purchase decision

Purchase decision, also referred to as the purchase decision, delineates the cognitive process and tangible steps individuals take when making buying choices. selecting and purchasing products or services. This process involves a series of steps, starting from recognizing needs or desires, searching for information, evaluating alternatives, to choosing a specific product or service. Purchase decision is the customer's desire to buy a product. Schiffman and Kanuk [10] also provide their perspective on purchase decision, stating that it involves selecting from two or more alternative choices. The decision-making actions undertaken include decisions about product benefits, product form, brand decisions, quantity decisions, seller decisions, as well as decisions regarding the timing and payment methods of the purchase.

Purchase decisions are influenced by various factors, including individual motivations, perceptions of the product, prior experiences, social factors, and market situations [11]. Consumers consider benefits, price, quality, brand, company reputation, and other relevant factors to meet their needs and preferences. Additionally, purchasing decisions are additionally impacted by individual elements such as age, stage in life, profession, financial status, way of life, character, and self-perception. According to Meitiana [2],

Consumer purchasing behaviors are molded by cultural, social, individual, and psychological factors. Of these, cultural elements wield the broadest and deepest impact on consumer conduct.

2.3. Sales

Sales refers to the outcome of the selling process or the items being sold, or the result of a transaction. Selling is the process of making a sale [12]. To sell means to transfer something to a buyer at a specific price. Therefore, sales can be defined as an activity and method to influence individuals to make a purchase (transaction) of goods or services offered at an agreed-upon price by both parties, whether in cash or on credit.

Sales can be categorized into five types [13]: (1) Selling through trade channels; (2) Selling with a focus on spreading information; (3) Selling that involves technical expertise; (4) Selling geared toward acquiring new business; and (5) Selling that responds to specific needs. One crucial factor in running a business is the direct interaction in the sales process. The success of a company can be assessed based on its ability to generate profits. The obtained profits can then be utilized to develop various activities, enhance the company's assets and capital, as well as expand and diversify business operations.

2.4. Marketing

Marketing is one of the key activities that companies, whether in goods or services industries, need to undertake to sustain their business [14]. Marketing involves activities related to creating value or benefits due to factors such as location, time, and ownership. It orchestrates the movement of goods from one location to another, involving storage and generating changes in ownership through the process of buying and selling. Marketing encompasses the actions associated with the trade of products and services between producers and consumers within the business domain.

Marketing is an activity aimed at achieving the goals of a company by identifying and understanding the needs and desires of customers or clients, and directing the flow of goods and services that fulfill their needs from the company. Marketing is a procedure that each company engages in to generate value for customers, establish solid customer relationships, and gain value reciprocally from customers.

3. Material and Methods

This research utilizes the Systematic Literature Review (SLR) method conducted in June 2023. The software used for analysis in this study includes Publish or Perish, VOSviewer, and Bibliometrics. Publish or Perish is employed to conduct a SLR on the research topic, specifically Purchase Decision. VOSviewer can analyze search results from search engines, bibliographic databases, or other datasets linked to scientific publications. Bibliometrics assists in visually interpreting and examining bibliographic data, enabling the comprehension of the relationships among publications, citations, authors, and various research fields. Consequently, bibliometrics plays a role in guiding decisions within research advancement, strategic decision-making, and evaluating scholarly performance.

3.1. Data source

The researcher conducted a search utilizing the Scopus electronic database. Scopus was selected because of its esteemed status as the most extensive scientific database, offering a broad array of peer-reviewed journal articles. [15]. In this study, the articles used were published in the last 35 years, from 1988 to 2023.

3.2. Eligibility criteria

The Eligibility Criteria (IC) used as guidelines for conducting the analysis using the SLR method are as follows:

IC1: Original and peer-reviewed literature written in English.

IC2: Studies aimed at identifying variables that influence Purchase Decision.

IC3: Studies employing quantitative, qualitative, and mixed-methods (qualitative and quantitative) approaches.

3.3. Research question

The following Research Question (RQ) is designed to identify the growth and development of research articles on Purchase Decision:

RQ 1 : What is the annual scientific production of research on purchase decision?

RQ 2 : What countries are involved in researching on Purchase Decision?

RQ 3 : How is the relevant Data Source of Growth related to Purchase Decision research?

RQ 4 : How many research papers are released by individual journals regarding Purchase Decision?

RQ 5 : What influence do journals have when publishing articles about Purchase Decision?

RQ 6 : Which authors hold the most significance in Purchase Decision research?

RQ 7 : Who are the most productive authors annually in terms of publications concerning Purchase Decision?

RQ 8 : What methods can be used to examine document keywords in research centered on Purchase Decision?

RQ 9 : What is the level of Affiliation productivity in research on Purchase Decision?

RQ 10 : What level of influence does each author have when they publish articles on the topic of Purchase Decision?

RQ 11 : What are the most dominant keywords related to research on Purchase Decision?

RQ 12 : What are other relevant keywords in research on Purchase Decision?

RQ 13 : What are the most dominant relevant keywords for research on Purchase Decision?

RQ 14 : How is the evolution analyzed based on themes in research related to Purchase Decision?

RQ 15 : How to analyze thematic maps that emerge based on document titles related to the subject of Purchase Decision?

3.4. Steps for conducting research

3.4.1. Steps for conducting research using Scopus and RStudio

The procedures employed in this study utilizing Scopus and RStudio are presented as follows:

Determine the search keywords. In this case, the keyword is "Purchase Decision."

Search for the keyword "Purchase Decision" based on the article title, abstract, and keywords (TITLE-ABS-KEY) in Scopus.

Narrow down the search outcomes by applying filters:

TITLE-ABS-KEY: "Purchase" AND "Decision"

LIMIT-TO(PUBYEAR, 2023)OR LIMIT-TO(PUBYEAR, 2022)OR LIMIT-TO (PUBYEAR, 2021)OR LIMIT-TO(PUBYEAR, 2020)OR LIMIT-TO(PUBYEAR, 2019)

LIMIT-TO(DOCTYPE, "ar")

LIMIT-TO(LANGUAGE, "English")

Save the search outcomes into a file with the .bib file extension.

Use RStudio to organize the data according to the Research Question.

Get the most recent editions of RStudio and R, then install them.

Launch the RStudio program and enter the subsequent code:

install.packages("bibliometrix")

library(bibliometrix)

biblioshiny()

RStudio will shift to a fresh hyperlink.

Upload the saved file on that page.

Complete the data analysis.

3.4.2. Steps in conducting research using Publish or Perish and VOSviewer

In answering several Research Questions (RQ), A software combination of Publish or Perish and VOSviewer can be utilized The following steps should be undertaken:

Conduct a search using the Publish or Perish software with the keyword "Purchase Decision" in the title, abstract, and keywords within the timeframe of 1988 - 2023 on Scopus.

Save the exhibited articles in a .RIS file format.

Visualize the data and analyze trends using the VOSviewer software.

4. Results and Discussion

The search was conducted in June 2023 using relevant keywords related to "Purchase Decision", here the keywords were sought within article titles, abstracts, and keywords. The method of sourcing information involved searching for articles in electronic databases. The Scopus database specifically was employed as the electronic database for this study.

4.1. Research findings

Each year, several journals discuss issues related to purchase decision. These journals employ quantitative, qualitative, and mixed methods approaches. This indicates that research related to Purchase Decision remains pertinent in recent years. This can be observed in Table 1.

TABLE 1: Some research articles related to purchase decision.

Author	Title	Reference	Publication Year
Dapas et al. [16]	"The Effect of Service Quality and Website Quality of Zalora.com on Purchase Decision as Mediated by Purchase Intention"	Quality Management	2020
Mahliza [17]	"Consumer Trust in Online Purchase Decision"	International Journal of Multidisciplinary Research (IJMR)	2020
Mappesona et al. [18]	"Customer Purchase Decision Model, Supply Chain Management and Customer Satisfaction: Product Quality and Promotion Analysis"	International Journal of Supply Chain Management	2020
Harahap and Amanah [19]	"Determinants of Consumer.Purchase Decision in SMES"	International Journal of Scientific & Technology Research	2020
Hassan et al. [20]	"Factors Influencing Housing Purchase Decision"	International Journal of Academic...Research in.-.Business and.-.Social Sciences	2021
Ali [21]	"Purchase Decision and Repurchase Models: Product Quality and Process Analysis (Case Study of House Ownership Credit Financing in Permata....Sharia Bank Jakarta)"	Scholars Buletin	2019
Ardiansyah and Sarwoko [22]	"How social media marketing influences consumers' purchase decision? A mediation analysis of brand awareness"	JEMA:-Jurnal-Ilmiah-Bidang-Akuntansi-dan-Manajemen	2020
Michelle and Susilo [23]	"The Effect of Instagram Social Media Exposure on Purchase Decision"	ETTISAL Journal of Communication	2021
Tran et al. [24]	"The Roles of Health Consciousness and Service Quality toward Customer Purchase Decision"	"Journal of Asian Finance Economic.and Business"	2020
Gulliando and Shihab [25]	"The Effect of Product Quality, Price and Promotion on the Purchase Decision of Telkomsel Service Products"	International Journal of.Innovative Science and Research Technology	2019

4.2. Data compilation and visualization

From Figure 1, it can be observed that within a span of 35 years (1988-2023), there are 128 sources that have conducted research on purchase decision. Among these 128 sources, there are 283 available documents with 763 authors. Among them, 24 authors are single authors, and 24.44% are involved in international co-authorship. Furthermore, there are a total of 973 author keywords. The average age of research documents on purchase decision is 5.63, with an annual growth rate of 7.36%. During the specified time period (1988-2023), the research data on purchase decision has an average citations per document of 26.48.
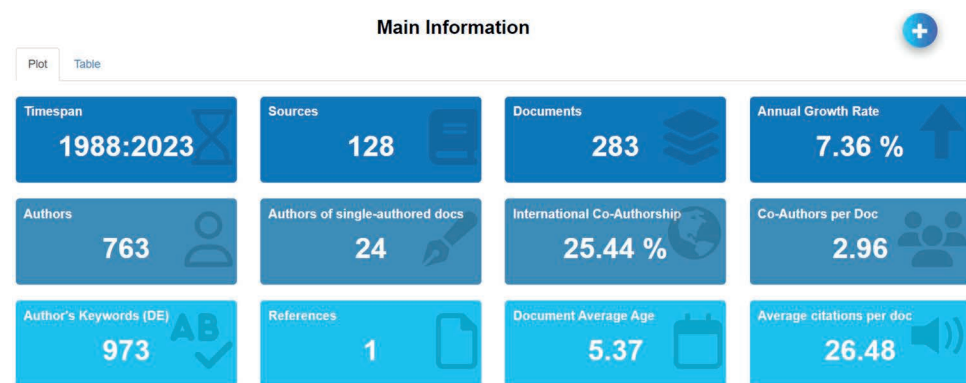

Figure 1: Main information. Source: Author's own work.

The .bib formatted file analysis is performed using RStudio, supported by the "bibliometrix" library. The data is structured according to the predefined Research Questions.

4.2.1. What is the annual scholarly production of research on Purchase Decision?

The annual scholarly production on the topic of Purchase Decision has been found from 1988 to 2023. As shown in Figure 2, there was a decline from 1988 to 1989, followed by a relatively stable period from 1989 to 1998 with no significant scholarly production on Purchase Decision. Subsequently, there was a fluctuating trend with a significant increase from 2010 to 2012. However, in 2014, there was a significant decline, but it showed another significant increase in 2016. The peak occurred in 2020, with the highest annual scholarly production data in the last 32 years. However, in 2023, two years later, the annual scholarly production decreased significantly.
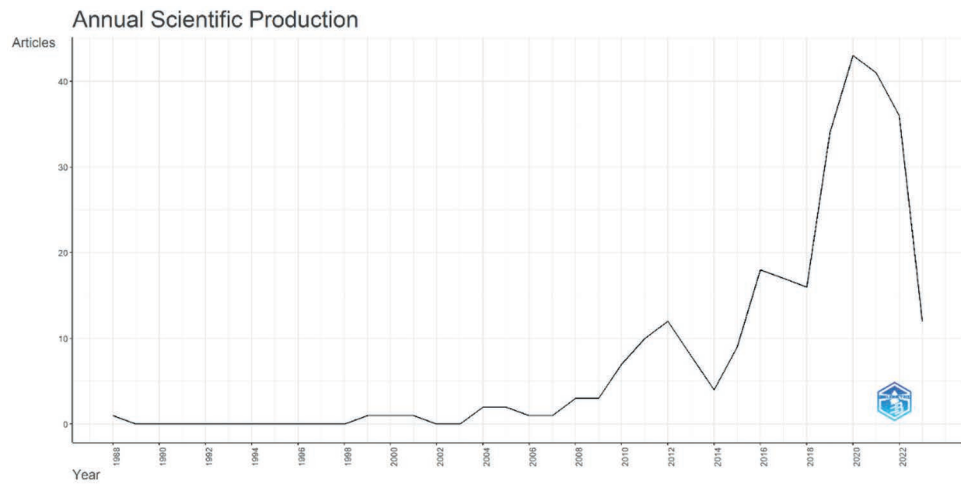
Figure 2: The annual scholarly production. Source: Author's own work.

### 4.2.2. What countries are involved in researching on Purchase Decision?
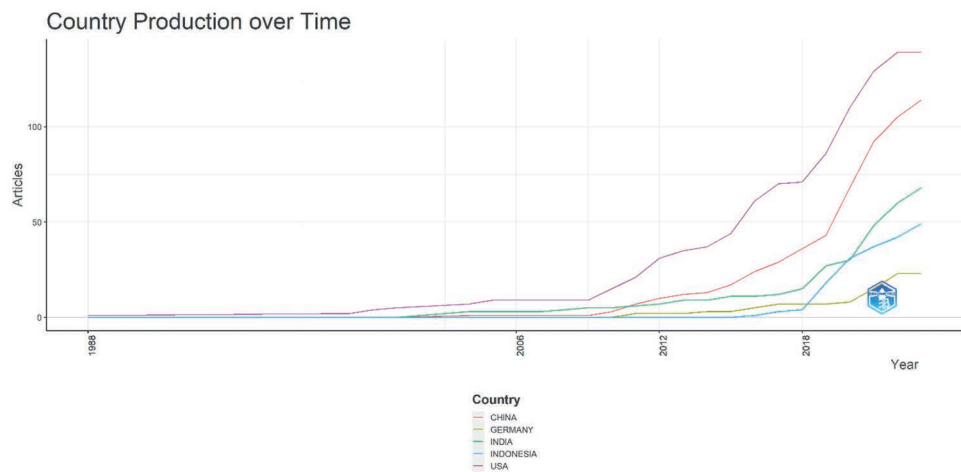
Figure 3: Country and the number of research productions on purchase decision each year. Source: Author's own work.

Figure 3 shows several countries that have conducted research on Purchase Decision, namely China, Germany, India, Indonesia, and the USA. Based on Figure 2, the countries with the highest number of research on Purchase Decision are the USA, China, India, Indonesia, and Germany, in that order. The USA has the highest number of research publications in 2023, with 139 articles, followed by China with 114 articles. India ranks third with 68 articles, followed by Indonesia with a total of 49 articles. Germany has the lowest number of research on Purchase Decision with 23 articles. From 1988 to 2023, all of the above-mentioned countries (China, Germany, India, Indonesia, and the USA)

show a relatively upward trend, as shown in Figure 3. There was a significant increase in research publications for both the USA and China from 2012 to 2023.

### 4.2.3. How is the relevant Data Source of Growth related to Purchase Decision research?
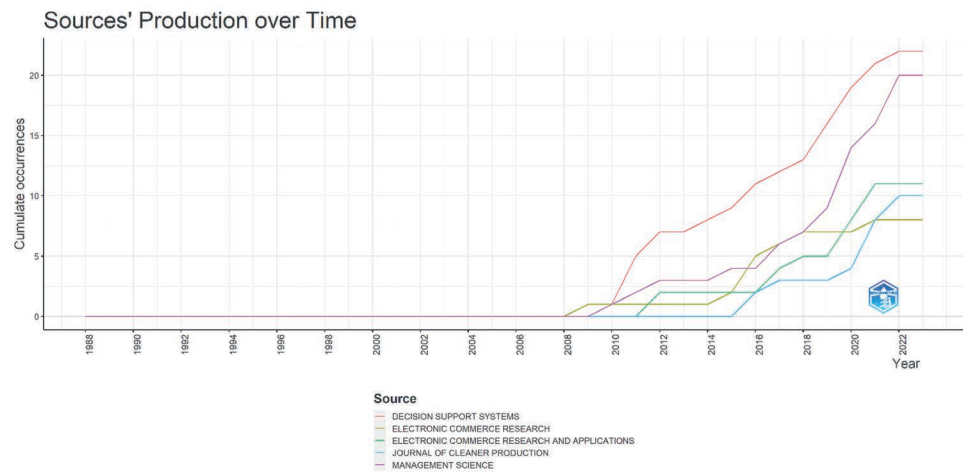
Figure 4: Growth of sources each year. Source: Author's own work.

This study delves into the evolution of journals serving as sources for Purchase Decision research. The graph above showcases the annual occurrence trends of each journal spanning from 1988 to 2023. It offers insights into journals that might exhibit an upswing or downturn in publications, depicted by the curve lines observed during the study. Particularly in the realm of Purchase Decision, the curve demonstrates a tendency toward progressively growing publications.

Figure 4 depicts several sources of research production on Purchase Decision, including Decision Support Systems, Electronic Commerce Research, Electronic Commerce Research and Applications, Journal of Cleaner Production, and Management Science. In 2023, Decision Support Systems had the highest production with a total of 22 articles, followed by Management Science with a total of 20 articles. The third position was held by Electronic Commerce Research and Applications with a total of 11 articles, followed by the Journal of Cleaner Production and Management Science with a total of 10 articles. Lastly, Electronic Commerce Research had a total of 8 articles. From the graph, it is evident that the annual research production on Purchase Decision from all the sources showed a relatively upward trend from 2008 to 2023. However, from 1988 to 2008, there was no significant growth observed.

4.2.4. How many research papers are released by individual journals regarding Purchase Decision?
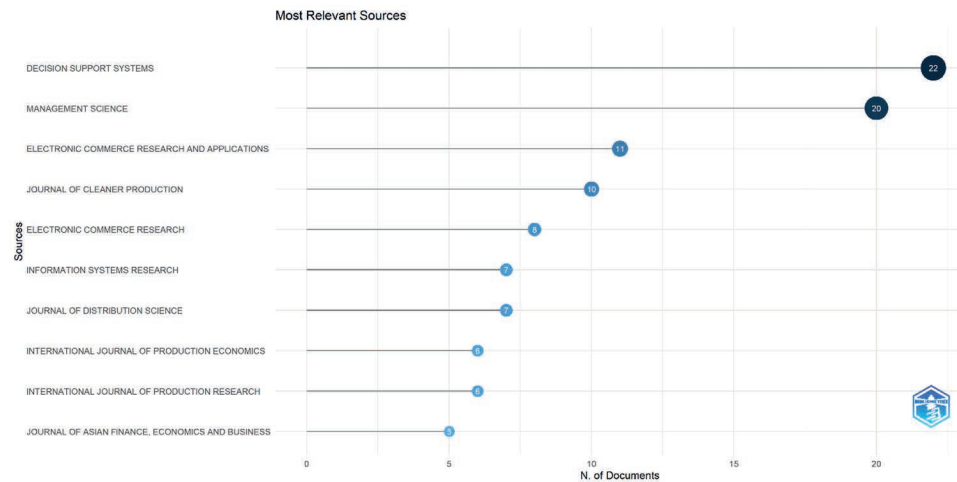
Figure 5: The most relevant sources. Source: Author's own work.

According to Figure 5, the illustration exhibits the volume of research articles released by specific journals, sorted by their alignment with the Purchase Decision theme. The data compiles journals that have issued a considerable number of articles, represented in a blue bar chart. The depth of the blue color signifies the volume and relevance of these publications to the research theme. The highest count of documents published by any journal reaches up to 22. Decision Support Systems is the top-ranked journal with 22 published documents, followed by Management Science with 20 published documents, indicated by a darker blue bar compared to the other journals' lighter blue bars. This is due to the relevance of those journals to the discussed theme.

4.2.5. What influence do journals have when publishing articles about Purchase Decision?

In addition to considering quantity and relevance, the evaluation of journals also involves measuring the impact of each publication focusing on Purchase Decision. The method used is the calculation of the H-index for each journal, as depicted in Figure 6. In addition to displaying the H-index values, the figure also represents the impact generated by these journals. The observed range of H-index in this study ranges from 0 to 16. In the figure, Decision Support Systems and Management Science rank highest with an H-index value of 16 and 12, respectively, indicated by the dark blue color. Electronic Commerce Research and Applications holds the third position with an H-index value of 9, while Electronic Commerce Research secures the fourth spot with an H-index
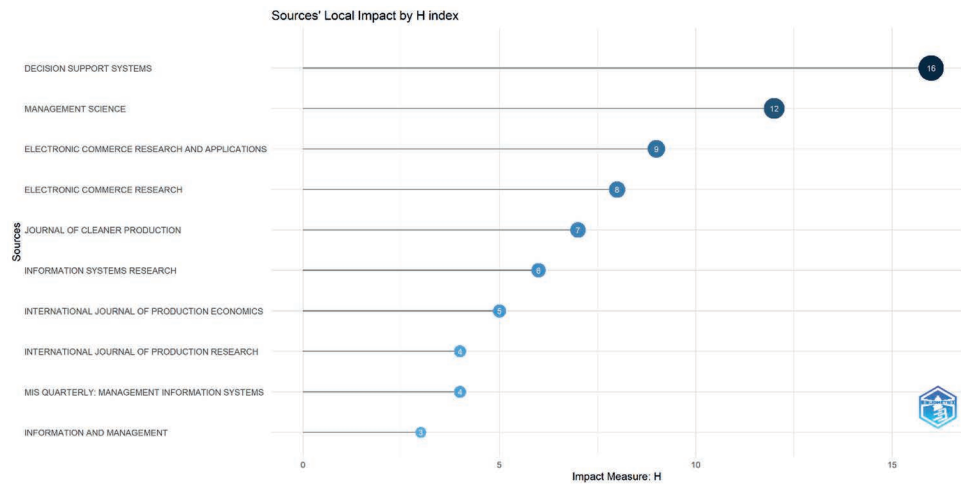
Figure 6: The impact of source. Source: Author's own work.

of 8. They are followed by the Journal of Cleaner Production, Information Systems Research, International Journal of Production Economics, International Journal of Production Research, MIS Quarterly: Management Information Systems, and Information and Management. Journals with lighter blue colors indicate lower impact levels.

4.2.6. Which authors hold the most significance in Purchase Decision research?
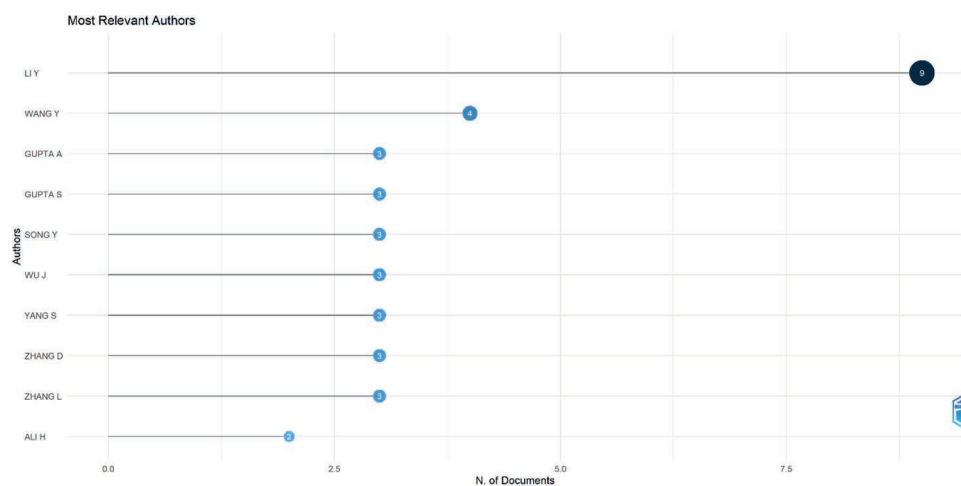
Figure 7: Most relevant authors. Source: Author's own work.

Figure 7 shows the number of research publications conducted by each author based on their relevance level to the theme of Purchase Decision. The data represents a list of authors who have published the most articles related to the topic, along with the range of publications they have produced as depicted in the displayed graph. The darker the blue color, the more documents they have published and the more relevant they are

to the research theme. The total number of documents published by all authors in the journals ranges from 0 to 9, with a total of 10 authors included in the most relevant data source. The author named Li Y occupies the top position with a total of 9 articles published, indicated by the taller dark blue bar compared to others. This indicates that the author is highly relevant to the theme discussed in the journals.

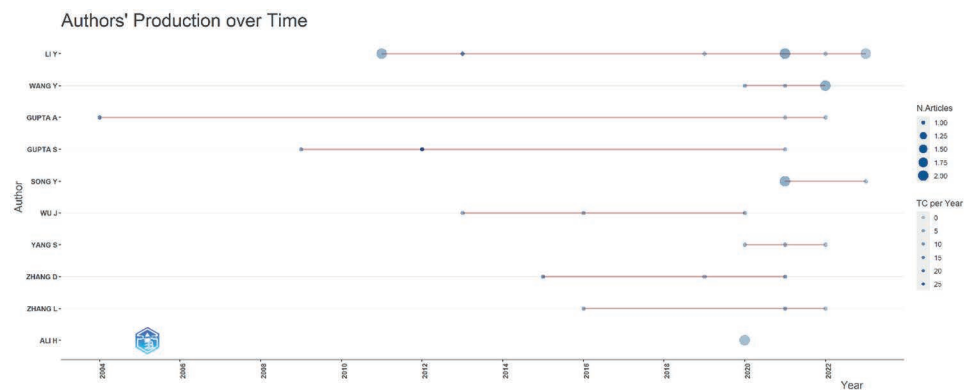### 4.2.7. Who are the most productive authors annually in terms of publications concerning Purchase Decision?

Figure 8: Author productivity. Source: Author's own work.

Figure 8 displays the productivity trends of authors throughout the research period, ranging from 2004 to 2023. Productivity is represented by the red line, tracking the authors' research outputs from the starting year to the concluding year. The circles plotted on this red line indicate the yearly tally of published papers. This figure provides an overview of authors involved in generating research associated with the Purchase Decision theme. Notable contributors actively producing articles related to Purchase Decision include Li Y, Gupta A, and Gupta S.

4.2.8. What methods can be used to examine document keywords in research centered on Purchase Decision?

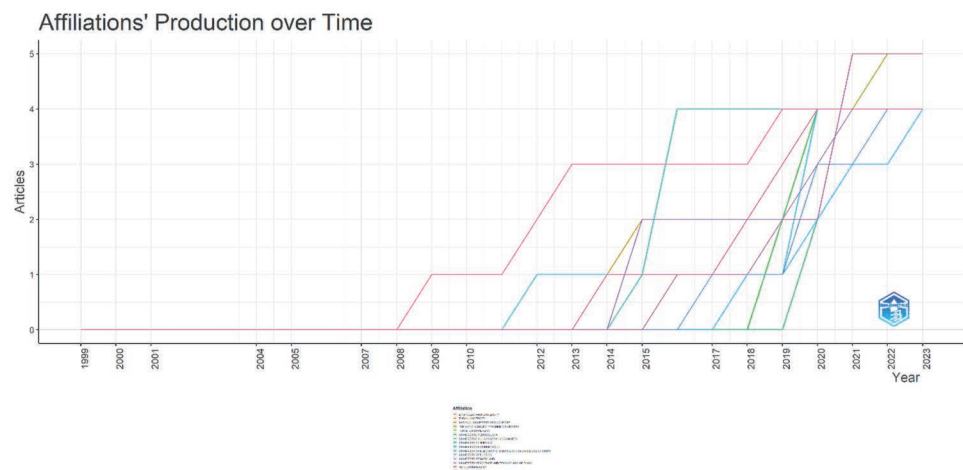Figure 9 exhibits a curve graph illustrating the evolution of keywords in research focusing on the theme of Purchase Decision across each year. The data illustrates the average frequency of keyword occurrences within research documents annually. Notably, key terms that surface consistently commence in 2008 and exhibit a continuous rise up to 2023. There's a notable surge in sustainability-related keywords such as
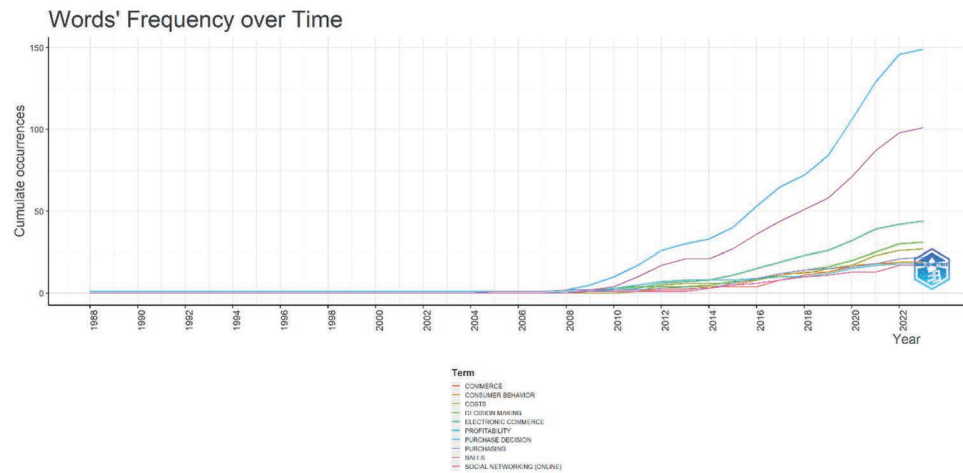
Figure 9: Frequency of keywords per year. Source: Author's own work.

Commerce, Consumer Behavior, Costs, Decision Making, Electronic Commerce, Profitability, Purchasing, Sales, and Social Networking (Online). These keywords notably demonstrate the most substantial progression over the years.

4.2.9. What is the level of Affiliation productivity in research on Purchase Decision?

Figure 10: Affiliation productivity. Source: Author's own work.

Figure 10 exhibits the productivity of affiliations throughout the research duration spanning from 1999 to 2023. The graph illustrates a fluctuating pattern in affiliation productivity, albeit with an overall upward trend. The figure highlights 15 affiliations. Based on the graph data, in 2023, the University of Science and Technology of China and The Hong Kong Polytechnic University emerge as the affiliations with the highest production, each contributing a total of 5 articles.

4.2.10. What level of influence does each author have when they publish articles on the topic of Purchase Decision?
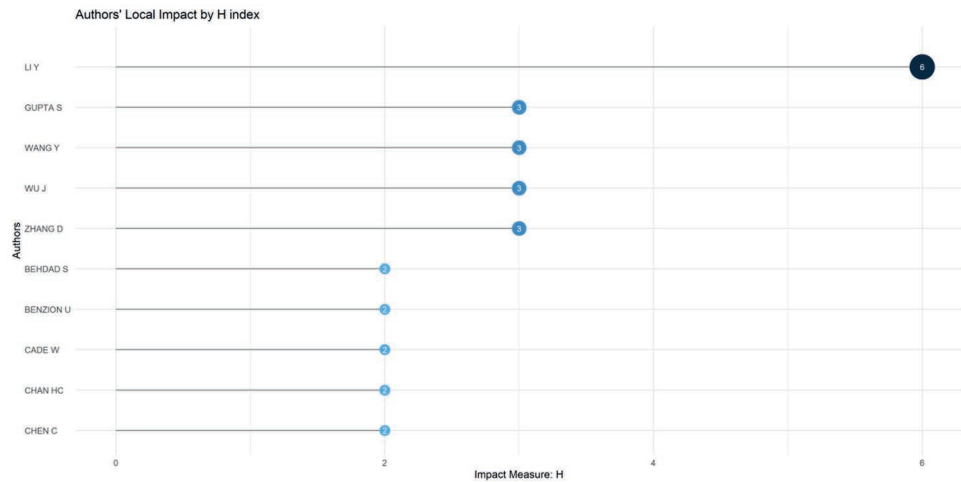
Figure 11: Impact of each author. Source: Author's own work.

The author evaluation in this study extends beyond quantity or relevance; it encompasses assessing the impact of each publication with a focus on Purchase Decision. The methodology involves calculating the H-index for individual authors, as portrayed in Figure 11. Alongside presenting the H-index values, the figure showcases the impact generated by each author. The observed H-index range in this analysis spans from 0 to 6. Li Y secures the top position with an H-index of 6, represented by the dark blue color. Following Li Y are Gupta S, Wang Y, Wu J, and Zhang D, each possessing an H-index of 3. Subsequently, Behdad S, Benzion U, Cade W, Chan HC, and Chen C hold an H-index of 2. Authors depicted with a light blue H-index exhibit a comparatively lower impact.

4.2.11. What are the most dominant keywords related to research on Purchase Decision?

Figure 12: Most dominant keywords. Source: Author's own work.

Figure 12 exhibits the predominant words within research connected to Purchase Decision in the form of a word cloud. This visual representation showcases frequently occurring words from a dataset of researched articles using keywords linked to Purchase Decision. The word cloud presents these words in different sizes, reflecting their frequency of occurrence. While the placement of words in the word cloud is random, the most dominant words will appear in the center and have a larger size. For this study, the word cloud is generated based on the analysis of article titles. From the analysis, the most dominant words related to Purchase Decision are identified, such as Sales, Electronic Commerce, Decision Making, Cost, Consumer Behavior, Purchasing, and Commerce. The majority of research related to Purchase Decision is closely related to the Sales issue. This indicates that Sales will be a critical determinant for achieving sustainable competitive advantage in future research.

4.2.12. What are other relevant keywords in research on Purchase Decision?
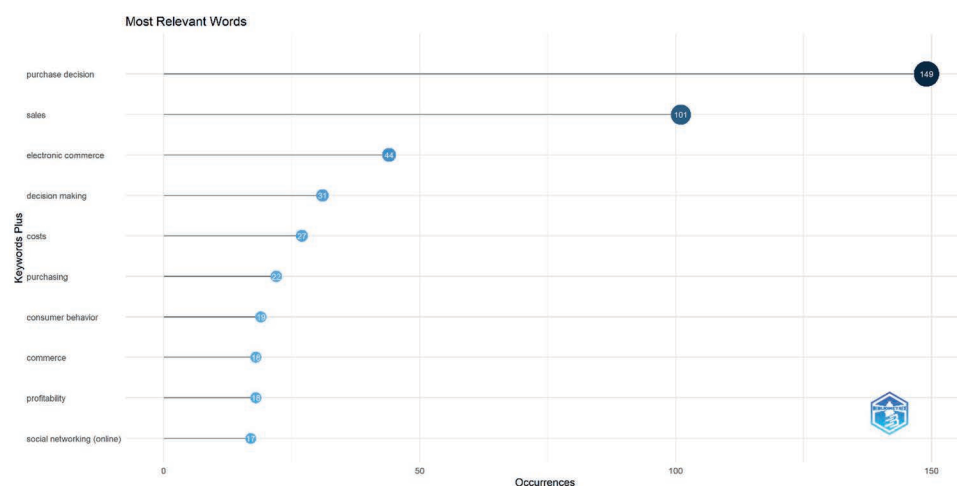
Figure 13: Other relevant keywords. Source: Author's own work.

The study on Purchase Decision incorporates numerous pertinent keywords, with frequencies ranging from 0 to 149 times, as depicted in Figure 13. The image above showcases the top 10 most relevant keywords utilized in this research. "Purchase Decision" emerges as the most frequently occurring keyword, noted with the highest count of 149 occurrences. Next, the keyword Sales ranks second most relevant to the research theme, with 101 occurrences. This is followed by the keyword Electronic Commerce as the third most relevant keyword to the research theme, with a total of 44 occurrences. This is followed by the keywords Decision Making, Cost, Purchasing, Consumer Behavior, Commerce, Profitability, and finally Social Networking (online).

4.2.13. What are the most dominant relevant keywords for research on Purchase Decision?

Figure 14: Most dominant relevant keywords. Source: Author's own work.

In the abstract document, significant words are visualized using a word tree map, presenting these words in box-shaped regions akin to maps, where the size of each box corresponds to the word's frequency. Figure 14 showcases the prominent words within research associated with Purchase Decision, such as Purchase Decision, Sales, Electronic Commerce, Decision Making, Cost, Purchasing, Consumer Behavior, Commerce, Profitability, and Social Networking (online). Most of the research related to the Purchase theme emphasizes Sales. This is because Sales is the primary focus for companies in maintaining the sustainability of their competitive advantage.

4.2.14. How is the evolution analyzed based on themes in research related to Purchase Decision?

The themes explored in the papers under scrutiny are likely to undergo changes, particularly in more recent publications. Figure 15 presents the transformation of themes analyzed in research concerning Purchase Decision. The visual representation adopts a rectangular shape, where the size of each rectangle corresponds to the frequency of theme usage. The development of these themes is categorized into two segments: on the left side, numerous frequently employed themes from 1988 to 2019 are depicted. Seven themes are presented, each represented with varying sizes corresponding to their respective frequencies of usage. The theme are "consumer product" occupies the first position, followed by "economics," "decision making," "decision theory," "purchase decision," "risk assessment," and lastly, "willingness to pay." Meanwhile, there

Figure 15: Thematic evolution. Source: Author's own work.

are 14 themes that were widely used from 2020 to 2023, namely "purchase deci-
sion," "economic analysis," "game theory," "willingness to pay," "consumer behavior,"
"costs," "Covid-19," "economics," "decision theory," "profitability," "consumption behav-
ior," "social networking (online)," "decision process," and "online platforms."

4.2.15. How to analyze thematic maps that emerge based on document titles with the theme of Purchase Decision?
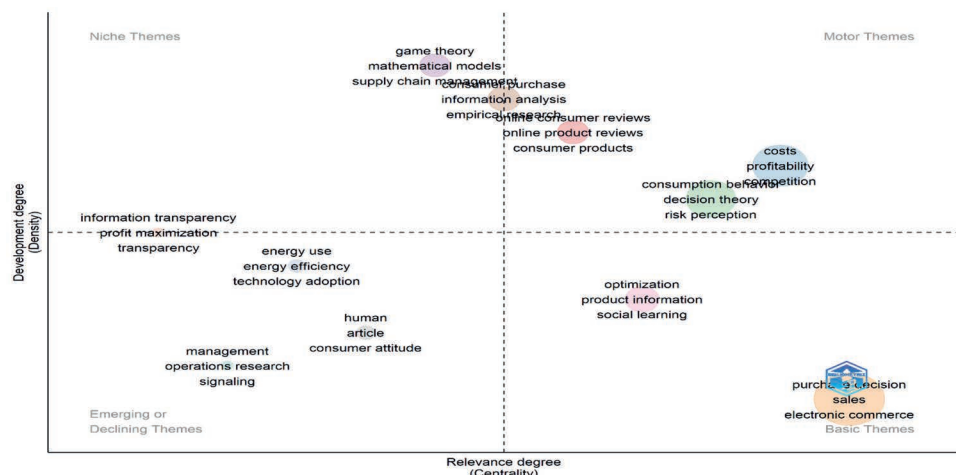

Figure 16: Thematic map. Source: Author's own work.

This research also analyzed the thematic map (Figure 16) that emerged based on
the document titles related to the research theme of Purchase Decision, Separated into

four quadrants. The findings were derived from utilizing a semi-automated algorithm that evaluated the titles of all references associated with the research object.

The upper-left quadrant encompasses rapidly emerging themes. This quadrant signifies highly specific and infrequently researched themes that exhibit significant development. The high density of keywords in this quadrant indicates this characteristic, coupled with low centrality. Themes encompassed in this quadrant include Game Theory, Mathematical Models, Supply Chain Management, and Information Transparency.

The lower left quadrant contains themes that have decreased. In this quadrant, themes that have been utilized extensively but exhibit a decrease in density and centrality are represented. Themes within this quadrant encompass Energy Use, Energy Efficiency, Technology Adoption, etc.

The upper-right quadrant can be considered as driving themes that have experienced an increase. This quadrant is characterized by both high density and centrality, indicating the need for further development and the importance of further research. Themes that emerge in this quadrant are Cost, Profitability, Competition, Online Consumer Reviews, Online Product Review, Consumer Product, Consumption Behavior, Decision Theory, Risk Perception.

The lower-right quadrant can be considered as driving themes that have experienced a decline. Themes that emerge in this quadrant are Optimization, Product Information, Social Learning, Purchase Decisions, Sales, and Electronic Commerce.

4.3. Discussion

Based on bibliometric analysis, several variables were found to be the most relevant in influencing purchase decision. Some of these variables are as follows.

The visualized results in the given figures provide valuable insights for researchers to pinpoint potential topics and introduce fresh contributions within the realm of Purchase Decision. The determinant factors of Purchase Decision obtained from the analysis include Sales, Electronic Commerce, Decision Making, Cost, Purchasing, Consumer Behavior, Commerce, and Profitability (as shown in Figure 17). These factors can serve as potential research areas to further investigate and explore in order to contribute new insights and advancements in understanding Purchase Decision.
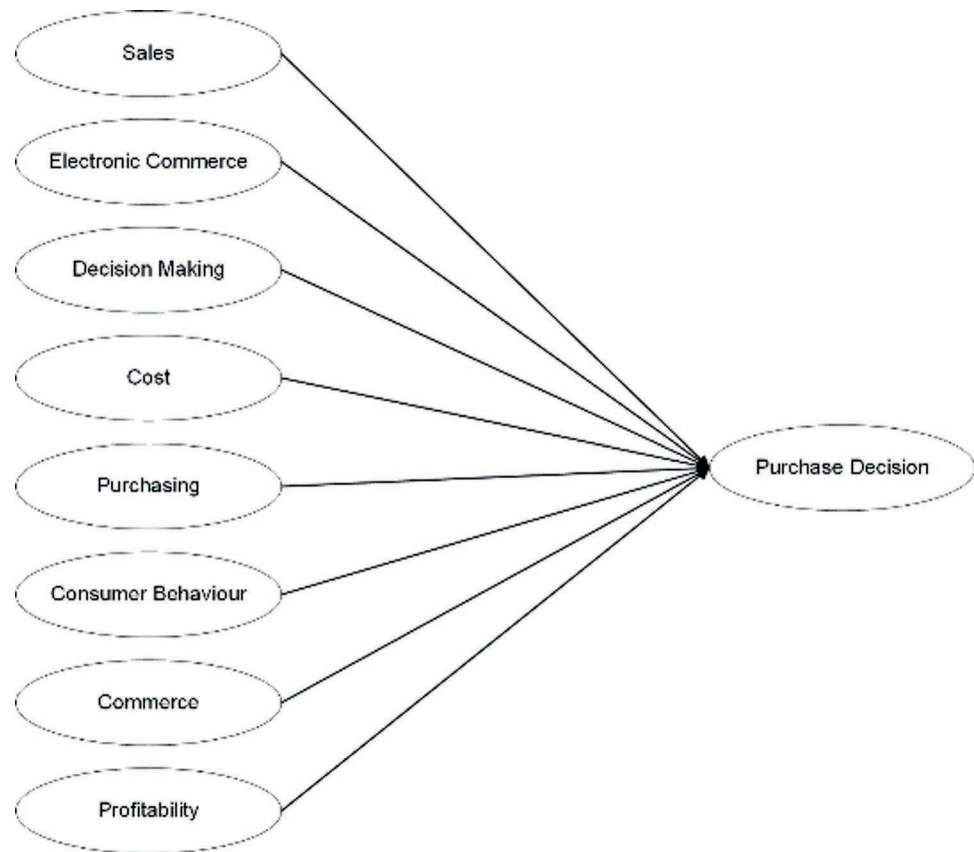
Figure 17: Purchase decision factor. Source: Author's own work.

5. Conclusion

According to the analysis results of the designed inclusion and exclusion criteria, several important findings are obtained, including:

Bibliometrics is beneficial in research using the SLR method to integrate the use of the Scopus electronic database within the realm of Purchase Decision.

Studies on Purchase Decision are conducted in numerous countries, spanning both developed and developing nations. Leading the research in this domain is the USA, contributing a total of 139 articles.

Research on Purchase Decision is conducted from various sources. It is observed that the annual production of research on Purchase Decision from all research production sources has shown a relatively upward trend from 2008 to 2023. However, there was no significant growth observed from 1988 to 2008. The journal "Decision Support Systems" had the highest research production on Purchase Decision in 2023, with a total of 22 articles.

The thematic evolution reveals numerous themes that are commonly employed from 2020 to 2023., including purchase decision, economic analysis, game theory,

willingness to pay, consumer behavior, costs, Covid-19, economics, decision theory, profitability, consumption behavior, social networking (online), decision process, and online platforms.

The "bibliometrix" library within RStudio, in conjunction with VOSviewer software, effectively conducted bibliometric analysis and quantitative data visualization sourced from Scopus. As a result, several determinant factors of Purchase Decision are identified, including Sales, Electronic Commerce, Decision Making, Cost, Purchasing, Consumer Behavior, Commerce, and Profitability.

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