# Green Marketing and Intention To Buy Green Product: Systematic Literature Review

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## ABSTRACT

Green marketing is a concept in which activities related to product, price, location, and promotion focus on environmental sustainability or environmental health, and more on environmentally friendly materials. So this research aims to analyze pre-existing literature on the topic of green marketing and consumer purchase intention towards green products, and conduct article mapping. The method used in this research is Systematic Literature Review (LSR) which is carried out by following the procedure and continued by conducting a meta-analysis to see the relationship in published articles. This research uses VOSViewer as a software tool and uses Publish or Perish to help the group data. The results of the study about green marketing and intention to buy green products output VOSViewer on co-authorship does not show the dominance of the name of a particular author in research related to green marketing and purchase intention to buy green products while in VOSViewer co- occurrence it is found that there are opportunities for renewal and green marketing, attitude, purchase decision, and marketing mix have a high enough linkage value.

## INTRODUCTION

Over the past few decades, environmental sustainability has been elevated to the top of the international political agenda and recognized as a key driver of innovation. As a result, the number of companies developing green products is growing rapidly, and consumer interest in these products is increasing. Therefore, understanding the main characteristics of green products, identifying factors that influence price and consumers' willingness to pay more for products, sales channels and promotional tools (4P's of Marketing) are essential for designing, developing and marketing green products (Dangelico & Vocalelli, 2017). Due to the increase in sustainable consumption, environmental consumers and ecological concerns in society, businesses have focused their efforts on providing green products and services to meet environmental needs (Nguyen-Viet, 2022).

The global green trend is creating new challenges and opportunities for entrepreneurs around the world with customers now more environmentally conscious and willing to pay extra for their green services and products (Khan et al., 2020). (Walia et al., 2019) tries to understand the dynamics of ever-present consumer attitudes and purchase intentions towards environmentally friendly products under the Fast Moving Consumer Goods category. In today's era, environmentally friendly products are

products that do not damage the environment, either in production, use, or disposal. In research (Pradana & Kartawinata, 2020) said that companies that are active in taking action to preserve the environment through strategic green marketing actions, especially focused on overcoming the problem of plastic waste in Indonesia, especially the disposable plastic packaging waste industry commonly used by fast moving consumer goods (FMCG), usually create sustainable growth / Sustainable Development Goals (SDGs) by having three major goals that apply the concept of implementing Triple P (People, Profit, Planet) for sustainable development.

In their research, (Huang et al., 2022) also pointed out that plastic consumption will continue to increase over time and with the growth of the global population, which may lead to an increase in the amount of plastic waste. Plastic waste is a typical industrial waste, and its disposal in landfills is a serious environmental problem (Moharir & Kumar, 2019). Based on this situation, businesses believe that consumers are willing to pay a high price for the eco- friendly products they consume.

As said (Luckyardi et al., 2022) in the study, the marketing mix can be said to be a form of strategy that combines many marketing activities that create the maximum combination so that it can produce a very satisfying result. Green Marketing emphasizes consideration of environmentally friendly aspects and development sustainability. Furthermore, products promoted with this green marketing method are products that must be environmentally friendly.

(Polonsky, 1994) states that the implementation of Green Marketing requires a fundamental and holistic approach to all aspects of the marketing function, including the overall marketing mix, namely targeting, pricing, design, positioning, and promotion. And there are four strategic variables in it, namely green product, green price, green promotion, and green consumption.

Apart from seeing the application of green marketing, consumer confidence in their choices influences their purchasing decisions (Kusumawati et al., 2021). (Türk & Erciş, 2017) states that there are other factors that influence purchasing decisions, namely consumer purchase intentions. According to (Walia et al., 2019) Purchase Intention This is a kind of purchase intention, which is defined as the willingness of consumers to buy environmentally friendly products. According to (Jogiyanto, 2004) intention itself is a motivation that comes from the need to achieve important goals. This leads to a person leaning towards objects that are considered more important. The more a person focuses on these items, the more they need to achieve their goals. Furthermore, they must focus on goals that are considered less important to achieve success.

This study mainly describes and systematizes the existing literature on green marketing which has an influence on purchasing decisions which will be mediated by purchase intention. The purpose of this study is to describe the characteristics and interrelationships of relevant studies to produce a structured systematization of their content and results and establish limitations and gaps in existing knowledge.

According to (Zhu & Sarkis, 2016) green consumers are consumers who tend to choose environmentally friendly products. As well as products manufactured with environmentally friendly materials and in the distribution system aimed at protecting the environment and developing advertising and communication tools. And (Papadas et al., 2017) also mentioned that the digital component added to green marketing can be said to be practical, and digital also has an ecological component by reducing paper consumption and energy consumption.

But according to (Pelau & Acatrinei, 2019) it should be noted that this behavior is not necessarily determined by consumers' ecological attitudes, but can also be obtained from the benefits of digitalization that result in consumer activities. Thus, the impact on the environment can be a side effect of digitization and the environment is not necessarily related to ecological behavior. This has also been confirmed by other researchers who show that digital behavior can reduce energy consumption. Therefore, ecological elements applied in the marketing mix, such as green products, distribution or communication, are closely related to ecological behaviors and attitudes (Cuc et al., 2022).

Purchase intention can be defined as "the likelihood that a consumer will intend to purchase a product or service in the future". Positive intentions encourage consumers to make actual purchase actions or negative purchase intentions hold consumers back from buying. There is consensus among experts that studies can also use purchase intention as an important indicator for estimating consumer

behavior (Mahmoud et al., 2017). But according to (Chan et al., 2017) Employees' ecological behavior is noticed as one of the ways to gain and maintain a competitive advantage in a changing market and the successful implementation of green practices depends on employees' knowledge, awareness, and concern for environmental programs.

Starting from current ecological behavior and attitudes, (Cuc et al., 2022) measured the impact that has the availability to buy environmentally friendly products, the desire to have an environmentally oriented lifestyle, and the willingness to pay higher prices for environmentally friendly products and gave significant results on consumer ecological behavior. Meanwhile, according to (Chan et al., 2017) which states that the process of ecology and employee behavior takes a long time and takes a lot of effort, the dissemination of organizational information is very important. When employees receive messages from top management exhibiting the implementation of important environmental practices, their awareness arises and makes them focus on environmental protection. It can be said that ecological buying, lifestyle, and willingness to pay are less significant.

Therefore, in this paper, we will study the impact of green marketing on consumers' ecological behaviors and attitudes and their willingness to purchase green products. We will examine the influence of green marketing tools on ecological attitudes and behaviors from an empirical perspective. We will also examine the extent to which ecological behavior influences the willingness to purchase green products, pay a higher price for them, and live an eco-friendly lifestyle. These structures will be linked to future purchase intentions of green products through mediation models. The findings contribute to the literature by empirically measuring the effects of marketing mix policies on ecological behavior and future intentions to purchase green products. E-marketing tools have makes a special contribution in reducing the amount of paper used for marketing advertising materials.

## RESEARCH AND METHOD

A systematic literature review is used to represent a field mapping method and is used to track the latest research developments needed to analyze journals that have been published to answer some specific research. The Systematic Literature Review (SLR) method follows established procedures and allows the literature review process to avoid bias and subjective understanding. This method uses meta-analysis to see the statistical distribution and relationship in published articles. In this study, researchers used VOSViewer and Publish or Perish software for data grouping.

Literature review conducted is **Fig 1**. Paper Selection Process Chart by looking for Green Marketing themes and Green Product Purchase Intention which are used as keywords in the search on the Publish or Perish software. In Publish or Perish there are two search engines used, namely Google Scholar and Scopus. Furthermore, it includes several limitations in the journal search process such as research articles, the number of journals to be displayed and journal years ranging from 2017 to 2022. The next stage is to carry out the search process using the keywords green marketing and green product purchase intention. The total results obtained were 865 journals with details of google scholar as many as 450 journals and scopus as many as 415 journals. The next process is the filtering process by pruning several journals and finding relevant journals using the keywords ecological buying, lifestyle, and willingness to pay more for green products to read the titles and keywords. Journals that are not included in the criteria will be eliminated. Next is to read the abstract of each journal, which if the journal is relevant to the theme to be studied then it will be included while journals that do not match the criteria will be eliminated again. The next process is to read the journal as a whole in order to find a more complex relevance to the theme under study. After reading the entire journal, the remaining journals are used in the literature review process. And the last stage is to determine the results and conclusions drawn from the literature review process.
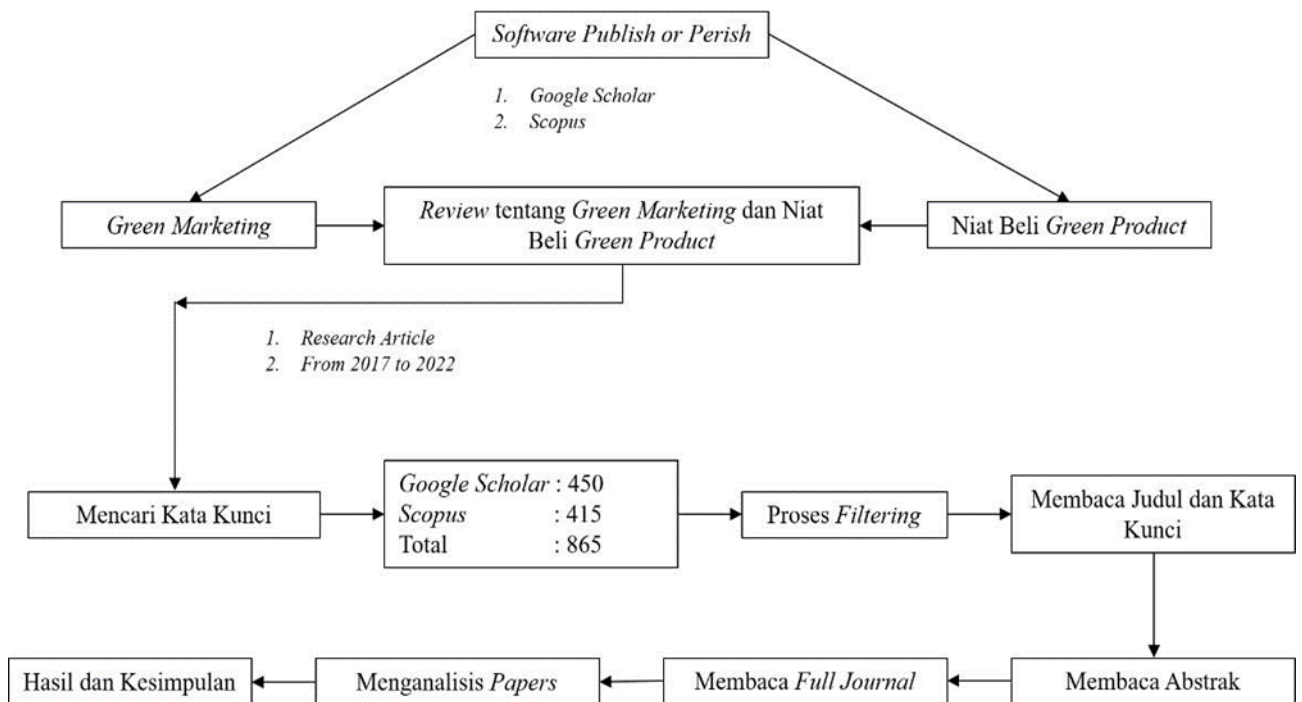
**Fig. 1** Paper Selection Process Chart

Bibliometric analysis refers to quantitative research that has been published in journals in a particular subject area. Bibliometric analysis itself is a method of measuring literature using statistical methods, so it is included in the application of quantitative analysis. Bibliometric analysis describes future research approaches in a selected field. A total of 34 article files were entered into the VOSViewer software. This data contains information about each article, such as author, title, year of publication, doi, abstract, affiliation, keywords, references, and journal.

Clustering is one of the data grouping methods. Clustering is the process of classifying data into several clusters or groups so that data in one cluster has the greatest similarity, and data between clusters has the least similarity.

Data Clustering is the most effective way to understand and research the proposed topic. Data clustering supports infrastructure discovery, natural clustering, and data compression. In this study, journal clustering is based on co-occurance and co-authorship.

Co-occurance based clustering is used to find the relationship and similarity of multiple items (words, phrases) in multiple documents in a single document the data set being analyzed. While clustering based on co-authorship was used to find the relationship of various studies based on research documents provided by researcher.

## RESULT AND DISCUSSION

Co-authorship networks are an indicator of cooperation in research and a strategy that can be used to increase the quantity and quality of scientific publications. To look at the shape of the author network, "social network analysis" is used, which focuses on the interactions that occur between related participants. Co- authorship analysis was used to find relationships between different studies based on the research documents provided by the researchers. In research related to green marketing and purchase intention to buy green products, 34 research journals have been used. In the next step, using the VOSViewer software to perform co-authorship analysis with the specification of the unit of analysis to be addressed is "authors". The results of co-authorship that have been carried out in the VOSViewer software are shown in **Fig 2**. Furthermore, from the results of data processing using the VOSViewer software, the visualization results of the 34 journals obtained clusters including 1 cluster with 34 items

that have been selected. **Fig 2** explains the cluster that shows the relationship between the author (chen, h) and other authors who are netted in the cluster.
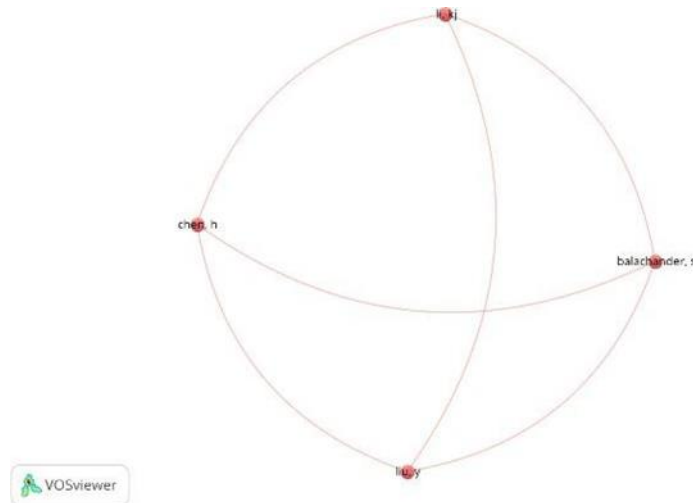


**Fig. 2** Relationship between the author

The larger the node size, the more often the author name appears in the dataset, or means that clusters in the co-authorship analysis output A dominant author on a particular research topic because he or she has a strong network of writing relationships with other authors.

To show the dominance of journals cited in the 34 journals that have been focused on, data collection is carried out by looking at the various citation indices of each journal, which will then be analyzed in VOSViewer using Co-occurrence Analysis.

Co-occurrence Analysis itself is used to find the relevance and various similarities of several items such as words or phrases from several documents from various data sets to be analyzed. This analysis itself was carried out on 34 selected journals with the specification of the journal analysis unit in the form of "keywords" and the number of occurrences of keywords at least once. So that 4 clusters are obtained with 34 items selected from the visualization. The co-occurrnce analysis output can be seen in **Fig 3**.

So that all clusters that have been visualized have a relationship with other clusters. For example, we can see in Figure 3 that the word "green marketing" has the largest node comparable to the word "marketing mix" so that the word "green marketing" has external links such as marketing mix, purchase decision, attitude, green purchase intention, green marketing mix, and so on. So that the bigger the node, the higher the frequency of words that will appear in a cluster.
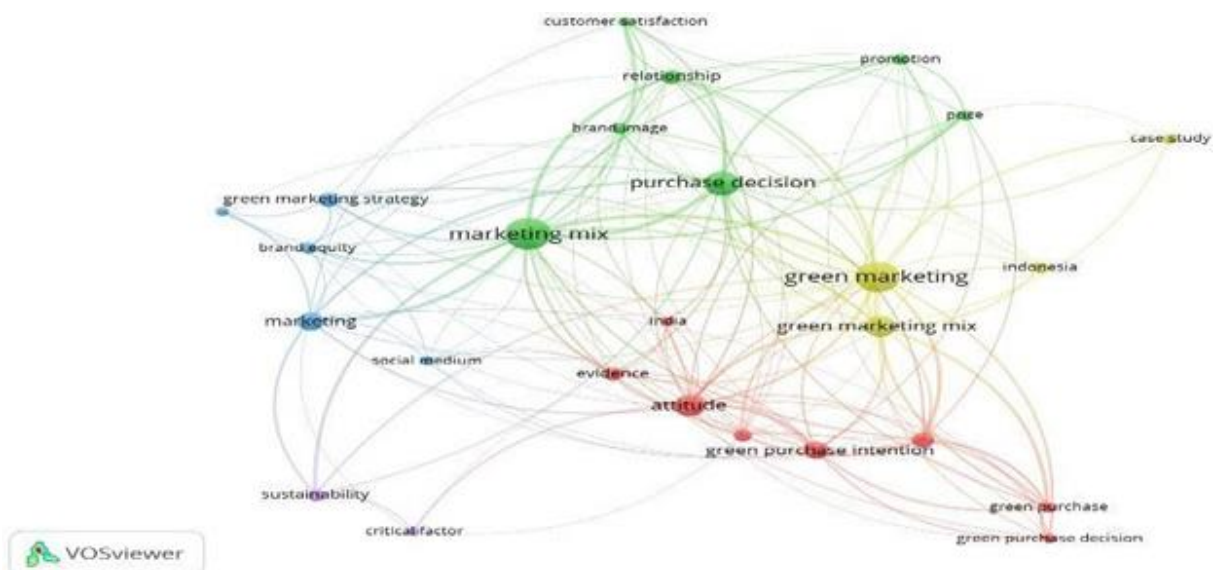
**Fig 3.** Co-occurrence Output

Process (the procedures, mechanisms and flow of activities by which services are delivered to customers), physical evidence (implying the environment that facilitates service transactions or influences perceptions, ambient conditions, spatial layout, signs and symbols, etc.), where on the one hand are employees and on the other hand are service consumers as co-producers and other consumers, as people who can influence the overall perception (Salman et al., 2017).

Research methods are closely related to the type of research study used. Based on the 34 types of research journals, a descriptive analysis was conducted by compiling the methodology used in each journal such as framework & conceptual, empirical study, modeling, and performance conceptual.

**Table 1.** List of Case Study Country Names

| Author | Country |
|---|---|
| Chen. C.C, 2018 | Switzerland |
| Liu, Y, 2018 | USA |
| Dangelico, 2017 | Italy |
| Kumar et al. | UK |
| Luckyardi et al, 2022 | Indonesia |
| Nguyen-Viet. B, 2022 | Vietnam |
| Walia et al, 2019 | India |
| Untaru et al, 2019 | Romania |
| Papadas et al, 2017 | UK |
| Okumus et al, 2019 | USA |
| Mahmoud et al, 2017 | United Emirates |
| Jaciouw. M, 2021 | Poland |
| Hojnik et al, 2021 | Slovania |
| Cuc et al, 2020 | Romania |
| Confente et al, 2020 | Italy |
| Chan et al, 2017 | Hong Kong |
| Arshad et al, 2022 | Pakistan |
| Putri et al, 2021 | Indonesia |
| Ahmed et al, 2022 | USA |
| Sukaatmadja. I. 2020 | Indonesia |
| Astuti et al, 2021 | Indonesia |
| Dominko. M, 2018 | Slovenia |

Table 1 above shows some of the dominant countries used as case studies in this study, namely Indonesia, because there are as many as 4 journals that have conducted research or research related to green marketing and purchase intention to buy green products and case studies in Indonesia. Several recent papers or journals have also taken case studies in Indonesia such as (Luckyardi et al., 2022), (Sukaatmadja, 2020), and (Astuti et al., 2021)

So that from the results of this study, the results of mapping several previous studies were obtained which will be future opportunities for future research. And based on the bibliometric analysis, it does not show the dominance of certain author names in research related to the topic of green marketind and purchase intention to buy green products, there are several opportunities for renewal and green marketing and marketing mix have a high relationship.

## CONCLUSION

Based on the results of the study conducted, it can be concluded that bibliometric analysis can assist researchers in seeing the distribution of research and opportunities for research. Based on the results of the VOSViewer output analysis on co-authorship, it does not show the dominance of names in certain authors in research related to green marketing and purchase intention to buy green products, while in

VOSViewer co- occurrence it is found that there are opportunities for renewal and green marketing, attitude, purchase decision, and marketing mix have a high enough linkage value. Based on the results of descriptive analysis and the results of analysis using Publish or Perish software, 865 journals were found and then re-analyzed by looking for links to the titles taken so as to get 34 journals that have links to the themes taken based on the range of 2017 to 2022. Of the 34 journal titles taken, the country of Indonesia is the origin of the authors and the most case studies related to the theme of green marketing and purchase intention. So that the contribution of this literature review is obtained journal mapping based on author, location of the dominating case study, so that updates will be obtained for future research. Future research is expected to be developed again for other countries that buy reviewing previous papers.

This study provides an in-depth analysis and synthesis of the body of knowledge so far generated in the field of Green Marketing. Our study largely confirms the trend in the evolution of the number of articles on Green Marketing found in the previous study review (Kumar et al., 2013) and extends it to the last few years starting from 2017 to 2022. Our review analyzes the meaning of Green Marketing and related concepts, its basic properties, the steps to define the strategy and the components contained in green marketing. Our analysis also explores the relationship between green marketing mix and purchase intention and the relationship between green marketing mix and purchase decision.

In terms of implications for companies, this research provides a clear picture of directions to the growing number of innovation and marketing firms that want to integrate environmental sustainability into their strategies on how to develop and implement a Green Marketing Strategy. Furthermore, this review highlights some issues seemingly relevant across more than one Green Marketing Mix element or Green Marketing Strategy step.

In terms of implications for students, this research, by integrating existing studies on the topic, provides a comprehensive theoretical framework, and, by highlighting aspects that are not adequately addressed in the existing literature, suggests directions for future research.

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