

## **BIBLIOMETRIC ANALYSIS: RESEARCH TRENDS ON ELECTRONIC WORD OF MOUTH, LIFESTYLE, DISCOUNTS, AND PRICE PERCEPTION TOWARDS IMPULSIVE BUYING BEHAVIOR IN ONLINE SHOPPING AMONG GENERATION Z**

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**Abstract:** Information technology's explosive growth has permeated many industries, including shopping. People's busy lives and the advancement of internet technology have made it unnecessary for people to leave their homes to shop for their needs, including Generation Z. Various variables also influence their decisions in choosing the desired products, which has led to the emergence of many studies to investigate what variables influence online shopping decisions. This study aims to investigate research trends, research gaps, and to see the opportunities and novelty of research related to the influence of impulsive buying among Online shopping by Generation Z, with a focus on e-wom, lifestyle, discounts, and price perception . This study uses a bibliometric analysis with data taken from Google Scholar with a research range between 2019-2024, and assisted by VOSviewer software

## **INTRODUCTION**

Since the COVID-19 pandemic hit Indonesia, it has led to several changes among people's actions, one of which is a propensity for to engage in online shopping compared to conventional shopping at physical stores or shopping malls. This shift in consumer behavior towards online shopping has prompted e-commerce businesses to compete fiercely to attract customers. E-commerce refers to the process of transactions between buyers and sellers in conducting the sale and purchase of specific products through electronic media, using computers as a medium for business. (Loudon, 1998 in Maulana, 2015). In today's digital era, e-commerce can operate effectively. Services can be accessed using the internet and can be reached through smartphones.

The trend of online shopping has penetrated various segments of society, including Generation Z. For this generation, shopping is not only driven by needs but also by desires. In economics, this tendency to make sudden and unplanned purchases is called impulsive buying.

Impulsive buying is often triggered by emotional or instinctive urges, without careful consideration of actual needs or financial capabilities. Individuals who make impulsive purchases are often tempted by factors such as big discounts, promotions, attractive product displays, or social pressure. In this study, which primarily focuses on Generation Z, various variables influence the impulsive buying decisions made by this generation in online shopping, including the influence of e-wom, lifestyle, discounts, and price. This is certainly a very interesting topic to be researched by academics, company marketers, and the government to be able to take various policies.

Therefore, the problem raised in this study is how much research has been conducted between 2019 and 2024 that examines the influence of the variables of e-wom, lifestyle, discounts, and pricing on Generation Z's hasty online purchasing habits. With a focus on the variables of e-wom, lifestyle, discounts, and pricing perception, the study aims to explore research trends, research gaps, and the potential and uniqueness of research related to the influence of impulsive buying among Generation Z in online shopping.

## **LITERATURE REVIEW**

### **Impulse Buying**

Impulse buying refers to unplanned purchases made on a whim, driven by a strong desire to possess something and characterized by quick decision-making (Widiyati & Ghozi, 2018). Syastra & Wangdra (2018) argue that impulsive buyers often make decisions without careful consideration or rational reasons, leading to a disregard for the consequences of their purchases. Impulsive buying is also characterized as spontaneous purchasing triggered by product displays and promotions at the point of sale. Additionally, Nawaz (2018) suggests that consumers' feelings after being exposed to stimuli in the shopping environment can further drive impulsive buying behavior. Moreover, technological advancements have transformed consumer shopping habits from traditional methods to online shopping, giving rise to the phenomenon of online impulse buying.

### **E-WOM, OR ELECTRONIC WORD-OF-MOUTH**

The practice of consumers writing and discussing goods and services on social media platforms based on their own thoughts, assessments, and experiences is known as electronic word-of-mouth, or e-WOM. This can serve as a valuable source of information and recommendations for other consumers (Sian & Brandinie, 2022). E-WOM can be employed

as a strategy to build trust in consumers' decision-making processes. Ali (2020), as cited in Fakhrudin et al. (2021), suggests that word of mouth has three key indicators: 1) Individuals discuss their experiences and the quality of a product; 2) People recommend products to family and friends; 3) Individuals encourage others to try a product by introducing it to their acquaintances.

## **Lifestyle**

An individual's lifestyle can be observed through their behaviors, such as the actions done to obtain or make use of products and services, as well as the choices made during these actions. Consumers with high purchasing power, coupled with ample free time and financial resources, are more likely to engage in impulsive buying (Darma & Japariato, 2014).

According to Alinda Mahdiyan (2019), there are two main factors influencing an individual's lifestyle: internal factors and external factors. Attitudes, observations and experiences, personality, self-concept, motivations, and perceptions are examples of internal factors. The following are the explanations for these factors: 1) Attitudes: Attitudes refer to a state of mind and a readiness to respond to an object; 2) Experiences and observations: Experiences can influence social observations of behavior, and the results of social experiences can shape views towards an object; 3) Personality: Personality is the configuration of individual characteristics and behavioral patterns that differentiate individuals; 4) Self-concept: This describes the relationship between a consumer's self-concept and brand image. How an individual perceives themselves will influence their interest in an object; 5) Motives: Individual behavior arises from motives, such as the need for security and the need for prestige. If an individual's motive for prestige is strong, it will tend to shape a hedonistic lifestyle; 6) Perception: Perception is the process by which an individual selects, organizes, and interprets information to form a meaningful picture of the world.

## **Discounts**

There are several definitions of discounts and price reductions proposed by various experts. According to Kotler (2003), a discount is a direct reduction in the price of a product purchased during a specified period. Meanwhile, Tjiptono (2007) defines a discount as a price reduction offered by a seller to a buyer as a reward for specific activities that benefit the seller. Based on these definitions, it can be concluded that a discount is a price reduction offered by a seller to attract consumers to purchase a product within a specified time period.

## **Price Perception**

Price perception occurs when consumers evaluate the value of a good or service relative to the benefits they receive from it. According to Hayati (2019) in Jayanti et al. (2020), price perception determines whether a product is perceived as expensive, cheap, or standard. Kotler, as cited in Suhandi et al. (2021), states that factors influencing price perception include price, quality, competitiveness, and product benefits.

## **Shopping Behavior Patterns of Generation Z**

When making purchases, Generation Z exhibits specific behavioral patterns. As consumers, they tend to be highly informed. They often observe and consider a product and its benefits before making a purchase decision. The following are some of the shopping behavior patterns of Generation Z:

1. Generation Z pays close attention to promotions and visual displays when shopping online.
2. They tend to prefer online shopping as it is considered more effective and efficient.
3. Generation Z is more easily influenced by influencers due to their deep engagement with digital media such as Instagram.
4. Shopping is done to meet both needs and wants, or as a form of entertainment.
5. Before making a purchase, this generation will compare prices to find the cheapest option that they feel is suitable.

## **RESEARCH METHODOLOGY**

Bibliometrics is the method employed in this study., assisted by the VOSviewer software, with data collected from Google Scholar. The reason for choosing bibliometrics is that it is a simple and cost-effective research method in the field of library science. Hakim (2020) defines bibliometrics as the study of measuring the development of research, literature, books, or documents in a particular field, both quantitatively and qualitatively, using statistical methods. Descriptive bibliometrics and behavioral bibliometrics are the two primary categories of bibliometrics. Descriptive bibliometrics describes the characteristics of a literature, while behavioral bibliometrics examines the relationships formed between the components of that literature (Royani, Tupan, & Kusumaningrum, 2019). Furthermore, Tupan (2016) states that Nicolai (2010) explains that the application of bibliometrics can be divided into two parts: 1) the calculation of bibliometric (performance) indicators at different behavioral levels; and 2) the analysis and visualization of bibliometric networks.

Analysis using bibliometric indicators is divided into descriptive bibliometrics and evaluative bibliometrics (Van Leeuwen in Nicolai, 2010). Evaluative bibliometrics is a tool for assessing the bottom-up strategy, which entails gathering all pertinent publications from each unit, to assess the research performance of smaller units, such as research groups or individuals. Because the PoP application is free and has the ability to filter the appropriate journal categories, the researcher used the Google Scholar database with it. Data was collected using the publication name of journals and keywords: ELECTRONIC WORD OF MOUTH, LIFESTYLE, DISCOUNT, PRICE PERCEPTION, IMPULSIVE BUYING, ONLINE SHOPPING, and GENERATION Z, within the period of 2019-2024, as shown in Figure 1.

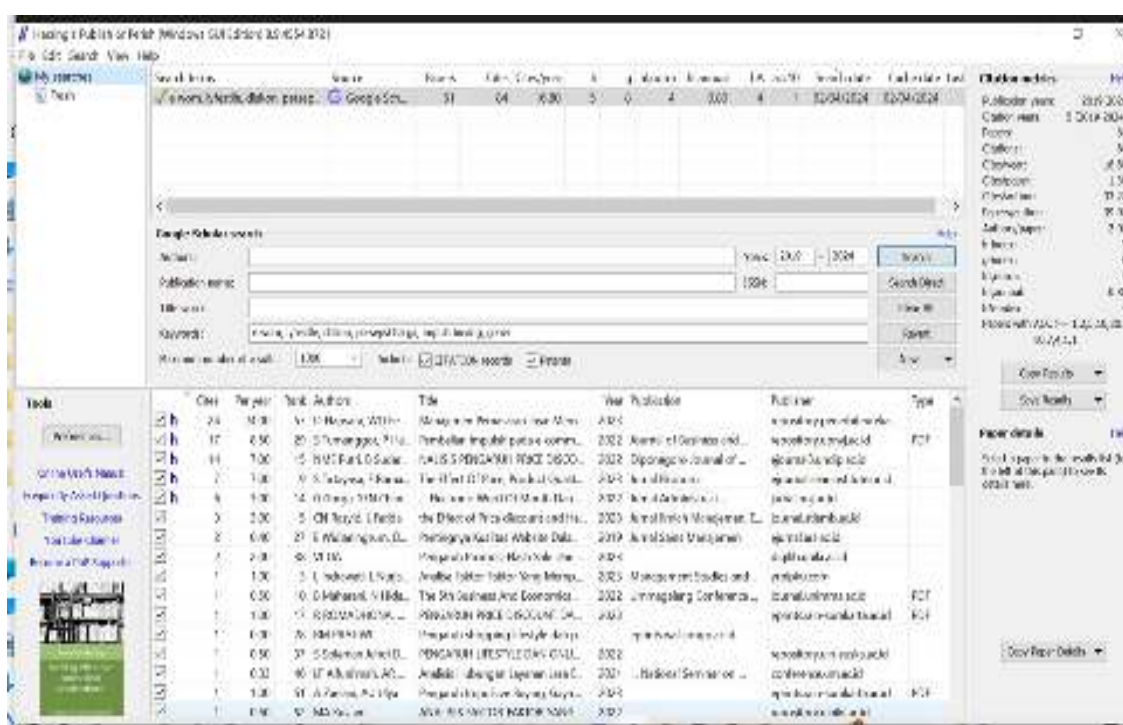


Figure1. Results from Publish or Perish using Google Scholar as the source, with the research period spanning from 2019 to 2024.

Based on the results of the search, 61 articles were identified. The analysis of the development of international publications was conducted using the VOSviewer application, as this application allows for the creation of research clusters and is free of charge.



## RESULTS AND DISCUSSION

### Number of Studies

Based on a search conducted in the Google Scholar database, research on the influence of the variables **word of mouth**, **lifestyle**, **discounts**, and **price perception** on **impulse buying decisions** for **online fashion products among Generation Z** during the period 2019–2024 exhibited fluctuating trends. Research in this field showed a significant increase in 2023, ranking first in GS Rank, as shown in Table 1.

From the 61 research articles identified through the Google Scholar database, the selection process narrowed the results down to the top 20 core journals in the field of consumer behavior as published on Google Scholar.

Cites	Authors	Title	Year	Source	Gsrnk
79	F Sudirjo, Lna Lotte, Int Sutaguna...	The impact of Gen Z consumer behavior on e-commerce shops' buying incentive	2023	Profit: jurnal ...	1
5	V Pratama, Aa Nugroho...	Pengaruh hedonic shopping motives dan social media product browsing terhadap online impulse buying produk fashion pada gen-z di pangkalpinang	2023	... bidang ekonomi dan ...	2
0	As Azzahra, D Wiryawan...	Pengaruh motivasi belanja hedonis dan promosi penjualan terhadap pembelian implusif (studi kasus pada generasi z pengguna shopee di bandar lampung)	2023	Innovative: journal of ...	3
0	D Puspitasari, J Chikmiyah	Pengaruh persepsi kemudahan penggunaan dan fomo terhadap pembelian impulsif pada gen z pengguna shopee pay later	2024	Journal of comprehensive ...	4

0	A Saputra, Vd Nurmalia	... Using happy emotions as an intervening variable in adolescent generation Z online stores to motivate impulse purchase	2023	Perbanas international seminar on ...	5
0	Bf Putri, S Slamet, Kdc Sari	Pengaruh generasi dan gender konsumen pada perilaku pembelian impulsif pengguna pay later	2023	Neraca: jurnal ekonomi, manajemen ...	6
7	I Deborah, Ym Oesman, Rtb Yudha	Hedonistic shopping motivation and shopping orientation in relation to social media and impulsive purchasing behavior	2022	Jurnal manajemen maranatha	7
0	Lg Purnama, Y Hendayana, A Sulistiyowati	Pengaruh brand ambassador dan flash sale terhadap impulse buying consumer di marketplace shopee pada generasi z	2024	... : jurnal manajemen dan ...	8
3	A Renaldi, Ra Nurlinda	Pengaruh hedonic shopping motivation dan sales promotion terhadap impulse buying melalui positive emotion	2023	Journal of advances in digital business ...	9
0	G Wijayanto, Nwsd Saraswati...	Gender-mediated hedonic and utilitarian browsing on impulsive online purchases in Generation Z at Shopee	2023	Proceeding of ...	10
2	A Qomariyah, Ga Qibtiah...	Financial literacy, impulsive buying behavior, and the z-gen	2022	Review of integrative ...	11
1	Lv Halim, V Hariyanto, A Yudiarso...	Understanding impulsive buying for fashion products in generation z	2023	20th insyma ...	12

1	W Arini, Pt Jessica, T Yuanita...	Does online advertising and purchasing motivation have an impact on compulsive buying?	2021	Jurnal ekonomi ...	13
2	Mr Masitoh, Gt Prihatma...	Effects of sales promotions, hedonic browsing, and the propensity for spontaneous purchases on Shopee customers	2022	Sains manajemen ...	14
0	N Astiti, My Rachman	Analisis motivasi belanja hedonis dan promosi penjualan pada pembelian impulsif konsumen shopee di kota banjarmasin	2024	Jurnal pendidikan tambusai	15
0	M Zhulal, Sa Marits, S Herman	The buying habits of Generation Z in the digital economy: a normative examination of online marketplaces	2023	Jurnal ilmiah manajemen kesatuan	16
4	Vf Sanjaya, Li Faiyah	Pengaruh flow experience dan moderasi promosi selama masa pandemi.	2022	Inobis: jurnal inovasi bisnis dan manajemen ...	17
15	A Halik, M Nugroho	The part that customer satisfaction plays in reducing the impact of price reductions and content marketing on generation Z's online purchasing decisions and loyalty	2022	Media ekonomi dan manajemen	18
0	Ws Ringo, Sa Salqaura...	The impact of gamification, shopping culture, and hedonic shopping value on impulsive purchases among	2023	International journal of ...	19



		generation z tiktok shop users in medan city			
5	D Masida, A Fauzi	Pengaruh potongan harga, daya tarik iklan dan user friendly pada aplikasi dompet digital terhadap pembelian impulsif konsumen generasi milenial	2022	Jurnal ekonomi dan manajemen	20

### Most Productive Researchers

The mapping of research developments on variables influencing consumer behavior in impulse buying utilized VOSviewer 1.6.16 for the study. The researchers used the "create a map based on bibliographic data" option when choosing the data type. The researchers used files from reference manager software, which supported the RIS file type, as the data source. With a minimum of six documents per author, complete counting was the counting technique employed.

The results, as shown in Figure 2, identified 15 items selected by the researchers that were relevant to the keywords, forming four clusters distinguished by various hues. There are six items in Cluster 1 (red), five in Cluster 2 (green), three in Cluster 3 (blue), and three in Cluster 4 (yellow).

Each item within a single cluster represents variables that are closely related and mutually influential. Conversely, variables located in different clusters and positioned far apart in the network visualization indicate a lack of proximity or influence (gap). For instance, **product quality**, which is found in Cluster 3, is not a significant variable in influencing impulse buying within Cluster 1. This is evident because the two variables not only belong to different clusters but are also positioned far apart in the network visualization.

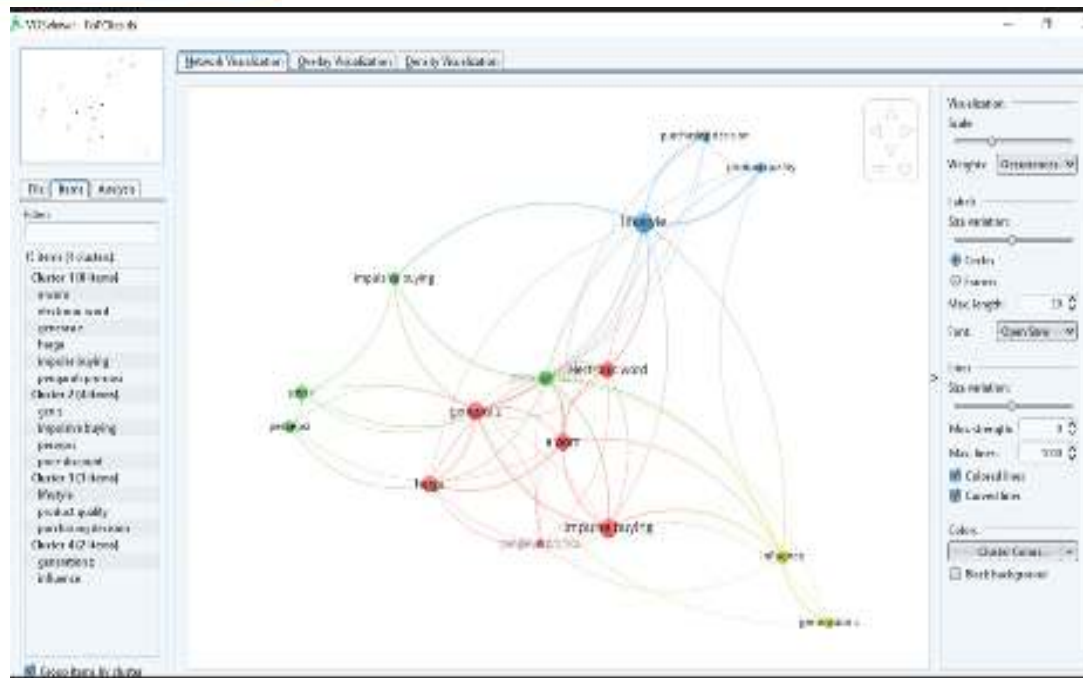


Figure 2. Network Visualization

Figure 3's Overlay Visualization makes it clear that the more vivid the color, the higher the novelty of the research. In this study, the variables **Gen Z** and **Influence** are identified as relatively new areas of research. Meanwhile, variables such as **Price** and **E-WOM** were more extensively researched in 2022.

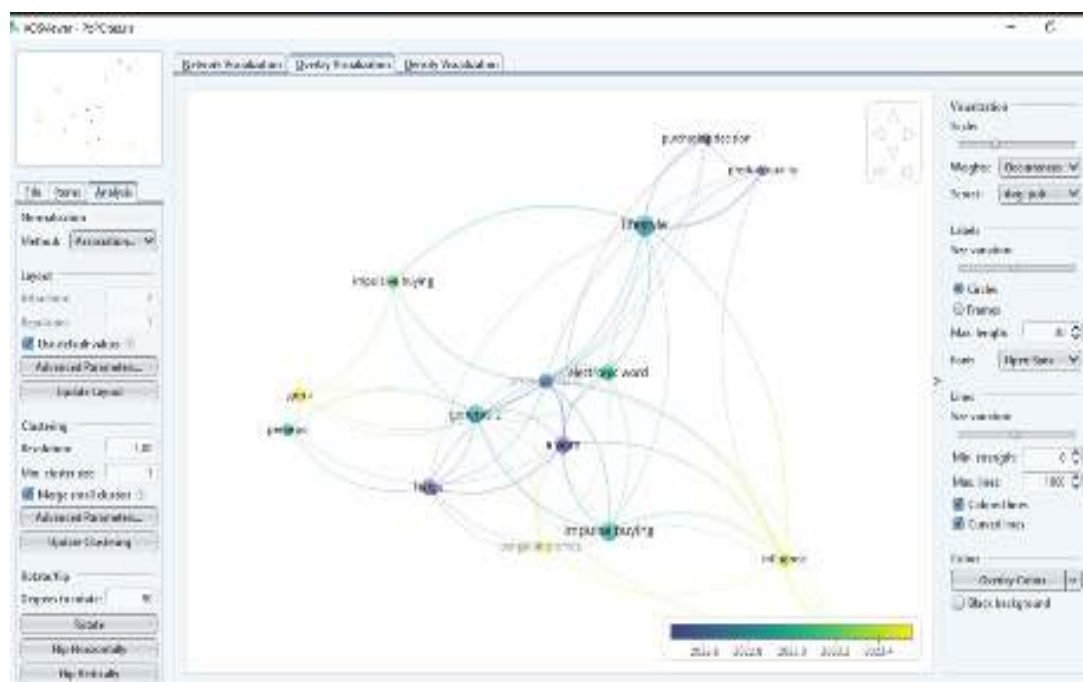


Figure 3. Overlay Visualization

## Mapping the Development of Research

The mapping VOSviewer 1.6.16 was used to conduct a study on how pricing, discounts, lifestyle, and E-WOM affect Generation Z's online impulsive purchasing decisions. The researchers used the "create a map based on text data" option as the data type for this procedure. They used reference management files with the supported file type RIS as the data source.

Binary counting was the counting technique employed, with a minimum of 10 term occurrences and a maximum of 35 terms to be chosen. The results generated a **density visualization**, as shown in Figure 4.

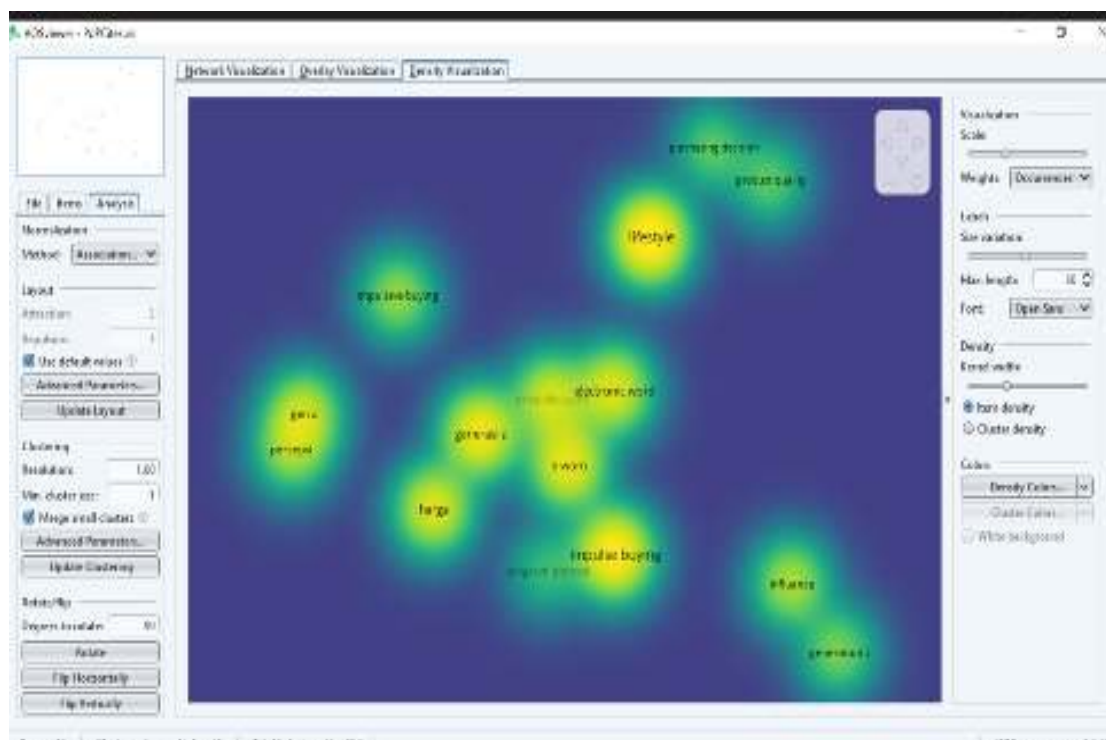


Figure 4. Density Visualization

From the results displayed in the **Density Visualization**, it is evident that the brighter the color, the more recent the research. This indicates that studies related to the variables **electronic word of mouth**, **price**, **lifestyle**, **Generation Z**, and **impulse buying** are research themes that are still relatively new and emerging.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the bibliometric analysis conducted through mapping metadata from economics journals retrieved from Google Scholar using keywords **E-WOM**, **Lifestyle**,

**Discounts, Price Perception, Impulse Buying, Online Shopping, and Generation Z** within the 2019–2024 timeframe, and further analyzed using VOSviewer, the following conclusions were drawn:

1. A total of 64 studies related to the keywords mentioned above were identified in Google Scholar.
2. Research trends on the influence of **E-WOM, lifestyle, discounts, and price on online impulse buying decisions among Generation Z** showed fluctuating patterns, with the highest number of studies conducted in 2023.
3. Variables such as **E-WOM, price, Generation Z, and impulse buying** are grouped within the same cluster, indicating their potential as dependent or independent variables for future studies. In contrast, variables like **product quality** and **lifestyle** are in separate clusters, presenting opportunities for research gaps in future studies.
4. Variables such as **E-WOM, lifestyle, Generation Z, and impulse buying** are relatively new research topics, as indicated by the bright colors in the Density Visualization.

## Recommendations

The following recommendations are provided to enhance future research:

1. To improve the comprehensiveness of research, future researchers are advised to utilize additional data sources such as **Scopus** and **Semantic Scholar** for comparison, alongside Google Scholar.
2. There remains significant potential for studying **Generation Z's behavior in online shopping**. Therefore, future researchers are encouraged to explore this as a primary theme for their studies.

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