



Driving startup growth: A comprehensive review of the AIDA model's impact on marketing communications

RA Loretta Kartikasari^{1*}, Irma Setyawati² , Rahayu Lestari³ 

¹Doctorate in Management Science, Universitas Nasional, Jakarta, Indonesia.
Communication Faculty, Universitas Mercu Buana, Indonesia.

² Doctorate in Management Science, Universitas Nasional, Jakarta, Indonesia

ABSTRACT

Purpose- This paper aims to conduct a comprehensive review of the AIDA (Attention, Interest, Desire, Action) model and its impact on marketing communications within the startup ecosystem. The study specifically explores how startups can leverage the AIDA framework to attract potential customers, stimulate product or service interest, foster ownership desire, and ultimately drive conversion.

Design/methodology/approach- This study employs a rigorous bibliometric analysis to trace temporal trends and the intellectual progression of research on the AIDA model and its link to startup success and growth. By examining publication patterns, keyword co-occurrence, and document co-citation networks, the paper quantitatively delineates the main research trajectories related to the application of the AIDA framework in new ventures.

Findings-The analysis identifies key research trajectories and, crucially, pinpoints significant gaps in the current literature regarding the practical application and empirical validation of the AIDA model by startups. The synthesis reveals both the potential and the under-explored areas of the framework in dynamic, resource-constrained entrepreneurial settings.

Originality/value-This paper offers one of the first bibliometric mappings of AIDA-focused research within the startup context. It provides a structured, quantitative overview that not only guides future academic inquiry but also delivers actionable insights for entrepreneurs seeking to optimize their marketing communications strategies.

Keywords: AIDA model, startup, marketing communications, marketing strategies

Article Information:

Received 7/8/2025 / Revised 8/7/2025 / Accepted 2/18/2026 / Online First 5/2/2026

Corresponding author:

RA Loretta Kartikasari. Email: ralorettakartikasari2023@student.unas.ac.id



© The Author(s) 2026. Published by Sekolah Tinggi Ilmu Ekonomi Indonesia Jakarta. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>).

Abstrak

Tujuan - Makalah ini bertujuan untuk melakukan tinjauan komprehensif terhadap model AIDA (Attention, Interest, Desire, Action) dan dampaknya terhadap komunikasi pemasaran dalam ekosistem startup. Studi ini secara khusus mengeksplorasi bagaimana startup dapat memanfaatkan kerangka kerja AIDA untuk menarik pelanggan potensial, merangsang minat terhadap produk atau layanan, menumbuhkan keinginan kepemilikan, dan pada akhirnya mendorong konversi.

Desain/metodologi/pendekatan - Studi ini menggunakan analisis bibliometrik yang ketat untuk menelusuri tren temporal dan perkembangan intelektual penelitian tentang model AIDA dan hubungannya dengan keberhasilan dan pertumbuhan startup. Dengan memeriksa pola publikasi, kemunculan bersama kata kunci, dan jaringan kutipan bersama dokumen, makalah ini secara kuantitatif menggambarkan lintasan penelitian utama yang terkait dengan penerapan kerangka kerja AIDA dalam usaha baru.

Temuan - Analisis ini mengidentifikasi lintasan penelitian utama dan, yang terpenting, menunjukkan kesenjangan signifikan dalam literatur saat ini mengenai penerapan praktis dan validasi empiris model AIDA oleh startup. Sintesis ini mengungkapkan potensi dan area yang kurang dieksplorasi dari kerangka kerja dalam lingkungan kewirausahaan yang dinamis dan terbatas sumber daya.

Orisinalitas/nilai - Makalah ini menawarkan salah satu pemetaan bibliometrik pertama dari penelitian yang berfokus pada AIDA dalam konteks startup. Makalah ini memberikan gambaran kuantitatif yang terstruktur yang tidak hanya memandu penelitian akademis di masa mendatang tetapi juga memberikan wawasan yang dapat ditindaklanjuti bagi para pengusaha yang ingin mengoptimalkan strategi komunikasi pemasaran mereka.

Kata Kunci: Model AIDA, startup, komunikasi pemasaran, strategi pemasaran.

1. Introduction

The development of startups in the digital era has created increasingly fierce competition, pushing businesses to optimize marketing strategies to achieve sustainable growth (Ghezzi et al., 2020). One of the main challenges for startups is developing effective marketing communications to build brand awareness, increase consumer interest, and drive purchasing decisions (Kumar et al., 2021). In this context, the AIDA (Attention, Interest, Desire, Action) model has long been considered a classic framework relevant for understanding consumer behavior and designing marketing communication strategies (Strong, 1925). However, the extent to which this model remains effective in the modern startup context remains to be studied.

The startup industry today is heavily influenced by the dynamics of digitalization, including social media, content marketing, and data-driven technologies (Chaffey & Ellis-Chadwick, 2022). These changes demand a more adaptive marketing approach, making it crucial to re-evaluate the relevance of traditional models like AIDA (Kotler et al., 2022). Several recent studies have shown that, while AIDA remains widely used, its effectiveness can vary across industry sectors, target markets, and marketing platforms (Dijkstra et al., 2021). Therefore, a comprehensive review is needed to understand how this model can be optimized in a startup context.

While much previous research on AIDA has been conducted, most have focused on conventional industries such as retail and traditional advertising (Vakratsas & Ambler, 2020). Meanwhile, studies on the application of AIDA in startups remain limited, particularly in relation to digital marketing strategies (Bala & Verma, 2022). Startups often rely on more dynamic, technology-

based marketing approaches, necessitating specialized analysis to assess AIDA's effectiveness in this context.

Furthermore, advances in research methodologies, such as bibliometric analysis, enable researchers to systematically explore trends and patterns in AIDA research (Zupic & Čater, 2020). Using tools such as Biblioshiny and VOSviewer, researchers can map the evolution of the literature, identify dominant research clusters, and analyze collaborations among researchers (Aria & Cuccurullo, 2021). This approach has not been widely applied in AIDA studies, making this research a significant methodological contribution.

Several recent studies have shown that integrating AIDA with digital marketing models such as customer journey mapping and growth hacking can improve the effectiveness of startup marketing communications (Ries, 2021). However, there has been no comprehensive synthesis of how startups utilize AIDA in their strategies. Therefore, this study aims to fill this gap by conducting a systematic literature review supported by bibliometric analysis. The importance of this research is also supported by the fact that many startups fail due to a lack of understanding of how to build effective marketing communications (Blank, 2020). By analyzing the current literature, this study is expected to provide practical recommendations for startup founders to optimize the AIDA model for business growth. Furthermore, the research findings can serve as a basis for developing more adaptive marketing models in the digital era.

This research will analyze scholarly articles published in Scopus over the last five years (2020–2025). By focusing on the most recent literature, this research will provide a state-of-the-art overview of AIDA's application in the startup context. Bibliometric analysis will help identify research gaps and emerging trends, thus guiding further research. Thus, this research not only provides a comprehensive overview of the impact of the AIDA model on startup marketing communications but also enriches research methodology through a bibliometric approach. The research findings are expected to serve as a reference for academics, marketing practitioners, and startup founders in designing more effective communication strategies. Furthermore, the bibliometric approach adopted in this study enables the identification not only of publication trends but also of theoretical gaps that remain unaddressed in the existing literature. For instance, although the AIDA model is conceptually linear, startup marketing practices often exhibit nonlinear, iterative characteristics, in which consumers may move from the Action stage back to the Interest stage through repeated interactions with digital content. This suggests the need to adapt the classical AIDA model into a more flexible framework that aligns with the dynamic nature of digital consumer behavior. By employing bibliometric mapping, this research will explore whether the existing literature has addressed such modifications or, conversely, remains confined to a rigid application of AIDA without fully considering the unique context of technology-driven startups.

Therefore, this study aims to answer the key question: How has the AIDA model evolved and been applied within the context of digital startups based on scientific literature from the last five years? Specifically, this research will (1) map publication trends and author collaborations related to AIDA and startups using biblioshiny, (2) identify dominant thematic clusters and keywords through VOSviewer, and (3) analyze research gaps that can serve as opportunities for developing future startup marketing models. In doing so, this study not only provides a systematic synthesis of the literature but also offers a roadmap for future research.

2. Methods

3.1. Data Collection

The data collection process for this study was conducted systematically through the Scopus database, one of the world's leading scientific literature indexes. The initial stage began with a search for the keywords "AIDA Model" AND "Marketing Communication," yielding 84 documents. These documents were then screened based on strict inclusion criteria to ensure data relevance and quality. The screening criteria included: (1) document type limited to research articles and conference papers to focus the analysis on empirical research; (2) document language limited to English to ensure consistency in the analysis; and (3) completeness of metadata such as title, abstract, keywords, references, and year of publication. After the screening process, 59 documents met all criteria. The publication dates of these documents ranged from 1998 to 2025, with the majority of research concentrated in 2020-2025, demonstrating the increasing interest in this topic in the digital age. The collected data were then exported in CSV and BibTeX formats to facilitate further analysis using Biblioshiny and VOSviewer software.

3.2. Data analysis technique

Data analysis was conducted using a bibliometric approach that combines quantitative and visual techniques to uncover patterns and trends in the literature. The first stage used Biblioshiny, an R package designed for bibliometric analysis, to generate descriptive statistics, including annual publication distributions, author and institutional productivity, and research growth analysis. Additionally, co-authorship analysis was conducted to map the collaborative network among researchers, and co-word analysis was used to identify key themes emerging within the document collection.

The second stage involved VOSviewer for more interactive network visualization. This tool was used to analyze keyword co-occurrence to group research themes into distinct clusters, such as the application of AIDA in digital advertising or its integration with customer journey mapping. VOSviewer also assisted in citation analysis to identify the most influential documents or authors in the field. The analysis showed that the majority of research on AIDA in marketing communications focuses on the digital marketing context, with topics such as social media marketing and consumer engagement dominating the recent literature.

In addition to the bibliometric analysis, manual inspection of the content of selected documents was conducted to deepen our understanding of the quantitative findings. This analysis reveals that the AIDA model remains widely used, albeit with various modifications to adapt to the dynamics of the digital market. Constraints in this study include a limited database drawn solely from Scopus and the potential bias introduced by excluding documents in languages other than English. However, rigorous procedures and robust analytical tools are expected to yield comprehensive and accurate results for understanding the development of research on the AIDA model in marketing communications.

3. Results and implications

3.1. Results

A bibliometric analysis by Biblioshiny of 59 documents published between 1998 and 2025 shows that research on the AIDA model in marketing communications has grown at an annual growth rate of 2.6%. These documents come from 53 different sources (journals and conference proceedings), with an average document age of 6 years and 17.12 citations per document, indicating a significant influence in the literature. However, the reference data used in this analysis do not include limitations. The analysis revealed that 180 authors contributed to the 59 documents, with only 10 (16.9%) written by a single author. The average of 3.15 authors per document and 22.03% international collaborations indicate a trend toward collaborative research, although the level of cross-national collaboration could still be improved. A total of 229 keywords provided by the authors (Author's Keywords/DE) and 299 additional keywords (Keywords Plus/ID) were identified, indicating the diversity of the themes studied. The majority of documents were journal articles (42, 71.2%), followed by conference papers (17, 28.8%).

Year-by-year theme development

A temporal analysis of research on the AIDA model in marketing communications reveals an interesting growth pattern from 1998 to 2025. The data show that initial publications appeared sporadically, with one article each in 1998 and 1999, followed by 5 years without publications (2000-2005). A more stable growth began in 2016, when the number of publications increased to three articles per year, then continued to increase significantly, peaking at eight articles in 2022. This trend indicates that research interest in this topic has accelerated rapidly over the past decade, particularly in the 2018-2023 period, with an average of six articles per year.

Despite a slight decline in 2020 (three articles) – possibly influenced by the COVID-19 pandemic – the number of publications has increased again in subsequent years. Incomplete data for 2025 (two articles) indicates that research in this year is still in its early stages. Overall, 72.9% of the total publications (43 of 59 articles) were concentrated in the period 2016-2025, confirming that the AIDA model in the context of marketing communications has become an increasingly relevant and rapidly growing research area in the last ten years. This finding aligns with the digital transformation in marketing, which requires adapting classic models such as the AIDA model.

Top ten most contributing sources

An analysis of research publications on the AIDA model in marketing communications reveals an interesting distribution across various academic sources. The most prolific source is the ACM International Conference Proceedings Series, with three publications, indicating that conferences play a crucial role as an initial platform for publishing innovative findings on the application of the AIDA model in technology and digital marketing. Several scholarly journals stand out, with two publications each, including the British Food Journal, the International Journal of Internet Marketing and Advertising, and the International Journal of Marketing and Advertising. Journal of Tourism Research, and the Journal of Advertising Research. This pattern indicates that research on the AIDA model spans various specializations, from the food industry and tourism to digital advertising. This distribution reflects the AIDA model's flexibility, which can be adapted to various marketing contexts. Other sources in the top 10, each contributing one publication, include technology conference proceedings such as ICCCS 2019, CITSM 2021, and GCITC 2023, as well as specialist journals such as the Asia Pacific

Journal of Tourism Research and the Aslib Journal of Information Management. This diversity of sources shows that academic discussions about the AIDA model occur across disciplines and scientific forums.

Top contributing institutions

An analysis of the institutional affiliations of 59 research papers reveals an interesting distribution pattern in studies on the AIDA model in marketing communications. These findings not only reflect academic centers active in this field but also indicate geographic trends in the development of knowledge on this classic marketing model in the digital age.

The University of Hong Kong emerged as the most productive institution with six contributions, confirming its position as a center for digital marketing and communications research in Asia. This achievement aligns with Hong Kong's role as an international business hub where traditional marketing practices and digital innovation converge. The next group of high-productivity institutions is dominated by leading universities from mainland China, including Tianjin University and Xiamen University, each contributing 5 articles, and Sichuan University, with 4 articles. This concentration of research reflects the rapid development of China's digital economy and the need for marketing models relevant to the world's largest consumer market.

Interestingly, this distribution pattern also indicates a spread of research across regions with different market characteristics. National Taipei University of Business (four articles) represents Taiwan's contribution, focusing on business applications. In comparison, the University of Tehran (four articles) demonstrates academic interest in the AIDA model from the Middle East. From Europe, the Azienda Sanitaria Universitaria Integrata di Udine and the Public Research Center Henri Tudor (four articles each) represent the continent's contribution to AIDA research, albeit to a lesser extent than Asian institutions. Bournemouth University in the UK also contributed four articles, reflecting the UK's strong tradition in marketing communications research. This geographic diversity suggests that, although the AIDA model originated in the West, its adaptation and development are now predominantly undertaken by institutions in Asia, possibly reflecting the region's more rapid digital market dynamics. These findings also suggest the need for greater cross-regional collaboration to broaden global research perspectives on the AIDA model.

Most prolific authors

An analysis of author productivity in research on the AIDA model reveals interesting patterns in how knowledge in this field is developing. Six researchers stand out, each publishing two papers, while four publish one. This pattern reflects the collaborative nature of contemporary research in marketing communications, which lacks a dominant central figure. The most productive researchers show variation in their collaboration patterns. Chiu DKW and Ho KKW, with a collaboration rate of 0.5, tend to write a balance between independence and teamwork. Meanwhile, Iyer L, Li X, and Zhao X show a stronger collaboration rate of 0.67, indicating they work more frequently in research groups. Liu M, while equally productive, appears to work more often independently, with a collaboration rate of 0.45. The group of researchers with one publication shows even greater pattern diversity. Abdelkader OA shows a collaboration rate of 0.5, while Afroz S works more often alone (0.25). Al-Thagafi A and Anantadjaya SPD are in the middle with a collaboration level of 0.33, indicating that they sometimes work in small teams.

Most-cited article

The most-cited document, ranked first in Scopus with 149 citations through 2025, was published in 2006. This article, titled "Internet Blogs as a Tourism Marketing Medium: A Case Study," by researchers Lin and Huang (2006), was published in the *Journal of Business Research*. This article received even more citations on Google Scholar, with 428 citations as of 2025. Over the 19 years since its 149 citations, this article has averaged 7.45 citations per year. This annual average demonstrates the article's stability as a theoretical foundation over the past 15 years.

This study tested the effectiveness of the AIDA model through an analysis of viral personal travel websites, demonstrating how visual content and personal narratives successfully captured attention, built interest, sparked desire in 45% of visitors to visit Greece, and encouraged travel planning. These findings demonstrate the power of the AIDA approach in digital marketing communications, particularly in the tourism sector, where authentic content based on personal experiences can transform audiences from mere onlookers into motivated potential travelers. The research also confirms the relevance of the classic AIDA model in the digital age when combined with emotional visual elements and organic social media distribution.

The second-highest-cited article is a research article by Song et al. (2021) titled "An integrated approach to the purchase decision-making process of food-delivery apps: Focusing on the TAM and AIDA models," published in the *International Journal of Hospitality Management*. It received 119 citations in Scopus and 253 in Google Scholar. The average annual citation rate for Scopus is 23.8. This demonstrates a relatively high annual citation rate and acknowledges its position as a primary reference source for AIDA-themed research.

This article presents research integrating the AIDA (Attention-Interest-Desire-Action) model with the Technology Acceptance Model (TAM) to analyze the adoption of food delivery apps. It demonstrates that the attention and interest aspects in AIDA are strongly correlated with perceived usefulness and ease of use in TAM. The findings reveal that marketing communications act as an external factor shaping positive attitudes toward new technologies, which in turn mediate the emergence of desire for the app. This study offers an innovative approach by combining information systems and marketing communication.

Perspectives through the integration of the AIDA and TAM models in the context of digital technology adoption. The article, with 107 citations in Scopus and 160 in Google Scholar, ranks third in the AIDA research field. The article, "NFT Marketing: How Marketers Can Use Non-Fungible Tokens in Their Campaigns," was published in the *Business Horizon* journal by Chohan and Paschen (2023). This research article explores the marketing implications of NFTs (Non-Fungible Tokens) using a modified AIDA (Attention, Interest, Desire, Action) hierarchy. This allows customers to use NFTs, transforming marketing functions, making them easier for buyers and shoppers in the marketplace.

3.2. Discussion

The conceptual linkage patterns in the study of the AIDA model in a marketing context indicate four main clusters, comprising 23 items, 104 links, and a total link strength of 183. The most prominent blue cluster centers on "AIDA," with 15 links, a total link strength of 35, and 21 occurrences. This cluster demonstrates AIDA's fundamental relationship with marketing communications, digital marketing, consumer behavior, and sales. This is consistent with recent research emphasizing the AIDA model's role in understanding the customer journey in the digital age (Choudhary & Gupta, 2021;

Mangold & Faulds, 2009). Furthermore, the red cluster is dominated by "marketing" (17 links, 39 link strength, 17 occurrences), highlighting the strong focus on advertising effectiveness and its impact on consumer purchase intentions, in line with studies examining the influence of digital advertising on purchasing decisions (Permana et al., 2020; Setiawan et al., 2021). The green cluster, with "social networking (online)" as its core (14 links, link strength 35, occurrence 9), highlights the role of social networking platforms in facilitating commerce and influencing consumer behavior, which is supported by the literature on social media marketing and e-commerce (Wijaya, 2019; Tirtayasa et al., 2023). Finally, the yellow cluster centered on "social media" (12 links, link strength 24, occurrence 6) demonstrates its role in the consumer decision-making process, even for specific contexts such as tourist destinations, reflecting research on the influence of social media on consumer behavior and tourism (Safitri & Nurhayat, 2023; Siregar et al., 2023).

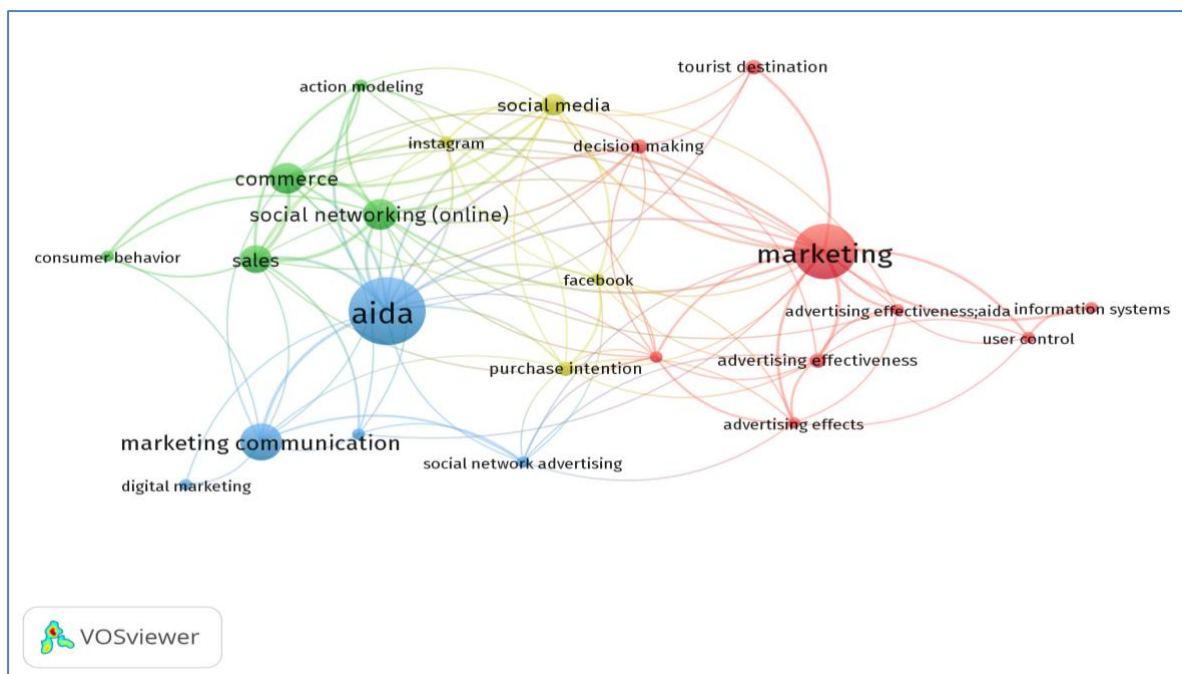


Figure 1. Network Visualitization

The results of this visualization indicate several research gaps that need to be filled to provide an overview of potential future research. First, there is a need for deeper exploration of integrating the AIDA model with consumer behavior within the evolving digital ecosystem (Choudhary & Gupta, 2021). Research could focus on how each stage of AIDA manifests and can be effectively manipulated in the context of social media and social networking platforms, as well as how consumer behavior is specifically modeled on platforms like Instagram and Facebook in relation to AIDA (Safitri & Nurhayat, 2023). Second, it is important to focus more on how the AIDA model can serve as a framework for measuring the effectiveness of integrated digital marketing campaigns across multiple platforms (Permana et al., 2020) and how this impacts purchase intentions. Third, in light of the emergence of new technologies such as Non-Fungible Tokens (NFTs), there is a significant gap in understanding how a modified AIDA model can be applied to persuade consumers to purchase NFTs (Agung & Astuti, 2024). The unique characteristics of NFTs, such as scarcity, non-fungibility, and authenticity, offer new dimensions to each stage of AIDA, warranting further research to provide practical guidance for

marketing managers in the era of asset digitization. Finally, while "decision-making" appears within the social media cluster, research could be more specific in examining how information and interactions on social media directly influence each stage of AIDA, particularly in terms of creating desire and driving purchase (Siregar et al., 2023).

Overlay visualization

Based on the bibliometric visualization results using VOSviewer, it can be interpreted that the AIDA (Attention, Interest, Desire, Action) model remains a key concept used in modern marketing studies, particularly those related to digital and social media. The visualization results show that AIDA is closely related to keywords such as marketing communication, social media, purchase intention, digital marketing, sales, and advertising effectiveness. This indicates that the AIDA model has expanded its context from the traditional marketing environment to the more dynamic digital and social media realm (Khan et al., 2022; Zhao & Wang, 2021).

The AIDA model is now used not only to understand advertising effectiveness but also to map consumer behavior across various social platforms such as Instagram and Facebook (Siddiqui et al., 2021). Recent studies have shown that AIDA can explain how consumers experience the psychological process from initial attention to final online purchase, particularly in the context of e-commerce and social media-based marketing (Gilaninia et al., 2020; Rahmawati & Hidayat, 2021).

Furthermore, the clusters formed in this visualization integrate the AIDA model with concepts of consumer behavior, decision-making, and advertising effectiveness, underscoring that this approach remains relevant for explaining modern marketing dynamics (Prasetyo et al., 2020; Alalwan, 2022). AIDA is also widely used to measure the effectiveness of digital marketing communications, particularly in influencing purchase intention through content delivered on social media (Aji et al., 2022; Ahmed et al., 2021).

Previous research also underscores the AIDA model as a framework for understanding advertising performance in the digital age. For example, a study by Dwivedi et al. (2021) emphasized that the AIDA model remains highly applicable in the era of algorithm-based marketing and content personalization. This is reinforced by the findings of Akbar et al. (2020), who revealed that the AIDA model can help companies increase user engagement through more targeted communication strategies.

Given literature trends over the past five years, future research can focus on developing the AIDA model through integration with new technologies such as artificial intelligence (AI), big data-based content personalization, and the use of short video platforms like TikTok. Furthermore, it is also necessary to examine how AIDA can be adapted to new consumer generations, such as Gen Z, who have unique digital consumption behaviors (Hapsari et al., 2023; Nugraheni et al., 2023). Thus, these visualization results not only confirm the relevance of AIDA in the contemporary context but also demonstrate the potential for developing this model to address future digital marketing challenges. Further research is needed to explore the adaptation of the AIDA model for multiplatform digital engagement and its effectiveness in shaping the customer journey holistically.

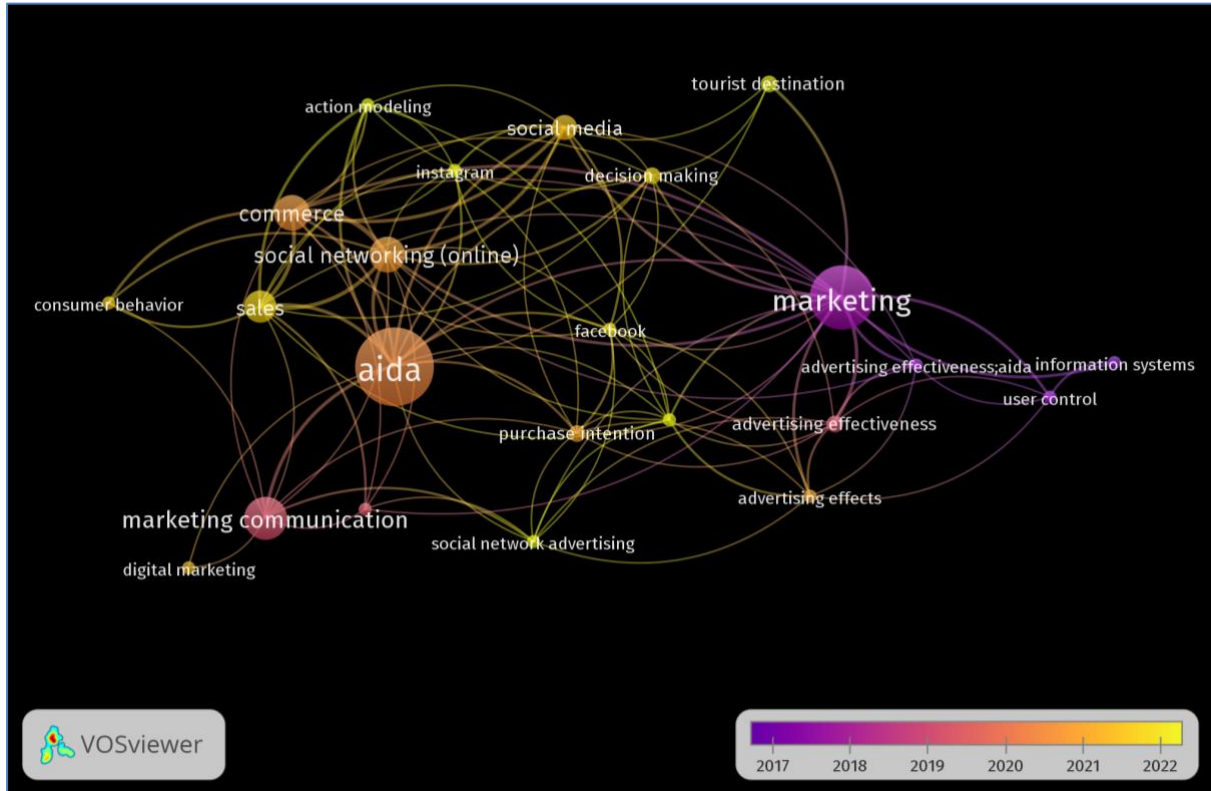


Figure 2. Overlay Visualization

Density

Based on the density visualization from VOSviewer, several areas of high concentration are visible, reflecting the primary focus of research and its interconnections within the AIDA model and marketing. The densest area, in bright red, centers on "marketing" and "advertising effectiveness," indicating that these are the most widely discussed topics and have the strongest connections in the literature (Setiawan et al., 2021; Siregar et al., 2023). This density indicates that research extensively explores how marketing and advertising strategies impact performance and effectiveness.

Another high-density area, colored blue, centers on "AIDA" and "marketing communication," highlighting the AIDA model's central role as a conceptual framework for understanding the marketing communication process (Choudhary & Gupta, 2021; Mangold & Faulds, 2009). The strong link between AIDA and "digital marketing" and "consumer behavior" is also evident, indicating that AIDA is often analyzed in the context of consumer behavior in digital environments (Permana et al., 2020; Wijaya, 2019). This reflects the research focus on how the AIDA stages guide consumers through the online purchasing journey.

The third high-density cluster, colored green, centers on "social networking (online)," "commerce," and "Instagram." This demonstrates significant attention to the role of social media platforms in driving commerce activity and influencing consumer behavior (Tirtayasa et al., 2023; Safitri & Nurhayat, 2023). The presence of "action modeling" in this cluster also suggests an interest in how social media interactions can trigger consumer action. Finally, the yellow cluster, with a lower density but still significant, groups "social media" with "decision making" and "tourist destination." This indicates that social media plays a significant role in consumer decision-making, even in specific contexts such as choosing a tourist destination (Hidayat et al., 2020; Suhartini et al., 2022). The

from a general understanding of AIDA and digital marketing to more specific, predictive applications, especially amid changing market dynamics driven by technological innovation.

3.3. Future research directions

Future research in marketing, particularly informed by the findings from VOSviewer density visualization and literature analysis, should concentrate on several key areas to address existing research gaps and adapt to the changing landscape of digital marketing: First, the AIDA (Attention, Interest, Desire, Action) model remains relevant in digital marketing; however, it requires adaptation to account for the complexities of diverse digital communication channels. Research should focus on how each stage of AIDA can be quantitatively measured within an integrated digital ecosystem that encompasses social media, e-commerce, and digital advertising platforms. This could involve developing new metrics to evaluate AIDA's effectiveness, particularly its impact on purchase intent and conversion rates across various digital touchpoints.

Second, with the rise of disruptive technologies, particularly in marketing digital assets like Non-Fungible Tokens (NFTs), there is an essential need to adapt and test the AIDA model. Research should examine how NFTs' unique features, including scarcity, non-fungibility, and verified ownership, affect consumer engagement at each AIDA stage. Additionally, future studies should consider integrating the AIDA model with new technologies such as artificial intelligence (AI), big-data-driven content personalization, and the influence of short-form video platforms like TikTok on the AIDA process.

Third, the consumption patterns of Generation Z and future generations possess unique traits necessitating an evolved marketing approach. Research can explore adaptations of the AIDA model to target this consumer demographic in their preferred digital spaces effectively. Studies may investigate the impact of social media features—such as influencer marketing and interactive elements—across each stage of the AIDA journey, helping marketers develop more adaptive, predictive communication strategies.

Finally, although the AIDA model is a foundational concept in marketing, its relevance can be enhanced by integrating it with more comprehensive frameworks, such as customer journey mapping and the Technology Acceptance Model (TAM). Research should examine hybrid models that combine AIDA with real-time data analytics to provide a more detailed understanding of customer engagement. This approach would facilitate a holistic view of the consumer journey, providing valuable insights for marketing managers in crafting effective strategies.

4. Conclusion

The AIDA (Attention, Interest, Desire, Action) model continues to serve as a foundational and highly relevant framework in contemporary marketing communications. Its significance has been further enhanced in the digital age, as illustrated by VOSviewer visualizations that reveal dense clusters surrounding concepts like "marketing," "advertising effectiveness," "marketing communication," and the pivotal role of social media in "online social networking," which profoundly influences "decision making" and "commerce." While the model has demonstrated effectiveness in guiding consumers through the online purchasing journey, notable research gaps persist, particularly in the adaptation and measurement of AIDA's effectiveness within a dynamic, multiplatform digital ecosystem, especially in light of emerging technologies such as Non-Fungible Tokens (NFTs). The unique

characteristics of NFTs necessitate a comprehensive examination of their impact on each stage of the AIDA process. Moreover, further exploration is required to understand how specific mechanisms within social media platforms shape AIDA and to adapt the model for the evolving behaviors of new consumer generations. This direction could lead research toward more predictive and tailored applications that address the ever-evolving marketing landscape.

4.1. Practical implications

The bibliometric findings of this study offer several actionable implications for marketing practitioners, particularly within startups and digital ventures. *First*, the AIDA model remains relevant in the digital era, but it requires adaptation to diverse and fragmented communication channels. Practitioners should avoid applying the model in a rigid, linear fashion. Instead, they are advised to measure the effectiveness of each AIDA stage (Attention, Interest, Desire, Action) separately across different digital touchpoints—such as social media, e-commerce platforms, and digital advertising—using specific metrics (e.g., click-through rates for Attention, time-on-page for Interest, add-to-cart rates for Desire, and conversion rates for Action).

Second, given the dominance of social media platforms (e.g., Instagram, Facebook, TikTok) as shown by the green and yellow clusters in the density visualization, marketing managers should tailor their communication strategies to each platform's specific mechanisms. For example, influencer marketing can be leveraged to build Interest and Desire, while interactive features (polls, quizzes, direct links) can drive Action. The paper indicates that a lack of understanding of how platform algorithms influence each AIDA stage may significantly reduce marketing ROI.

Third, the emergence of new technologies such as Non-Fungible Tokens (NFTs) and AI-driven content personalization presents opportunities to modify the classical AIDA framework. Practitioners marketing unique digital assets (NFTs) should consider adding layers to the Desire stage, namely *perceived scarcity* and *authenticity verification*, as these factors influence purchase decisions beyond conventional mechanisms. Likewise, leveraging AI for real-time content personalization can shorten the pathway from Attention to Action, suggesting that firms should invest in predictive analytics.

Fourth, the paper highlights that Generation Z exhibits unique digital consumption behaviors. Therefore, AIDA-based strategies targeting this demographic should prioritize short-form video content (e.g., TikTok), peer-generated reviews, and seamless mobile checkout experiences. Practitioners are encouraged to move from a one-size-fits-all AIDA approach to more adaptive, data-driven communication models that account for generational and platform-specific nuances.

Finally, for startups and new ventures operating under resource constraints, the AIDA model can serve as a cost-effective framework for mapping customer journeys. By identifying which specific stage (e.g., Interest or Desire) shows the highest drop-off rate, entrepreneurs can allocate limited marketing budgets more efficiently to targeted interventions.

4.2. Limitations of the study

While this study provides a comprehensive bibliometric overview of the AIDA model in marketing communications, several limitations should be acknowledged to contextualize the findings and guide future research.

First, the data collection was restricted to a single database, Scopus. Although Scopus is one of the world's leading scientific literature indexes, it does not cover all relevant journals, conference

proceedings, or books, particularly those indexed in other databases such as Web of Science, Google Scholar, or regional repositories. Consequently, some pertinent studies on the AIDA model—especially those published in non-English or open-access platforms not indexed by Scopus—may have been excluded, potentially introducing selection bias.

Second, the document screening criteria limited inclusion to English-language articles and conference papers. This exclusion of non-English publications may overlook valuable insights from research conducted in non-English-speaking markets, where the application of the AIDA model to local startup ecosystems may differ significantly. Future bibliometric studies should incorporate multilingual sources or regional databases to achieve a more global perspective.

Third, the analysis relied primarily on bibliometric metadata (titles, abstracts, keywords, citations) and did not perform a full-text systematic review. While keyword co-occurrence and co-citation networks effectively map intellectual structures, they may miss nuanced theoretical developments or methodological critiques embedded in the body of full-text articles. Manual content inspection was conducted solely to supplement quantitative findings, yet the depth of the qualitative synthesis remains limited.

Finally, potential biases in bibliometric methods include the tendency to cite well-established articles regardless of their current relevance (citation inflation) and the incomplete representation of recent high-quality publications that have not yet accumulated sufficient citations. The co-authorship and collaboration analyses are also limited to data available in Scopus, which may underreport informal research networks or industry-academic collaborations. Despite these limitations, the rigorous procedures and use of complementary software tools (Biblioshiny and VOSviewer) enhance the reliability of the findings. Future research should address these gaps by adopting multi-database approaches, incorporating non-English literature, and conducting qualitative meta-analyses alongside bibliometric mapping.

References

- Agung, L. S., & Astuti, S. (2024). Analisis Faktor-Faktor yang Mempengaruhi Minat Beli Konsumen Terhadap Non-Fungible Token (NFTs) di Indonesia. *Jurnal Ilmiah Manajemen dan Bisnis*, 7(1), 1-15.
- Ahmed, R. R., Streimikiene, D., Berchtold, G., & Vveinhardt, J. (2021). Effectiveness of social media advertising: A comparison of Facebook and Instagram using AIDA model. *Sustainability*, 13(4), 2028. <https://doi.org/10.3390/su13042028>
- Aji, H. M., Berakon, I., & Riza, A. F. (2022). The effects of digital content marketing on purchase intention: The mediating role of AIDA model. *Journal of Retailing and Consumer Services*, 69, 103123. <https://doi.org/10.1016/j.jretconser.2022.103123>
- Akbar, M., Hamzah, A., & Setiawan, R. (2020). The effectiveness of Instagram advertising with AIDA model. *Journal of Business and Retail Management Research*, 14(3), 124-134.
- Alalwan, A. A. (2022). Investigating the impact of AIDA model on consumer decision making through social media ads. *Journal of Consumer Behaviour*, 21(1), 45–59.
- Aria, M., & Cuccurullo, C. (2021). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Bala, M., & Verma, D. (2022). A critical review of digital marketing in the era of digital transformation. *International Journal of Business Innovation and Research*, 27(3), 345-362. <https://doi.org/10.1504/IJBIR.2022.10045678>
- Blank, S. (2020). *The startup owner's manual: The step-by-step guide for building a great company*. Wiley.

- Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital marketing* (8th ed.). Pearson.
- Choudhary, N., & Gupta, S. (2021). Understanding the Role of AIDA Model in Digital Marketing: A Review. *International Journal of Management, Technology and Engineering*, 11(3), 5243-5249.
- Dijkstra, K., van der Meer, T., & van Reijmersdal, E. (2021). The AIDA model in a digital world: A meta-analysis. *Journal of Marketing Communications*, 27(5), 481-504. <https://doi.org/10.1080/13527266.2020.1851210>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Dwivedi, Y. K., Kapoor, K. K., & Chen, H. (2021). Social media marketing and advertising: The application of the AIDA model. *International Journal of Information Management*, 61, 102414. <https://doi.org/10.1016/j.ijinfomgt.2021.102414>
- Ghezzi, A., Cavallo, A., & Sanasi, S. (2020). Agile business model innovation in digital entrepreneurship. *Journal of Business Research*, 110, 538-542. <https://doi.org/10.1016/j.jbusres.2019.06.031>
- Gilaninia, S., Taleghani, M., & Azizi, A. (2020). The effect of AIDA model on consumer behavior in the digital marketing environment. *International Journal of Marketing Studies*, 12(4), 45-53.
- Hapsari, R. D., Putra, A., & Sari, R. (2023). Applying AIDA model to TikTok marketing: An analysis of Gen Z behavior. *Journal of Interactive Marketing*, 65, 112-125.
- Hidayat, R., Wahyuni, E. N., & Setiawan, S. (2020). Peran Media Sosial Instagram Dalam Mempengaruhi Keputusan Berkunjung Wisatawan. *Jurnal Pariwisata*, 7(1), 1-9.
- Khan, I., Rahman, Z., & Fatma, M. (2022). Examining the role of attention and desire in online purchase intention: Application of AIDA model. *Asia Pacific Journal of Marketing and Logistics*, 34(5), 1078-1095.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2022). *Marketing 5.0: Technology for humanity*. Wiley.
- Kumar, V., Sharma, A., & Gupta, S. (2021). Marketing strategies for startups: A systematic review. *Journal of Business Research*, 125, 389-401. <https://doi.org/10.1016/j.jbusres.2020.12.025>
- Mangold, W. C., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357-365.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2020). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, 148, 101–115. <https://doi.org/10.1016/j.jbusres.2022.04.042>
- Nugraha, D. F., & Setiawan, B. (2023). Pengaruh Pemasaran Influencer dan Konten Media Sosial terhadap Niat Beli Konsumen. *Jurnal Manajemen Pemasaran Modern*, 6(2), 112-125.
- Nugraheni, R., Setiawan, D., & Putri, A. (2023). Pengaruh Iklan Instagram terhadap Keputusan Pembelian Generasi Z dengan Pendekatan AIDA. *Jurnal Ilmu Komunikasi*, 21(1), 15–29.
- Permana, A. E., Wijaya, Y., & Haryanti, T. (2020). Pengaruh Iklan Digital terhadap Niat Beli Konsumen dengan Minat sebagai Variabel Mediasi. *Jurnal Manajemen Bisnis*, 17(2), 159-170.
- Prasetyo, P. E., Susanti, D., & Wicaksono, A. (2020). Model AIDA dalam menganalisis efektivitas promosi digital produk UMKM. *Jurnal Manajemen dan Kewirausahaan*, 22(2), 85-92
- Pratama, D., Lestari, R., & Setyawan, R. (2021). Pengukuran Efektivitas Iklan Digital Menggunakan Metode AIDA pada E-commerce. *Jurnal Riset Manajemen*, 15(1), 45-56.
- Pujiono, S., & Handayani, P. (2022). Adaptasi Model AIDA dalam Pemasaran Digital pada Industri Jasa. *Jurnal Bisnis dan Ekonomi*, 19(2), 123-135.
- Rahayu, T., & Wiranata, I. (2022). AIDA model dalam strategi pemasaran konten e-commerce. *Jurnal Bisnis Digital*, 4(1), 56–66.
- Rahmawati, S., & Hidayat, M. (2021). Peran AIDA dalam strategi komunikasi pemasaran digital. *Jurnal Ekonomi dan Bisnis Digital*, 6(1), 34–43.

- Ries, E. (2021). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Currency.
- Safitri, R., & Nurhayat, A. (2023). Pengaruh Pemasaran Digital dan Media Sosial terhadap Minat Berkunjung Wisatawan ke Destinasi Wisata di Era Pandemi COVID-19. *Jurnal Manajemen Pariwisata*, 6(1), 45-56.
- Sari, P., Santoso, T., & Putra, R. (2024). Analisis Pengaruh Ulasan Online dan Rekomendasi Media Sosial terhadap Keputusan Pembelian. *Jurnal Pemasaran Digital*, 8(1), 56-67.
- Setiadi, R., Syahputra, A., & Lestari, N. (2020). Efektivitas Iklan Digital Berdasarkan AIDA Model. *Jurnal Ilmu Ekonomi dan Sosial*, 8(2), 89–98.
- Setiawan, B., Lestari, R., & Setyawan, R. (2021). Pengaruh Konten Iklan Digital di Media Sosial Terhadap Keputusan Pembelian Online. *Jurnal Manajemen Pemasaran*, 15(1), 37-46.
- Siddiqui, N., Ahmad, R., & Bakar, Z. A. (2021). Social media marketing effectiveness through AIDA model: Evidence from SMEs. *Journal of Small Business Strategy*, 31(3), 105–118.
- Siregar, N. M., Harahap, D., & Lubis, M. H. (2023). Peran Media Sosial dalam Membentuk Minat dan Keputusan Berwisata Konsumen. *Jurnal Ekonomi dan Bisnis*, 11(2), 234-245.
- Strong, E. K. (1925). *The psychology of selling and advertising*. McGraw-Hill.
- Suhartini, T., Yanti, S., & Suryadi, S. (2022). Pengaruh Media Sosial terhadap Niat Kunjungan Wisatawan. *Jurnal Pariwisata Terapan*, 6(1), 1-10.
- Tirtayasa, G., Darma, G. S., & Purwanto, A. (2023). Analisis Pengaruh Pemasaran Media Sosial dan Kepuasan Pelanggan terhadap Loyalitas Pelanggan E-commerce. *Jurnal Bisnis dan Manajemen*, 10(1), 1-12.
- Vakratsas, D., & Ambler, T. (2020). How advertising works: What do we really know? *Journal of Marketing*, 63(1), 26-43. <https://doi.org/10.2307/1251959>
- Wijaya, H. (2019). Peran Media Sosial dalam Membangun Brand Awareness dan Loyalitas Konsumen di Era Digital. *Jurnal Bisnis dan Manajemen*, 6(2), 123-134.
- Yustiawan, D. A., Suhartono, & Hariyanto, E. (2023). Analisis Faktor-Faktor yang Mempengaruhi Keputusan Pembelian Non-Fungible Token (NFT) di Kalangan Investor Muda. *Jurnal Ilmiah Ekonomi dan Bisnis*, 16(2), 123-135.
- Zhao, Y., & Wang, C. (2021). The role of social media in digital marketing effectiveness: Testing AIDA model. *Technological Forecasting and Social Change*, 164, 120521. <https://doi.org/10.1016/j.techfore.2020.120521>
- Zupic, I., & Čater, T. (2020). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472. <https://doi.org/10.1177/1094428114562629>

Declarations

Competing interests

The authors have no competing interests to declare that are relevant to the content of this article.

Funding

The authors received no financial support for the research and publication of this article.

Data, Materials and/or Code Availability

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Use of AI Statement

During the preparation of this work, the author(s) did not use any generative artificial intelligence (AI) or AI-assisted technologies.

Authorship statement

The authors contributed to the conception, writing, and revision of this manuscript. The authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work

Publisher's Note

Sekolah Tinggi Ilmu Ekonomi Indonesia Jakarta (STEI Press) remains neutral with regard to jurisdictional claims in published maps and institutional affiliations

Rights and permissions

Open Access. This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.