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From Local Buzz to Global Trends: A Bibliometric Analysis on the Evolution of Viral Marketing Strategies

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Abstract: The growth of articles is reflected in the increasing interdisciplinary research and publications on viral marketing. Scholars from fields as diverse as computer science, business, management and accounting, mathematics, and engineering have contributed to more than 150 publications. This article aims to understand the growth of viral marketing by using bibliometric analysis. With the limitation set only for the final stage and English used, 784 articles were published in the Scopus database from 1999 to 2025. The analysis of document and source types, subject area, keyword analysis, and other bibliometric indicators was explained. In addition, the Publish or Perish software was used to analyze citation metrics and highly cited articles. The proliferation of social media and digital platforms has reshaped the landscape of modern marketing, placing viral marketing at the core of many strategic efforts. Future studies on viral marketing broaden their scope beyond the current sources by including comprehensive analyses of additional article databases like Web of Science (WoS) and Google Scholar, and studies can capture a wide array of research trends and insights, potentially revealing subtle patterns and interdisciplinary connections that could be overlooked. Furthermore, the researcher can explore how viral marketing exploits the rapid and organic dissemination of engaging content across digital networks to enhance brand visibility and amplify message reach through exponential growth.

Keywords: *Viral Marketing, Bibliometric Analysis, Modern Marketing, Social Media*

1. Introduction and Background

In the dynamic realm of digital communication, viral marketing has emerged as an influential strategy. It is commonly defined as the intentional design and dissemination of marketing content that encourages fast and extensive sharing by consumers themselves, often likened to the way a virus spreads through a population (Kaplan & Haenlein, 2011). This marketing model employs social networks, emotional, and psychological, to achieve notable results, often at low expense, frequently exceeding traditional advertising in terms of efficiency (Rollins et al., 2014; Subramani & Rajagopalan, 2003). Recent studies indicate that social media virality is now increasingly relevant to brand communication strategies, with platforms like TikTok, YouTube, Facebook, and Instagram enabling live dialogue, content variation, and mutual participation of content by users (Puriwat & Tripopsakul, 2021).

Moreover, viral marketing today is used to increase visibility and enhance reliability, encourage consumer action, and even improve customer experience, as demonstrated in recent studies analyzing viral strategies in varied industries (Alramdhan, 2022). The field has also become increasingly integrative across fields, drawing from marketing, data science, psychology, and network theory to understand the dissemination of persuasion and maximize viral impact (Gibreel et al., 2025).

Despite its broader interest, the academic treatment of viral marketing remains disconnected, with much of the literature focused on isolated campaigns and specific platform explorations (Singh, 2014). Bibliometric and content analyses reveal that while the number of studies has increased, there remains a limited integration of its theoretical foundations and sustained implementation (Thoifur et al., 2022; Gibreel et al., 2025).

This review aims to fill that gap by systematically tracing the viral marketing from its foundational practices in the email era to its current expression in a platform-oriented, analytics-based, and participatory context. It seeks to provide a comprehensive overview of key concepts, strategies, and research trajectories, and to highlight emerging directions in viral marketing scholarship.

2. Literature Review

Viral marketing, originally rooted in the tradition of word-of-mouth (WOM) communication, has evolved into a digitally amplified phenomenon that enables content to achieve broad dissemination through peer-to-peer sharing. At its core, viral marketing is defined as a strategy that encourages individuals to pass along marketing messages voluntarily, typically via online platforms, resulting in fast transmission through social networks (Kaplan & Haenlein, 2011).

Building on this, Puriwat and Tripopsakul (2021) identified factors, specifically identity, innovation, insight, instantaneity, integration, interactivity, and invisibility, that collectively serve as a comprehensive guide for marketers to design effective viral marketing strategies that can enhance brand visibility and choice among consumers. Unlike traditional WOM, which is often limited in reach and pace, digital viral marketing capitalizes on the accessibility of the internet and social media to broaden communication beyond immediate networks within minutes (Subramani & Rajagopalan, 2003).

Over the past two decades, scholars have investigated the psychological, structural, and content-based factors influencing virality. Berger and Milkman (2012) found that emotion-driven content, particularly messages that elicit admiration, enjoyment, or outrage, is more likely to be shared. Dobele et al. (2005) further emphasized that messages containing shock, humor, or helpfulness tend to spread more quickly. The role of social network structures and influencers in speeding up or slowing down has also been a key focus and central topic (Watts & Peretti, 2007).

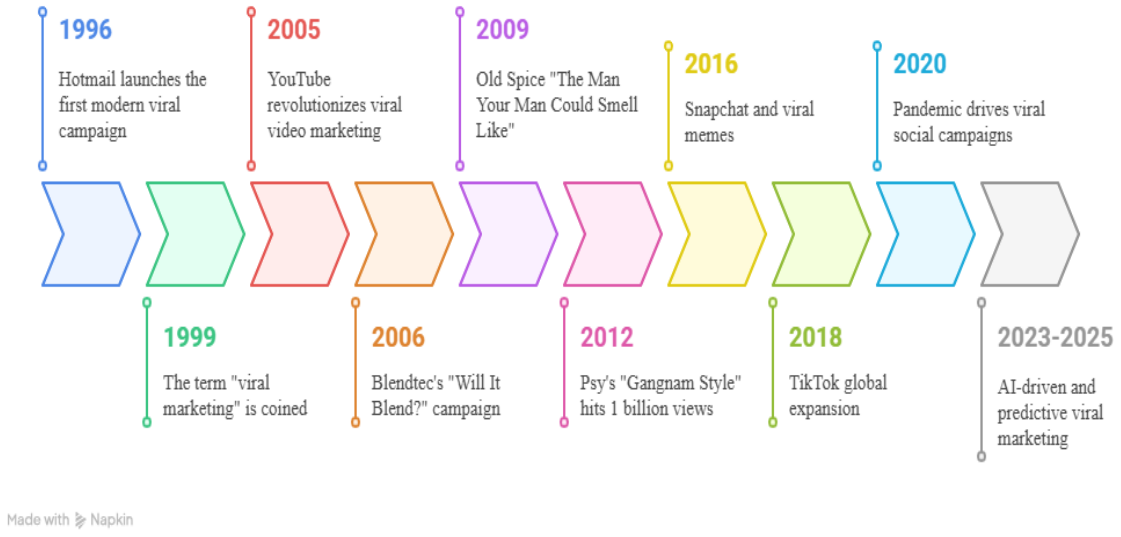
Parallel to this, scholars have identified a trend toward increasing use of AI in promotional content, where machine learning models predict the virality potential of content based on data analytics, user behavior, and historical engagement metrics (Gibreel et al., 2025). This reflects a change from organic virality to engineered virality, where brands use AI tools to generate content variations, run tests automatically, and fine-tune messages for selective reach. Scholar indicates a notable geographical concentration of publications in the United States, potentially introducing a regional bias into the available studies on viral advertising (Wang, 2024). This concentration risks overlooking significant contributions from diverse countries and regions and could ignore meaningful input from other countries or regions, thereby skewing a comprehensive understanding of global trends in the field. This concern is further supported by Dobele et al. (2005), who observed that early viral marketing campaigns mostly emerged from Western markets (e.g., the UK, US, Australia), with limited exploration into the performance of viral marketing across different cultural and legal contexts.

Evolution of viral marketing

Viral marketing emerged in the late 1990s as a disruptive promotional strategy that fundamentally redefined how brands communicate with consumers in the digital space. It originated from the idea of leveraging social connectivity to spread marketing messages analogous to the transmission of a rapid, exponential, and largely self-sustaining virus. Figure 1 of viral marketing milestones presents a chronological timeline illustrating the evolution of viral marketing from its inception in the mid-1990s to its current and future trajectory. Generated by using Napkin AI, this visual framework highlights pivotal events, technologies, and campaigns that have shaped the field across nearly three decades.

The most widely acknowledged starting point for viral marketing is the Hotmail campaign of 1996. This is one of the most iconic and widely studied examples, being Hotmail's signature email campaign. This campaign ingeniously included a line at the bottom of every outgoing user email, "Get your free email at Hotmail," which linked directly to the Hotmail sign-up page. Users became inadvertent brand ambassadors with every message sent, promoting the service to their networks without any incentive or formal affiliation (Rollins et al., 2014; Subramani & Rajagopalan, 2003). As a result, Hotmail's user base surged from zero to over 12 million users in just 18 months, and the company was later acquired by Microsoft, a testament to the explosive potential of user-driven content dissemination (Rollins et al., 2014). The campaign's success laid the foundation for what would later be known as viral marketing, which refers to a technique wherein users serve as the distribution channels for marketing messages, enabling exponential reach with minimal promotional costs.

Figure 1: Evolution of Viral Marketing Since 1996 to the present. Viral marketing milestone



The year 1999 represents an important milestone in marketing discourse in the evolution of digital marketing with the initial usage of the term "viral marketing." Coined by venture capitalists Tim Draper and Steve Jurvetson, the term emerged in response to the widely recognized impact of Hotmail's referral-based email campaign, which illustrated how a rapid increase in user numbers could be achieved through simple peer-to-peer message dissemination. The coining of the term "viral marketing" gave scholars a precise vocabulary to begin studying the dynamics of message virality, such as the psychological triggers that prompt sharing, the structural role of social networks, and the content characteristics that extend audience (Dobele et al., 2005; Berger & Milkman, 2012). Moreover, it enabled marketing professionals to design and execute campaigns designed to encourage self-replication and user engagement. As a result, what was once an ad hoc approach became a deliberate, structured promotional tactic to digital promotion, which is commonly applied in the design of social media campaigns, referral programs, and influencer marketing today.

The launch of YouTube in 2005 marked a notable change in the history of viral marketing by introducing a widely accessible platform for free and uncomplicated video distribution. Unlike prior video hosting services constrained by technical or financial factors, YouTube provided a connected and growth-capable environment for users to upload, view, and distribute video content globally. This democratization of content creation and expansion of user-generated media changed digital messaging practices by shifting the control of media production from brands and broadcasters to everyday users. As a result, YouTube became the first true catalyst for video virality, allowing both user-generated and branded content to reach global audiences without the need for traditional advertising infrastructure (Gibreel et al., 2025; Burgess & Green, 2018). From a marketing perspective, YouTube enabled a new form of visual storytelling that could harness humor, emotion, controversy, or novelty to engage viewers and incentivize sharing rapidly. Moreover, YouTube's built-in features—such as embedding, commenting, and later, algorithmic recommendations—enhanced content discoverability and network effects, making it a foundational tool in digital marketing strategies (Khan, 2017).

Viral marketing underwent a transformative evolution, shaped by technological innovation, shifting user behavior, and strategic creativity. A pivotal moment occurred in 2006 with Blendtec's "Will It Blend?" campaign, where the brand used entertaining product demonstrations such as blending iPhones to drive consumer engagement, resulting in a 700% increase in sales and establishing a model for product-focused virality (Dobele et al., 2007). This was followed by Old Spice's 2009 "The Man Your Man Could Smell Like" campaign, which redefined brand engagement through real-time interactions across YouTube and Twitter, revitalizing the brand and showcasing the potential of humor, personalization, and interactivity in viral content (Kaplan & Haenlein, 2011).

In 2012, Psy's "Gangnam Style" became the first video to surpass one billion views on YouTube, exemplifying the power of music-based and cross-cultural virality in global digital ecosystems (Wang et al., 2024). This demonstrated the global potential of culturally resonant viral content. By 2016, the rise of Snapchat and meme culture introduced new formats for short, humorous, and socially resonant material that could be shared quickly. The viral marketing landscape changed in 2018 with TikTok's global expansion. The onset of the COVID-19 pandemic in 2020 led to increased online media, with the use of emotionally charged campaigns to express brand values and interact with users during lockdowns (Alramdhan, 2022).

The period between 2023 and 2025 represents considerable growth in the evolution of viral marketing, characterized by more frequent application of artificial intelligence (AI) tools in content creation, prediction, and optimization. Brands have begun adopting AI technology to visually support promotional material such as videos, captions, and visuals, and to predict audience response before deployment. This shift is caused by the widespread consumer datasets and advanced machine learning that analyze consumer behavior, sentiment trends, sharing patterns, and platform-specific engagement metrics to predict which content formats and messages are most likely to determine potentially successful media features (Gibreel et al., 2025). AI tools can produce numerous content types quickly and test them in real-time, significantly reducing the time and cost of campaign development while enhancing performance. This trend reflects the growing use of data in media strategy. AI assists strategists with evidence-based tools in content strategy and enhancing the precision of emotional, visual, and linguistic elements. For instance, AI models can now detect which video thumbnails, music tracks, or hashtags have the highest probability of triggering user interaction, enabling brands to reconstruct popular content features (Wang et al., 2024).

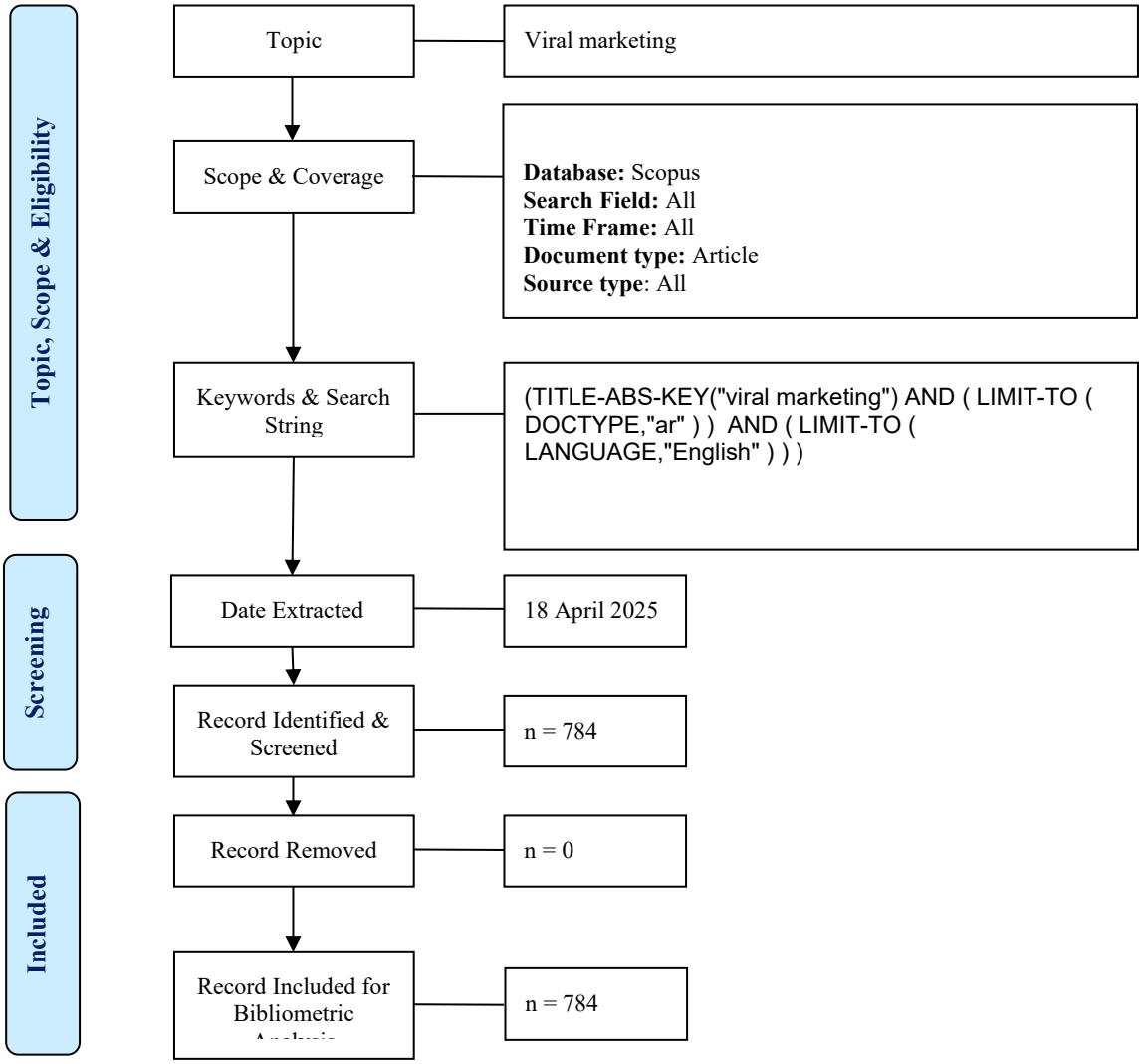
3. Methodology

The PRISMA-style flow diagram presented in Figure 2 illustrates a structured data retrieval approach applied in the bibliometric analysis of viral marketing literature. This structured method aids consistency and methodological transparency in data collection, which is important for bibliometric studies. The flow begins with the definition of the topic, identified as "viral marketing," which sets the boundaries of inquiry of the review.

The criteria and range of the search started with the data retrieved from Scopus, a widely recognized research database covering multiple disciplines. The search field was unrestricted to "all fields", allowing for the inclusion of articles where the term "viral marketing" appeared in the title, abstract, or keywords. Notably, the time frame was left open to "All", ensuring longitudinal coverage and enabling trend analysis inclusive of all years for comparative review. The search was limited to document types of articles, and the language was English, which maintained a standard source set

On 18 April 2025, the extraction yielded 784 records, all of which were included for screening. Interestingly, no articles were removed. The keywords and search string applied were (TITLE-ABS-KEY ("viral marketing") AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English"))). This string filters the results only to include English-language journal articles explicitly addressing "viral marketing" within the searchable metadata fields. This suggests that the initial query was highly specific and efficient in retrieving directly relevant sources, with minimal need for further refinement or manual exclusion. Overall, this diagram exemplifies a clear, systematic, and replicable search strategy, adhering to best practices in bibliometric research. Presenting the search process visually and quantitatively enhances the study's methodological transparency, allowing future researchers to replicate or extend the analysis using similar criteria or databases.

Figure 2: PRISMA flow diagram of the search strategy



Source: Zakaria et al. (2020)

4. Results

The results of this bibliometric analysis on viral marketing provide a general summary of the academic landscape through five analytical components: document and source types, evolution of published studies since 1999, subject area distribution, keyword co-occurrence analysis, and citation metrics of highly cited articles.

Document and Source Types

Relying exclusively on journal articles indexed in the Scopus database offers identifiable strengths, particularly in trustworthiness, procedural quality, and subject relevance. As Scopus includes only peer-reviewed literature from reputable publishers, journal articles ensure that the sources are methodologically sound, evidence-based, and contribute meaningfully to scholarly discourse (Mongeon & Paul-Hus, 2016). These articles frequently contain detailed discussions and study results, useful for a focused study. However, limiting sources to journal articles alone may also present possible weaknesses. Such an approach omits relevant information from grey literature, conference proceedings, industry reports, or up-to-date commentary found in applied media (Adams et al., 2017). As a result, the review might lack practical perspectives, real-time industry applications, or emerging trends not yet captured in academic literature. Therefore, while journal articles

provide a reliable core for academic rigor, a more balanced review may benefit from the inclusion of diverse source types to present a broader knowledge on a given topic.

Evolution of Published Studies

The earliest publications appeared in 1999, coinciding with the coining of the term "viral marketing," and reflect the nascent research stage, with only one article published (0.13%). From 1999 to 2005, publication numbers remained low, with fewer than five articles per year, suggesting limited early academic exploration. However, beginning in 2006, the frequency of publications started to rise, likely influenced by the emergence of YouTube and user-generated content platforms that transformed how marketing messages were disseminated (Dobele et al., 2005).

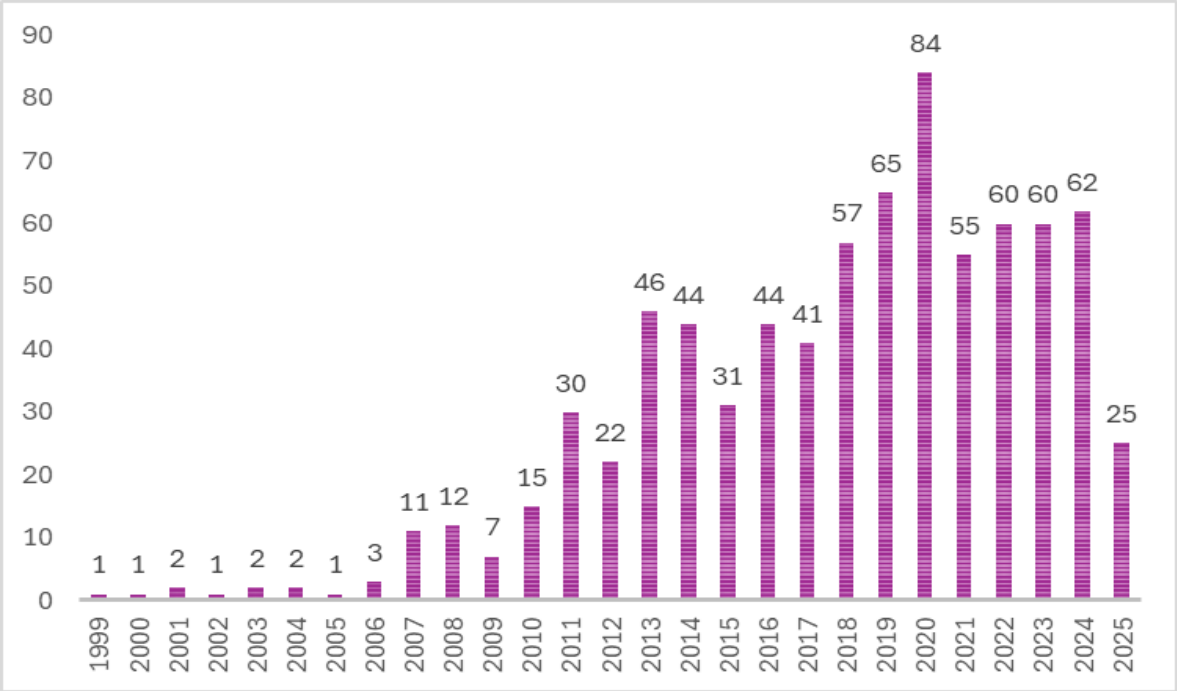
Table 1 presents the annual distribution of scholarly publications on viral marketing from 1999 to 2025, revealing significant insights into the evolution of academic interest in the field. The data indicate a progressive increase in publication volume over the past two and a half decades, highlighting the growing scholarly engagement with viral marketing as both a theoretical concept and a practical strategy.

Table 1: Document Types

Year	Total Publications (TP)	Percentage (%)
2025	25	3.19%
2024	62	7.91%
2023	60	7.65%
2022	60	7.65%
2021	55	7.02%
2020	84	10.71%
2019	65	8.29%
2018	57	7.27%
2017	41	5.23%
2016	44	5.61%
2015	31	3.95%
2014	44	5.61%
2013	46	5.87%
2012	22	2.81%
2011	30	3.83%
2010	15	1.91%
2009	7	0.89%
2008	12	1.53%
2007	11	1.40%
2006	3	0.38%
2005	1	0.13%
2004	2	0.26%
2003	2	0.26%
2002	1	0.13%
2001	2	0.26%
2000	1	0.13%
1999	1	0.13%
Total	**784**	**100.00**

A notable acceleration occurs from 2010 onward, marking the period when viral marketing became a mainstream research topic. Particularly, 2020 records the highest publication count (84 articles; 10.71%), possibly reflecting the surge in digital engagement and the strategic relevance of viral campaigns during the COVID-19 pandemic (Puriwat & Tripopsakul, 2021). This peak may also coincide with increased reliance on social media, short-form video platforms, and crisis communication, prompting researchers to examine viral mechanisms more intensively.

Figure 3: Total publications



Between 2021 and 2024, publication levels remained consistently high, averaging over 55 articles per year, as illustrated in Figure 3, indicating sustained academic interest. The slight decline in 2025 (25 publications; 3.19%) may be attributed to the partial-year data cut-off (as of April 18, 2025) and does not suggest a downward trend. This continuous engagement underscores viral marketing's evolving importance within interdisciplinary domains, particularly at the intersection of marketing, technology, psychology, and communication studies.

Subject Area

Table 2 presents the distribution of publications on viral marketing across various subject areas, providing insight into the interdisciplinary nature of the field. The data reveal that viral marketing is not confined to traditional marketing domains but spans a broad array of disciplines, reflecting its versatility and integrative relevance in theory and application.

Table 2: Subject Area

Subject area	Total Publications (TP)	Percentage (%)
Computer Science	441	56.25%
Business, Management, and Accounting	218	27.81%
Mathematics	181	23.09%
Engineering	157	20.03%
Social Sciences	128	16.33%
Decision Sciences	79	10.08%
Physics and Astronomy	65	8.29%
Economics, Econometrics, and Finance	41	5.23%
Multidisciplinary	31	3.95%
Materials Science	30	3.83%
Medicine	20	2.55%
Psychology	17	2.17%
Arts and Humanities	16	2.04%
Environmental Science	11	1.40%

The highest research concentration is found in Computer Science, accounting for 441 publications (56.25%),

highlighting the strong technological foundation underpinning viral marketing research. This dominance reflects the critical role of algorithms, social media platforms, data mining, and machine learning in understanding and predicting the viral dissemination of content. It also points to the increasing use of computational models and simulation techniques to study information diffusion, network dynamics, and user behavior in digital ecosystems (Gibreel et al., 2025).

Business, Management, and Accounting emerges as the second most prominent area, with 218 publications (27.81%), emphasizing the strategic and managerial dimensions of viral marketing. Research in this area often focuses on branding, consumer engagement, campaign design, and return on investment, positioning viral marketing as a cost-effective alternative to traditional advertising methods (Kaplan & Haenlein, 2011). Decision Sciences (10.08%) and Economics, Econometrics, and Finance (5.23%) are closely related, further underscoring the growing interest in optimizing viral strategies through quantitative modelling and market response analysis.

Interestingly, Mathematics (23.09%) and Engineering (20.03%) also contribute substantially, suggesting a focus on network theory, probabilistic models, and systems engineering approaches to studying how content spreads through digital and social networks. The inclusion of Physics and Astronomy (8.29%), while unexpected, often reflects the application of complex systems and diffusion models from physics to simulate viral phenomena, similar to epidemiological modelling of disease spread (Watts & Peretti, 2007).

Social Sciences (16.33%) and Psychology (2.17%) provide important behavioral and societal perspectives, exploring how individuals perceive, engage with, and are influenced by viral content. These studies often delve into motivation, peer influence, emotional triggers, and the socio-cultural factors that affect sharing behavior (Berger & Milkman, 2012). Fields such as Arts and Humanities (2.04%), Medicine (2.55%), and Environmental Science (1.40%) reflect niche applications of viral marketing in domains like public health messaging, environmental advocacy, and digital storytelling.

The subject area distribution illustrates that viral marketing research is fundamentally interdisciplinary, blending computational, behavioral, economic, and strategic insights. This breadth enriches the academic discourse and enables a holistic understanding of how viral mechanisms operate across different platforms, audiences, and societal contexts.

Keywords Analysis

Table 3 outlines the most frequently used author keywords in the corpus of viral marketing literature, offering insights into the core themes, conceptual priorities, and evolving research directions within the field. All listed keywords appear in more than 20% of the 784 articles analyzed, indicating their centrality and recurring significance across diverse studies.

Table 3: Top Keywords

Author Keywords	Total Publications (TP)	Percentage (%)
Viral Marketing	426	54.34%
Social Networking (online)	221	28.19%
Marketing	195	24.87%
Influence Maximizations	171	21.81%

Unsurprisingly, the term “Viral Marketing” appears in 426 publications (54.34%), reaffirming its role as the anchor concept around which the research is structured. This consistent usage highlights the keyword's importance not just as a subject, but as a lens through which scholars investigate related phenomena such as consumer behavior, digital engagement, and message propagation.

The second most prominent keyword is “Social Networking (online)”, appearing in 221 publications (28.19%), which underscores the medium through which viral marketing predominantly operates. It reflects the shift from traditional word-of-mouth to digitally mediated peer-to-peer communication, particularly on platforms like Facebook, Twitter, Instagram, and TikTok (Kaplan & Haenlein, 2011). The appearance of “Marketing” in 195 articles (24.87%) reflects the broad integration of viral marketing into traditional marketing strategy

discussions. This suggests that researchers view virality as a digital tactic, a fundamental marketing mix, and a consumer outreach component. A particularly interesting cluster of keywords— "Influence Maximizations" (21.81%) points to a growing body of computational research to identify optimal strategies for maximizing message reach.

This theme is notably present in computer science and decision sciences, where researchers employ algorithms to influence spread and determine key opinion leaders (KOLs) or seed nodes within a network to initiate information transmission (Kempe et al., 2015). Together, these keywords indicate the broad scope of viral marketing, spanning theoretical, technological, and business contexts. They reveal intersecting priorities from marketing strategists, social scientists, and computational modelers, suggesting that the field has broadened in scope and disciplinary collaboration.

Citation Analysis

In the present study, citation analysis was conducted using Publish or Perish (PoP), an established bibliometric tool for evaluating the scholarly impact of publications, as described by Harzing (2013). Version 8.17.4863 of Publish or Perish was used, which is compatible with Windows operating systems. Publish or Perish retrieves citation data from various academic databases. This tool provides a range of bibliometric indicators that can be used to evaluate individual articles, authors, journals, and academic fields. Table 4 presents the dataset composed of 784 journal publications between 1999 and 2025. These metrics offer a quantitative assessment of the impact, productivity, and scholarly influence of research in this domain over 26 years.

Table 4: Citations Metrics

Metrics	Data
Publication years	1999 - 2025
Citation years	26 (1999-2025)
Papers	784
Citations	29,776
Citations/year	1145.23
Citations/paper	37.98
Citations/author	11,538.45
Papers/author	312.01
h-index	84
g-index	153

The total number of citations accumulated by the corpus stands at 29,776, which shows a measurable citation presence and implies that viral marketing is a frequently referenced subject within the broader academic community. With an average of 1,145.23 citations per year, the data shows ongoing academic interaction across disciplines, especially since the increased use of social platforms and personality-driven content in the mid-2000s and the growth in digital engagement due to global lockdowns (Gibreel et al., 2025; Puriwat & Tripopsakul, 2021). The average citations per paper, calculated at 37.98, shows citation activity per publication in this field. This figure exceeds the threshold often associated with "highly cited" research in many social science and business contexts, suggesting that most papers on viral marketing are not only being published but are also actively cited and incorporated into broader academic discourse (Donthu et al., 2021).

The citations per author metric, listed as 11,538.45, and the papers per author figure of 312.01, appear anomalously high and may indicate aggregated or cumulative values across co-authors in the dataset, rather than reflecting individual productivity or influence. These metrics should be interpreted cautiously, particularly in bibliometric databases that assign fractional authorship credits inconsistently across multi-authored works. Collectively, these metrics highlight that viral marketing has transitioned from an emerging concept in the early 2000s to a highly impactful and interdisciplinary research domain, intersecting marketing, communication, computer science, and social psychology. The robust citation figures suggest not only widespread academic interest but also real-world relevance, as marketing professionals and digital strategists continue to draw on this literature to inform practice in fast-changing online environments.

Table 5: Highly cited articles

No.	Authors	Title	Year	Cites	Cites per Year
1	J. Berger, K.L. Milkman	What makes online content viral?	2012	2136	164.31
2	J. Leskovec, L.A. Adamic, B.A. Huberman	The dynamics of viral marketing	2007	1429	79.39
3	A. De Bruyn, G.L. Lilien	A multi-stage model of word-of-mouth influence through viral marketing	2008	627	36.88
4	J.E. Phelps, R. Lewis, L. Mobilio, D. Perry, N. Raman	Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email	2004	607	28.9
5	S. Aral, D. Walker	Creating social contagion through viral product design: A randomized trial of peer influence in networks	2011	584	41.71
6	B.A. Huberman, D.M., Romero, F. Wu	Social networks that matter: Twitter under the microscope	2008	581	36.31
7	O. Hinz, B. Skiera, C. Barrot, J.U. Becker	Seeding strategies for viral marketing: An empirical comparison	2011	493	35.21
8	D. Golovin, A. Krause	Adaptive submodularity: Theory and applications in active learning and stochastic optimization	2011	446	31.86
9	D. Kempe, J. Kleinberg, É. Tardos	Maximizing the spread of influence through a social network	2015	439	43.9
10	Z. Katona, P.P. Zubcsek, M. Sarvary	Network effects and personal influences: The diffusion of an online social network	2011	438	31.29
11	A. Arora, S. Bansal, C. Kandpal, R. Aswani, Y. Dwivedi	Measuring social media influencer index- insights from Facebook, Twitter, and Instagram	2019	389	64.83
12	J.Y.C. Ho, M. Dempsey	Viral marketing: Motivations to forward online content	2010	378	25.2
13	M.A. Shareef, B. Mukerji, Y.K. Dwivedi, N.P. Rana, R. Islam	Social media marketing: Comparative effect of advertisement sources	2019	336	56
14	R. Thackeray, B.L. Neiger, C.L. Hanson, J.F. McKenzie	Enhancing promotional strategies within social marketing programs: Use of Web 2.0 social media	2008	332	19.53
15	C. Kiss, M. Bichler	Identification of influencers - Measuring influence in customer networks	2008	315	18.53
16	N. Donthu, S. Kumar, N. Pandey, A. Mishra	Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis	2021	308	77
17	A. Dobele, A. Lindgreen, M. Beverland, J. Vanhamme, R. van Wijk	Why pass on viral messages? Because they connect emotionally	2007	305	16.94

Table 5 presents a list of the most highly cited articles in the field of viral marketing, offering insight into the scholarly impact, thematic trends, and key contributors to the literature. These articles, spanning from 2004 to 2019, have shaped theoretical and empirical understandings of viral marketing, influencing marketing strategies, consumer behavior, and the development of computational models for information diffusion.

The most cited article in the dataset is "What makes online content viral?" by Berger and Milkman (2012), with 2,136 citations and an impressive 164.31 citations per year. This article is foundational in emotionally driven viral marketing, proposing that emotional arousal, particularly awe, humor, and anger, is crucial for content virality (Berger & Milkman, 2012). The high citation count suggests a notable influence in shaping consumer behavior theories and the psychology of sharing in digital environments. The article's continued relevance in various fields such as marketing, psychology, and media studies suggests long-term academic interest.

Another early contribution is "The dynamics of viral marketing" by Leskovec et al. (2007), which has garnered 1,429 and 79.39 citations annually. This paper integrates network theory and computational methods to model viral marketing dynamics, focusing on how information spreads across social networks and the role of influencers in promoting faster dissemination. Its mathematical and network-based approach has been used in supporting marketing studies involving network data (Leskovec et al., 2007). Other notable academic publications such as "A multi-stage model of word-of-mouth influence through viral marketing" by De Bruyn and Lilien (2008), with 627 citations and 36.88 citations per year, and "Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email" by Phelps et al. (2004), with 607 citations and 28.9 citations per year, have provided insight into the understanding of WOM and viral diffusion models. These works introduced foundational concepts for analyzing consumer motivations, message propagation mechanisms, and network effects within viral marketing (Phelps et al., 2004).

Articles by Aral and Walker (2011), Huberman et al. (2008), and Kempe et al. (2015), which all focus on influence maximization and social contagion, have been referenced in the computational and algorithmic modelling of viral marketing. Their work underscores the importance of network centrality and peer influence in designing effective viral campaigns. Aral and Walker's study on social contagion has been cited 584 times and discusses the application of peer influence in viral product design, highlighting how network-based interventions can enhance the spread of products and ideas (Aral & Walker, 2011). Further, the work by Donthu et al. (2021) on mapping electronic word-of-mouth (eWOM) research is a noteworthy recent contribution reflecting the growing importance of systematic reviews and bibliometric analyses in understanding the evolution of viral marketing as a field. This paper's 308 citations and 77 citations per year indicate its function in outlining research directions for future studies in digital marketing (Donthu et al., 2021).

Discussion

Despite its common adoption, limited research exists regarding ethical implications, the long-term effectiveness of viral campaigns, and the cultural differences in sharing behaviors. While many studies have emphasized virality's tactical and psychological elements, fewer have critically analyzed trust dynamics, false information exposure, and content control (Puriwat & Tripopsakul, 2021). Furthermore, most viral marketing research has been conducted in Western contexts, with limited attention given to other regional platforms and cultural communication styles, such as platforms like Bilibili in China and emerging short-form content trends in Indonesia (Wang et al., 2024).

Much of the existing research has concentrated primarily on Western-centric platforms and user behaviors, leaving a gap in understanding the cultural dimensions and localized practices of virality in non-Western contexts (Wang et al., 2024). For instance, platforms like TikTok in Asia, or localized influencer dynamics in region-specific influencer strategies in areas such as Southeast Asia and the Middle East, present unique models of content sharing and emotional triggers often rarely discussed in scholarly sources. While studies have frequently explored motivational components such as emotion and relevance, there are insufficient multi-year analyses of marketing outcomes of viral campaigns. Viral content may create initial reach and user interest, but its effects on brand equity, loyalty, and conversion rates remain insufficiently explored (Gibreel et al., 2025; Dobele et al., 2007). Future studies could combine qualitative and quantitative approaches or use time-based tracking to assess how viral campaigns shape consumer responses across different stages.

With the emergence of AI-driven and predictive systems in viral marketing, many ethical questions remain largely unexamined in current literature. The use of AI to personalize and amplify content raises concerns regarding consumer autonomy, as users are often unaware of the algorithms influencing their exposure to content visibility or the behavioral nudges embedded in AI-generated campaigns (Pasquale, 2015). These systems may optimize engagement or enhance interaction while reducing visibility into the process, making it

difficult for audiences to discern between organically viral content and algorithmically manufactured trends. This blurring of lines questions the authenticity of viral experiences and raises issues of consumer choice and consent (Zuboff, 2019).

Thus, the transformation of digital environments and content practices calls for a multi-disciplinary lens to viral marketing research. Integrating perspectives from communication studies, behavioral economics, data science, and media ethics might support a deeper investigation into how viral phenomena function in complex, algorithmically curated digital ecosystems. Future research should also consider establishing comparative systems across platforms that move beyond a single-platform case to capture the interconnectedness of shared messaging structures across marketing channels.

5. Conclusion

The exploration of viral marketing has provided useful perspectives into its underlying mechanisms and pervasive influence within the digital landscape. As we consolidate the findings presented herein, it becomes evident that viral phenomena represent a dynamic and complex force shaping contemporary communication and consumer engagement. In summary, while viral marketing has become a recurring element in marketing practice, future research must incorporate more geographic and methodological diversity, ethical, cultural, and technological aspects to remain relevant in a rapidly evolving digital context. Specifically, forthcoming studies should give attention to how cultural nuances and specific contextual factors influence how viral content is received and shared across regions globally. Additionally, to enhance this study, future research could prioritize documents that contribute to a more precise understanding of the results and undertake a thorough study of the patterns that govern the diffusion of viral content across various online platforms.

References

Adams, R. J., Smart, P., & Huff, A. S. (2017). Shades of grey: Guidelines for working with the grey literature in systematic reviews for management and organizational studies. *International Journal of Management Reviews*, *19*(4), 432-454.

Alramdhan, S. A. (2022). The impact of the effectiveness of viral marketing on achieving customer delight. *Baltic Journal of Law & Politics*, *15*(2), 688-717.

Aral, S., & Walker, D. (2011). Creating social contagion through viral product design: A randomized trial of peer influence in networks. *Management Science*, *57*(9), 1623-1639.

Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, *49*(2), 192–205.

Burgess, J., & Green, J. (2018). *YouTube: Online video and participatory culture*. John Wiley & Sons.

De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, *25*(3), 151-163.

Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., & Van Wijk, R. (2007). Why pass on viral messages? Because they connect emotionally. *Business Horizons, 50*(4), 291-304.

Dobele, A., Toleman, D., & Beverland, M. (2005). Controlled infection! Spreading the brand message through viral marketing. *Business Horizons*, *48*(2), 143-149.

Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, *135*, 758-773.

Gibreel, O., Mostafa, M. M., Kinawy, R. N., ElMelegy, A. R., & Al Hajj, R. (2025). Two decades of viral marketing landscape: Thematic evolution, knowledge structure and collaboration networks. *Journal of Innovation & Knowledge*, *10*(2), 100659.

Harzing, A. W. (2013, August 25). Publish or Perish. https://harzing.com/resources/publish-or-perish

Huberman, B. A., Romero, D. M., & Wu, F. (2008, December 4). *Social networks that matter: Twitter under the microscope*. arXiv, Cornell University.

Kaplan, A. M., & Haenlein, M. (2011). Two hearts in three-quarter time: How to waltz the social media/viral marketing dance. *Business Horizons*, *54*(3), 253-263.

Kempe, D., Kleinberg, J., & Tardos, É. (2015). Maximizing the spread of influence through a social network. *Theory of Computing, 11*(4), 105-147

Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*, *66*, 236-247.

Leskovec, J., Adamic, L. A., & Huberman, B. A. (2007). The dynamics of viral marketing. *ACM Transactions on the Web (TWEB)*, *1*(1), 5-es.

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, *106*, 213-228.

Pasquale, F. (2015). *The black box society: The secret algorithms that control money and information*. Harvard University Press.

Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, *44*(4), 333-348.

Puriwat, W., & Tripopsakul, S. (2021). The role of viral marketing in social media on brand recognition and preference. *Emerging Science Journal*, *5*(6), 855-867.

Rollins, B., Anitsal, I., Anitsal, M. M., & Meral, M. (2014). Viral marketing: Techniques and implementation. *Entrepreneurial Executive*, *19*(1), 1-17.

Singh, N. (2014). Viral marketing: The rise of the marketing virus. *Review of Professional Management*, *12*(2), 34-41.

Subramani, M. R., & Rajagopalan, B. (2003, December 1). Knowledge-sharing and influence in online social networks via viral marketing. *Communications of the ACM*, *46*(12), 300-307.

Thoifur, D. M., Utari, E. R., Sinaga, D. L., & Sewaka, S. (2022). Analisis bibliometrik terkait viral marketing. *Jurnal Economina*, *1*(4), 931-937.

Wang, Y., Salim, N. A. M., Subri, S., & Zhang, X. (2024). Analysis of viral advertising research hotspots and trends based on bibliometric methods. *Studies in Media and Communication*, *12*(1), 206-222.

Watts, D. J., & Peretti, J. (2007). Viral marketing for the real world. *Harvard Business Review*, *85*(5), 22–23.

Zakaria, R., Ahmi, A., Ahmad, A. H., & Othman, Z. (2020). Worldwide melatonin research: A bibliometric analysis of the published literature between 2015 and 2019. *Chronobiology International*, *38*(1), 27-37.

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. PublicAffairs, New York