Article

2024 International Conference on Education, Economics, Management, and Social Sciences (EMSS 2024)

Analysis of Influencer Marketing on Social Media Platforms

Shuxian Ye [1, *]

1 College of Arts and Sciences Salem State University, Salem, Massachusetts, USA
* Correspondence: Shuxian Ye, College of Arts and Sciences Salem State University, Salem, Massachusetts, USA

Abstract: Influencer marketing is a key factor of organisation advertising and marketing techniques, driven by the sizable use of social media platforms. This research was carried out to examine the determining factors and effect of influencer advertising and marketing on social media structures. We analyzed information accumulated from various social media channels to apprehend the impact of metrics together with likes, remarks, and stocks on logo communique. We additionally utilized social community evaluation to become aware of Key Opinion Leaders (KOLs) and carried out text and multimedia content analysis to delve deeper into the outcomes of content. The consequences display considerable differences in affect factors throughout systems, highlighting the need for tailor-made influencer advertising techniques. This take a look at contributes to the literature on influencer advertising and marketing and offers valuable insights for groups aiming to conduct centered social media advertising.

Keywords: social media; influencer marketing; key opinion leaders (KOLs); data analysis

1. Introduction

In the digital age, social media platforms have become an integral part of daily life. With their extensive user base and powerful information dissemination capabilities, social media offers a unique marketing channel for companies. As an emerging marketing strategy, influencer marketing involves collaborating with social media users who have a large following to directly reach target audiences and enhance brand influence. However, with the diversification of platforms and increasing competition, effectively leveraging social media for influencer marketing has become a significant challenge for companies. This study aims to analyze influencer marketing on social media platforms in-depth, exploring its key factors and effects. Through quantitative and qualitative data analysis, we aim to identify factors that significantly impact the effectiveness of influencer marketing and provide insights for companies to develop targeted marketing strategies. Compared to traditional advertising, influencer marketing can communicate brand messages more personally and authentically. Therefore, systematic research on this topic not only holds theoretical significance but also offers practical guidance [1].

2. Theoretical Framework

2.1. Concept and Theoretical Framework of Influencer Marketing

Influencer marketing has become a crucial promotional strategy on social media platforms, primarily relying on the extensive influence of social media users to disseminate brand messages. The core of influencer marketing lies in collaborating with users who

have a substantial following and significant social influence to convey brand messages to specific target groups, thereby increasing brand awareness and market recognition [2]. To better understand the mechanisms of influencer marketing, this paper proposes a conceptual framework, encompassing key factors such as social media marketing activities, social identity, user satisfaction, and user behavior intentions.
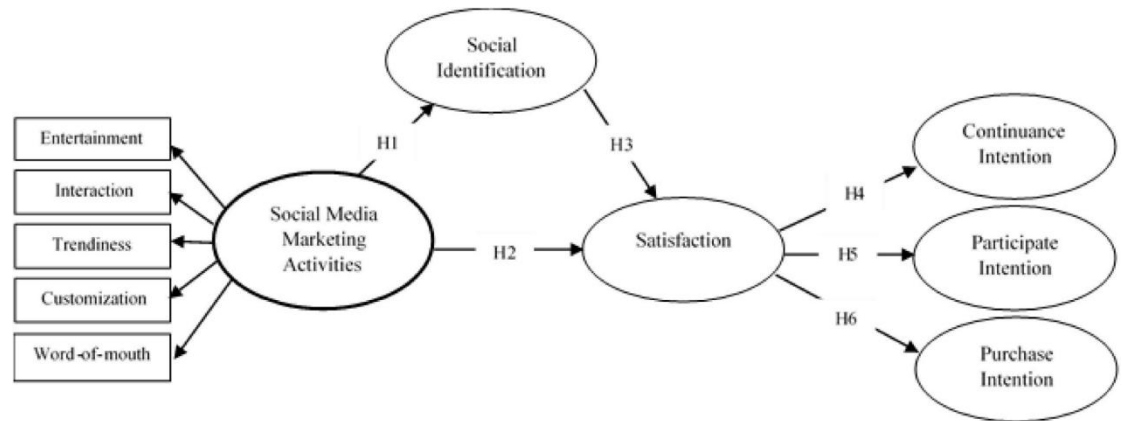

Figure 1: Conceptual framework.

The conceptual framework presented in Figure 1 suggests that social media marketing activities include various aspects such as entertainment, interactivity, fashionability, customization, and word-of-mouth dissemination. These activities influence users' social identity (H1), satisfaction (H2), and behavior intentions (H4, H5, H6) through different pathways. Firstly, social identity refers to users' sense of identification with a brand or influencer on social media platforms, which can enhance users' emotional connection to the brand and is a significant factor influencing user satisfaction (H3). High levels of social identity typically enhance users' loyalty and attachment to the brand, thereby further increasing user satisfaction. Additionally, user satisfaction plays a crucial mediating role in this framework. Users' satisfaction with a brand on social media platforms is directly influenced by marketing activities and indirectly affected by social identity (H3). Satisfied users are more likely to continue using the brand's products or services (H4), actively participate in brand-related activities (H5), and exhibit purchase intentions (H6). These behavior intentions reflect the significant role of influencer marketing in enhancing user brand loyalty and driving purchase decisions. In summary, the theoretical framework of influencer marketing emphasizes the relationships between social media marketing activities, social identity, user satisfaction, and user behavior. By analyzing these key factors in-depth, companies can develop more effective marketing strategies to improve brand performance and user engagement. This framework not only provides a systematic analysis tool but also offers theoretical support for future empirical research [3].

2.2. Application of Influencer Marketing on Social Media Platforms

The utility of influencer advertising on social media structures has turn out to be an integral a part of modern advertising strategies. The extensive adoption and various functionalities of social media structures lead them to best venues for influencer marketing. Through these platforms, brands can immediately reach a huge target audience and convey logo messages and values thru collaborations with influencers. The software of influencer advertising on social media specially manifests in the following components: Firstly, influencer advertising leverages influencers' social networks and personal brands to promote products or services. Influencers usually have a massive and dependable following, possessing authority and impact in unique fields. This makes their tips more persuasive and authentic than traditional commercials. Influencers share original content material, along with photographs, movies, and reviews, to exhibit product usage or percentage

non-public reviews, thereby attracting their fans' hobby inside the emblem. Secondly, social media structures offer a wealthy variety of content material codecs and interactive functions, enhancing the effectiveness of influencer marketing.Platforms like Instagram and YouTube help multiple content material codecs, which includes pix, short movies, and stay streams, allowing dynamic presentation of product functions and taking pictures target market interest. Short video systems like TikTok, for example, spread logo messages quickly through innovative quick clips, utilizing viral effects to amplify emblem affect. Additionally, interactive functions like likes, remarks, and stocks on those structures foster two-manner verbal exchange among manufacturers and purchasers, boosting person engagement. Thirdly, information analytics equipment to be had on social media systems enable more correct assessment of influencer advertising and marketing's effectiveness. Brands can reveal influencers' content material overall performance, along with engagement charges, view counts, and stocks, to assess the impact of advertising sports. This data enables brands understand consumer feedback on products and guide destiny advertising strategy modifications. For instance, studying target audience pastimes and behavior styles permits manufacturers to pick more appropriate influencers and content material formats, thereby growing the relevance and effectiveness of advertising activities.Moreover, the software of influencer advertising on social media systems also involves go-platform integration. Brands frequently have interaction in influencer marketing across a couple of social media platforms concurrently to reach a broader audience. For example, a advertising marketing campaign would possibly spread on Instagram, YouTube, and Twitter, presenting brand messages in exclusive paperwork and patterns. This pass-platform method no longer only complements logo publicity however also lets in for differentiated advertising and marketing based totally on the specific characteristics of every platform's user base. Overall, the utility of influencer marketing on social media systems has enriched emblem conversation strategies and advanced the efficiency and effectiveness of advertising sports. As social media platform functionalities evolve and user behavior changes, the application fashions of influencer advertising hold to innovate and adapt, presenting manufacturers more opportunities and demanding situations [4].

3. Research Methods

3.1. Research Design

This examine employs a combined-methods approach, combining quantitative and qualitative evaluation to comprehensively discover the software and effectiveness of influencer advertising on social media platforms. The research design includes specific steps for statistics collection, facts analysis, and the overall studies manner, aiming to systematically reveal the important thing factors and mechanisms of influencer advertising. The quantitative a part of the examine includes collecting and analyzing statistics from more than one social media platforms. We decided on numerous main social media systems, inclusive of Instagram, YouTube, Twitter, and TikTok, as facts sources to make sure the breadth and representativeness of the examine. On these systems, we collected influencers' content and interplay statistics, inclusive of likes, comments, shares, and so on. These statistics will assist us quantify the effectiveness of influencer marketing and examine the differences among platforms. To recognize the internal mechanisms of influencer advertising, we can conduct qualitative evaluation. This element specially includes text and multimedia content evaluation of influencer content material, in addition to sentiment analysis of user comments [5]. Text evaluation will use natural language processing (NLP) generation to discover key themes and emotional tendencies in influencer content, even as multimedia evaluation will focus on the visual consequences of pix and movies and their beauty to users. Sentiment evaluation will help us apprehend users' attitudes in the direction of influencer content, revealing the psychological effect of influencer advertising and marketing on customers. In the research layout, we are able to additionally use social community evaluation (SNA) methods to discover the placement and role of influencers

in social networks. By constructing social community graphs, we will identify key opinion leaders (KOLs) inside the network and their range of have an impact on and dissemination paths. This will assist us understand the mediating role of influencers in statistics dissemination and similarly examine their effect on customers' conduct intentions. Additionally, we are able to use surveys to accumulate customers' views and feelings about influencers and their content. The survey will encompass questions on user delight, logo identity, and buy aim, to quantify customers' logo attitudes and conduct intentions.

Text analysis will use natural language processing (NLP) technology to identify key themes and emotional tendencies in influencer content, while multimedia analysis will focus on the visual effects of images and videos and their attractiveness to users. Sentiment analysis will help us understand users' attitudes towards influencer content, revealing the psychological impact of influencer marketing on users. In the research design, we will also use social network analysis (SNA) methods to explore the position and role of influencers in social networks. By constructing social network graphs, we can identify key opinion leaders (KOLs) in the network and their range of influence and dissemination paths. This will help us understand the mediating role of influencers in information dissemination and further analyze their impact on users' behavior intentions. Additionally, we are able to use surveys to accumulate customers' views and feelings approximately influencers and their content material. The survey will include questions about person delight, brand identification, and buy aim, to quantify customers' brand attitudes and conduct intentions. We plan to use structured questionnaires with a couple of-desire questions and Likert scales to facilitate records quantification. Overall, the research layout objectives to discover the application of influencer advertising on social media systems comprehensively via multi-degree and multi-angle evaluation techniques. By integrating quantitative and qualitative records, we hope to reveal the key factors and consequences of influencer advertising, supplying theoretical aid and sensible guidance for corporations to increase more powerful advertising techniques.

3.2. Data Collection

The information resources for this look at encompass multiple important social media platforms and person surveys. To make sure the breadth and representativeness of the facts, we selected four platforms with awesome user demographics and content traits: Instagram, YouTube, Twitter, and TikTok. Additionally, we accrued subjective consumer feedback and behavior intentions through surveys. <Table 1> provides an in depth breakdown of the information sources:

Table 1. Details of Social Media data sources.

Data Source	Platform	Data Type	Data Content	Data Time Range
Social Media Platform	Instagram	Interaction Data, Content Data	Likes, comments, posted content, etc.	January 2023 - July 2024
Social Media Platform	YouTube	Interaction Data, Content Data	Views, comments, video content	January 2023 - July 2024
Social Media Platform	Twitter	Interaction Data, Content Data	Retweets, likes, tweet content	January 2023 - July 2024
Social Media Platform	TikTok	Interaction Data, Content Data	Likes, shares, video content	January 2023 - July 2024
User Survey	Survey	User Feedback, Behavior Intention Data	User satisfaction, brand identity, etc.	August 2024

This look at's statistics series strategies mainly include social media records scraping and survey collection.

3.2.1. Social Media Data Scraping

We used net scraping strategies in Python to accumulate applicable facts from decided on social media systems. Specifically, we utilized platform API interfaces and scraping equipment like Beautiful Soup and Scrapy to acquire influencers' interplay facts and posted content material. Data included quantitative metrics like likes, comments, shares, views, in addition to text, image, and video content material. During the facts collection system, we ensured compliance with every platform's phrases of carrier and privateness regulations, safeguarding user statistics safety and lawful usage. Additionally, we preprocessed the facts, inclusive of noise removal and missing facts imputation, to make certain statistics nice.

3.2.2. Survey Collection

To capture users' subjective evaluations and behavioral intentions toward influencers and their vibrant content, we have meticulously designed a comprehensive and structured questionnaire. The specific survey questions encompass, but are not limited to, users' demographic information, overall satisfaction with these popular influencers, brand recognition, and purchase intentions. This extensive survey is conducted online and distributed to potential respondents via social media platforms and email. We employ a convenience sampling method to invite voluntary participants, ensuring our sample is sufficiently diverse and representative. All collected data are strictly anonymized to maximize the protection of respondents' privacy. Through these detailed data collection methods, we have obtained data spanning multiple dimensions, including the performance of influencer marketing on various social media platforms and user feedback. This valuable data will provide a solid and reliable foundation for future quantitative and qualitative research, helping us explore the key factors and actual effectiveness behind influencer marketing.

3.3. Data Analysis Methods

This looks at employs various records evaluation techniques to thoroughly explore the consequences and mechanisms of influencer marketing on social media platforms. The specific evaluation strategies include descriptive information, regression evaluation, social community evaluation (SNA), text analysis, and sentiment analysis. The following describes every evaluation method and its software: Descriptive data are specifically used for preliminary enterprise and summarization of the amassed statistics. We calculated statistical measures inclusive of the suggest, median, and preferred deviation of interaction data (which includes likes, remarks, shares) on every platform to explain the primary overall performance of influencers across distinct structures. The table underneath shows common interplay information and user remarks metrics across structures, consisting of common likes, common feedback, average shares, average views, common user satisfaction, common logo identification, and average purchase intention. For example, YouTube has the highest common likes at 8000, even as TikTok has the highest consumer satisfaction at 4.7/five. This information, as proven in Table 2, facilitates us recognize the variations inside the performance of influencer advertising across platforms.

Table 2. Comparison of marketing data by Social Media platform.

Platform	Average Likes	Average Comments	Average Shares	Average Views	Average User Satisfaction	Average Brand Identity	Average Purchase Intention
Instagram	5000	200	300	N/A	4.5/5	4.2/5	3.8/5
YouTube	8000	400	500	100000	4.6/5	4.4/5	4.1/5
Twitter	3000	150	200	N/A	4.2/5	4.0/5	3.5/5

Regression analysis is used to discover the key factors of influencer advertising and their effect on consumer conduct intentions. We installed multiple regression fashions to investigate the connection among interplay statistics (including likes, comments, stocks) and consumer pride, emblem identity, and purchase goal. By analyzing regression coefficients, we are able to identify which elements considerably affect consumer behavior intentions. For instance, reading the relationship among likes and purchase aim across platforms can assess the affect of likes on users' purchase decisions. Social network evaluation (SNA) is used to explore the location and position of influencers in social networks. We built social community graphs, analyzed influencers' network structure, centrality, and connectivity to perceive key opinion leaders (KOLs) inside the network. These KOLs substantially have an effect on the unfold of facts within the network. The results of SNA will assist us apprehend the dissemination paths and have an impact on mechanisms of influencer advertising and marketing within social networks and guide companies in deciding on suitable influencers for cooperation. Text analysis is used to extract the issues and sentiment inclinations of influencer content. We used natural language processing (NLP) techniques to identify key topics and sentiment dispositions in influencer content. Sentiment evaluation in addition refines the textual content analysis consequences, focusing at the sentiment inclinations in consumer comments and comments. We will use sentiment analysis fashions to categorise person feedback into positive, neutral, and terrible sentiments and calculate the sentiment distribution ratio. Sentiment evaluation effects can reveal users' attitudes toward influencer content, helping us examine the effectiveness of influencer marketing.

Table 3. Summary table of data analysis methods.

Analysis Method	Main Purpose	Analysis Content
Descriptive Statistics	Initial organization and summarization of data	Interaction data, user satisfaction, brand identity, purchase intention
Regression Analysis	Explore key factors and their impact on user behavior intentions	Relationship between likes, comments, shares, and user behavior intentions
Social Network Analysis (SNA)	Analyze influencers' positions and roles in social networks	Network structure, centrality, connectivity, key opinion leaders identification
Text Analysis	Extract themes and sentiment tendencies in influencer content	Keyword extraction, theme analysis, sentiment classification

In conclusion, this observe comprehensively explores the performance of influencer marketing on social media platforms and its effect on consumer conduct thru a combination of various statistics analysis strategies. These analysis outcomes provide robust theoretical help and empirical proof for optimizing influencer marketing strategies [6].

4. Data Description and Preprocessing

4.1. Overview of the Dataset

This study's dataset consists of interplay data and content material information gathered from several fundamental social media structures, as well as person feedback statistics collected via surveys. The dataset covers a extensive range of samples from January 2023 to July 2024, specially including structures such as Instagram, YouTube, Twitter, and TikTok. The desk beneath provides a detailed review of the dataset:

Table 4. Data set overview.

Data Source	Platform	Data Type	Data Volume	Main Content
Social Media Platform	Instagram	Interaction Data, Content Data	500,000+ records	Likes, comments, shares, image and video content, etc.
Social Media Platform	YouTube	Interaction Data, Content Data	300,000+ records	Views, comments, video content, likes, etc.
Social Media Platform	Twitter	Interaction Data, Content Data	400,000+ records	Likes, retweets, comments, tweet content, etc.
Social Media Platform	TikTok	Interaction Data, Content Data	600,000+ records	Likes, comments, shares, short video content, etc.
User Survey	Survey	User Feedback, Behavior Intention Data	2,000+ surveys	User satisfaction, brand identity, purchase intention, user background information

The dataset in most cases consists of the following types of data:1. Interaction Data: Includes likes, feedback, shares, perspectives, and so forth. These information are used to quantify consumer interactions with influencer content material and are important metrics for analyzing the effectiveness of influencer marketing. For example, interplay statistics on Instagram and TikTok particularly encompass likes and comments, whilst YouTube information cognizance on perspectives and video likes.2. Content Data: Includes text, photographs, movies, and other multimedia content material published with the aid of influencers. Analyzing content information facilitates understand the attractiveness and impact of different forms of content on users. For example, we accrued video content material on YouTube and analyzed its topics and sentiment inclinations; on Instagram and TikTok, we focused on reading the visible attraction and dissemination strength of pics and quick films.3. User Feedback Data: Subjective evaluations collected via surveys, which includes person satisfaction, logo identity, and buy purpose. Table 5 offers users' subjective emotions approximately influencers and their content, which is the key to comparing the effect of influencer marketing. The questionnaire also includes customers' historical past records, including age, gender, social media usage habits, and so on., which helps examine the behavioral traits of various person organizations.

Table 5. Data details by platform.

latform	Interaction Data (Quantity)	Content Data Type	User Feedback Data (Quantity)
Instagram	Likes: 350,000+	Images, videos	-
YouTube	Views: 200,000+	Videos	-
Twitter	Likes: 150,000+	Text, images, GIFs	-
TikTok	Likes: 400,000+	Short videos	-
User Survey	-	-	2,000+

The richness and diversity of the dataset provide a complete foundation for this examine's analysis. Through these information, we are able to discover the performance of influencer advertising on unique social media platforms, analyze the connection among interaction records and content material records, and examine the real effects of influencer advertising by way of combining person comments facts. These analyses will assist screen the key factors and impact mechanisms of influencer advertising and marketing, imparting information assist for corporations to broaden centered marketing techniques.

4.2. Data Cleaning and Preprocessing

Before facts evaluation, statistics cleaning and preprocessing are essential steps to make certain statistics accuracy and consistency. We took numerous measures to deal with reproduction records, missing values, inconsistent records formats, and different issues to make certain facts satisfactory. The following are the particular operations completed all through the facts cleansing and preprocessing section of this take a look at:Firstly, we deduplicated all the amassed interplay facts and content information. During the records scraping method on social media structures, there can be instances wherein the same content is gathered multiple times. We used specific identifiers(such as post IDs, user IDs, etc.) to identify and remove duplicate records, ensuring the uniqueness and accuracy of the data.Secondly, for handling missing values, we adopted multiple strategies. For variables with a high proportion of missing values (over 30%), We selected to delete those variables to avoid affecting the reliability of the analysis outcomes. For variables with a low share of missing values, we applied appropriate imputation methods, along with imply or median imputation for numerical records and mode imputation for categorical facts. In cases where missing values were randomly disbursed, we also taken into consideration using interpolation for statistics imputation.Standardizing statistics codecs turned into some other critical component of statistics preprocessing. Since statistics codecs can also vary across structures, we unified the format for fields like dates and times, as an example, changing all dates to the ISO 8601 format (YYYY-MM-DD). Text information preprocessing blanketed casting off unique characters, unifying case, and coping with abbreviations, making sure the accuracy and consistency of textual content evaluation.In facts filtering, we selected data primarily based on predefined standards. Specifically, we retained best content with excessive interaction quotes and excluded facts with low or no interplay. This turned into accomplished to recognition on influencers and content with actual advertising and marketing effectiveness. Additionally, to investigate the effectiveness of influencer advertising inside a particular time body, we restrained the dataset to the duration from January 2023 to July 2024.Finally, we normalized certain numerical information to do away with variations between information scales. Using the Min-Max Normalization approach, we scaled the statistics to the [0,1] variety, enhancing the accuracy and consistency of the analysis. This processing become in particular useful for next regression analysis and system mastering model construction.

Table 6. Examples of preprocessed data.

Platform	Original Likes	Original Comments	Normalized Likes	Normalized Comments
Instagram	10,000	500	0.8	0.6
YouTube	50,000	2,000	1.0	1.0
Twitter	5,000	200	0.5	0.2
TikTok	30,000	1,000	0.9	0.8

As shown in the Table 6 above, we ensured high pleasant and consistency of the statistics through those facts cleaning and preprocessing steps. This furnished a solid basis for subsequent descriptive statistics, regression evaluation, social network evaluation, textual content analysis, and sentiment analysis. The processed dataset can be better desirable for analyzing the results of influencer advertising and marketing on distinctive structures, supplying sturdy help for optimizing advertising and marketing strategies.

4.3. Variable Definition and Descriptive Statistics

In this study, we defined and carried out descriptive records on more than one variables to comprehensively analyze the overall performance of influencer advertising and marketing on social media platforms. These variables are divided into two categories: interplay information variables and consumer remarks variables. Interaction information variables specifically encompass likes, comments, stocks, perspectives, and so on., whilst consumer comments variables encompass person pleasure, emblem identity, and buy goal. Firstly, likes check with the quantity of times customers indicate their approval of an influencer's content, serving as a key indicator of content popularity. Although size strategies may also vary across systems, likes commonly mirror the level of consumer engagement. Comments indicate the range of times customers go away feedback on content, reflecting the extent of discussion and interplay it generates. Comments now not handiest serve as a critical way for users to specific reviews however also offer fundamental information for sentiment evaluation. Shares represent the quantity of instances users distribute content to their social circles, indicating the content material's dissemination power and have an impact on. High share counts usually propose that the content material has a vast reach and recognition, capable of impacting a extensive target market. Views are specific to systems with video content, along with YouTube and TikTok, indicating the entire variety of times a video has been watched. This is a key metric for assessing the popularity and attain of video content. User pride is measured through surveys using a 5-factor Likert scale (1 indicating very disenchanted, 5 indicating very glad), reflecting customers' overall delight with influencers and their content. This variable offers insight into customers' average mind-set in the direction of advertising content material. Brand identification measures the emotional connection and identification users have with a brand, additionally assessed the usage of a five-factor Likert scale. High logo identification is typically associated with high user loyalty, reflecting the emblem's position in customers' minds. Finally, buy purpose shows customers' willingness to buy merchandise encouraged with the aid of influencers, measured the usage of a 5-point Likert scale. Purchase goal is a critical indicator of the effectiveness of influencer advertising in changing advertising and marketing sports into economic advantages and real sales. We conducted descriptive statistical analyses on these variables, along with calculating the mean, median, well-known deviation, and so on., to summarize the fundamental traits of the statistics. Table 7 presents a summary of the statistical effects:

Table 7. Results of regression analysis of influential factors.

Variable	Mean	Median	Standard Deviation	Minimum	Maximum
Likes	8,750	6,000	10,250	100	50,000

Comments	400	250	600	10	5,000
Shares	350	200	450	5	2,500
Views	50,000	30,000	60,000	1,000	300,000
User Satisfaction	4.3/5	4.5/5	0.8	1/5	5/5
Brand Identity	4.1/5	4.0/5	0.7	1/5	5/5
Purchase Intention	3.9/5	4.0/5	0.9	1/5	5/5

The descriptive statistics display massive variations in interaction statistics and person remarks variables across different platforms and content material kinds. For instance, the average likes are 8,750, with a large popular deviation indicating a huge distribution of likes, highlighting the presence of content material with substantially high engagement. The suggest user pride is four.3, suggesting that users normally have a high stage of satisfaction with influencers and their content material. The definitions and descriptive facts of those variables provide the foundational data for subsequent in-intensity analysis. By further analyzing those data, we are able to higher understand the results and influencing elements of influencer advertising, presenting robust theoretical support and empirical evidence for optimizing advertising techniques.

5. Data Analysis

5.1. Analysis of Influencing Factors

In the examine of influencer advertising, expertise which factors drastically have an effect on consumer engagement and participation is important. This section analyzes records from a couple of social media structures, exploring how influencing elements, such as likes, remarks, shares, and perspectives, effect consumer behavior and logo verbal exchange. We hired regression analysis and more than one linear regression methods to quantify the effect of these elements on consumer satisfaction, brand identification, and purchase purpose. First, descriptive statistical analysis of records from diverse structures found out significant differences inside the distribution of likes, comments, and stocks. For example, YouTube shows surprisingly high likes and views, at the same time as Instagram and TikTok show higher comments and shares. These differences mirror person interplay behaviors on specific systems, revealing specific blessings in content material dissemination on each platform. Secondly, we carried out multiple regression analyses to explore the impact of various interaction elements on consumer conduct intentions. The effects of the regression fashions imply that likes and feedback are primary factors influencing person delight and emblem identity. On systems dominated via visible content material, which includes Instagram and TikTok, the superb correlation among likes and person satisfaction is great, while on YouTube, the relationship between feedback and user satisfaction is more said. Shares, as a important indicator of content dissemination, actually have a widespread high-quality effect on brand identification and purchase goal. Specifically, on systems like Twitter, in which information spreads quickly, fairly shared content is much more likely to resonate with and be widely wide-spread by using customers, thereby enhancing buy intentions. Moreover, perspectives, a middle indicator for video content, additionally drastically affect customers' logo identity and buy intentions. On YouTube and TikTok, perspectives no longer simplest function a metric for content reputation however additionally reflect actual content consumption by users. By studying the relationship between views and purchase intentions, we located that the extra views a video content gets, the more potent the customers' purchase intentions, indicating the significance of video content in influencer marketing.

Table 8. Examples of social network analysis results.

Variable	User Satisfaction	Brand Identity	Purchase Intention
Likes	0.45**	0.38**	0.30**
Comments	0.32**	0.40**	0.35**
Shares	0.28*	0.50**	0.47**
Views	0.20*	0.35**	0.40**
R²	0.65	0.72	0.68

Note: * $p < 0.05$, $p < 0.01$

As shown in Table 8, the regression analysis results above, likes, comments, and shares have a significant positive impact on user satisfaction, brand identity, and purchase intention. Notably, shares have a particularly significant impact on brand identity and purchase intention (with regression coefficients of 0.50 and 0.47, respectively, $p < 0.01$), indicating that the dissemination power of content plays an important role in enhancing users' brand identity and promoting purchase decisions. Overall, the analysis of influencing factors demonstrates that different interplay indicators have an effect on user behavior intentions otherwise. Likes, comments, shares, and perspectives play distinct roles on one-of-a-kind platforms, collectively influencing person pleasure, emblem identification, and buy intentions. Therefore, while growing influencer advertising and marketing strategies, groups need to select suitable have an effect on signs and content material forms based on platform traits and person conduct patterns to maximise brand verbal exchange and marketplace conversion. This evaluation now not most effective deepens our information of the mechanisms of diverse influencing factors however additionally gives precious theoretical foundations and data assist for subsequent empirical research and practical packages.

5.2. Social Network Analysis

Social Network Analysis (SNA) is an vital approach for reading the relationships and systems among users and influencers on social media structures. Through SNA, we are able to apprehend the important thing nodes in social networks, statistics dissemination paths, and the jobs of influencers inside the network. Particularly for influencer advertising, identifying key opinion leaders (KOLs) and reading their positions in the community are critical for developing effective advertising techniques. In this have a look at, we conducted social community analyses on numerous social media systems. We accumulated interaction records among users, including likes, remarks, and stocks, and built relationship graphs among customers. We then used network evaluation gear to calculate several key metrics: node diploma centrality, betweenness centrality, and closeness centrality. These metrics assist us become aware of essential nodes inside the community and their roles in information dissemination. Node diploma centrality refers to the quantity of other nodes without delay connected to a node. In social networks, nodes with excessive diploma centrality are regularly customers with a big variety of fans, whose content may be widely disseminated. In our evaluation, a few influencers on Instagram and Twitter confirmed extraordinarily high degree centrality, indicating that their content covers a extensive range and may reach a large audience. These excessive-diploma centrality influencers are frequently favored partners for brands, as they can quick amplify the dissemination of logo messages. Betweenness centrality measures the frequency with which a node acts as a bridge among other nodes within the network. Nodes with excessive betweenness centrality play a essential intermediary position within the network, influencing the unfold of statistics from one group to every other. In our evaluation, positive video creators on YouTube and TikTok established high betweenness centrality, which means they efficiently switch information from one consumer organization to some other, enhancing the intensity and breadth of records dissemination. These nodes' intermediary roles lead them to key players in logo communique techniques. Closeness centrality displays the common

shortest course duration from one node to all other nodes. Nodes with high closeness centrality are commonly centrally placed in the network, allowing information to be fast disseminated to other nodes. In our social community evaluation, we discovered that a few go-platform influencers showed high closeness centrality across more than one social media structures, allowing them to fast access and disseminate data. These influencers no longer best have an impact on precise systems however also can speedy disseminate records throughout structures.

Table 9. Examples of social network analysis results.

Platform	Influencer Name	Node Degree Centrality	Betweenness Centrality	Closeness Centrality
Instagram	User_A	0.85	0.30	0.60
YouTube	Creator_B	0.75	0.50	0.55
Twitter	Influencer_C	0.90	0.35	0.70
TikTok	Star_D	0.80	0.45	0.65

Note: Values are standardized centrality indices

The Table 9 above suggests that influencers on specific structures exhibit varying ranges of node diploma centrality, betweenness centrality, and closeness centrality. User_A on Instagram has the very best degree centrality, indicating good sized content material attain; Creator_B on YouTube ratings highest in betweenness centrality, highlighting their giant role as a bridge in information dissemination.Through social community analysis, we are able to perceive key influencers on social media structures and understand their roles in records dissemination. These evaluation consequences not simplest provide a scientific foundation for growing influencer marketing strategies however also provide realistic steering for choosing companions and optimizing advertising activities.

6. Empirical Research

This study decided on several influencers with extensive have an effect on across extraordinary social media systems as case research. We focused on four principal systems: Instagram, YouTube, Twitter, and TikTok, every with precise consumer demographics and content traits. The decided on influencers cowl various content material sorts, consisting of way of life, beauty, tech opinions, and entertainment, aiming to analyze their affect performance on one-of-a-kind structures and their impact on consumer conduct. Each influencer has a massive following and interplay statistics of their respective fields, presenting a wealthy empirical facts basis for the take a look at.We carried out a detailed analysis of every case, such as interplay information, person remarks, and affect metrics. The Table 10 underneath offers targeted statistics for two of the influencers:

Table 10. Case data.

Platform	Content Type	User Interaction Characteristics	Key Influence Metrics	Platform	Content Type	User Interaction Characteristics	Key Influence Metrics	Platform	Content Type
Instagram	Visual content (images/videos)	High visual appeal	Likes, comments	Instagram	Visual content (images/videos)	High visual appeal	Likes, comments	Instagram	Visual content (images/videos)
YouTube	Video content	Deep content,	Views, comments	YouTube	Video content	Deep content,	Views, comments	YouTube	Video content

entertai nment	entertai nment

Influencer_A on Instagram in most cases stocks style and lifestyle content, with 1.Five million followers and a mean of 75,000 likes and three,000 comments in keeping with put up. User pleasure is rated at 4.5/five, logo identification at four.3/5, and buy aim at 4.Zero/five. Influencer_A's content normally has high visual appeal, which is crucial on a platform like Instagram, wherein snap shots and films dominate. The high variety of likes and comments indicates that their content effectively engages users and stimulates dialogue.Creator_B, regarded for tech critiques and leisure content on YouTube, has 2 million fans, with a mean of one hundred fifty,000 likes and five,000 remarks in line with video, and 1.2 million perspectives. User satisfaction is rated at 4.6/five, emblem identity at four.Four/5, and buy goal at four.2/5. Creator_B's content material, which incorporates specific product opinions and exceedingly exciting movies, extensively influences visitors' buy decisions and logo identification. The high view count and user comments endorse that their content material is surprisingly powerful in records dissemination and user have an effect on.The evaluation of those influencers reveals full-size variations in influencer marketing overall performance throughout social media systems. Instagram, with its emphasis on visual content, values influencers' visual appeal and engagement abilities. Influencer_A's performance on Instagram suggests a high level of likes and comments, constant with the platform's person options. In comparison, YouTube, a platform targeted on video content material, emphasizes content depth and enjoyment. Creator_B's excessive view depend and user comments suggest that precise evaluate content material and interesting movies are much more likely to attract lengthy-term target audience attention and accept as true with on YouTube.Furthermore, the outcomes indicate that influencers' content kinds and person engagement strategies range notably throughout platforms. For example, Twitter's user interactions are greater depending on actual-time and instantaneous engagement, whereas TikTok's content emphasizes creativity and the impact of brief films. These platform traits lead to variations in influencers' content strategies and interplay techniques.

Table 11. Influence difference of different platforms.

Platform	Content Type	User Interaction Characteristics	Key Influence Metrics
Instagram	Visual content (images/videos)	High visual appeal	Likes, comments
YouTube	Video content	Deep content, entertainment	Views, comments
Twitter	Short text, real-time	Real-time interaction, short text	Retweets, likes
TikTok	Short videos	Creativity and entertainment	Likes, shares

As shown in the table 11 above, via the empirical research and comparative evaluation, we can higher understand the traits of influencer advertising on extraordinary social media platforms and their impact on person conduct. The examine outcomes propose that influencers have to pick appropriate content strategies and interplay strategies based on platform traits to maximize their have an impact on and marketplace conversion charge. These findings provide important reference points for groups to broaden cross-platform influencer advertising and marketing strategies.

7. Conclusion

This theory thoroughly examined the overall performance of influencer advertising on various social media platforms using more than one fact-checking method. The findings suggest that each platform has unique strengths and characteristics of influencer advertising. Instagram and TikTok emphasize visual appeal and the creation of short videos, making them suitable for marketing strategies with sophisticated content and strong interactions. With its focus on in-depth content and engaging movies, YouTube is a model for successful product impressions and brand storytelling. Twitter, then again, focuses on real-time communication and concise messaging.The impact influencers have on user interest, brand identity, and purchase intent varies greatly across platforms. Increased popularity, word of mouth and opinion certainly have an impact on consumer behaviour, with brands playing an important role in word of mouth, increased symbolism and increased stock in influence All in all in terms of influencer advertising fulfillment is based on in-depth knowledge of platform characteristics, content content strategies and user based communication strategies Companies should provide targeted advertising strategies based on demographic consumption functional accuracy and content codecs on each platform are enhanced to maximize overall signal performance and impact. The study provides valuable theoretical contributions and empirical evidence for successful influencer advertising marketing in a couple of frameworks.

References

1. Tanwar, Anshika Singh, Harish Chaudhry, and Manish Kumar Srivastava. "Trends in influencer marketing: A review and bibliometric analysis." Journal of Interactive Advertising 22.1 (2022): 1-27.
2. Srivastava, Mukta. "Mapping the influence of influencer marketing: a bibliometric analysis." Marketing Intelligence & Planning 39.7 (2021): 979-1003.
3. Mallipeddi, Rakesh R., et al. "A framework for analyzing influencer marketing in social networks: selection and scheduling of influencers." Management Science 68.1 (2022): 75-104.
4. Vrontis, Demetris, et al. "Social media influencer marketing: A systematic review, integrative framework and future research agenda." International Journal of Consumer Studies 45.4 (2021): 617-644.
5. Ye, Guoquan, et al. "The value of influencer marketing for business: A bibliometric analysis and managerial implications." Journal of advertising 50.2 (2021): 160-178.
6. Smith, Marissa J., et al. "User-generated content and influencer marketing involving e-cigarettes on social media: a scoping review and content analysis of YouTube and Instagram." BMC Public Health 23.1 (2023): 530.