The Impact of Online Word-of-Mouth from Multi-Platform on Product Sales

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Abstract

This Article aimed to study 1. the comprehensive impact of various dimensions of online word-of-mouth (WoM) from a single e-commerce platform on product sales. 2. the impact of integrating social media platforms' online WoM on product sales. 3. the most important online WoM factors that affect product sales. The number of comments and picture reviews, the star rating of fourteen skin care products from the JD e-commerce platform, and the number of comments from the third-party social media platform Xiaohongshu are selected as the dimension of online WoM. 20578 valid samples of WoM from JD and Xiaohongshu are captured by crawler programs. The sample data is processed and analyzed by SPSS. The research results were found as follows:

1. The number of comments and image reviews from the JD e-commerce platform significantly impacts product sales. This means that consumers are more inclined to choose products with a large number of comments and image reviews when purchasing skincare products online. High-quality product image reviews are intuitive and persuasive, provide more detailed product information, give consumers a more authentic understanding of the product, and are crucial for attracting more potential consumers' attention and trust.

2. The JD star rating has no significant impact on product sales. Because all the products have relatively high average rating scores which leads consumers to overlook the small difference in ratings among products.

3. The number of comments from the third-party social media platform Xiaohongshu significantly impacts product sales. This means that consumers like to search for products across different platforms to understand the products comprehensively. More comments mean that the products have gained recognition from purchased consumers which will attract and stimulate more potential consumers to make purchasing decisions.

Keywords: online word-of-mouth; product sales; social media platforms; e-commerce platform

Introduction

With the increasing improvement of basic internet resources, people's activities have become more inclined or even dependent on the internet. According to the 51st "Statistical Report on the Development of China's Internet" released by the China Internet Network Information Center (CNNIC), by the end of December 2022, The number of online shopping users in China has reached 845 million, accounting for 79.2% of the total number of netizens. (CNNIC, 2023). Therefore, the online shopping model has become a purchasing method with long-term development potential. With the large-scale application of massive intelligent internet devices and applications, consumers can easily comment on purchased products or services in the online shopping platform or the third platform after online shopping which forms online word-of-mouth(WoM). Online WoM is a new form of WoM compared with traditional WoM and has gradually become an important factor affecting consumer purchasing behavior. So it has attracted the attention of many scholars (Xiaoqian & Yuemei, 2021). According to research (Leeflang et al., 2014), 90% of consumers will read online comments before purchasing a product and read at least 4 comments, meanwhile, 67% of consumers are influenced by user-generated content (i.e., material uploaded by users on social media) to make purchase decision. It can be seen that online WoM, as an important component of internet information, has a crucial impact on consumers' purchasing intentions and behavior.

Hu Yaqi used a stepwise regression method to explore the impact of online comments on agricultural product sales based on the Taobao e-commerce platform. The results indicate that the number of comments and visual reviews significantly promotes agricultural product sales, while the number of negative reviews significantly reduces product sales, and the length of reviews has no significant impact on product sales (Hu & Lin, 2021). Lakshman, D. found that both numerical and textual comments have a positive impact on sales performance. So online comments have a positive impact on overall sales performance (Lakshman, 2021). With the popularization and application of social software, in addition to shopping websites, social media platforms have also become important channels for consumers to share purchased products and experiences. From social media platforms, potential consumers can easily obtain comments about product attributes and service quality that are important for experiential products which give consumers a comprehensive understanding and judgment only after being purchased and experienced by consumers. Consumers prefer to read a large number of WoM about products from multiple platforms before making purchase decisions about whether to purchase the corresponding products and services. Research has shown that online WoM is an important source of quality information for experiential products before sale (Liao & Huang, 2016). In the field of experiential products, customers tend to trust WoM information on third-party platforms. The usefulness of third-party platforms perceived by consumers is higher than that of sellers' platforms, and there is a significant difference (Li & Ren, 2015). Therefore, this paper focuses on not only the influence of online WOM factors on product sales from a single e-commerce platform but also on integrating online WOM from a third social media platform.

In addition, with the improvement of people's consumption level and the emphasis on appearance, women are more inclined to choose suitable skincare products for skin care by online shopping. Based on this background, this paper selects typical experiential products (facial essence in skincare products) as the research object, uses crawler programs to obtain online WoM data of skincare products from e-commerce platforms and social media platforms, makes a multi-dimensional analysis of online WoM, analyzes and evaluates the impact of online WoM factors on the sales of skincare products.

Objective

1. To study the comprehensive impact of various dimensions of online WoM on a single e-commerce platform.
2. To research the impact of integrating social media platforms' online WoM on product sales.
3. To study and identify the most important online WoM factor that affects product sales.

Literature Review

Social Marketing

Social media or social media (social media) refers to electronic media. It is a medium that allows the general public to participate in creating and exchanging various opinions via the Internet. These media are owned by companies that provide services through their websites such as Facebook, High-Five, Twitter, etc. states that social media is a technology. Computers facilitate the sharing of ideas and information through the creation of virtual networks and communities. Social media works on the Internet and allows users to quickly communicate electronic content including personal information, videos, and photos. Users engage with social media through tablets or smart computers. smartphone via software or web application The purpose of social media marketing is to showcase your business on social media and use it as a way to communicate your message to potential consumers. The main goal of social media marketing is to: promote companies and individuals can find many other benefits from social media marketing (eMarketing Institute, 2018).

Types of social media

Modern social media can be divided into nine categories, each with its characteristics depending on who is expected to use it (SEOPressor, 2021).

1. Social networks (Social media) are social media where you can connect with people with similar interests and backgrounds. The Yodnikhom social networks include Facebook, Twitter, and Instagram. They are considered platforms that allow you to connect with friends, family, or those interested in various brands. This social network allows the sharing of ideas. Upload photos and videos and join groups of interest.
2. Bookmarking sites are web-based services for Internet users. By sharing bookmarks on a provider's website to collect, store, categorize, search, and especially share the website or its content with interested others. A great feature is that users can "tag" likes. link, which makes searching easier, and share them regularly with their followers, such as Pinterest, Flipboard, Diggs, StumbleUpon, etc.
3. Social News is a newsgroup website that allows users to post news links and more to external articles. News and website content are submitted by users and promoted to the homepage through a user-voted ranking system. The one with the most votes will be displayed, for example, Reddit, Digg, and Current TV.
4. Media Sharing is a website that allows users to share various types of media, divided into two types: Image sharing and video hosting websites You can upload photos, data files, and songs to share with members. With the ability to create a profile and the option to comment on photos or videos uploaded, the platform allows anyone to create, curate, and share their creativity. Can chat with YouTube, Vimeo, 4shared, Flickr, Pinterest, etc.
5. Microblogging (Microblogging) A blog is a website that has a content format similar to an online diary, with a comments section and links to other related websites. Microblogging

is the posting of short-written messages. This may include links to websites, products, or services, including Twitter, and Facebook.

6. Blog comments and forums are websites that allow users to participate in discussions by posting and sending messages. Commenting on blogs will be more or less according to the response. Google has a popular blogging website, Blogger. For forums, there are many forms, such as sports forums, games forums, health forums, and various knowledge that arises from. The members come to exchange knowledge. Most of them are in the form of asking questions and answering questions, which if it is interesting, will continue to gain followers. An e-forum community with many Thai users, such as the Pantip website (www.pantip. com) that is often called Pantip Cafe

7. Social review sites or social media review sites such as TripAdvisor, Yelp, and FourSquare, for example, searching for new products or new restaurants. The user will go to the review. Review sites like TripAdvisor show reviews of communities, places, and experiences that can help you make informed decisions. Businesses can use it to understand customer perspectives, both good and bad, to improve.

8. Community Blogs, including Tumblr, and Medium, are blogs that give the community a space to express their opinions and their voices on stories shared on the platform.

9. Sharing Economy Networks include Airbnb, Pantheon, and Kickstarter. This network is for sharing things users want, such as searching for accommodations or various activities.

Conceptual Framework

The research models on online WoM vary due to different research perspectives and variables. From a research perspective, some scholars conducted research on the impact of the perceived usefulness of online comments, while others focused on the influencing factors of consumer purchase decisions. In this study, we mainly focus on product sales, namely how online WoM affects product sales. This study divides the collected data indicators into product indicators and online WoM indicators based on different attributes. Then, according to research needs and actual situations, product sales are used as the dependent variable, and online WoM indicators are used as independent variables to study the moderating effect of online comments from cross platforms on product sales. Based on the selected variables, the theoretical model is determined as shown in the figure1:

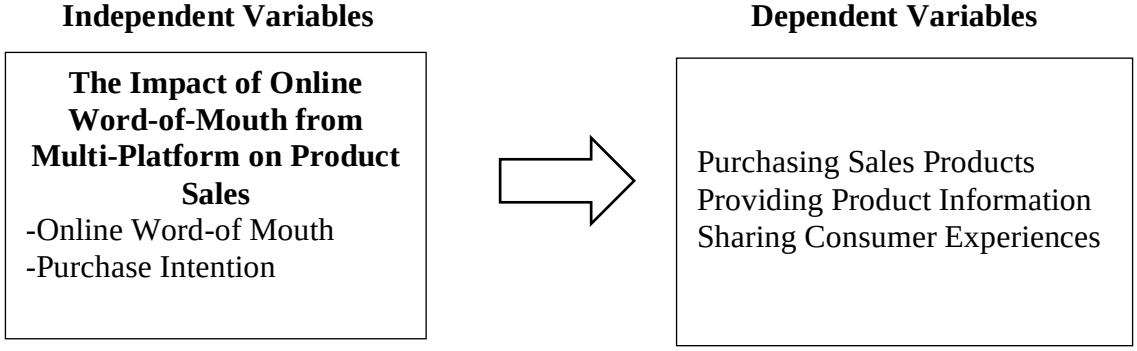

Figure 1 : Conceptual Framework

From Figure 1 the researcher has investigated and analyzed learning using cloud-based in U-Learning environment to develop or synthesize as a learning model. Then the learning model is evaluated for appropriateness before using for learning management in order to compare the learning achievement before and after teaching.

Research Hypothesis

1. Influence of single e-commerce platform online WoM on product sales.

H1a: The more the number of comments in the e-commerce platform comments, the greater the impact on product sales, and it is a positive relationship.

H1b: The more image comments in the e-commerce platform reviews, the greater the impact on product sales, and it is a positive relationship.

H1c: The more star ratings in e-commerce platform reviews, the greater the impact on product sales, and it is a positive relationship.

2. Influence of integrating social media platform online WoM on product sales.

H2a: The higher the number of comments on social media platforms, the greater the impact on product sales, and it is a positive relationship.

Research Methodology

1. Research design

1) Review the existing literature and research status both domestically and internationally.

This study reviews existing literature from three aspects: the usefulness of online WoM, the impact of online WoM on consumer decision-making, and the impact of online WoM on product sales.

2) Build a multi-dimensional WoM model.

Based on existing literature research, this study identifies the independent variables included in the research model, learns the quantification methods of each variable, and ultimately constructs a research model and proposes research hypotheses.

3) Extracting WoM information.

Firstly, select appropriate data sources. Then, develop a crawl in Python to get the data required for this study. Finally, process the data and get the sample data.

4) Empirical analysis to conclude.

The sample data is input into the model for analysis using SPSS software. After statistical analysis, the proposed hypothesis in the previous section is verified to be true or false, and the final empirical conclusion is drawn.

5) Suggestions and Prospects

Based on empirical research conclusions, this study provides opinions on the product online WoM management and consumer purchasing decision-making and presents future research directions.

2. Population and Sample

1) This paper mainly focuses on experiential products (facial essence in skin care products).

2) The selected sample data (online WoM) mainly comes from JD Mall product comments and Xiaohongshu notes.

Figure 2: JD Mall Online Comments

Figure 3: Referring and sharing experiences on the Xiaohongshu platform

3. Research Instruments

This study will adopt a quantitative research method. Develop a data crawler program in Python to capture data related to essence products from JD and Xiaohongshu, and save the collected information to a local folder. Develop a data processing program in Python to process and analyze the collected data, and then use SPSS to perform statistical analysis on the sample data.

4. Data Collection

This paper uses web crawler technology to obtain JD e-commerce website data and third-party platform Xiaohongshu comment data, and the crawler program is mainly developed in Python. This study selects 14 skincare products and obtains the relevant data from daily comments on the self-operated platform of JD and Xiaohongshu. The specific time of the samples is from June 26, 2023 - July 25, 2023. After the original data is captured, the existing data is processed, and invalid samples are eliminated. In the end, a total of 20,578 samples of valid comment data were obtained, including 10,433 samples from JD and 10,145 samples from Xiaohongshu. For the sake of research rigor and data reliability, daily product sales and online WoM data are collected for facial essence products of each brand. The final structured data content is: comment ID, product title, total number of comments, and number of image reviews, star rating from JD and comment time, note title from Xiaohongshu.

5. Data Analysis:

(1) Variable design. 1)Dependent variable: product sales. 2) Independent variable: The independent variables in this study mainly include the number of comments, star ratings, and images from JD e-commerce platform-related products, as well as the number of comments on Xiaohongshu platforms.

(2) Descriptive statistical analysis. Using statistical software SPSS for analysis.

(3) Correlation analysis. Use the Pearson correlation analysis matrix to preliminarily test whether there is a correlation between each independent variable and between the independent variable and the dependent variable. We can analyze which variables are significantly correlated with sales from the results of correlation analysis.

(4) Hypothesis test. Regression model construction and hypothesis test results.

$$sales = w_1 x_1 + w_2 x_2 + w_3 x_3 + w_4 x_4 + b$$

Among them: sales represent product sales, W is the index weight, x is the value of each independent variable, and b is an offset constant.

Research Finding

1. Influence of single JD e-commerce platform online WoM on product sales.

1) Descriptive Statistical Analysis Results

Table 1 Descriptive Statistics Analysis on JD

	N	Minimum	Maximum	Mean	Std. Deviation
Num of JD's Comments	420	1.00	149.00	26.2959	23.08164
Num of JD's Image	420	0.00	116.00	21.0136	22.01581
Star rating of JD	420	3.67	5.00	4.8946	0.17118
Sales volume of products	420	25.00	330.00	138.5986	80.00129
Valid N (listwise)	420				

The descriptive statistical analysis results show that on the JD platform, there is a certain degree of difference in the total number of product comments and image comments. Some products have received relatively more user discussions, while others have fewer comments. Most products have achieved high star ratings on the JD platform.

2) Correlation Analysis Results

Table 2 Correlation analysis on JD

		Num of JD's Comments	Num of JD's Image	Star rating of JD	Sales volume of products
Sales volume of products	Pearson Correlation	.831**	.790**	-0.007	1
	Sig. (2-tailed)	0.000	0.000	0.910	
	N	420	420	420	420
**. Correlation is significant at the 0.01 level (2-tailed).					

After conducting Pearson correlation analysis, there is a significant correlation ($P<0.05$) between the number of comments on JD, the number of image reviews, and sales. There is no significant correlation between star rating and sales volume ($P>0.05$).

3) Regressive Analysis Results

Table 3 Model goodness of fit on JD

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.838a	0.703	0.700	43.84348
a. Predictors: (Constant), Star rating of JD, Num of JD's Image, Num of JD's Comments				
b. Dependent Variable: Sales volume of products				

From the results in the above table, the following conclusion can be drawn: R^2 (Coefficient of determination) = 0.7, which means that the fitting degree of the model is 70%. The independent variables of the model (number of comments, number of image reviews, star rating) relatively well explain the changes in product sales.

Table 4 Analysis of variance on JD

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1317807.863	3	439269.288	228.518	.000b
	Residual	557452.776	419	1922.251		
	Total	1875260.639	416			
a. Dependent Variable: Sales volume of products						
b. Predictors: (Constant), Star rating of JD, Num of JD's Image, Num of JD's Comments						

From the significance test results in the table above, it can be seen that the F-value of the significance test is 228.518, and the significance level (Sig.) P=0<0.05, indicates that the entire regression model is highly significant overall.

Table 5 Regression coefficients on JD

Model		Unstandardized	Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-2.913	74.908		-0.039	0.969		
	Num of JD's Comments	2.172	0.249	0.627	8.739	0.000	0.199	5.018
	Num of JD's Image	0.839	0.260	0.231	3.226	0.001	0.200	4.999
	Star rating of JD	13.639	15.232	0.029	0.895	0.371	0.965	1.036
a. Dependent Variable: Sales volume of products								

From the T-test results, it can be seen that the number of comments and image comments has a significant impact on sales (P<0.05), and the regression coefficients are both positive, indicating a significant positive impact on sales. The regression coefficient of the number of comments is greater than the number of image comments, indicating that the number of comments has a greater impact. Star rating has no significant impact on sales (P>0.05). The maximum value of the variance inflation factor (VIF) for each variable is 5.0, which is much less than 10, indicating that there is no collinearity problem between the independent variables.

2. Influence of Integrating Social Media Platform(Xiaohongshu) online word of mouth on Product Sales.

1) Descriptive Statistical Analysis Results

Table 6 Descriptive Statistics Analysis on Xiaohongshu（XHS）

	N	Minimum	Maximum	Mean	Std. Deviation
Num of JD's Comments	420	1.00	149.00	26.2959	23.08164
Num of JD's Image	420	0.00	116.00	21.0136	22.01581
Star rating of JD	420	3.67	5.00	4.8946	0.17118
Num of XHS's Comments	420	1.00	107.00	23.5034	17.63427
Sales volume of products	420	25.00	330.00	138.5986	80.00129
Valid N (listwise)	420				

The results of the descriptive statistical analyses show that there is a significant difference in the level of discussion about the products covered by Xiaohongshu. This wide range of distribution may reflect the differences in popularity and attention of different products among users. As a social media platform, Xiaohongshu may be influential in brand communication and product promotion.

2) Correlation Analysis Results

Table 7 Correlation analysis Integrating XHS

		Num of JD's Comments	Num of JD's Image	Star rating of JD	Num of XHS's Comments	Sales volume of products
Sales volume of products	Pearson Correlation	.831**	.790**	-0.007	.129*	1
	Sig. (2-tailed)	0.000	0.000	0.910	0.026	
	N	420	420	420	420	420
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

After conducting Pearson correlation analysis, it was found that there was a significant correlation ($P<0.05$) between the number of comments on JD, the number of image comments, the number of comments on Xiaohongshu, and sales volume, while there was no significant correlation ($P>0.05$) between star rating and sales volume.

3) Regressive Analysis Results

Table 8 Model goodness of fit Integrating XHS

Model	**R**	**R^2**	**Adjusted R^2**	**Std. Error of the Estimate**
1	.858a	0.736	0.733	41.37400
a. Predictors: (Constant), Num of XHS's Comments, Star rating of JD, Num of JD's Image, Num of JD's Comments				
b. Dependent Variable: Sales volume of products				

From the results in the table above, it can be concluded that after integrating data from the social media platform Xiaohongshu, the R^2 increased, with R^2 (Coefficient of determination) = 0.73, indicating that the independent variables of the model (number of comments, number of image comments, star rating, and Xiaohongshu comments) relatively well explained the changes in product sales. The increase in R2 means that the model has stronger explanatory power for product sales.

Table 9 Analysis of variance Integrating XHS

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	1380548.242	4	345137.060	201.621	.000b
	Residual	494712.397	415	1711.808		
	Total	1875260.639	419			
a. Dependent Variable: Sales volume of products						
b. Predictors: (Constant), Num of XHS's Comments, Star rating of JD, Num of JD's Image, Num of JD's Comments						

In the regression model incorporating comments from Xiaohongshu, the F-value of the overall significance test was 201.621, and the significance level (Sig.) P=0<0.05. This means that the entire regression model is highly significant overall and can effectively explain product sales.

Table 10 Regression coefficients Integrating XHS

Model		Unstandardized	Coefficients	Standardized Coefficients	t	Sig.	Collinearity	Statistics
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-40.975	70.968		-0.577	0.564		
	Num of JD's Comments	2.510	0.241	0.724	10.410	0.000	0.189	5.301
	Num of JD's Image	0.509	0.251	0.140	2.025	0.044	0.191	5.245
	Star rating of JD	16.922	14.384	0.036	1.176	0.240	0.964	1.038
	Num of XHS's Comments	0.853	0.141	0.188	6.054	0.000	0.946	1.057
a. Dependent Variable: Sales volume of products								

From the T-test results, it can be seen that in the regression model incorporating the number of comments on Xiaohongshu, the number of comments on Xiaohongshu has a significant impact on sales ($P<0.05$), and the regression coefficient is positive, indicating that the number of comments has a significant positive impact on sales. The number of JD comments and JD image comments has a significant impact on sales ($P<0.05$), while star rating still has no significant impact on sales ($p>0.05$). The maximum value of the variance inflation factor (VIF) for each variable is $5.3<10$, indicating that there is no collinearity problem between the independent variables.

After data organization and analysis, the 4 hypotheses proposed in the paper were validated. The results of hypothesis testing are listed in the table.

Table 11 Hypothesis test results

Serial Number	Research Hypotheses	Conclusions
H1a	The more comments in the e-commerce platform reviews, the greater the impact on product sales, and it is a positive relationship	valid
H1b	The more image comments in the e-commerce platform reviews, the greater the impact on product sales, and it is a positive relationship	valid
H1c	The more star ratings in e-commerce platform reviews, the greater the impact on product sales, and it is a positive relationship	invalid
H2a	The higher the number of comments on social media platforms, the greater the impact on product sales, and it is a positive relationship	valid

Summary: When analyzing only a single e-commerce platform (JD), the more total comments and image reviews, the greater the positive impact on product sales, and the largest impact is on the total comments of the e-commerce platform (JD). When integrated into third-party social media platforms (xiaohongshu), an increase in the number of third-party platform comments will have a more significant positive impact on product sales.

Conclusion

1. The comprehensive impact of various dimensions of online WoM on product sales from a single e-commerce platform.

The research results show that the number of comments and image reviews increase, product sales will increase, and there is a significant positive correlation between the JD e-commerce platform. This indicates that consumers show more interest in products with more comments and image reviews. The impact of star ratings on product sales is relatively small because high-star-rating products have already achieved consumers' satisfaction and trust.

2. Integrating the influence of social media platforms' online WoM on product sales.

Research has found a significant positive relationship between the number of comments on social media platforms and product sales. This indicates that more comments on social media can positively impact product sales. The widespread dissemination and user interaction on social media platforms make it easier for consumers to access the real user experience and evaluations of other purchased consumers, and this contributes to generating trust in products and further promoting purchase decisions by consumers.

3. The most important online WoM factor affects product sales.

Research has found that the number of comments is the most important influencing factor. There is a significant positive relationship between the increase in the number of comments and product sales, which further confirms that consumers are more inclined to consider products with more comments in their purchasing decisions. The number of comments represents the degree to which more consumers participate and pay attention, and also means that more consumers have purchased and evaluated the product.

Discussions

1. About sample selection This study only selects 14 skincare products and 20578 valid samples are collected as sample data for regression analysis. While the product types on e-commerce platforms are diverse, analyzing more product types is our future research direction. Which corresponds to (Jia & Chen, 2021) How Does Word of Mouth from Different Components Systems Influence Product Sales differently The results showed that the review component and the Q&A component were significantly different in terms of quantity and completeness of content. The review component will be more complete and larger. And the Q&A section had little content and relatively small volume in comparison. Additionally, the OLS results indicated that topic consistency had a negative impact on product sales. While both maturity characteristics have a positive impact on product sales. And the completeness of the content of the Q&A element has a greater impact on sales than the review element

2. Relevant sample sources The e-commerce platform selected for this study is JD. Although JD is one of China's leading e-commerce platforms, its coverage cannot represent all e-commerce platforms. Different e-commerce platforms have unique user groups, product types, and characteristics. The selected social media platform is Xiaohongshu. Although it is a very popular social media platform, different social media platforms have different user groups, content characteristics, and communication methods. Therefore, the relationship between the number of product comments and sales needs to be further tested and verified on other e-commerce platforms and social media platforms which corresponds to (Huang & Zhe, 2022). Spanning 36 years, the evolution and trend of word-of-mouth marketing research–based on bibliometrix analysis. Word of mouth is an important factor that influences customers' purchasing decisions. Behavior and is an important basis for promoting products and improving business activities. The term viral marketing is a new type of marketing tool, which has a special communication mechanism and characteristics and is the main focus of business activity research. From extracting information from the scientific web This study used bibliometrix software to perform network econometric analysis on 259. Literature on word-of-mouth marketing over the past 36 years. Research on word-of-mouth marketing is divided into three phases, emphasizing the development of research topics and future development trends.

3. Accuracy of measurement The number of measurement variables used in this article is relatively less, which only represents part of the impact of WoM variables on product sales. We will extend online WoM variables to comprehensively evaluate the impact of WoM variables on product sales in our future study which corresponds to (Sattelberger, 2015). Optimising media marketing strategies in a multi-platform world: an inter-relational approach to pre-release social media communication and online searching This study reveals strong relationships both within and between platforms. This finding points to strong path dependency and an unexpectedly high level of interchangeability between different platforms with different users. It suggests that more streamlined procedures for monitoring social media could be developed. This may reduce effort and costs. Increasing access to samples This causes the number of likes and comments to lead to disproportionately low negative evaluations for movies. From these discoveries, A multi-platform marketing strategy should focus on fan pages and trailers as much as possible. From the findings in this article, Marketing strategies for art and film directors should be widely distributed. For blockbuster movies The online search process invariably precedes online user communication. It's important to provide information about a film before it's released to increase the likelihood that it will be indexed by online search engines. The methods of this article can be applied to other research areas

Suggestions

From the research results, we can conclude that online WoM has a significant impact on product sales. It is recommended to adopt WoM marketing strategies, such as providing high-quality products and customer service to increase consumers' trust and satisfaction and promote consumers to give good online WoM. At the same time, brand exposure and awareness can also be increased through channels such as social media platforms. In the management of online WoM, we provide suggestions on these important factors:

1. Suggestions for the platform

1) E-commerce platforms: 1) Reduce attention to online star ratings, avoid blindly pursuing store star ratings, and focus more on other dimensions of online WoM.2) Encourage users to participate in online comments by setting up reward mechanisms; It can also stimulate consumers' purchasing desire and enthusiasm; After online shopping, guidance can be provided to encourage users to share their purchasing experience and product usage experience; The platform can encourage consumers to share their comments on social media, expand the influence of comments, and attract more users to participate in comments.3) Improve the reward mechanism for image reviews and stimulate consumers' enthusiasm for image reviews.

2) Social media platforms: 1) Improve the quality of promotional content. 2) Emphasize the significance of user sharing. 3) Create a sharing theme activity. 4) Provide incentive measures. 5) Follow and recommend high-quality sharing. 6) Provide skincare discussion areas.

2. Suggestions for consumers: Because skincare products are experiential products, it is difficult to understand skincare products before use. Therefore, it is recommended that consumers should have a comprehensive and accurate understanding of their own skin type and needs. Before purchasing a product, it is important to pay attention to the product online WoM from the e-commerce platform, such as the number of comments, image comments, etc. Consumers also read third-party platforms (such as social media platforms) online WoM to learn if this product is compatible with yourself.

3. Suggestions for enterprises: 1) Value and proactively respond to user feedback. 2) Focus on social media and online comments. 3) Win-win cooperation with the third media platform. 4) Purposive WoM marketing. 5) Strict monitoring and management of online comments. 6) Cultivate brand loyalty. 7) Highlight product features.

Overall, e-commerce platform sellers can actively seek cooperation with third-party social media platforms to enhance the visibility of positive WoM. By collaborating to maintain the reputation of their sales platform and third-party social media platforms, e-commerce platform sellers are expected to enhance consumers' perception and experience of their products, thereby promoting the growth of product sales. In today's fiercely competitive e-commerce environment, WoM management on e-commerce platforms and third-party social media platforms is the key to successful sales. Only by carefully planning and implementing WoM strategies, and actively collaborating with third-party social media, can e-commerce platform sellers achieve sales goals and increase market share.

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