

## Regression Analysis based on Social Media Promotion

Jianxin Zheng<sup>1, a</sup>, Shuyi Lv<sup>2, b</sup>

<sup>1</sup>School of Mathematical Sciences, TIANGONG University, Tianjin, China.

<sup>2</sup>Tianjin University of Finance and Economics, Tianjin, China.

<sup>a</sup>zhengjianxin111@icloud.com, <sup>b</sup>lvshuyi10@126.com

### Abstract

**Interactions such as reposting, commenting, and liking can increase the popularity and influence of self-media. In some blogger blogs, we often see bloggers interacting with fans frequently, allowing fans to repost, comment, and like Own blog. This shows that the transfer of praise and praise plays a vital role in the promotion of self-media. This article aims to tap the amount of reposts, likes, and comments of different categories of hot search blogs in a short period of time. Perform regression analysis on forwarding, likes, and comments, and use regression analysis to provide reasonable suggestions and opinions for different types of self-media promotion, so as to achieve better promotion purposes.**

### Keywords

**Regression Analysis; Blog Search; Repost, Like; Comment; Blog Promotion.**

## 1. INTRODUCTION

In recent years, the rapid development of a new generation of Internet technology represented by Web2.0 has changed the traditional method of information dissemination, making social media based on the Internet from virtual to reality, and people have begun to express in this way more suitable for information dissemination With his own views and needs, social media has gradually become a mainstream in society, and has received a high degree of attention in the Internet and business fields, providing new options and ideas for enterprise marketing methods.

The development of the Internet is accompanied by the generation of large amounts of data, especially blogs that are widely used. The number of blog users continues to grow, and governments, celebrities, and celebrities will post their opinions, share lives, etc. through the blog. As a social media platform, the blog stores a large amount of user information. Each data is closely related to the user and has inextricably connected with things. Through these data, we can more objectively understand the user's attitude and idea.

The so-called social media is a process in which a large number of netizens spontaneously contribute, extract, create news, and then spread. There are two points that need to be emphasized. One is a large number of people, and the other is spontaneous communication. Without any of these two factors, it will not constitute a social media category. The generation of social media depends on the development of WEB2.0. If the Internet does not give netizens more initiative, social media will lose the mass foundation and technical support, and lose its foundation. If there are not so many interactive modes supported by technology, the demand of netizens for so many interactive products can only be suppressed and not released. If you don't realize that netizens' strong desire to interact and express themselves will not spawn so many

dazzling technologies. Social media was developed based on the mass foundation and technical support [1]

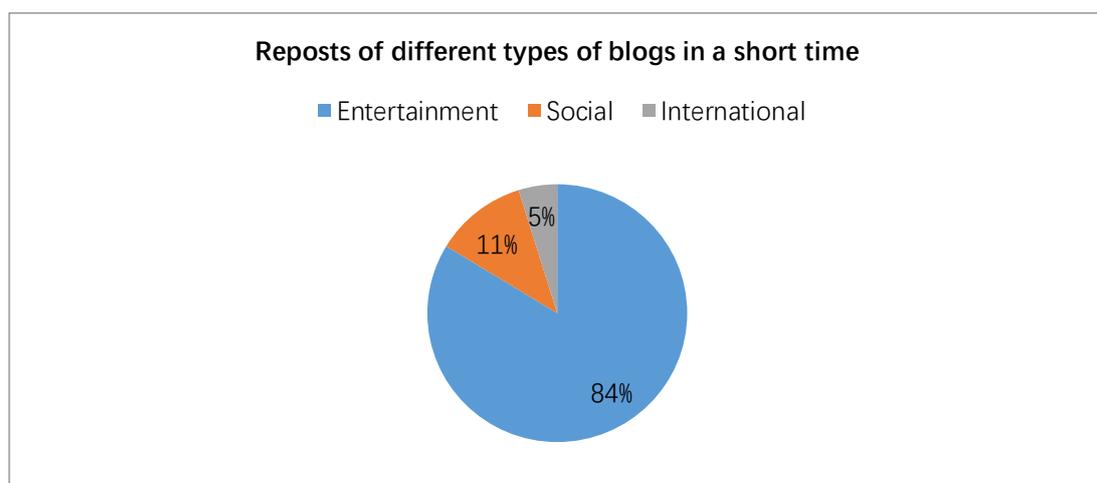
As a new concept emerging in recent years, social media has received more and more attention and attention. Among the top 10 websites in the world, 5 are social media, especially social media sites represented by Facebook, Twitter, YouTube, etc. are popular all over the world and are all the rage. Currently, the number of Facebook monthly active users worldwide has reached 750 million, Twitter users have exceeded 300 million, and YouTube's weekly video views are 3 billion. In China, the number of social media users represented by blogs in the first half of 2011 From 63.31 million to 195 million, a six-month increase of up to 208.9%. Social media is moving from virtual to reality, profoundly affecting and changing our lives. [2] Social media is defined as an online, timely talking platform, where people can create their own content and share the content of others.

How to operate your own social media is an important thing for media people. This article extracts data in real time, and explores the three characteristics of popular bloggers like, comment, and forward to netizens in a short period of time, and performs regression analysis. First of all, according to the blogs of different topics, analyze the conditions like likes, comments, and reposts that are conducive to promotion and operation. Secondly, according to different likes, comments, and reposts, and according to regression to analyze their impact on different types of news.

## 2. DATA MINING AND ANALYSIS

### 2.1. Statistical Graph Analysis

Based on the question of the impact of the re-reviews on a blog in a short period of time, a total of 1,200 pieces of data were mined for research. Considering that forwarding, likes, and comments may have different effects on different blog types, this article classifies blogs. Blogs that contain entries such as celebrities, games, and movies are classified as entertainment categories. The blogs with the words life, scientific research, etc. are classified as social categories. Classify words containing foreign words into international categories. In order to explore the relationship between different types of news forwarding, likes, and comments on the blog at the same time.



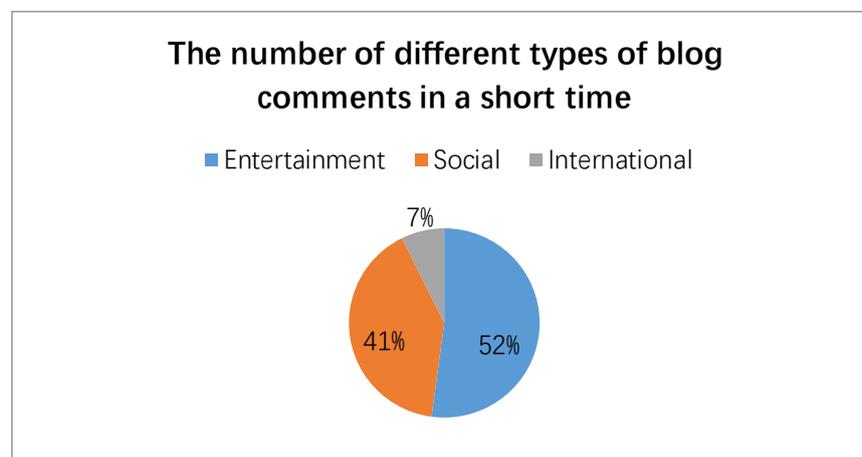
**Figure 1.** Reposts of different types of blogs in a short time

Reposting is a manifestation of propaganda. For stars, the number of reposting is a manifestation of fans and fans. Simply put, just how popular this star is, just look at his

forwarding volume, then the number of forwardings is basically the current fan activity of this star. Take the star as an example. One person reposted 240,000, liked 500,000, and commented 50,000. One person forwarded hundreds of thousands, liked 350,000, and commented 90,000. Although the latter may be more popular in the impression of everyone, in fact, the latter may not be as good as the former. In the case of news, for example, reposting is to expand influence. I hope this matter will be followed and paid attention to by more people.

From the figure, we can see that in the same short period of time, blog users retweet more entertainment, and social and international blogs retweet significantly less than entertainment. That is to say, in the user forwarding operation, the entertainment blog is easier to be forwarded in a short time. Compared with the social and international categories, the entertainment category has a clear advantage in the forwarding operation.

Therefore, when a blog user wants to promote his blog, if he needs more retweets, or wants more fans and fans, choose an entertainment blog for originality, and carry out appropriate blog promotion to enable his own The number of blog account fans has become more active.

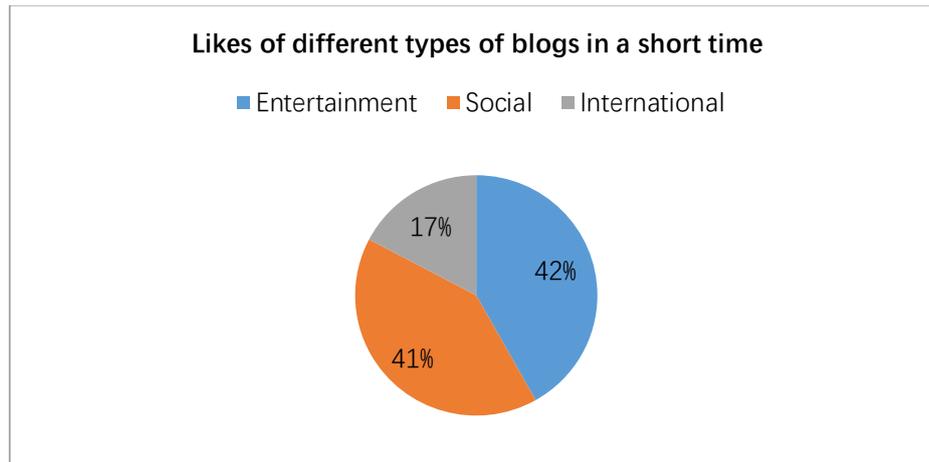


**Figure 2.** The number of different types of blog comments in a short time

The number of comments reflects more activity. For celebrities, they usually reply, either pure powder or black powder. The number of comments reflects more interaction, that is, the number of replies, which is usually an intuitive manifestation of the combat effectiveness of fans. For example, a star sends a blog with 500,000 likes and 100,000 comments. One person has 500,000 likes and 200,000 comments. It can be seen that the former is good for people and the latter has strong traffic. In the case of news, for example, commenting is to express one's own opinion, to discuss and collide with other users.

We can see that in a short period of time, compared with the amount of reposts, the proportion of social comments increased significantly. Entertainment reviews accounted for 52% of the total, social reviews accounted for 41% of the total, and international reviews accounted for 7% of the total. This shows that blog users have more or less discussions and collisions of ideas on entertainment and social aspects.

From this picture, we can see that social news is the object that humans often pay attention to. In the discussion of social news, people have more collisions of ideas, which can strongly arouse people's deep thinking and consideration, and carry out intense discussions in the discussion area. Discussion, that is, more interactions.



**Figure 3.** Number of likes of different types of news blogs in a short time

The number of likes reflects the user's overall favorability of the blog content, mainly the favorability of passers-by. For example, in a blog topic, some blogs like hundreds of thousands of likes, while others only have thousands. Just looking at one person's digital reference is not strong, but comparing two people, you can find that there is still a gap. Another example is that the praise of other types of news is a kind of approval or appreciation. For example, the news reports supporting Wuhan during the epidemic. The praise is the admiration of every volunteer.

In a short period of time, international likes accounted for a relatively small amount, but compared to reposting and commenting, the number of likes increased significantly. This shows that everyone also has a certain degree of favor for international news, while entertainment and social news are basically the same in terms of praise. That is to say, entertainment and social news are similar to the public in terms of goodwill.

For a blogger, the release of entertainment and social news can get the comprehensive favorability of the majority of group owners. If a user is locating a blog type, the number of social and entertainment likes in a short period of time basically does not need to be considered.

## 2.2. Statistical Graph Analysis

When a blogger knows his position and wants to promote it, the blogger should consider the impact of three factors of forwarding, commenting, and liking on different types of blogs. Or a certain two conditions have effect on the promotion of this type of blog. This article categorizes 1200 pieces of data, and performs a regression analysis on the forwarding, comments, likes, and promotion of 400 entertainment blogs, 400 international blogs, and 400 forwarding blogs, and explores forwarding, commenting, and likes. Whether there is a significant impact on the promotion of different types of blogs.

Entertainment likes and entertainment reviews can explain the 82.7% change in entertainment promotion. When the F test is performed on the model, it is found that the model passes the F test ( $F=38.375$ ,  $p=0.000<0.05$ ), which means that at least one of entertainment forwarding, entertainment likes, and entertainment reviews will have an impact on entertainment promotion. The multicollinearity test found that the VIF values in the model are all less than 5, which means that there is no collinearity problem; and the DW value is near the number 2, which means that the model does not have autocorrelation, and there is no correlation between the sample data, The model is better.

**Table 1.** Regression analysis of entertainment news forwarding, likes and comments on promotion

Linear regression analysis results (n=400)									
	Unstandardized coefficient		Standardized coefficient	t	p	VIF	R <sup>2</sup>	Adjust R <sup>2</sup>	F
	B	Standard error	Beta						
constant	-248547.911	139349.904	-	-1.784	0.087	-	0.827	0.806	F (3,24)=38.375,p=0.000
Forward	-5.257	4.019	-0.138	-1.308	0.203	1.539			
Like	4.826	0.617	0.976	7.822	0.000**	2.165			
Comment	-3.527	10.305	-0.049	-0.342	0.735	2.910			
Dependent variable: entertainment promotion									
D-W: 2.122									
* p<0.05 ** p<0.01									

The regression coefficient value of entertainment forwarding is -5.257 ( $t=-1.308$ ,  $p=0.203>0.05$ ), which means that entertainment forwarding will not affect the promotion of entertainment. The regression coefficient value of entertainment likes is 4.826 ( $t=7.822$ ,  $p=0.000<0.01$ ), which means that entertainment likes will have a significant positive impact on entertainment promotion. The regression coefficient value of entertainment reviews is -3.527 ( $t=-0.342$ ,  $p=0.735>0.05$ ), which means that entertainment reviews will not have an impact on entertainment promotion.

At the same time, we will categorize the remaining 800 blogs, including 400 international blogs and 400 social blogs. The regression analysis is as follows:

The regression coefficient of social blog forwarding is 25.185 ( $t=4.975$ ,  $p=0.000<0.01$ ), which means that social blog forwarding will have a significant positive impact on social promotion. The value of the like regression coefficient of social news is 1.655 ( $t=4.078$ ,  $p=0.000<0.01$ ), which means that social likes will have a significant positive impact on social promotion. The regression coefficient value of social news commentary is -7.011 ( $t=-1.092$ ,  $p=0.286>0.05$ ), which means that social commentary will not have an impact on social promotion.

The final specific analysis shows that the regression coefficient value of international blog forwarding is 1.384 ( $t=1.815$ ,  $p=0.082>0.05$ ), which means that the forwarding of international blogs will not affect the international news promotion. The regression coefficient value of international blog likes is 1.955 ( $t=16.692$ ,  $p=0.000<0.01$ ), which means that international blog likes will have a significant positive impact on international promotion. The regression coefficient of international blogs is -2.155 ( $t=-1.102$ ,  $p=0.281>0.05$ ), which means that comments on international blogs will not affect the promotion of international blogs. International praise will have a significant positive impact on international promotion. But international forwarding and international reviews will not have an impact on international promotion.

### 3. SUMMARY

Through regression analysis, the research on social networks in social media, comprehensively, the above research work provides a lot of analysis techniques and research ideas for social media promotion. However, as the scale of social network users and resources continues to grow, the applicability of these methods needs to be improved in the face of large-scale social network group mining, node authoritative computing, information recommendation, search and other tasks. For social media, many previous methods no longer apply. Most of the analysis for blogs today is a regression analysis of the total promotion, and there is no specific time period analysis and summary, and we think that good time is also crucial to the impact of blogs. This article focuses on the short promotion of blogs. Analyze and compare the internal data to understand the influence of the re-commenting praise on a blog in a short time.

We also can find that when a blogger locates a blog type and wants to promote such news, in a short period of time, no matter what news, the most important thing is to consider the amount of likes of the blog. Second, we can see the entertainment category News likes will have a significant positive impact on promotion. But reposting and commenting will not affect the relationship between entertainment promotion. Social news forwarding and social likes will have a significant positive impact on promotion. However, comments will not affect the relationship between social promotion. As far as international news is concerned, praise will have a significant positive impact on international promotion. But forwarding and commenting will not affect the promotion of international news.

Through the analysis of this article, we can better allow people who promote Weibo to choose their own promotion plan according to different news types. At the same time, for some new bloggers who have not clearly positioned themselves, this article can better enable the newcomers to define their own positioning according to their blog operation level and popularity, so as to promote and operate their own blogs more appropriately. account number.

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