

Which Platform is Better for Business: Instagram VS Twitter

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ABSTRACT

The use of online promotion has increased dramatically in recent years. Managers are beginning to search for the best forum for promotion. However, due to the huge amount of platforms, their quality has declined. Therefore, managers should identify the quality of the platforms individually. The purpose of this research is to assist and help managers in determining which platform will be the best for their specific needs. First, this study chose two of the most popular social media platforms, Instagram and Twitter, and collected users' online review comments to identify users' experience. Second, sentiment analysis was conducted based on Rstudio. Finally, this paper compared the outcomes of the two platforms to determine which is more advantageous for online promotion. According to the findings, Twitter is a more business-related promotion platform, while Instagram is better in functionality. As a result, the findings assist businesses in interpreting the platforms' functionality and quality in order to make decisions that are tailored to their specific demands.

Keywords: Social platform, Media communication, Comparison, Promotion strategy

1. INTRODUCTION

As the popularity of online promotion grew, many individuals began to operate platforms or websites online, creating spaces for other businesses to promote, and in recent years, it became a crucial promotion strategy for businesses [1]. As the number of platforms grows, the quality of each platform's coverage of this topic becomes questionable and unclear. Two of the most popular platforms of this generation were chosen to be tested in this research, and the sentiments in reviews from their currently active users in the business field will be evaluated. Over the years, reports and strategies on how to test sentiments from customer reviews using coding programs, such as text mining to identify and extract subjective data from source material, have been published [1], or some methods for turning customer reviews into insights [2,3]. However, the amount of experimentation on the business marketing functionality of platforms is very limited, and there is no possibility to find relevant information on it. As a result, the methodology for testing a platform's advertising features and evaluating sentiments of relevant reviews on this topic is still vague. As previously stated, the

methodology for evaluating sentiments in business-related feedback remains unclear to users. As a result, when new businesses use the methodology posted online to evaluate their customer reviews, it may be difficult for businesses to determine the meaning of each word. Furthermore, there is little evidence that the two platforms chosen were tested for this specific topic. The goal of this research is to create a new and clear methodology on top of the strategies that have already been published online (educates others on how to retrieve sentimental words from reviews); the new approach will be specifically designed for managers to assess the relevance of a marketing platform. This research aims at helping people in the business field make better decisions for their firm when selecting a platform for marketing reasons, as well as to teach them how to examine their findings. If the reviews from a promotion platform is evaluated properly, then managers would make a better decision on identifying the platform that would be the best choice for them and suitable according to their needs.

2. METHODOLOGY

Research has already confirmed the importance and usefulness of online review comments to identify users' experience and its links to firm's performance and social practices creating unique insights for both researchers and practitioners [4-6]. Since Instagram and Twitter are two most popular social media platforms which attract many firms advertising on them, users' review comments have been collected to analyze which platform is more suitable for online promotion.

The data set was obtained from KuChuan website with a total of 500 review comments. First, this research uses RStudio to collect and clean the data, it deletes multiple duplicate comments from the same account at the same time. The primary resource of reviews are mixed with positive, negative and neutral reviews. Then, by reading through every comment and using RStudio to search for vocabulary such as "like, dislike, best, worst" and more emotional wordings, this study considered the use of polarity categories: very positive, positive, neutral, negative, very negative), as well as emotion detection within reviews for later analysis (happiness, frustration, anger, sadness, and more); polarity categories are important since it will reflect if a piece of text is positive, negative, or neutral in emotion. This method is widely used for text mining and sentiment analysis [7]. Lastly, the reviews are arranged into an excel file for later analysis.

The data analysis can be divided into two parts. On the one hand, text mining was performed to identify semantic and relational insights of the review comments. Specifically, the word counts between Instagram and Twitter have been compared to identify the different major topics emerged within users' comments. On the other hand, this research conducts sentiment analysis, calculates the sentiment scores of Instagram and Twitter to identify which one is more popular among users.

3. RESULT AND DISCUSSION

3.1. Compare word counts

3.1.1. Instagram

Table 1. Word counts of Instagram

Concept	Count	Concept	Count
application	432	privacy	132
new	418	innocent	101
content	405	scam	94
social	386	recommendations	91

video	351	considering	74
post	329	product	58
celebrities	309	join	49
interact	287	internat	47
people	256	communities	42
facebook	233	share	34
emojis	221	honest	25
emotions	204	industry	19
express	187	fake	10
policy	166	avoid	7

Table 1 is the word counts of Instagram. It shows that the top three most frequently shown words are application, new, and content, whose number is 432, 418 and 405, respectively. Negative handlings include scam, fake and avoid.

Looking at Instagram's total sentimental words in Table 1, it is clear that this platform is more biased to be used for entertainment purposes rather than as a business marketing strategy that will benefit the businesses' profits. Vocabulary such as application, new, and content are not strongly related to the topic of marketing platforms; and language such as celebrities and emojis are far more irrelevant to the topic since it does not demonstrate how it could be beneficial or harmful to the marketing field. Some of the negative handlings include scam, fake, and avoid; these words may provide information about the platform's security, functionality, and quality. For example, the word "fake" may be linked to inactive Instagram users, which are referred to as "bots". These are fake users created by individuals to be used for their own advantage, such as boosting their popularity and using these accounts to follow oneself and raising the number of followers.

3.1.2 Twitter

Table 2. Word counts of Twitter

Concept	Count	Concept	Count
accessible	391	follow	105
innovated	382	conversations	83
privacy	347	social	77
popular	297	media	72
advertising	246	site	65
network	229	individuals	61
connects	214	like	52

latest	205	helps	36
stories	174	regarding	33
ideas	140	friends	29
opinions	136	colleagues	27
simply	131	favorite	15
accounts	128	club	11
compelling	122	understand	9

Table 2 is the word counts of Twitter. It shows the top three most frequently shown words are accessible, innovated, and privacy, whose number is 391, 382 and 347, respectively. No clear negative handlings are included.

According to the observations, the top three most frequently used keywords in Twitter’s sentimental words, as shown in Table 2, are accessible, innovated, and privacy. These are the forms of feedback that indicate whether or not the platform is influential in the field of business marketing. For example, for businesses, privacy and the innovativeness of the platform are crucial; privacy matters because interactions among one another should be end-to-end equipped, because it may contain critical information relating to the enterprises’ transactions. Businesses may look for a creative and innovative app to demonstrate their uniqueness to audiences, so innovativeness may be important.

3.1.3 Comparing polarity ratings

Instagram’s notable negative handlings are: scam, fake (As demonstrated in Table 1). Only positive or neutral vocabulary were displayed for Twitter (as shown in Table 1).

3.2 Comparing sentimental scores from both platforms

Table 3. Comparing sentimental scores

Application	Positive sentiment score	Negative sentiment score
Instagram	0.07284923	0.03849215
Twitter	0.13204825	0.04113948

As shown in Table 3, Instagram’s positive score is 0.07284923, and its negative score is 0.03849215. Twitter has a positive score of 0.13204845 and a negative score of 0.04113948.

In comparison, Instagram is more popular among users. Table 3 shows that when the positive sentiment

scores of both platforms are compared, Instagram’s positive score is higher than Twitter by 0.59644405. As a result, Instagram seems to have more positive reviews than Twitter. Furthermore, by comparing the negative sentiment scores from both platforms, it could be seen that Twitter has a greater negative sentiment score, exceeding Instagram’s score by 0.00264733. As a result, Instagram has greater positive reviews than Twitter and fewer negative complaints.

3.3. Comparing word cloud

3.3.1. Analysing Twitter’s word cloud



Figure 1. Twitter’s word cloud

Figure 1 shows the word cloud map of Twitter. The most centered and the largest words are the ones being used most frequently. The top three are “accessible”, “innovated”, and “privacy”. Other than the top three largest words, many other vocabulary was frequently mentioned and used in the reviews; such as “networks”, “latest”, “connects”, “advertising” and more.

These statistics demonstrated Twitter’s overall theme on functionality, and the evidence of these vocabulary may imply that Instagram is useful for business marketing. Because the words on the word cloud were mostly related to business and advertising. The word “advertising” itself appeared in the word cloud, implying that it is frequently used. However, many of the words that appeared were neutral in terms of sentiment, as they could be used in either a negative or a positive comment.

3.3.2. Analysing Instagram’s word cloud



Figure 2. Instagram’s word cloud

Figure 2 shows the word cloud map of Instagram. The most centered and the largest words are the ones being used most frequently. The top three are “application”, “new”, and “content”. Aside from the three words mentioned above, words like “video”, “social”, “interact” and others are also prominently displayed.

These words could be business-related, as social media advertising necessitates interaction and socializing. It does not, however, clearly demonstrate Instagram’s advertising capabilities. The majority of words used are neutral in terms of polarity and sentiment, implying that they could be mentioned in either negative or positive comments about the platform’s functionality.

3.3.3. Conclusion and comparing word cloud

There is little evidence from either word cloud as to whether it has had a positive or negative impact on the total sentimental scores of both platforms. Twitter’s word cloud, on the other hand, appears to be more business-related, as the displayed words are more related to advertising and marketing, but again, there is little to compare in terms of positive or negative sentimental scores from both sides.

Since neither side has clear evidence on the impact of the words, companies considering using one of the platforms should read through a large number of comments and reviews on the marketing and advertising functions of both platforms to gain a thorough understanding of the impact of the words displayed on the word cloud maps.

4. FINDINGS

4.1. Frequently used words in both platform

When comparing Figure 1 and 2, and looking at the top three most frequently used vocabulary words in the two platforms’ reviews, it is arguable that Instagram is less effective as a business promotion platform because no business-related vocabulary words were displayed on the most frequently used words list. Furthermore, it is clear that there are a few commonly used negative words such as scam, fake, and avoid. Looking at the negative handlings from Instagram, it is clear that users have expressed dissatisfaction with the platform’s functionality and reliability. Moving on to Figure 2, which shows the most frequently used words in reviews by Twitter users, it is arguable that Twitter is a better business platform than Instagram, because accessible, innovated, and privacy are the top three most frequently used words in its reviews, and the three words are related to some of the most significant features a business promotion platform may require. Furthermore,

no negative handlings were featured in this graph of Twitter’s most frequently used words.

4.2. Polarity ratings and sentiment scores

In terms of polarity ratings, Instagram has more negative sentiments than Twitter because as shown in Figure 1, which are the most frequently used words in reviews by Instagram users, there are a few negative handlings, whereas Twitter has no negative sentiment. However, as shown in Figure 3, Twitter’s positive sentiment scores are noticeably lower than Instagram’s, whilst the negative sentiment score is also higher. This implies that Twitter users have more negative opinions about the platform, whereas Instagram users have more positive opinions about it.

5. CONCLUSION AND SUGGESTIONS

The analysis does not provide a clear answer as to which platform is significantly better in all aspects; however, it does provide an answer to the platform’s functionalities, shortcomings, and strengths. According to all of the research, Instagram appears to be stronger in its functionality, such as interaction and features of celebrity users. In terms of Twitter, the analysis revealed in Figure 2 that Twitter’s reviews appear to be more positive than Instagram’s when it comes to business. Nonetheless, further analysis of Figure 3 suggests that Twitter has more negative sentiments than Instagram because Twitter’s negative scores are higher than Instagram’s, while the positive scores are significantly lower as well.

To summarize, Twitter proved to be a more business-related platform than Instagram; however, its sentiment scores remain lower, implying that they will need to look for concerns that most users may identify; then, fix reported bugs as well as improving its functionality. Instagram’s sentimental scores are higher than Twitter’s, but it still needs improving in terms of functionality and business relevance.

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