Research on Communication Effect of Mobile Phone Enterprise Original Micro-blog-with OPPO as an Example

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ABSTRACT

In the paper, content analysis method is used for analyzing original micro-blog of OPPO official micro-blog in order to study the transmission effect of mobile phone enterprise original micro-blog. The result shows that: the sales promotion micro-blogs are the most, which is followed by product introduction micro-blogs; brand message micro-blog ranks the third place, and other micro-blogs account for the minimum proportion. There are more brand information micro-blogs and other micro-blogs in the early stage of the new product introduction into the market from the perspective of time phase changes. Then, once the products are introduced to the market, the micro-blogs about product introduction and sales promotion are rapidly increased, which finally become micro-blogs ranking No. 1 and No. 2 proportions. The communication effect shows that the transmission effect of the sales promotion micro-blog is the best, which is followed by brand information micro-blogs, and the communication effect of product introduction micro-blogs and other micro-blogs is the worst, and there is no significant different between them.

KEYWORDS

Mobile phone enterprise micro-blog, communication effect, content analysis method.

INTRODUCTION

Internet user option right, participation right and decision-making right, etc. make great breakthrough through using technical means such as expression, participation, resources integration, etc. with the advent of the era of web and constant change of Internet media application technology, ‘Micro-content’, ‘micro-value’ and ‘micro-power’ have become powerful under the convergence of the Internet; Internet users are not only the recipients of information, but also producers and communicators. Meanwhile, the time and space for users to receive information are ‘fragmented’. In this context, new media and information communication carriers are emerging, wherein micro-blog is the representative form of network communication in web2.0 era.

‘Micro-blog’ is translated from English micro-blogging, namely mini blog. It is an information sharing, communication and access platform based on user relationship. It
is a variant of traditional blog. Individual community is formed through focusing and focused functions. Users can release short message to individual micro-blog through mobile phone, IM, E-mail, Web and other modes. Information is updated with text with regulated character number, thereby realizing real-time sharing of information. Twitter, the world's first micro-blogging website, was founded in the United States in 2006. The 140-character instant messaging service has become a global social media tool within ten years. When Twitter was popular in the world, China domestic imitators were emerging, including the initial independent micro-blogging website Fanfou, Jiwai and Sina micro-blogging internal test in July 2009. Sina micro-blog is in the leading position among domestic social platform websites in both user quantity and user increase speed after development for several years. Micro-blog has born self-media attribute, huge user scale and user weak advantages. The above features make micro-blog become an important network platform for enterprise brand promotion and product propaganda. All major enterprises open enterprise micro-blog accounts, establish own huge micro-blog fans groups. The paper aims at exploring the influence of enterprise micro-blog contents on fans forwarding behaviors through utilizing content analysis methods.

LITERATURE REVIEW

Overview of micro-blog research

Research on micro-blogs has gradually begun since the advent of micro-blogs. Scholars explored the properties of the new thing early. Foreign research on micro-blog is based on related case phenomena of Twitter. Scholars define micro-blog contents from the perspective of technology application and two dimensions of information dissemination: Gaonkar & Choudhury (2007) regards MicroBlog as a complex integrating four elements of mobile phone sensor, wireless network, and information process and space visualization from the perspective of technical application. Kaplan & Haenlein (2011) believed that Twitter is an application procedure based on the Internet, it allows users to share short text messages, images or video linkage from the perspective of the technology application. There is still certain disagreement at present aiming at the nature of micro-blog. Michaud (2007) thought that Twitter is a combination of instant communication and text. Kwak (2010) analyzed 41.7 million Twitter users, 1.47 billion social relations, 4262 topic trends and 160 million tweets, the results show that more than 85% content of the Twitter information has certain relationship with news, Twitter is not a social networking (SNS), but it is an application similar to traditional media.

Overview of micro-blog marketing research

Micro-blog integrates text messages, blogs, social networks, IM (instant messaging software). Since it has characteristics of low user threshold, minimalist content, openness, timeliness, strong interactivity, etc., it is favoured by people, information can be spread in geometrical progression mode within short time. Micro-blog has become an important platform for marketing promotion. Jansen et al. (2009) collected more than 150000 micro-blogs, including brand comments, emotion and suggestion. Emotions and opinions on brands as well as positive and negative actions
contained in micro-blog are analyzed. The results show that 19% micro-blogs contain brand evaluation. In 19% micro-blogs, 20% contains consumer brand emotion expression. The 50% micro-blogs for brand emotion expression contain praise contents, and 33% micro-blogs contain criticizing contents. Micro-blog has become an online tool for word-of-mouth communication among consumers. Therefore, micro-blog should be a part of marketing strategy of enterprises. Burton (2011) investigated and studied official Twitter accounts of 6 enterprises. It was discovered that Twitter provides a perfect one-to-many information dissemination channel for enterprises. Meanwhile, enterprises also can use Twitter to answer user inquiries, handle complaints, etc. timely. Sevin (2013) analyzed the operation condition of official Twitter in five famous tourism destinations in the United States from 2011 to 2012. It is discovered in the study that enterprises utilize Twitter to communicate with consumers in two modes: one is 1-N broadcasting information dissemination, and the other is 1-1 interactive mode. The first 1-N mode is mostly applied in five official Twitter accounts for online information release. Twitter's interpersonal communication and social functions are rarely utilized. The destination message is better diffused to more consumers by utilizing Twitter forwarding, mentions, and tag functions. Domestic scholar Xue Jianping (2013), etc. implemented whole-sample analysis on the micro-blog contents of Yixun. Micro-blog brand communication effect difference of e-commerce enterprises is explored. It is discovered in the study that the promotion effect is the best in advertising and sales, which is followed by public relations, and the "other" is the worst.

Evaluation of micro-blog marketing effect

The marketing effect of micro-blog is the direct criterion to evaluate whether the marketing behavior is effective or not. Since micro-blog has prominent difference from traditional marketing tools in communication factors and communication mode, the traditional tools and methods for evaluating marketing effect are not applicable to the evaluation of micro-blog marketing effect. The evaluation and research on micro-blog marketing effect is still in the exploration stage. Micro-blog is regarded as a new form of social media. Social media marketing effect evaluation has certain reference significance on micro-blog, wherein ( ) is the most representative. Foreign scholar Murdough summarized social media marketing metrics with certain popularity, including qualitative evaluation index (discussion topics and user review viewpoint, etc.) as well as quantitative evaluation index (fans, review quantity, promotion activity involving amount, etc.). Chinese scholar Jin Yongsheng (2011) established a first-order autoregressive model of enterprise micro-blogging marketing effect and fans quantity. The results show that current enterprise micro-blogging marketing influence effect is positively correlated to the influence of the previous period. Enterprise micro-blog marketing influence effect is positively correlated to the micro-blog release number and number of fans. Zhao Aiqin (2012) summed up three modes for evaluating enterprise micro-blog marketing effect: traditional network monitoring, the third-party monitoring and integration with fan research. Han Mei and He Yue (2015) proposed an evaluation index system aiming at enterprise micro-blog activity marketing effect. DEA model is combined for establishing an enterprise micro-blog activity marketing effect evaluation model and quantitatively evaluating enterprise micro-blog activity marketing effect.
Marketing effect includes sales effect and communication effect. Because the enterprise micro-blog aims to improve enterprise popularity and influence, carry out product and brand publicity, etc., enterprise micro-blogging marketing effect reflects the communication effect. Therefore, the forwarding number will be adopted to evaluate the effect of enterprise micro-blog marketing.

RESEARCH DESIGN

Sample selection and data collection

Sano monitoring data displays that the market share of OPPO mobile phones was the largest in China from October 2016 to March 2017. Therefore, OPPO official micro-blog will be selected as the research object. A total of 686 micro-blogs from October 1, 2016 to April 30, 2017 in the official micro-blog are selected through web crawler technology, including 445 original micro-blogs. The original micro-blog is regarded as the sample for collecting three data items of micro-blog text content, release time and forwarding number.

Content analysis method

In the paper, the text content of 445 original micro-blogs was analyzed for complete sample by content analysis method. The micro-blog content theme types reflected in the text are classified, the operational definition of each topic is shown in table 1.

An exclusive coding approach is adopted in the study. Meanwhile, two graduate students are invited to complete coding. Firstly, a coding protocol is developed according to the research questions, including research purpose, operational definition of product level, category assignment, coding rules, relevant considerations, etc. Secondly, two coders are trained, who should fully understand the operational definition and coding rules of different types of micro-blogs. After the training is ended, two coders are required to precode. The process is repeated. Formal coding is implemented until the coding result reaches 85%. Finally, two coders should code formally. The result credibility is evaluated. In the study, the consistency result of two codes is 90.5%, which is higher than the 85% level in overall consistency estimates. The coding reliability level is better.

Descriptive statistics

Official micro-blog platform is utilized for sales promotion and introduction of product related information aiming at mobile phone enterprise micro-blog according to the classification results. The frequency distribution of different types of micro-blogs is shown as follows: 144 sales promotion micro-blogs accounting for 32.4%; 143 product introduction micro-blogs accounting for 32.1%; 117 brand information micro-blogs accounting for 26.3%; 41 micro-blogs in other categories accounting for 9.2%. In terms of posting time, 242 micro-blogs are posted in non-idle time (9:00-18:00 on working days), and 203 micro-blogs are posted in free time (the rest time), which respectively account for 54.4% and 45.6%.
TABLE 1. OPERATIONAL DEFINITION OF ENTERPRISE MICRO-BLOG CONTENT CLASSIFICATION.

<table>
<thead>
<tr>
<th>Type of micro-blog content</th>
<th>Operational definition</th>
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<tbody>
<tr>
<td>Sales promotion</td>
<td>Users are encouraged to participate in reward and have the opportunity to receive rewards, such as gift forwarding, fan welfare, etc.</td>
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<tr>
<td>Brand information</td>
<td>Including enterprise information, brand event activities, etc.</td>
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<tr>
<td>Product introduction</td>
<td>Product design, performance, purchasing mode, after-sales service, etc. are introduced.</td>
</tr>
<tr>
<td>Others</td>
<td>Micro-blog contents that are not directly related to enterprises, products and brands, such as festival greetings, current events, anecdotes, practical information, etc.</td>
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The mobile phone enterprise micro-blog categories show stage change characteristics: the brand information micro-blog quantity is higher than the remaining three categories from the 1st to the 280th micro-blog. The brand information micro-blog quantity is increased slowly from the 300th to the 445th micro-blog. The quantity thereof is higher than product introduction micro-blogs and sales promotion micro-blogs. The sales promotion, product introduction and other micro-blogs are similar in quantity from the 1st to the 120th micro-blog. The sales promotion micro-blogs are more and more since the 80th micro-blog with time advancement. The quantity is the most in the 445th micro-blog. The product introduction micro-blog number is rapidly increased since the 120th micro-blog, and it becomes the micro-blog content with the second largest quantity since the 445th micro-blog. Other micro-blogs are basically stable to the 140th micro-blog. It is obvious that micro-blog is regarded as the enterprise marketing self-media platform from new product introduction to the market to elimination from the market. Brand momentum is produced in the initial stage. Enterprises increase to release micro-blogs about product introduction and sales promotion with the product introduction into the market, thereby attracting target users to focus on company product, and promoting their purchase.

![Figure 1. The frequency distribution of different types of micro-blogs.](image-url)
DATA ANALYSIS AND RESULTS

Homogeneity test of variance:

The variance homogeneity test is conducted for four groups of data. The results show that Levin statistics is 46.25, P<0.05. It is obvious that the four groups of data are not consistent with the homogeneity assumption. The variance of the data in each group is significantly different.

Single factor variance test

In the study, single factor variance test is adopted to explore the difference of communication effect produced by four kinds of micro-blog contents. ANOVA results show that F value of the forwarding number is 30.46, P<0.05. It is obvious that the forwarding number of four groups of data has significant difference.

Multiple comparisons

Because the variance of the four groups of data is significantly different, Tamhane test, Dunnett's T3 test, Games-Howell test and Dunnett's test are adopted for testing. Consistent conclusion is obtained from the four methods: the forwarding number of product introduction micro-blogs is not significantly different from the forwarding number of micro-blogs in other categories statistically at the significance level of 0.05: 627 VS 320, P> 0.05. The forwarding number brought by the sales promotion micro-blog is significantly higher than that of brand information micro-blog: 4979>2736, P<0.05; It is significantly higher than the forwarding number of product introduction micro-blogs: 4979>627, P< 0.05; It was also significantly higher than the forwarding number of product introduction micro-blogs: 4979>320, P< 0.05. The forwarding number of brand information micro-blogs is significantly higher than that of the product description micro-blog: 2736>627, P<0.05. It is higher than the forwarding number of micro-blog in other categories: 2736>320, P<0.05. The above analysis shows that the marketing effect of product introduction micro-blog and micro-blogs in other categories is poor among four kinds of micro-blogs. The marketing effect difference is significant compared with the brand and sales promotion micro-blogs.

RESEARCH CONCLUSIONS AND PROSPECTS

In the paper, OPPO official micro-blog is regarded as the research object for exploring distribution law, stage change characteristics and communication effect of mobile phone enterprise micro-blogs in different categories. Concrete research conclusion is shown as follows:

Firstly, sales promotion micro-blogs are preferred in mobile phone enterprises. Fans are encouraged for forwarding in the mode of forwarding lottery. Secondly, product introduction micro-blog ranks the second place, the proportion of the brand information micro-blog is in the third place, and micro-blogs in other categories account for the lowest proportion. It indicates that mobile phone enterprises regard micro-blog as the self-media marketing platform. Information about product and sales released on the platform belongs to normal enterprise behavior.
Secondly, the research on the change in the micro-blog stage shows that brand information micro-blog and micro-blogs in other categories are more at the initial stage of new product introduction to the market. Then, once the products are introduced to the market, the micro-blogs about product introduction and sales promotion are rapidly increased. They finally become micro-blog categories with No. 1 and No. 2 proportions. It is obvious that enterprises not only regard micro-blog as important self-media platform for brand promotion and product introduction, but also regard it as an important tool of sales promotion.

Thirdly, research on enterprise micro-blog communication effect difference shows that the mean value of generation and forwarding number of micro-blogs in different categories is different, the communication effect of sales promotion micro-blogs is the best, which is followed by brand information micro-blogs. The product introduction micro-blogs and micro-blogs in other categories have the worst transmission effect, and there is no significant different between them. The reason lies in that lucky drawing, gift presentation, etc. in sales promotion micro-blogs can bring users with the most direct interests, which can stimulate users to generate forwarding behaviors. The brand information micro-blogs commonly contain humorous words and the latest news of brand star spokesperson, and other contents. It is beneficial for users to share information to more friends through forwarding under the drive of fan effect. Product introduction micro-blog is very important for the enterprises. However, the micro-blog always has main content of hardware and software technical parameters during introduction of product information. The information can meet the demand of users to obtain the latest product information. However, it has tiny effect on stimulating users to forward and spread the micro-blog. Micro-blogs in other categories bring low perception value to users, which can not promote forwarding of consumers. Therefore, enterprises should release more related sales promotion and brand information micro-blogs, thereby meeting user demand to obtain information, and enhancing interaction between users and enterprise official micro-blog. When product introduction micro-blogs are released, both micro-blog content practicability and interest are enhanced for promoting user forwarding.

In the paper, the content analysis method is adopted to propose operational definition and coding aiming at micro-blog type, thereby ensuring data reliability. The micro-blog of the whole period of introducing OPPO R9s into the market is regarded as the whole specimen, thereby ensuring the reliability of the conclusion. The limitation of the paper lies in using single example for studying. Subsequent study can be expanded to many cases, and the enterprise micro-blog communication effect difference in mobile phone enterprise and other industries also can be explored.

REFERENCES