

INDIVIDUAL-INFLUENCE & INTERACTIVE-RELATIONSHIP: THE APPLICATION UPON SOCIAL MEDIA FOR PUBLISHING-RELATED ENTITIES

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ABSTRACT

This paper is aimed at researching three major issues concerning applications of social media for two categories of publishing-related entities – individuals and organizations - in China: their application trend, the differences between the two categories of entities, and the main reason for the differences. The results show that, for individual users of Weibo accounts, individual-influence has greater positive effect on the application efficiency of social media compared with interactive-relationship. But as for publishing-related corporate users, equal attention need to be paid to the individual-influence and interactive-relationship about their positive effect on the application efficiency of social media.

Keywords: publishing entity; Weibo; application efficiency of social media; individual-influence; interactive-relationship

INTRODUCTION

The transmission of new media will tremendously strengthen the communication among non-profit organization, costumers, volunteers, media and the public^[1]. Numerous social media platforms provide unprecedented opportunities for the activities of the publishing entities. Social media, such as Weibo, the most famous social media in China, is beneficial for the publishing entities to cultivate individual influence or to form interactive relationships - the strong connections of the publishing entities with their followers (and the followers of followers - “fans” as they are called on Weibo). However, the

underlying problems are whether these publishing entities have differences on application of social media and what the causes of the differences are. Publishing related entities in this paper refer to web-writers, publishing houses, e-books websites, bookstores, libraries and Intellectual Property Offices. In order to analyze the impact factors and functional mechanism of publishing related entities regarding their application of social media, at first, the samples were categorized into two types: individual and organizational. Since this paper studies Chinese publishing related entities on their application of social media, Sina Weibo was used as the research platform.

RESEARCH HYPOTHESES

Taking the Weibo application of the publishing related entities (including web-writers, publishing houses, e-book websites, libraries and Intellectual Property Offices) as research objects, this paper explored and analyzed the impact factors and functional mechanism of publishing related entities for the application upon social media. In this paper, the application effectiveness of social media is defined as the extent of the expected results or impact that users use social media to achieve. In order to comprehensive assess the social media application ability upon individual accounts and organizational accounts, this paper will mainly weight from three related aspects, *degree of activity*, *communication ability*, and *degree of coverage*. *Degree of activity* is defined as the degree of the appointed accounts to taking the initiative to post, repost and comment on Weibo within certain times, which emphasizes upon bloggers' proactive behaviors. *Communication ability* is defined as the popular degree of related weibos posted by Weibo accounts, which is mainly measured by the total number of reposts and comments. *Degree of coverage* is defined as the influencing coverage of the blogs, which is dependent upon the number of active fans and the step flow of communication of the weibos.

On the whole, the impact factors of social media application effectiveness can be classified into two categories: Individual-influence and Interactive-relationship. Individual-influence is defined as individual ability to the role that they play in the information communication in social media^[2].

Study from Song and Zinkhan found that para-social interaction led to forming the positive relational tie between audiences and media^[3]. We measured Individual-influence using the two factors, *the follower number of insiders* and *high-impact fans*. *The follower number of insiders* can be defined as the total number of the publishing related entity Weibo account being followed by other accounts within the same circle (namely, the total number of a publishing company Weibo account is being followed by other Weibo accounts of publishing companies, publishing houses, e-books websites, bookstores, libraries, Intellectual Property Offices, and web-writers). In order to assess *high-impact fans* of different accounts, in the data processing we classified the accounts of all the fans, selecting

talent-fans (the account followed by another authenticated users and with the five-pointed star logo), blue-fans (the enterprise user account with a blue V-shaped logo) and orange-fans (the personal user account with an orange V-shaped logo) among them as active fans, all of them are real(not machine program automatically generated) and have a higher value.

Interactive-relationship is defined as the extent of the strength of interaction between users in social media ^[4]. When concerning Interactive-relationship, we mainly measured from two indexes: *the number of replies upon repost or comment* and *interactive value of insiders*. The former is defined as the total number of bloggers’ replies to other users’ repost and comment within certain times; while the latter means the degrees of mutual interaction between “personal” and “personal”. *Interactive value of insiders* of Weibo account is defined as the sum of the every *interactive value* between this account and other classified group ones. The indicators of *interactive value* include private letters, comments, reposts, @ and so on.

Based upon the above analysis as well as combined with the previous research, this paper will focus on the mutual interaction among the application effectiveness of social media, individual-influence and interactive-relationship, for which to establish the diagrammatic figure by structural equation modeling for the application upon social media for publishing related entities, as Fig. 1 below:

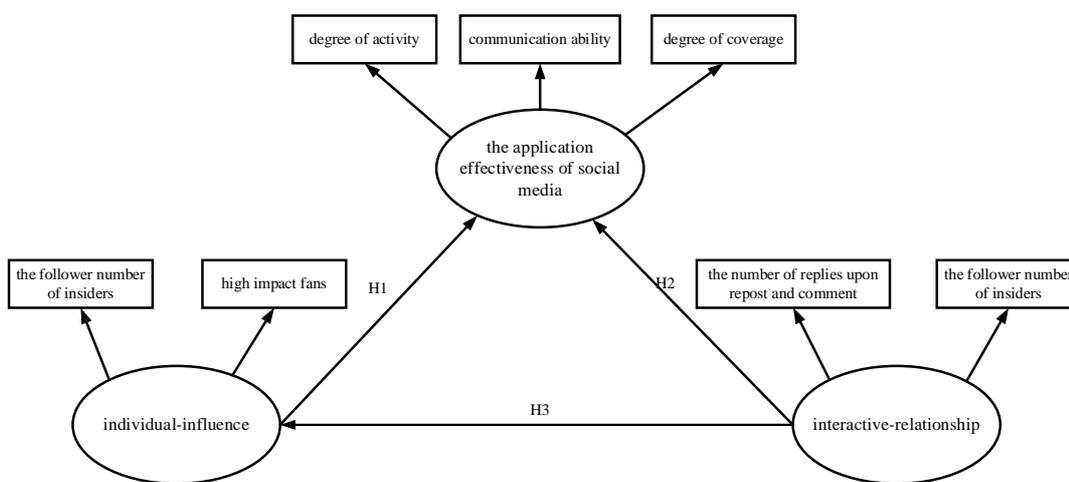


Fig. 1. The diagrammatic figure by structural equation modeling for the application upon social media for publishing related entities

From the above discussion, we have the following hypothesis:

- H1: Individual-influence has positive effect on the application effectiveness of social media
- H2: Interactive-relationship has positive effect on the application effectiveness of social media;
- H3: Interactive-relationship has positive effect on effectiveness upon individual-influence

METHOD

There exist significant links between the application effectiveness of individual or organizational Weibo and their accounts' influences or the degrees of interactive-relationship. In the previous study upon new media, which were always regarded individuals and organizations as a whole entity for analysis and argumentation. However, when referring to the original intention towards new media application, there still existing significant differences between individuals and organizations themselves, between enterprise organizations and public service organizations. Therefore, in order to empirically analyze the influence on the application effectiveness of the Weibo pushed by the influence of the accounts and interactive-relationship, the sample in this paper is divided into individual users and organizational users. While, in order to analyze the possible differences among various types of organizations upon new media application, organizational users will be further divided into two groups, they are enterprise organization and public service organization, which will be fulfilled by the multiple-group analysis through structural equation modeling.

In order to explore the mutual interaction among the application effectiveness of publishing entities' Weibo, Individual-influence and Interactive-relationship, this paper will firstly collect 1958 Weibo accounts of publishing related entities, and then to select representative 546 as research objects, including 201 individual accounts (cyber-writers), 345 enterprise accounts (55 publishing companies, 101 publishing houses, 27 e-books websites, 88 bookstores, 65 libraries, 9 Intellectual Property Offices). Whereby publishing company, publishing house, e-books website and bookstore belong to the category of enterprise organization; while libraries and Intellectual Property Offices belong to public service organization. As for five indexes, '*degree of activity*', '*communication ability*', '*degree of coverage*', '*the number of replies upon repost or comment*' and '*interactive value of insiders*', will be measured by data within 3 months (April, May, June, 2015). While for two indexes, '*the follower number of insiders*' and '*high-impact fans*', which will be measured by data as of 30, June, 2015.

RESULTS

In order to analyze the discrepancy of the new media application upon publishing related entities, this paper divides the publishing entity into individual group and organization group. Considering the differences among different organizations, the organization samples are divided into two types: enterprise organizations and public service organizations. In this study, we evaluate the validity of the proposed model from the two aspects of model intrinsic quality (intrinsic structural fitness index) and

external quality (overall fitness index).

When conducting multiple-group analysis for the overall sample (individuals and organizations all included), we found that there are multiple models can be adapted. In the casual model of the individuals and the organizations, inherent latent variable of the application effectiveness upon the social media can be explained by individual-influence and interactive-relationship, their variances are 50.8% and 89.6%. In the above assumptions, H1, H2 can be set up but H3 is false in the individual group as well as H1, H2, H3 can be set up in the organizational group. To the individual group and organizational group, the direct effect of Individual-influence act on the application effectiveness upon the social media is stronger than that of the interactive-relationship. Whereas, the difference is that in the organizational group, not only could interactive-relationship have direct effect on the application effectiveness upon the Weibo, but also have indirect influence by individual-influence. The effect of the individual-influence act on the application effectiveness upon the social media is 0.77. The cumulative effect of the interactive-relationship act on the application effectiveness upon the social media is 0.602.

In the casual model of public service organization and enterprise organization, inherent latent variable of the application effectiveness upon the social media can be explained by Individual-influence and Interactive-relationship, their variances are 78.9% and 87.4%. In the above assumptions, H1, H2, H3 all can be set up in both kinds of organizational group. To enterprise organization and public service organization, the variables of the Interactive-relationship both could have direct and indirect effect on the application effectiveness upon the Weibo. The difference is that, in the public service organization, the direct effect, which Interactive-relationship acts on Individual-influence, is stronger than the application effectiveness upon the social media. But in the enterprise organization, the direct effect, which Interactive-relationship acts on the application effectiveness upon the social media, is stronger than Individual-influence. To the public service organization, the total effect of the Interactive-relationship acting on the application effectiveness upon the social media 0.716 is stronger than Individual-influence (0.597), but in the enterprise organization, the former 0.564 is a little less than the latter (0.784). The online interaction between non-profit organization and its stakeholders is more and more common, multi-elemental and significant for operations of organizations ^[5].

DISCUSSION AND CONCLUSIONS

This paper focuses on the existing differences as to the application upon social media for various publishing related entities. Through the analysis of Chinese Weibo applications of 546 publishing related entities, three significant conclusions can be listed hereunder. Firstly, individual-influence exert

great effect upon the application effectiveness of social media for individual users. Secondly, publishing related enterprises shall pay equal attentions towards individual-influence and interactive-relationship. Thirdly, for users of publishing related public service organizations, interactive-relationship have stronger positive effect upon the application effectiveness of social media.

Although social media tools are always on iteration, its core value does not change synchronously at all. In terms of development in the near future, Weibo, a widely-used mature applicable social tool at the present, will be merged with other applications for social services. Therefore, as research gradually developed in the future, we will not only conclude more research samples, but also taking the application situation of publishing-related entities upon other social media tools into consideration.

REFERENCES

- [1] Waters, R. D. Nonprofit organizations' use of the Internet: A content analysis of communication trend on the Internet sites of the Philanthropy. *Nonprofit Management and Leadership*, 2007, 18(1), 59-76.
- [2] Zhang, L. Study on the measurement of individual influence based on social media. *Contemporary Communication*. 2014, 29(1), 30-33.
- [3] Song, J. H., Zinkhan, G. M. Determinants of perceived web site interactivity. *Journal of Marketing*, 2008, 72(2), 99-113.
- [4] Guo, Y., Zhu, Y., Zhu, X. The interactive interpersonal relationships and the forming of network in social structure: Restructuring basis of social capital theory. *Social Sciences Shanghai China*, 2003, 24(8):64-74.
- [5] Lovejoy, K., Saxton, G. D. Information, community, and action: How nonprofit organizations use social media. *Journal of Computer-Mediated Communication*, 2012, 17(3), 337-353.