Analysis of Enterprise Microblog Marketing in Different Industries Based on DEA Model

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Abstract. In this paper, we propose a evaluation system for the enterprise microblog marketing effectiveness, combine DEA method to establish the evaluation model, and applying the quantitative evaluation method of input and output to evaluate the effect of microblog marketing among different enterprises. In the empirical part, in order to verify the feasibility of the model, we compare the effectiveness of the relative marketing effect of 50 official microblog in 5 different industries based on Sina microblog. The result shows that microblog marketing effect among different enterprises is different. In the five major industries, the integrated marketing effect of mobile phones industry is best, followed by Home Furnishing, skin care, snacks, the worst is the women's clothing industry. In the end, by combining the development characteristics and situation of each industry, the paper puts forward some measures to improve the marketing effect of enterprise microblog.

Keywords: Microblog marketing · Enterprise microblog · Marketing effectiveness · DEA

1 Introduction

CNNIC [10] has pointed out that as of June 2016, Chinese netizens has reached 710 million, the size of microblog users to 242 million. The huge user resources of microblog provide a rich fertile soil of marketing activities for enterprises. Many companies have realized the importance of microblog. Therefore, they launch the online marketing on microblog. However, how to assess the effectiveness of microblog marketing becomes the practical problems faced by enterprises.

With the Matthew effect of microblog is gradually prominent, the number of the domestic and foreign scholars who study on the effect of microblog marketing are on the rise. Scholars on microblog marketing research mainly focused on three aspects: marketing effect, the impact of microblog marketing and marketing strategy. In the study of the marketing effect of microblog, Leung [13] attempted to explore the marketing effectiveness of two different social media sites (Facebook and Twitter) in the hotel industry, Integrated the attitude-toward-the-ad

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(Aad) model with the concepts of attitude-toward-social-media-page, and finally proposed a theoretical model of hotel social media marketing effectiveness. For different groups of people, microblog marketing may have different influence, Barry [2] assessed whether alcohol companies restrict youth/adolescent access, interaction, and exposured to their marketing on Twitter and Instagram. Clark [9] found that due to the youth presence on Twitter and the clinical uncertainty of the long term health complications of electronic cigarette consumption, the protection of public health warrants scrutiny and potential regulation of social media marketing. Chen [8] explored young consumers' interpretation of Twitter and marketing information on this particular social media platform from the perspective of consumers. Good marketing strategy is very important for enterprises, Liu [14] developed a guideline for advertisers to make the best marketing practices by visualizing and studying the evolution of popular Twitter hashtags. In order to understand how social media affect the hospitality and tourism field has increased, Park [15] discussed and demonstrated social media analytics using Twitter data referring to cruise travel, finally provided feasible marketing strategies. Kafeza [12] introduced a novel methodology to achieve information diffusion within a social graph that activates a realistic number of users, the methodology is useful to marketers who are interested to use social influence and run effective marketing campaigns.

To sum up, the innovation of this paper is to put forward the microblog marketing activity is input and output activities, through the introduction of DEA model, we establishes the comprehensive evaluation index system using quantitative method to calculate the input-output efficiency of enterprises microblog marketing, and then evaluate the effect of enterprise microblog marketing.

2 Related Work

2.1 Enterprise Microblog Marketing Effect Evaluation System

There are relatively abundant indicators to assess the effect of microblog marketing. Through quantities of case studies and quantitative research methods, some scholars found that there are many factors which have influence on the enterprise microblog marketing effectiveness. Xue [18] found that sales promotion is easy to promote consumer to make information share by forwarding to a friend or to make comments. In addition, Chang [5] thought liking or sharing social media messages can increase the effects of popular cohesion and message diffusion. What's more, Zhu [20] argued that social media marketing efforts need to be congruent and aligned with the different needs of social media users.

Bi [3] thought that the comments and reposts can reflect the microblog marketing effects. Saulles [16] considered not only the simply counting Twitter followers and volumes of tweets as indicators of effectiveness but also utilises social authority scoring from the digital marketing analysts. Based on the above findings, this paper selects the number of fans, the number of microblog, the frequency of releasing microblog, and prizes value as the input evaluation indexes. The selected output evaluation indexes are the number of fans forwarding, the

number of fans comments, the number of fans point of praise, and non negative sentiment index.

From the input index perspective, this paper puts forward active comments and passive comments. Active comments means that the numbers of blogger's active replies to followers. Here the follower's comments do not express the tendency of doubt or the desire to get any responds from the blogger. However, the passive comments refer to the number of the replies. The replies are the blogger who make to answer the doubts or the questions which fans put forward to. In fact, there are obvious marks in these comments. For example, these comments consist of the symbol@, or the interrogative and obvious punctuation, microblog expressions.

From the output index perspective, the original microblog forwarded and the original microblog comments were proposed. The reason is that the official microblog generally contain original and non-original microblog(namely forwarding other's microblog). The total numbers of the original microblog forwarded also contain the original microblog forwarded and the non-original forwarded. Therefore, in order to more clearly measure the spread of the original microblog, the article puts forward the two indicators.

Based on the above analysis, the evaluation index system of enterprise microblog marketing effectiveness is established, as is shown in Fig. 1.

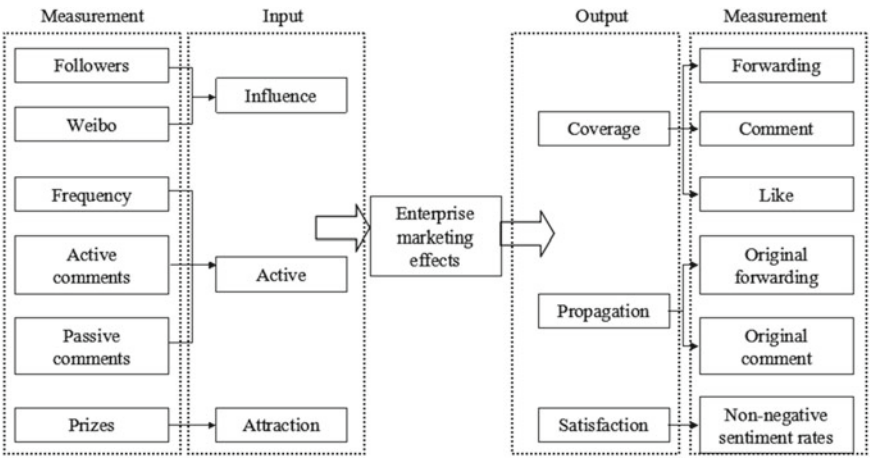

Fig. 1. Enterprise microblog marketing effect evaluation index system

2.2 Analytic Approach

Data Envelopment Analysis which can be used for evaluating the relative efficiency of decision-making units in organizations was first proposed by Charnes et al. [6]. While DEA prototype can be traced back to 1957, in the analysis of British agricultural productivity, Farrell [4] put forward the thought of envelope.

Later, the related DEA methods are mostly building on the idea of Farrell to develop a mathematical programming model. Other than comparing efficiency across DMUs within an organization, DEA has also been used to compare efficiency across firms.

DEA model has many forms. This paper selects the BCC model which can evaluate the effectiveness of scale and technical. Sun [17] proposed that we can suppose there are n decision-making units, each unit $\mathrm{DMU}_j(j = 1, 2, \cdots, n)$ has m inputs and s outputs. Respectively, they are showed by input X and output Y.

$$X_j = (x_{1j}, x_{2j}, \cdots, x_{nj}), \quad Y_j = (y_{1j}, y_{2j}, \cdots, y_{nj})^T, \quad j = 1, 2, \cdots, n.$$

To evaluate DMU_j, Cooper [11] thought that we can use the linear programming model (P) and dual programming model (D), as shown below:

$$(p) = \begin{cases} \max \mu^T y_0 = V_p \\ \omega^T x_j - \mu_i^T \geq 0 (j = 1, 2, ..., n) \\ \omega^T x_0 = 1 \\ \omega \geq 0, \mu \geq 0, \end{cases} \tag{1}$$

$$(D) = \begin{cases} \min V_D = \theta \\ \sum_{j=1}^{n} x_j \lambda_j + s^- = \theta x_0 \\ \sum_{j=1}^{n} y_j \lambda_j - s^+ = y_0 \\ \lambda_j \geq 0, (1 \leq j \leq n) \\ s^+ \geq 0, s^- \geq 0. \end{cases} \tag{2}$$

In the above formula, s^- and s^+ are slack variable. λ_j is the weights coefficient of input and output indicators. θ represents the ratio of input reduction. If $\theta^* = 1, s^{-*} = s^{+*} = 0$, the unit is considered to be valid. If $\theta^* = 1$, the s^{-*}, s^{+*} are not all 0, the unit is considered weak effective. If $\theta^* < 1$, the unit is considered to be invalid. When using the model to measure technical efficiency, technical efficiency can be decomposed into pure technical efficiency and scale efficiency.

3 Data Collection

3.1 Sample Selection

The research time was setting on March 5, 2014-March 11, 2014. When choosing the brands, this paper discretionarily chooses five different industries, which is Women's Clothing, Mobile Phones, Skin Care, Home Furnishings, and Snacks. Then the microblog of enterprises who have the sina official certification will be determined to as the study sample. The final choice of enterprises list is as shown in Table 1.

Table 1. The chosen enterprises in this research

Category	Women's clothing	Mobile phones	Skin care	Home furnishings	Snacks
1	Ochirly	Apple	EsteeLauder	Lin shi mu ye	Three squirrel
2	HSTYLE	Samsung	Pechoin	Bell Land	Be & Cheery
3	Vero Moda	MIUI	Lancome	Gudxon	Haoxiangni
4	ELF SACK	Huawei	Laneige	Coleshome	FERRERO ROCHER
5	Artka	VIVO	L'Oreal	QuanU	ZHOUHEI YA
6	INMAN	Coolpad	Kiehl's	Flisa	Lou lan mi yu
7	GIRDEAR	Nokia	MEIFUBAO	Hegou	BESTORE
8	ONLY	HTC	Marykay	KUKa	Xinnongge
9	LIEBO	Sony	AFu	LUHU	Xiyumeinong
10	PeaceBird	Lenovo	CHCEDO	YIMILOVE	Houstage

3.2 The Experimental Data Preprocessing

This paper collects 1363 microblog and 128483 comments on the 50 sina official microblog. In the all comments, there are 123782 fans comments, 2584 active comments and 2117 passive comments. The definition of main input and output indicators are as follows:

(1) The input indicators

Followers and microblog are all gotten from the pameng crawler.

The frequency of releasing microblog (FRW). This paper collects microblog of enterprise during 7 days. The frequency of post microblog = the numbers of microblog/7.

The number of active comments (NAC). This paper invites two researchers to judge the emotion of the comments. When judge the comments, the researcher according to the emotion and tone in the sentence pretend to be a follower to determine whether the comment has the tendency to question.

The number of passive comments (NPC). Use the similar collecting method with the active comments.

Prizes value (PV). Through sina advanced search, screening the microblog which contain prizes information. Then, recording the number of prizes and price. At last, this paper calculates the price of the total prize according to the market price.

(2) The output indicators

The number of microblog forward (NWF), the number of fans praise (NWL), the original microblog forwarded (OWF), the original microblog comment (OWC). They are all gotten from the pameng crawler.

The number of follower comments (NWC). Follower comments = microblog comments − active comments − passive comments.

Non negative sentiment rates (NNS). Non negative sentiment rates = positive emotion + neutral emotion)/all kinds of emotion. This represents the ratio of non-negative sentiment occupying the total emotional. This rate can also reflect the ratio of negative emotion from the side. The enterprise collects negative

emotions to effectively understand the user, and then help enterprises to improve the service.

In order to improve the accuracy of the emotional data, this paper use artificial method to judge the emotion in the comments. When collecting the comments, this paper regards the spam comments as the neutral emotion to avoid its interference.

After the comments collection is to classify the emotion of the comments. This paper use the content analysis method. Then, these two researchers will classify the comments which belong to one enterprise that is chosen randomly among 50 enterprises. These comments will be used to practice the researcher repeatedly to ensure the accuracy. Then, the Kappa Statistic in reliability studies will be used to test the researcher. As a result, the researcher's kappa value is 0.87. That shows a good consistency. Therefore, these two researchers can be used in the phase of emotional classification. Finally, we can get the number of positive comments, negative comments and neutral comments. Average these three comments are the brand's corresponding comments. We can use these data in our study.

Then, each brand's microblog indexes in 7 days (except for the frequency to send microblog, the prize value, non-negative sentiment index) are also on average. Due to the numerous tables, this paper only selects the ladies enterprises' data, as shown in Tables 2 and 3.

From the table we can see, there are many data whose value is 0 in the column of active comments, passive comments and prize value. That is because that different enterprise has different marketing strategy. Thus, some input data value of enterprises is 0. Besides, this paper uses the infinitesimal (0.0001) to replace the 0 due to the forbiddance that the input DEA data cannot be 0.

3.3 Experimental Result

This paper uses the transverse, longitudinal comparison to do the comprehensive analysis in the part of results analysis.

Table 2. The input indicators of Women's Clothing enterprises

	Followers (Ten thousand)	Microblog (Thousand)	FRW	NAC	NPC	PV (Hundred)
Ochirly 11.96 2.05	0.71	1.6	0.2	0		
HSTYLE	14.67	0.26	9.29	0.42	0.11	3.65
1Vero Moda	15.61	2.52	1.71	0.08	0	
ELF SACK	5.55	9.82	8.86	2.89	0.27	2.5
Artka	3.7	2.11	7.14	0.34	0.04	14.46
INMAN	22.26	6.33	8.71	1.92	0.08 5	
GIRDEAR	1.05	3.91	0.29	0	0	0
ONLY	47.26	4.56	5	0.11	0	0
LIEBO	27.52	6.72	2.71	0.37	0.21 9	
PeaceBird	6.86	4.01	2	0	0	0

Transverse analysis is a method of comparative analysis of different enterprises' microblog marketing effect between input and output efficiency within the same industry. Longitudinal analysis refers to the comparative analysis of different industries. First, arranging all the 50 brands DEA results data in a table. Then regarding the comprehensive technical efficiency as the key word, according to the descending order, to compare the input and output efficiency of different industries.

(1) The Transverse Comparison

This paper is based on BCC model of DEA which assumes that scale reward is variable. DEAP2.1 software is applied to this experiment. Through calculating, we can obtain the evaluation results. Because of the 50 brands, the number of relate tables are also very large. In this thesis, the representative list is only shown in Table 4.

Table 3. The output indicators of Women's Clothing enterprises

	NWL	NWF	NWC	OWF	OWC	NNS
Ochirly	9.2	6.4	11.2	7.75	13	0.93
HSTYLE	3.22	10.38	4.14	14.5	5.64	0.99
Vero Moda	4.42	3.58	4.33	3.58	4.33	0.63
ELF SACK	3.73	3.95	13.9	4.68	15.3	0.99
Artka	3.5	3.64	3.52	3.36	3.06	0.98
INMAN	7.36	125.56	35.69	84.4	44.09	0.92
GIRDEAR	0.5	0.5	2.5	0.5	2.5	1
ONLY	6.97	10.2	3.63	10.47	3.74	0.91
LIEBO	4	17.16	15.68	43.57	39.86	0.99
PeaceBird	0.29	0.29	0.43	0.29	0.43	0.5

Table 4. The marketing efficiency of Women's Clothing

Enterprises	Crste	Vrste	Scale	
Ochirly	1	1	1	-
HSTYLE	0.895	0.898	0.997	irs
Vero Moda	1	1	1	-
ELF SACK	0.522	0.522	1	-
Artka	0.543	0.545	0.997	irs
INMAN	0.45	0.453	0.994	irs
GIRDEAR	1	1	1	-
ONLY	1	1	1	-
LIEBO	0.31	0.31	0.998	irs
PeaceBird	0.5	1	0.5	irs

If the value of the comprehensive efficiency of an enterprise is 1, that shows that the input-output efficiency of the enterprise marketing activities is ideal, namely the enterprise marketing effect is good. The irs in the table represents the enterprises marketing activity is in the state of increasing, drs represents the decreasing state.

The comprehensive technical efficiency is the measurement and evaluation of the ability of resource allocation and resource utilization of the decision-making unit. Pure technical efficiency is the production efficiency of enterprises due to the factors such as management and technology, and the specific meaning is the ability to get the maximum output under the given input. Scale efficiency is the production efficiency which is influenced by the scale of enterprise. It reflects the gap between the actual size and the optimal production scale. According to the production status of activities in the part of returns to scale, the scale efficiency can be divided into three states, increasing returns to scale (irs) and decreasing returns to scale (drs) and constant returns to scale (crs).

It can be seen from Tables 3 and 4, in the 10 brands of Women's Clothing category, only 4 enterprises reach the ideal input-output ratio. They are Ochirly, VEROMODA, GIRDEAR and ONLY. HSTYLE, Artka, INMAN, LIEBO's marketing effect are not ideal, because the pure technical and scale efficiency are invalid. In addition, they are in a state of increasing return of scale. This shows that its allocation of resources and the scale of investment are not good enough. The low comprehensive efficiency of ELF SACK is due to the invalidation of scale. The best method to improve the condition is to increases the scale of activities and expands its exposure rate.

After the comprehensive comparison of the data table of other industry, the article finds that in five industries, the integrate marketing effect of mobile phone is best. 80% enterprises achieve the satisfied efficiency. Then the following is Home Furnishing 70%, Skin Care 60%, and Snacks 50%. The worst result is Women's Clothing industry, only 40%. The low satisfaction of Women's clothing industry may be due to the fans' activity participation is not high because of its boring and unattractive contents. Its microblog mostly show new products, seldom interacting with fans. So the official microblog is similar to enterprise's advertising platform, rather than a communication platform with fans. Lacking of interaction and humanization, the marketing effect of the product is naturely not very good.

(2) The Longitudinal Comparison

In order to better evaluate the microblog marketing effect between the five major industries, this paper proposes to use the overall ranking of comprehensive technical efficiency in DEA results in the table to identify the success or failure of enterprise marketing effect. Ranking the Comprehensive technical efficiency value of the 50 brands from high to low sequence, if the technical efficiency is equal, the brands are in same ranking. After that, the ranking will be as the enterprise scores. Higher ranking namely that the ranking order is more backward explains that the enterprise marketing effect is poorer. Calculate every

Table 5. The ranking status of comprehensive technical efficiency which is not 1

Ranking	Enterprises	Crste	Vrste	Scale	
31	Pechoin	0.99	1	0.99	irs
32	Lin shi mu ye	0.968	1	0.968	irs
33	Haoxiangni	0.956	1	0.956	irs
34	Lenovo	0.955	1	0.955	irs
35	HSTYLE	0.895	0.898	0.997	irs
36	Nokia	0.673	0.677	0.994	drs
37	Laneige	0.655	0.704	0.93	drs
38	EsteeLauder	0.589	0.591	0.998	drs
39	Artka	0.543	0.545	0.997	irs
40	ELF SACK	0.522	0.522	1	-
41	PeaceBird	0.5	1	0.5	irs
42	INMAN	0.45	0.453	0.994	irs
43	MEIFUBAO	0.444	0.445	0.999	-
44	Three squirrel	0.414	0.414	0.999	irs
45	LIEBO	0.31	0.31	0.998	irs
46	BESTORE	0.243	0.244	0.996	drs
47	Be & Cheery	0.142	0.143	0.999	-
48	Xinnongge	0.127	0.128	0.997	-
49	Bell Land	0.021	1	0.021	irs
50	Gudxon	0.001	1	0.001	irs

enterprise's score, and then classified calculate the score of each category. The higher score shows that the category's marketing effect is poorer.

Experimental data shows that the top 30 enterprises' marketing effects are very ideal, because the comprehensive technical efficiency, pure technical efficiency and scale efficiency value are 1. The comprehensive technical efficiency of last 20 enterprises are different, as shown in Table 5.

The data shows that in the top 30 enterprises, mobile phones companies have 8, accounting for 26.7%; Home Furnishing class has 7, accounting for 23.3%; skin care companies have 6, occupying 20%; snacks has 5, accounting for 16.7%; women's clothing enterprises have 4, occupying 13.3%.

In whole 50 enterprises, achieving the satisfactory efficiency of enterprises in the mobile phones industry accounted for 16%, followed by home furnishing for 14%, skin care for 12%, snacks for 10%. Women's clothing class accounts for only 8%. The above data shows that in five industries, the microblog marketing effect of mobile phones companies are doing relatively well, women's relatively weak.

Then, classifying the ranking scores of all brands, mobile phone has the lowest score 78 points. Home furnishing gets 138 points. Skin care is 155 points. Snack is 223 points. Women's clothing gets the highest score 246 points. Therefore, from the perspective of input and output, the input-output ratio of mobile phones is the most ideal, which show that there are good microblog marketing effect in this category. The home furnishing and skin care industries are also relatively well. The input of snacks, women's clothing is redundant, while the output is insufficient. They should properly adjust the resources reasonably, display the resources value to maximize to increase enterprise microblog marketing effect.

In summary, this paper finds the marketing effect of different goods of different types of enterprises on sina microblog is different. The best effect is mobile phones industry, followed by Home Furnishing, skin care, snacks. The worst is the women's clothing industry.

3.4 Results

(1) Microblog Marketing Input-Output Analysis
As can be seen from the previous section, the invalid marketing effects of enterprises have 3 kinds:

- The technical efficiency, pure technical efficiency, scale efficiency are all not 1;
- The technical efficiency, pure technical efficiency is not 1, scale efficiency is 1;
- The pure technical efficiency is 1, the technical efficiency, scale efficiency is not 1.

The paper selects the first representative case to analyze. There are some enterprises satisfying the condition, randomly select one company. As a result, this paper chooses Be & Cheery as the sample. Table 6 is Be & Cheery's unit adjusted value: Table 6 The adjustment values of Be & Cheery.

The comprehensive efficiency value of Be & Cheery is 0.142. The pure technical efficiency value is 0.143. The scale efficiency value is 0.999. The comprehensive efficiency and pure technical efficiency value are very low, that shows there is a big problem. From the table we can see, there are input redundancy in 6 input indexes, especially on the number of followers. The original value of followers is 80.650, but the actual target value is 5.508. Be & Cheery spends too much energy on the increasing number of followers, and this part of input do not actually convert into the corresponding output, which cause a great waste of resources. Be & Cheery releases 42 microblog within 7 days, with high number of active and passive comments. Relatively speaking, official microblog is active, but the active behavior does not bring good interaction. The average number of forwarding and comments are all only 5, the number of praise is 2. The output is significantly inadequate. Besides, the prizes of Be & Cheery are attractive, the price reaching 1489 yuan. However, they do not get corresponding fans participation. In addition, Be & Cheery is good at guiding the followers' emotion and controlling the scale of marketing. The future improvement is mainly on the allocation of resources. To sum up, the above adjustment values can provide an important basis for the evaluation of enterprise marketing effects.

Table 6. The adjustment values of Be & Cheery

Enterprises	Indicators	Original value	Redundant input value	Insufficient output value	Effective target value
Be & Cheery	NWL	1.881	0	0.965	2.846
	NWF	5.929	0	0.005	5.934
	NWC	5.714	0	0.953	6.668
	OWF	6.639	0	0.015	6.654
	OWC	6.25	0	0	6.625
	NNS	0.992	0	0	0.992
	Followers	80.65	−69.15	−5.992	5.508
	microblog	6.13	−5.256	0	0.874
	FRW	6	−5.144	0	0.856
	NAC	0.667	−0.572	0	0.095
	NPC	0.262	−0.225	0	0.037
	PV	14.89	−12.767	−1.563	0.56

(2) The Improve Measurement for Enterprises
Through calculation of the DEA model, this paper finds that the microblog marketing effect of firms in different industries is different. According to the different situation of the enterprise, this paper puts forward the following measures to help enterprises improve.

① Increase the enterprise's official microblog exposure, propagandize enterprise microblog through many ways.
According to the "2015 electric business microblog development report" released by sina microblog, the current number of active electric business enterprises in sina microblog account for a total of more than 1600. If you want to highlight your own business account in so many official accounts, you must understand the main way for users to pay attention to enterprise. Seize the basic demands for user to follow the enterprise.

The sina "2015 microblog user development report" shows, users follow the enterprise's microblog primarily through three ways: advertising, others forwarding and corporate propaganda. Besides, Baird [1] thought the establishment of social customer relationship, seized the customer psychology, and the use of interactive communication strategy were also important. In addition to the above measures, the enterprise can also increase the promotion in the major holidays and special time point.

② Pay attention to negative emotions, encourage the positive emotions, and guide the neutral mood.
Chatterjee [7] said that consumers always believe the negative information have more critical value than the positive information when they make purchase decisions or scan the comments. Therefore, they always have greater degree of dependence on the negative information. Through microblog to guide consumers is the main reason for some enterprise to do the microblog marketing. The negative

comments may cause certain extent damage to the product of enterprise. Therefore, some enterprises must pay much attention to the negative emotion and know the origin of it. That can help the enterprise to eliminate the negative emotion.

For the positive emotions, the enterprise should take the initiative to interact with the followers and encourage users to maintain this positive emotion, then to increase the reputation of enterprise. For the neutral emotions, the enterprise should show its advantage to consumers with the objective data.

③ Both active and passive comments should be concerned
Most followers want to get reply or attention when they give comments to the blogger. If bloggers can timely find this kind of behaviors of followers, and then give timely response, that can largely reduce the negative emotions and increase the positive interaction with followers.

④ Diversify the types of microblog
Zhang [19] believed that the types of microblog can to a certain extent influence the browsing and forwarding of fans. Generally the type of blog is divided into: pictures, short chain, video, text, or a mixture of the four types. In order to maintain the freshness of microblog, the enterprise should cross use multiple types of posts to give user a new experience.

4 Conclusions

This paper through the literature research, put forward the evaluation indicators of the microblog marketing effect in enterprises, and set up a set of comprehensive evaluation system.

Combining with the method of data envelopment analysis (DEA), this paper proposes the evaluation model, with input and output of the quantitative evaluation method to evaluate the microblog marketing effect between different enterprises. In the empirical part, this paper selects 50 different enterprises to verify the feasibility of the model. According to the objective data, this paper makes a comparison of different enterprise marketing effect, and provides a feasible improvement measures for it.

In fact, this paper also has certain limitation in the selection of indicators. The article does not use the enterprise actual sales as the evaluation index. Besides, this paper only studies the different enterprises in the short period. The future research can increase the time and carry on deeper research on microblog marketing effects.

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