

Study on the Influence Mechanism of Language Content Features on Live Broadcast Marketing Effectiveness

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Abstract: Under the current popular live marketing method, sales are achieved through the online interaction between anchors and audiences. The language content features of anchors have an important impact on live broadcast marketing efficiency. This paper analyzes the language content features of anchors and product sales through questionnaire survey data and establishes a regression model to study the impact of language content features of anchors on live broadcast marketing efficiency. Through the questionnaire survey data analysis of anchors language content features and product sales to establish a regression model to study the impact of anchors language content features on live marketing effectiveness. The findings confirm that rigor in language content features has a considerable boost to the effectiveness of field marketing, and that different languages should be used to address different consumer groups. The higher the product quality, the greater the effect of language content features on the field marketing effect. Finally, this study puts forward relevant suggestions from the aspects of improving the efficiency of field marketing, promoting the development and profit of e-commerce industry.

Keywords: live marketing, Marketing effectiveness, Language, Content feature

1. Introduction

With the increasing popularity of live marketing, the promotion is more convenient and the platform policy is inclined. In order to make the presentation effect better, the anchor takes the leading position in the marketing process, and the influence of its language content features on the marketing efficiency has attracted much attention. In e-commerce live broadcasting, anchors undertake the most critical task of online sales. They guide consumers to buy products through language, appearance and interaction with consumers. However, as ordinary anchors do not have a strong fan base or well-known personal charm of Internet celebrities, choosing more appropriate live broadcasting language is a faster and more effective way to increase product sales [1].

The language content feature in live broadcast is the key link in live broadcast marketing. By attracting customers' attention, transmitting product information and establishing brand image, language content features can significantly improve marketing effects.

In the context of live broadcast, the main problem of this study is the mechanism of the relationship between informativeness, rigor, entertainment in different languages of the host, consumer groups and product quality, and the connection between the effect on consumer purchase intention.

The research methods adopted in this paper mainly include the empirical research method of questionnaire survey, which takes whether the live delivery products have been purchased in the past month as the explained variable of the model. With entertainment, rigor and information as explanatory variables, a regression model was established and analyzed through OLS least square method and subsample discussion. Discussed the influence of the characteristic of the host language content on live marketing efficiency mechanism, the study for promoting employment, let consumer potential better release, contribute more power for economic development is of great significance [1, 2].

2. Theoretical Review

2.1. Model Construction

Baseline regression model: OLS least square method examines the influence of language content features on marketing effectiveness. In this study, anchors' linguistic content features, product quality and consumer groups are incorporated into a theoretical research model to explore the internal relationship between anchors' linguistic content features and marketing effectiveness.

2.2. Content Characteristics

As for the influence mechanism of linguistic content features on live broadcast marketing effectiveness, the content characteristics in this paper refer specifically to the characteristics of the language content in the online sales situation of the anchor: taking Wang Hong et al as an example, the author has made a detailed study on each of the three linguistic content features of information, entertainment and quality [1]. Ji Man et al. believe that e-commerce network live broadcasting is not only about selling high-quality and low-cost products, but also about creating an atmosphere and interacting with consumers during live broadcasting, which can stimulate consumers' purchase desire [3]. Through empirical research, Yi Changchun et al. found that the information and entertainment of language content in live broadcasting have a positive impact on consumer attitudes [4].

In various studies, entertainment is a factor that has a significant positive impact on marketing effectiveness, but most anchors' language content features are not only entertaining, but also informative, lacking contrast between opposing features. There is a lack of research on the rigor of language in live sales. In the detailed possibility model proposed by Cacioppo and Petty, there is a point that the information content provided by the media will make consumers subconsciously and instinctively carefully consider in order to form their attitude towards the brand [5]. In the live sales of e-commerce, this study uses customer demand information to select different marketing methods, so as to enhance market positioning and segmentation capabilities, improve customers' willingness to pay and improve marketing efficiency [6,7].

The group characteristics of the respondents in the study are mostly women and young people, and middle-aged people buy more daily necessities. The study ignored the people with wider audience of live sales. In order to make the study more valuable for reference, this study conducted a questionnaire survey on a wider group of people.

3. Method

3.1. Data Collection and Screening

In this study, electronic questionnaires were mainly used to distribute to customers who had purchased livestreamed products in the past 30 days. 267 electronic questionnaires were collected, and 198 valid questionnaires were extracted after screening of invalid questionnaires, with an

effective data recovery rate of 74.1%. For invalid questionnaires, the method of specifying option questions and before and after questions is mainly used to eliminate, and the questionnaire with too short response time is deleted.

3.2. Variable Setting

This study adopts the method of empirical investigation, with a total of 14 variables. The explanatory variable of the model is whether the live broadcast products have been purchased in the past month, and the regression model is established with entertainment, rigor and information as explanatory variables.

Table 1: Definition of variables

| Variable type | Variable name | CODE | item | Instructions |
|----------------------|-----------------------------|---------------|------|--|
| Explained variable | Buy live delivery products | buy | Q14 | Purchase is assigned a value of 1, otherwise 0 |
| | Purchase quantity | buy_number | Q15 | A/B/C/D are assigned 1/2/3/4 points in order |
| | Purchase amount | buy_value | Q16 | |
| Explanatory variable | entertainment | entertainment | Q6 | A/B/C/D are assigned 1/2/3/4 points in order |
| | stringency | rigorism | Q7 | |
| | informativeness | information | Q8 | |
| Regulating variable | Return goods | return | Q11 | A value of 1 is assigned if a return occurs, otherwise 0 is assigned |
| | Product quality | quality | Q12 | A/B/C/D are assigned 1/2/3/4 points in order |
| | Live broadcast satisfaction | satisfy | Q13 | |
| Control variable | age | age | Q1 | A/B/C/D are assigned 1/2/3/4 points in order |
| | sex | gender | Q2 | The male is 1 and the female is 0 |
| | Marital status | marry | Q3 | A/B/C/D are assigned 1/2/3/4 points in order |
| | Educational level | edu | Q4 | |
| | Income level | income | Q5 | |

3.3. Data Collection and Analysis

In the questionnaire, the respondents' personal information is collected first, followed by the evaluation of the entertainment, rigor and information of the live language content, and the marketing effectiveness is evaluated by the purchase quantity and amount. The fourth part is the quality evaluation, with a total of 16 questions. The questionnaire was pre-investigated and modified before the formal release, and the questionnaire was finally formed and distributed on a large scale.

4. Results

The following shows the benchmark regression results of language content features on live marketing effectiveness. Taking the purchase of live broadcast products in the past month as explanatory variables of the model, regression models were established with entertainment, rigor and information as explanatory variables, respectively, to explore the effects of language content features on marketing effects.

Table 2 shows that the fitting coefficients of entertainment, rigor and information are 0.036, 0.132 and 0.020, respectively, passing the significance test at the level of 10%, 1% and 1% successively. This shows that the entertainment, rigor and information in live broadcasting can significantly improve the effectiveness of live broadcasting marketing and increase the purchase probability.

Table 2: Results of baseline regression

| | Explained variable: Whether to purchase live delivery products within the last month | | |
|--|--|----------|----------|
| entertainment | 0.036* | | |
| | (1.711) | | |
| stringency | | 0.132*** | |
| | | (4.430) | |
| informativeness | | | 0.020*** |
| | | | (3.526) |
| age | 0.081** | 0.071** | 0.074** |
| | (2.497) | (2.339) | (2.323) |
| sex | -0.019 | 0.053 | -0.007 |
| | (-0.251) | (0.705) | (-0.090) |
| Marital status | 0.179** | 0.124* | 0.190*** |
| | (2.505) | (1.810) | (2.690) |
| Educational level | -0.064** | -0.039 | -0.068** |
| | (-1.975) | (-1.177) | (-2.035) |
| Income level | 0.006 | -0.014 | 0.002 |
| | (0.190) | (-0.476) | (0.071) |
| Constant term | 0.603*** | 0.799*** | 0.599*** |
| | (3.863) | (5.635) | (2.891) |
| Sample size | 200 | 200 | 200 |
| Coefficient of determination | 0.105 | 0.189 | 0.101 |
| The determination factor of adjustment | 0.077 | 0.164 | 0.073 |

The t statistic is in parentheses; *p < 0.1, ** p < 0.05, *** p < 0.01;

Next, the number of livestream products purchased in the past month was taken as explained variable, and the regression model was again established with the entertainment, rigor and information as the explanatory variables to construct the robustness test. Table 3 shows that the fitting coefficients of entertainment, rigor and information are 0.107, 0.140 and 0.036, respectively, passing the significance test at the level of 10%, 5% and 1% in turn. This result is consistent with the baseline model, indicating that the model construction is stable.

Table 3: Robustness test results 1

| | Explained variable: The number of live broadcast products purchased in the past month | | |
|---------------|---|---------|--|
| entertainment | 0.107* | | |
| | (1.738) | | |
| stringency | | 0.140** | |
| | | (1.991) | |

Table 3: (continued).

| | | | |
|--|-----------|-----------|-----------|
| informativeness | | | 0.036*** |
| | | | (4.450) |
| age | -0.208*** | -0.189*** | -0.200*** |
| | (-2.980) | (-2.746) | (-2.935) |
| sex | -0.074 | -0.179 | -0.125 |
| | (-0.421) | (-1.036) | (-0.724) |
| Marital status | -0.477*** | -0.439*** | -0.507*** |
| | (-2.942) | (-2.692) | (-3.129) |
| Educational level | 0.106 | 0.080 | 0.102 |
| | (1.492) | (1.069) | (1.378) |
| Income level | -0.120* | -0.094 | -0.117* |
| | (-1.825) | (-1.418) | (-1.773) |
| Constant term | 2.829*** | 2.777*** | 3.214*** |
| | (8.430) | (9.109) | (7.496) |
| Sample size | 200 | 200 | 200 |
| Coefficient of determination | 0.132 | 0.143 | 0.123 |
| The determination factor of adjustment | 0.105 | 0.116 | 0.096 |

T statistic in brackets; *p < 0.1, ** p < 0.05, *** p < 0.01;

Next, the value of livestream products purchased in the past month is taken as the explained variable, and the regression model is again established with the entertainment, rigor and information as the explanatory variables to construct the robustness test. Table 4 shows that the fitting coefficients of entertainment, rigor and information are 0.131, 0.233 and 0.133, respectively, passing the significance test of 10%, 1% and 10% in turn. The results are consistent with those of the baseline model, indicating that the model construction is robust.

Table 4: Robustness test results 2

| | Explained variable: The value of livestreamed products purchased in the last month | | |
|-------------------|--|----------|----------|
| entertainment | 0.131* | | |
| | (1.731) | | |
| stringency | | 0.233*** | |
| | | (3.456) | |
| informativeness | | | 0.133* |
| | | | (1.691) |
| ago | -0.103 | -0.129* | -0.102 |
| | (-1.442) | (-1.841) | (-1.405) |
| sex | -0.240 | -0.084 | -0.163 |
| | (-1.340) | (-0.466) | (-0.914) |
| Marital status | 0.543*** | 0.466*** | 0.577*** |
| | (3.309) | (2.867) | (3.528) |
| Educational level | -0.100 | -0.057 | -0.081 |

Table 4: (continued).

| | | | |
|--|----------|----------|----------|
| | (-1.338) | (-0.765) | (-1.076) |
| Income level | 0.153** | 0.113 | 0.157** |
| | (2.172) | (1.605) | (2.230) |
| Constant term | 2.983*** | 3.178*** | 2.165*** |
| | (8.008) | (8.765) | (4.561) |
| Sample size | 200 | 200 | 200 |
| Coefficient of determination | 0.113 | 0.152 | 0.112 |
| The determination factor of adjustment | 0.086 | 0.126 | 0.085 |

The figures in parentheses are t-statistics; *p < 0.1, ** p < 0.05, *** p < 0.01;

Next, this study will conduct a sub-sample discussion, regression of male and female samples separately, and observe the differential impact of language content features on live marketing effectiveness in different audience groups.

As can be seen from Table 5, recreation has significant regression in both male and female samples, and the fitting coefficients are 0.047 and 0.013, respectively, passing the significance test at 5% and 10% level. From the fitting coefficient size analysis, it can be seen that in male samples, the fitting coefficient of entertainment is larger than that of female samples, which indicates that male consumers pay more attention to entertainment.

As can be seen from Table 5, recreation has significant regression in both male and female samples, and the fitting coefficients are 0.096 and 0.135, respectively, passing the significance test at 5% and 5% levels. From the fitting coefficient size analysis, it can be seen that in male samples, the fitting coefficient of rigor is smaller than that of female samples, which indicates that female consumers pay more attention to rigor.

As can be seen from Table 5, rigor was regression significant only in female samples, and the fitting coefficients were 0.110 respectively, passing the 5% level significance test. This shows that female consumers pay more attention to information.

Table 5: The results of gender regression

| | Explained variable: Whether to purchase live delivery products within the last month | | | | | |
|-------------------|--|---------|---------|--------------------|----------|----------|
| | Male interviewee | | | Female interviewee | | |
| entertainment | 0.047** | | | 0.013* | | |
| | (2.391) | | | (1.702) | | |
| stringency | | 0.096** | | | 0.135** | |
| | | (2.409) | | | (2.562) | |
| informativeness | | | 0.063 | | | 0.110** |
| | | | (1.001) | | | (2.200) |
| age | 0.096** | 0.081* | 0.069 | 0.051 | 0.058 | 0.044 |
| | (2.179) | (1.928) | (1.536) | (0.959) | (1.160) | (0.816) |
| Marital status | 0.260*** | 0.201** | 0.245** | -0.023 | -0.012 | -0.022 |
| | (2.677) | (2.094) | (2.574) | (-0.189) | (-0.103) | (-0.177) |
| Educational level | 0.007 | 0.005 | 0.013 | - | -0.083 | - |
| | (0.123) | (0.088) | (0.249) | 0.141*** | (-1.610) | 0.127** |
| | | | | (-3.076) | | (-2.587) |

Table 5: (continued).

| | | | | | | |
|--|------------------|-------------------|------------------|---------------------|---------------------|--------------------|
| Income level | 0.047 (0.917) | 0.022 (0.420) | 0.056 (1.082) | -0.036 (-0.685) | -0.047 (-1.035) | -0.029 (-0.532) |
| Constant term | 0.172 (0.637) | 0.495* (1.724) | 0.466 (1.576) | 1.053*** (4.474) | 1.075*** (5.108) | 0.721** (2.141) |
| Sample size | 104 | 104 | 104 | 96 | 96 | 96 |
| Coefficient of determination | 0.138 | 0.184 | 0.181 | 0.160 | 0.231 | 0.168 |
| The determination factor of adjustment | 0.094 | 0.143 | 0.139 | 0.113 | 0.188 | 0.122 |

T statistics are shown in brackets;*p < 0.1 , ** p < 0.05, *** p < 0.01;

Next, the adjustment effect of product quality is analyzed. Table 6 shows that the fitting coefficients of the three interaction terms, product quality * entertainment, product quality * rigor and product quality * information, are 0.004, 0.033 and 0.042, passed the significance test of 1%, 10% and 10% level respectively.

This shows that the quality of the product has a considerable positive effect, that is, when purchasing high-quality products, it will enhance the role of the host language content features on improving the effectiveness of live marketing.

Table 6: Results of adjustment effects 2

| | Explained variable: Whether to purchase live delivery products within the last month | | |
|---------------------------------|--|--------------------|--------------------|
| entertainment | -0.014 (-0.153) | | |
| Product quality * entertainment | 0.004*** (3.150) | | |
| stringency | | -0.035 (-0.414) | |
| Product quality * rigor | | 0.033* (1.725) | |
| informativeness | | | -0.140 (-1.437) |
| Product quality * Information | | | 0.042* (1.776) |
| Product quality | 0.072 (0.964) | 0.113* (1.689) | -0.048 (-0.440) |
| age | 0.077** (2.346) | 0.073** (2.375) | 0.069** (2.166) |
| sex | -0.019 (-0.236) | 0.040 (0.526) | -0.004 (-0.049) |
| Marital status | 0.147** (1.973) | 0.094 (1.321) | 0.138* (1.883) |

Table 6: (continued).

| | | | |
|--|----------|----------|----------|
| Level of education | -0.051 | -0.025 | -0.045 |
| | (-1.516) | (-0.752) | (-1.280) |
| Income level | 0.013 | -0.007 | 0.014 |
| | (0.408) | (-0.232) | (0.433) |
| Constant term | 0.355 | 0.429 | 0.679** |
| | (1.306) | (1.558) | (2.192) |
| Sample size | 200 | 200 | 200 |
| Coefficient of determination | 0.122 | 0.203 | 0.132 |
| The determination factor of adjustment | 0.085 | 0.169 | 0.095 |

The t statistic is in parentheses; *p < 0.1 , ** p < 0.05, *** p < 0.01;

5. Discussion

By exploring the effect mechanism of language content features (entertainment, rigor, information), product quality and consumer groups on live marketing effectiveness, this analysis finds that different language content features have different effects on marketing effectiveness. The information of language content features has obvious promoting effect on live marketing effectiveness; Entertainment has a considerable positive impact on male consumer groups in anchor language content characteristics. The higher the product quality, the greater the role of language content features on the effectiveness of live marketing.

Based on the above research conclusions, operational capabilities mainly focus on effectively improving high-quality goods/services, maximizing benefits and enhancing flexibility, but operational capabilities rely on marketing capabilities to achieve corporate goals [8,9].

Excellent marketing capabilities can provide high standards of consumer demand sensing for operational functions [10]. Therefore, in order to improve the effect of live marketing, the brand should first have a deep understanding of product quality, select appropriate language and content feature strategies, provide diversified information, and implement different aspects of publicity and guidance for different target customers to improve consumer perception and thus improve marketing efficiency. In the process of implementation, the strategy should be timely adjusted according to market feedback to ensure its effectiveness. The results show that the entertainment features of anchors' language content can promote the purchase of male consumers. Rigor has a significant driving effect on female consumers. Therefore, the target customers of different products should also adopt different linguistic content features to increase the attractiveness of the products to consumers, and at the same time, produce the products at the lowest possible cost to obtain enough profit margins [11]. So as to achieve improved marketing effectiveness.

This paper only explores the relationship between entertainment, rigor and information, which affects the effectiveness and quality of live marketing, and consumer groups, and does not mention the influence of other language content features, which has certain limitations.

6. Conclusion

This paper establishes a benchmark regression model through empirical method, and surveys the purchasing degree of consumers through questionnaires from the perspective of the language, content, features and product quality of anchors. This provides more accurate and convenient choices and marketing strategies for improving the effectiveness of live broadcasting marketing, which has certain practical value and can establish emotional connection with customers and improve brand loyalty.

Enterprises can solve users' doubts about products through live broadcasting, show the strength of the brand and certification information; it can expand the publicity effect of small and medium-sized enterprises, reduce the marketing cost and improve the marketing efficiency.

This study follows the standardization and rigor of scientific research, but the research is not perfect enough, and only the groups that are considered to be lacking in research and have more specific influences are selected. Only entertainment, rigor and information are selected to explore the relationship between language content features and marketing effectiveness. There are also live streaming and real-time interaction, which are not involved in this study.

In addition, this study adopts the questionnaire survey method to collect various data of marketing effectiveness through measurement items. The data obtained from the limited number of questionnaires is the result of consumers' subjective evaluation, and the sample data cannot fully ensure its quality, so there will be sample bias and other problems in the results. Future research can select more accurate objective data and combine the questionnaire.

References

- [1] Wang, H., Chen, H.L., Xie, J.X., Wen, S.L. (2012) *Study on the Influence of Host Language Content Characteristics on Consumers' Purchase Intention in Live Streaming with Goods*. *Management Modernization*, 42 (06), 59-65.
- [2] Nath, P., Nachiappan, S., Ramanathan, R. (2010) *The Impact of Marketing Capability, Operations Capability and Diversification Strategy on Performance: A Resource-Based View*. *Industrial Marketing Management*, 39(2), 317-329.
- [3] Ji, M., Zhuo, X.Z. (2019) *Influencing Factors of Consumers' Purchase Intention in Online Live Streaming Environment of E-commerce Based on SOR Model*. *Journal of Huaibei Normal University (Philosophy and Social Sciences Edition)*, 41(4), 49-57.
- [4] Xuan, C.C., Lin, S.D. (2019) *Research on Inverted U-shaped Pattern of Social Media Use's Influence on Advertising Attitude*. *Modern Communication (Journal of Communication University of China)*, 41(09), 130-135.
- [5] Cacioppo, J.T., Petty, R.E. (1984) *The Elaboration Likelihood Model of Persuasion*. *Advances in Consumer Research*, 19(4), 123-205.
- [6] Ahmed, M.U., Kristal, M.M., Pagell, M. (2014) *Impact of Operational and Marketing Capabilities on Firm Performance: Evidence from Economic Growth and Downturns*. *International Journal of Production Economics*, 154, 59-71.
- [7] Song, M., Di Benedetto, C.A., Nason, R.W. (2007) *Capabilities and Financial Performance: The Moderating Effect of Strategic Type*. *Journal of the Academy of Marketing Science*, 35(1), 18-34.
- [8] Tan, K.C., Kannan, V.R., Narasimhan, R. (2007) *The Impact of Operations Capability on Firm Performance*. *International Journal of Production Research*, 45(21), 5135-5156.
- [9] Day, G.S. (1994) *The Capabilities of Market-driven Organizations*. *Journal of Marketing*, 58(4), 37-52.
- [10] Wan, G.Y., Pu, F.Y., Li, Z.C., Cao, Y. (2021) *Research on the Interaction between Enterprise Marketing Capability and Production Operation Capability and Its Impact on Performance*. *China Management Science*, 1-14.
- [11] Dutta, S., Narasimhan, O., Rajiv, S. (1999) *Success in High-technology Markets: Is Marketing Capability Critical?* *Marketing Science*, 18(4), 547-568.