



Surveillance on the Strategic Management of Meituan Fresh's Business Model Under the Digital Economy -- Based on Multi-Case Comparative Analysis

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Abstract: With the continuous development of digital economy, the rapid rise of "fresh" retail formats in China, consumers' demand for fresh electricity business presents diversified and personalized characteristics, and fresh electricity business has become a field of wide attention. In this study, this paper discusses the business model and strategic management of Meituan Fresh in the digital economy based on statistical research and statistical measurement tools. Through interviews and questionnaires, Meituan Selection focuses on establishing an efficient and transparent supply chain and provides a variety of products through cooperation with multiple fresh brands. Meanwhile, Meituan Fresh actively cooperates with offline stores to provide faster distribution and better service. Compared with other e-commerce platforms, Meituan Selection better performance in fresh product quality, delivery speed and user experience; flexible and diversified service and management strategies in market expansion, and unique advantages in core links such as supply chain and distribution services. In terms of consumer awareness and brand awareness, Meituan Fresh still has room for further improvement. In the investigation and multi-case comparison, it reveals the preferred business model and strategic management of Meituan in the digital economy, and explores how to reduce the purchase cost of consumers on the premise of ensuring fresh quality and service quality, so that consumers can buy and eat safely.

Keywords: Digital Economy, Fresh Electricity Business, Business Model, Multi-Case Comparison Method

1. Introduction

With the development of the digital economy, fresh e-commerce has become a field of much attention. In this field, Meituan has always been in the leading position. Meituan is a community group buying model. As a new e-commerce model, it has been favored by more and more consumers for its characteristics of people, efficiency, convenience, affordable prices and offline services [1]. The "Meituan Selection" in this case is the main research object of the article. Meituan adopts the strategy of "retail + technology" to practice the corporate mission of "helping people eat better and live a better life" [2]. Since its establishment in March 2010, Meituan has continued to promote the digital upgrading of service retail and

commodity retail on the demand side and the supply side, and has worked together with the majority of partners to provide quality services for consumers. Meituan Selection to adopt the mode of "pre-purchase + self-pickup", enter the community e-commerce track, further explore the community fresh retail formats, meet the differentiated consumer demand, promote fresh retail online and offline retail, and accelerate the integration [3]. Meituan Selection is to provide community residents with cost-effective fruits, seafood, poultry, vegetarian snacks, grain and oil seasoning and other commodities, to meet the daily needs of ordinary families, and the price is generally lower than the market price. This community group blocks as the center, by the group network platform, community head within the neighborhood into a

block, group of members use small program order shopping, and then by the group network platform to goods to accommodation or stores, then told by the community head group members from or door-to-door delivery, is a kind of model through acquaintances and half acquaintances to sell goods [4]. Meituan Selection highlights its digital advantages, adopts C2M mode, and aggregates all kinds of commodity manufacturers on the platform to reduce the cost of intermediate links, so as to provide consumers with better quality product prices [5]. The comparison objects selected in the paper are "Duoduo maicai" and "Hema Fresh". As a high-quality fresh e-commerce platform, Duoduo's core competitiveness mainly lies in product quality and price, service experience and supply chain efficiency. Duo Duo adopts the B2C marketing model, that is, through the establishment of its own warehouse, to establish long-term cooperation with suppliers, to ensure product quality and price, and provide "1 hour flash delivery", "no reason to return" and other service experience, so as to win the trust of consumers [6]. Hema Fresh born through the integration of online resources, and "O2O" mode, is the goods online sales, offline or directly to a kind of operation mode, provide portable and variety of distribution services, Hema Fresh raw core competitiveness is "new retail" mode and customer experience, Hema Fresh born "sanxin" mode namely new channels, new supply chain and new retail, truly realize the product quality control and delivery efficiency [7]. Duo Duo, Hema and Meituan are the main fresh e-commerce platforms in China. Duo Duo is cheap and good quality, mainly for the third and fourth tier markets. Hema pursues quality as the first choice in the first and second tier cities, while Meituan is somewhere between them [8]. With the fresh community group purchase e-commerce model, their target groups, enterprise marketing and strategic management still have certain differences, in the comparative analysis found that each has its own characteristics, can take its essence, deeply explore the potential of Meituan Selection in fresh electricity business, explore the future of China's fresh electricity business.

2. Research Content

Digital economy has the characteristics of digital technology and high quality economic development, digital economy for new e-commerce (new retail, social electricity, etc.) provides the development of the possibility and opportunities, can effectively help enterprises to achieve diversified services, efficient use of social media, build new e-commerce mode, realize social electricity, strengthen logistics services [9]. The article studies fresh social e-commerce, selects Meituan Selection as the main line for research and analysis, and compares the two fresh electricity suppliers. The reason for comparison is that they have a lot in common, and at the same time, it is the social e-commerce platform chosen by the Chinese urban public, with the characteristics of good quality and low price. Compared with the business model of Hema Fresh and Duoduo maicai, Meituan Selection business model mainly has strong market

competitiveness and growth potential by integrating platform resources, providing rich product selection and high-quality guarantee, as well as data-driven operation, to meet consumers' needs for convenience, quality and choice. The contents of this study, such as e-commerce in the relationship between perceived quality, perceived value and customers' purchase intention. Specifically, the following questions need to be answered:

- 1) Whether there is a positive correlation between the degree of fresh e-commerce logistics distribution service and consumers' purchase intention.
- 2) Does the perceived value of the product have a positive impact on customers' purchase intention?
- 3) Does the perceived value of freshness have a positive impact on customers' purchase intention?
- 4) Does the logistics reputation of the e-commerce platform have a positive impact on the customers' purchase intention?
- 5) Does the customer expectation have a positive impact on the perceived value and customer satisfaction?

3. Research Methodology

3.1. Study Design

3.1.1. Design of the Questionnaire

This study takes fresh e-commerce as the research object, investigates the impact of the operation and management mode of the three fresh e-commerce platforms of Meituan, Duoduo and Hema on consumers' purchase intention, introduces brand identity and perceived risk, to study the intermediary role of brand identity and the regulating role of perceived risk. In order to achieve the research purpose, each variable will be quantified, including the following six variables: corporate image, product / service image, consumer image, brand identity, purchase intention, and perceived risk. These variables have been widely used in previous studies. This study will draw on more mature scales at home and abroad for research and design, and make simple modifications and improvements according to the characteristics of the three fresh e-commerce platforms. The questionnaire used in this paper consists of three parts: questionnaire description, scale and personal information. The questionnaire description is mainly designed to convey the true information about the content and purpose of the questionnaire to the respondents, as well as the principles of anonymity and confidentiality, so as to eliminate the concerns of the respondents and ensure that the questionnaire is filled in truthfully. The research scale consists of three parts: the basic information about consumers, the second for consumers' perceived quality of the e-commerce platform, and the third for consumers' purchase satisfaction. All crossing volumes in this study were measured using the Likert five-point scale, where 1 and 2 represent "very dissatisfied" and "dissatisfied", 3 for "relatively satisfied", and 4 and 5 are "satisfied" and "very satisfied", respectively. The personal information part mainly understands the basic situation of the research objects,

involving six aspects, including gender, age, occupation, education background, the number of monthly fresh purchases on the fresh e-commerce platform, and the monthly disposable income.

3.1.2. Questionnaire Participant Description Statistics

Before measuring the questionnaire variables of this study, the objective conditions of the respondents laid a good foundation for the subsequent study. The analysis of demographic variables in this study included gender, age, educational background, monthly income, the allocation amount of supermarket purchase, the rate of supermarket / market, and the occupation of the respondents. The analysis

results are shown in Table 1:

From analysis results, we can see the numerical characteristics of the demographic variables, reflecting the distribution of the respondents in this survey. Where the mean represents the central trend, and the standard deviation represents the fluctuating situation. According to the results of the frequency analysis of each variable, it can be seen that the distribution of this study basically meets the requirements of the sampling survey. On the whole, the population characteristics of the respondents are in line with expectations and have a certain representativeness. The details are as follows:

Table 1. Frequency analysis of the demographic numbers.

| variable | option | frequency | percentage | average value | standard error |
|---|----------------------|-----------|------------|---------------|----------------|
| sex | man | 480 | 28.1% | 1.72 | 0.45 |
| | woman | 1227 | 71.9% | | |
| age | Age 25 and below | 352 | 20.6% | 2.83 | 1.19 |
| | 26-35 Years old | 251 | 14.7% | | |
| | 36-45 Years old | 493 | 28.9% | | |
| | 46-55 Years old | 549 | 32.1% | | |
| | Over 55 years old | 62 | 3.6% | | |
| | Specialist and below | 459 | 26.9% | | |
| record of formal schooling | undergraduate course | 999 | 58.5% | 1.89 | 0.67 |
| | Master | 222 | 13.0% | | |
| | doctor | 27 | 1.55% | | |
| monthly income | Under 2000 | 185 | 10.8% | 3.01 | 1.37 |
| | 2000-4000 yuan | 464 | 27.2% | | |
| | 4000-6000 yuan | 633 | 37.1% | | |
| | 6000-8000 yuan | 150 | 8.8% | | |
| | 8,000-10,000 yuan | 121 | 7.1% | | |
| | Over 10,000 yuan | 154 | 9.0% | | |
| Purchase and consumption amount of the platform | Under 200 yuan | 358 | 21.0% | 2.43 | 1.04 |
| | From 200-500 yuan | 595 | 34.9% | | |
| | From 500-800 yuan | 408 | 23.9% | | |
| | More than 800 yuan | 346 | 20.3% | | |
| Weekly purchase frequency | 0 Times | 41 | 2.4% | 3.08 | 0.85 |
| | 0-2 Times | 430 | 25.2% | | |
| | 2-5 Times | 589 | 34.5% | | |
| | More than 5 times | 647 | 37.9% | | |
| occupation | public functionary | 193 | 11.2% | 3.54 | 1.47 |
| | company employee | 359 | 21.0% | | |
| | student | 177 | 10.3% | | |
| | professional | 298 | 17.3% | | |
| | other | 680 | 40.3% | | |

3.1.3. Questionnaire Survey Process

This paper is mainly through the revised official questionnaire generated by the questionnaire star website and sent to various community group buying wechat group, QQ group and other social software, by the people who have participated in the community group buying to fill in and forward, through online research, expand the scope of the research, save time and cost, and facilitate to obtain more data. In addition, we also contacted with the offline community group buying "head", and asked each leader to help distribute the offline questionnaires, so as to ensure the diversity of data sources. In this study, a total of 1809 questionnaires were issued. After eliminating invalid questionnaires, 1707 valid questionnaires were retained and the effective rate was 94.36%.

In view of the empty characteristics and consumer situation of Hema, Meituan and Duoduo, the data inquiry, field research, questionnaire survey, in-depth interview and other methods were mainly adopted to obtain data support. In the form of survey, 466 questionnaires were distributed on the preferred platform of Meituan, 432 valid questionnaires, accounting for 92.7%; 458 questionnaires were distributed on the platform, 424 valid questionnaires, accounting for 92.5%; in the selected locations, most of the locations of Hema stores were located in the first-and second-tier cities, and the questionnaires were mainly released in Guangzhou. In the form of survey questionnaires, 482 questionnaires were issued and 448 valid questionnaires were recovered, and the number of valid questionnaires accounted for 92.9%; for the understanding of the three fresh e-commerce platforms, a total

of 428 questionnaires were released, 403 valid questionnaires were recovered, and the valid questionnaires accounted for 94.1%. Also through win business network APP, appropriate travel APP data acquisition and analysis, and Meituan Selection APP, Duoduo maicai APP and box of fresh raw APP graphic introduction, consumer evaluation text analysis, the three fresh platform of the corresponding data, activist data and space environment description information comprehensive comb, get three fresh platform empty asked layout characteristics and consumer characteristics.

3.1.4. Statistical Data Processing

In this study, the data statistical analysis software SPSS 27 was used for data preprocessing, descriptive statistical analysis and reliability test, and confirmatory factor analysis for validity test and model testing hypothesis test.

(1) Descriptive statistical analysis

The basic characteristics and data of the research objects were analyzed, including the age, the use of community group buying, etc., so as to understand the basic situation of the research objects, and the questionnaire was selected according to the use of their community group buying.

(2) Reliability test

Reliability refers to the reliability of the scale, which is an important indicator used to verify the stability and credibility

of the scale. The main method of the reliability test is the internal consistency of the measurement scales. The present study used the Cronbach's α coefficient in SPSS. The larger the value of this coefficient is, the greater the correlation between the items of the variable is, that is, the higher its internal consistency is.

(3) Validity test

Validity is used to assess whether the scale used meets the preparation purpose and the degree of compliance. Factor analysis was performed in this study. The overall fit of the model is tested by the index, and then the standardized factor load of each item and the combined reliability and aggregate validity of each factor in the model are calculated, so as to judge whether the validity of the scale reaches the standard.

3.2. Variable Selection

3.2.1. Customer Expectations

Customer expectations in the cognition of a product or service plays a key role, refers to the customer demand based on past purchase experience, and the trust of electricity enterprises, for electric business platform of logistics service expectations, customer expectations can get from three aspects: the quality of product evaluation, evaluation of distribution service, and the overall expectations. Table 2, as shown below:

Table 2. Measurement indicators of customer expectations.

| latent variable | observable variable | encoding | Index reference source |
|-----------------------|------------------------------|----------|--|
| Customer expectations | Product quality expectations | W1 | Fornell [10] Oliver [11] Liu Xinyan [12] |
| | Service quality expectations | W2 | |
| | Overall expectations | W3 | |

3.2.2. Perceived Value

Perceived value is customers' subjective feeling of the transaction process and results of the e-commerce platform. Customers' perceived value is mainly measured by cost performance, which is customers' subjective feeling of gains and losses after the comprehensive price and quality of the

products and services they obtain. The measurement variables of perceived value have three aspects: quality perception under a given price condition, price perception under given quality condition, and cost performance. Therefore, this study will set the relevant measurement variables from the above three aspects, as detailed in Table Table 3:

Table 3. Measures of perceived value.

| latent variable | observable variable | encoding | Index reference source |
|-----------------|-----------------------------------|----------|--|
| Perceived value | Quality of the established price | V1 | Fornell [10] Oliver [11] Liu Xinyan [12] |
| | Price for the established quality | V2 | |
| | cost performance | V3 | |

3.2.3. Logistics Reputation of E-commerce Platform

The logistics reputation of the e-commerce platform refers to the recognition of the logistics reputation of the platform when customers buy on the e-commerce platform, and then purchase, which is the process of customers' cognitive psychological change. The logistics reputation can help the e-commerce

platform to gain trust and then complete value creation. This study combines the characteristics of fresh e-commerce logistics and distribution services, and sets the logistics reputation of the e-commerce platform as a single dimension, mainly measuring the popularity, reputation and overall evaluation of the e-commerce platform. Details below Table 4:

Table 4. Logistics reputation measurement indicators of e-commerce platforms.

| latent variable | observable variable | encoding | Index reference source |
|----------------------|------------------------|----------|------------------------|
| Logistics reputation | Platform visibility | R1 | Liu Xinyan [12] |
| | Platform word of mouth | R2 | |
| | global assessment | R3 | |

3.2.4. Customer Satisfaction

In this paper, customer satisfaction is defined as the cognitive evaluation formed by customers after the perceived results are compared with their expectations. Referring to

existing scales, this study will measure customer satisfaction from overall satisfaction, comparison with expected values and comparison of ideal points. The design of the specific measurement variables is shown in Table 5:

Table 5. Measures of customer satisfaction.

| latent variable | observable variable | encoding | Index reference source |
|-------------------------------|-----------------------------|----------|--|
| customers satisfaction degree | Product packaging materials | S1 | Fornell [10] Oliver [11] Liu Xinyan [12] |
| | Delivery speed | S2 | |
| | Fresh degree | S3 | |
| | Variety richness | S4 | |
| | Service cost performance | S5 | |
| | remedial measure | S6 | |
| | personalized service | S7 | |
| | Communication satisfaction | S8 | |
| | logistics information | S9 | |
| | product price | S10 | |

In the selection of fresh electricity business logistics distribution service perception quality variables, and through the fresh e-commerce platform user evaluation data mining to improve the perceived quality dimension. Select the delivery service quality, service time quality, information service quality and convenience of the fresh e-commerce platform.

3.3. Variable Measurement

The specific measures of the study variables are shown in the following table:

(1) Measurement of the basic information of the respondents

Table 6. Basic Information.

| Study variables | Measure the item |
|-----------------------------|---|
| Demographic characteristics | sex |
| | age |
| | Education level |
| | type of work |
| | average monthly earnings |
| | Whether you have online shopping fresh experience |
| | Often online shopping fresh types |
| | Often used fresh electricity business platform |
| | The average monthly frequency of online fresh food shopping |

(2) Measurement of the perceived quality of logistics and distribution services

Table 7. Perceived quality.

| latent variable | Measure the item |
|------------------------------|--|
| Quality of delivery services | Q1 purchased fresh products can keep the products intact and no damage in the process of logistics distribution |
| | Q2 purchased fresh products can maintain the freshness of products in the process of logistics distribution |
| | Q3 Buying fresh products can be delivered to designated locations |
| | Q4 purchased fresh products are the same as the order of purchase |
| timeliness | Q5 received fresh products in full packaging |
| | Q6 After placing an order, the platform can process the orders in time |
| | Q7 The fresh products delivered by the e-commerce platform can arrive at the promised time |
| | Q8 The e-commerce platform distribution of fresh products speed is fast |
| Information service quality | Q9 The e-commerce platform can provide real-time logistics information of orders |
| | Q10 The e-commerce platform provides reliable logistics and distribution information |
| | Q11 The e-commerce platform feedback logistics and distribution information update frequency is fast |
| | Q12 The e-commerce platform has a wide logistics and distribution range |
| convenience | Q13 The e-commerce platform supports a variety of pick-up methods |
| | Q14 The e-commerce platform expenditure flexible pick-up time |
| Quality of personnel service | Q15 The logistics and distribution personnel of the e-commerce platform have a good service attitude and polite communication |
| | Q16 The logistics and distribution personnel of the e-commerce platform can effectively deal with the errors in the distribution process |
| | Q17 The logistics and distribution personnel of the e-commerce platform are skilled in standardizing the distribution operation process |
| | Q18 The e-commerce platform logistics distribution personnel clean image, uniform clothing |

(3) Customer satisfaction measurement

Table 8. Customer satisfaction.

| latent variable | Measure the item |
|-------------------------------|--|
| Customer expectations | W1 Before receiving the product, I hope that the fresh product can meet my expectations |
| | W2 Before receiving the product, I hope that the quality of the fresh logistics distribution service can meet my needs |
| | W3 Before receiving the products, I hope that the overall service quality of online fresh products is in line with my expectations |
| Perceived value | V1 Compared with ordinary commodity distribution services, under the same price, the logistics and distribution quality of the fresh e-commerce platform is guaranteed |
| | V2 Compared with ordinary commodity distribution services, at the same price, the fresh e-commerce platform logistics distribution price is reasonable |
| | V3 The fresh e-commerce business platform logistics distribution service cost performance is reasonable |
| Logistics reputation | R1 the fresh e-commerce platform logistics distribution service in the peer has a high visibility |
| | R2 the fresh e-commerce platform logistics distribution services in the industry has a good reputation |
| | R3 the fresh e-commerce platform has a good evaluation on the whole |
| customers satisfaction degree | S1 online shopping fresh logistics distribution service is generally satisfied to consumers |
| | S2 online shopping fresh logistics distribution service is generally in line with consumer expectations |
| | S3 Compared with the ideal logistics delivery service in my heart, the current delivery service level is satisfactory to me |

3.4. Data Inspection

3.4.1. Reliability Test

Reliability refers to the stability of the measurement results, which represents the proximity of the results after repeated measurement of the same measurement object. The reliability test is mainly used to test the reliability and accuracy of the quantitative data answers [13]. In this study, the Cronbach's reliability coefficient was used to evaluate the reliability ratio. If the a coefficient is higher than 0.8, the reliability is high; if the a value is between 0.7-0.8, the reliability is good; if the a value is between 0.6-0.7, the reliability is acceptable; if the

value is 0.6, the reliability is poor. In addition, if the total correlation (TC) value is lower than 0.5, the item can be considered for deletion: if the "Q coefficient after deleting the item" is significantly higher than the A coefficient, the item can be considered for reanalysis. The value of a is between 0 and 1, the closer to 1 indicating higher confidence, generally speaking. Greater than 0.7 indicates good credibility and meets the reliability requirements [14]. The data collected from the pre-survey were imported into SPSS 27.0 for reliability analysis. For reliability analysis, the results are shown in Tables 9 to 14:

(1) See Tables 9 and 10:

Table 9. Results of the reliability analysis.

| | Scale average after item items | Scale variance after removing the items | The corrected were correlated to total | Square-wise multiple correlations | Clone Bach Alpha after the deletion term |
|---------------------|--------------------------------|---|--|-----------------------------------|--|
| Delivery speed | 22.87 | 32.381 | .900 | .835 | .970 |
| Variety richness | 22.83 | 32.846 | .905 | .876 | .970 |
| Packaging integrity | 22.86 | 32.359 | .925 | .892 | .968 |
| Fresh degree | 22.90 | 32.991 | .881 | .883 | .971 |
| product price | 22.91 | 33.521 | .883 | .880 | .971 |
| mode of payment | 22.83 | 33.292 | .899 | .847 | .970 |
| service level | 22.81 | 33.471 | .886 | .844 | .971 |
| Product quality | 22.89 | 33.822 | .874 | .792 | .971 |

Table 10. Reliability statistics.

| Clone Bach, Alpha | Clone Bach Alpha based on the normalization term | number of terms |
|-------------------|--|-----------------|
| .974 | .974 | 8 |

Through the above reliability analysis of the questionnaire, we can see the clone Bach based on the standardized item. All were greater than 0.7, which indicates the high reliability of the study: and the deletion of clone Bach. All smaller than clone Bach A based on standardization item, the clone Bach

coefficient of deleting any item will become smaller, which indicates that no item is deleted, and the reliability clone Bach value is as high as 0.974, which can be studied in the next step.

(2) 3. See Tables 11 and 12:

Table 11. Results of the reliability analysis.

| | Scale average after item items | Scale variance after removing the items | The corrected were correlated to total | Square-wise multiple correlations | Clone Bach Alpha after the deletion term |
|---------------------|--------------------------------|---|--|-----------------------------------|--|
| Delivery speed | 17.46 | 36.741 | .769 | .695 | .929 |
| Variety richness | 17.46 | 35.041 | .800 | .738 | .926 |
| Packaging integrity | 17.55 | 35.224 | .823 | .810 | .924 |
| Fresh degree | 17.41 | 34.524 | .898 | .891 | .919 |
| product price | 17.57 | 34.787 | .744 | .644 | .930 |
| mode of payment | 17.28 | 33.700 | .777 | .734 | .929 |

| | Scale average after item items | Scale variance after removing the items | The corrected were correlated to total | Square-wise multiple correlations | Clone Bach Alpha after the deletion term |
|-----------------|--------------------------------|---|--|-----------------------------------|--|
| service level | 17.40 | 37.246 | .693 | .680 | .933 |
| Product quality | 17.55 | 35.979 | .729 | .664 | .931 |

Table 12. Reliability statistics.

| Clone Bach, Alpha | Clone Bach Alpha based on the normalization term | number of terms |
|-------------------|--|-----------------|
| .936 | .938 | 8 |

From the above analysis of the items based on the standardized items based on the standardized items. All were greater than 0.7, which indicates the high reliability of the study: and the deletion of clone Bach. All smaller than clone Bach A based on standardization item, the clone Bach

coefficient of deleting any item will become smaller, which indicates that no item is deleted, and the reliability clone Bach value is as high as 0.936, which can be studied in the next step.

(3) See Tables 13 and 14:

Table 13. Results of the reliability analysis.

| | Scale average after item items | Scale variance after removing the items | The corrected were correlated to total | Square-wise multiple correlations | Clone Bach Alpha after the deletion term |
|---------------------|--------------------------------|---|--|-----------------------------------|--|
| Delivery speed | 18.19 | 33.766 | .880 | .791 | .948 |
| Variety richness | 18.05 | 33.738 | .785 | .636 | .954 |
| Packaging integrity | 18.20 | 33.569 | .864 | .770 | .948 |
| Fresh degree | 18.18 | 33.709 | .911 | .858 | .946 |
| product price | 18.17 | 32.708 | .913 | .861 | .945 |
| mode of payment | 18.24 | 33.430 | .855 | .746 | .949 |
| service level | 18.23 | 33.911 | .827 | .696 | .951 |
| Product quality | 18.12 | 35.973 | .649 | .432 | .961 |

Table 14. Reliability statistics.

| Clone Bach, Alpha | Clone Bach Alpha based on the normalization term | number of terms |
|-------------------|--|-----------------|
| .956 | .956 | 8 |

Through the reliability analysis of the questionnaire on the optimization items. All were greater than 0.7, which indicates the high reliability of the study: and the deletion of clone Bach. All smaller than clone Bach A based on standardization item, the clone Bach coefficient of deleting any item will become smaller, which indicates that no item is deleted, and the reliability clone Bach value is as high as 0.956, which can be studied in the next step.

3.4.2. Validity Test

After the reliability test, the validity test shall be conducted. KMO and Bartlett spherical tests were first performed to test the correlation between variables to determine suitability for factor analysis [15]. KMO should not be less than 0.6, and the closer to 1, the more suitable for factor analysis; if Bartlett spherical test corresponds to P value less than 0.05, it is suitable for factor analysis. After passing KMO test and Bartlett spherical test, principal component analysis was performed by Varimax rotation and factors with eigenvalues greater than 1 were extracted for factor analysis. Then, the corresponding relationship between the item and the factor is analyzed. If the load of the measurement item must be greater than 0.5, indicating that if the relationship between the factor and the item is inconsistent, or the common value of an item is lower than 0.4, the item can be deleted. In addition, the factor cumulative total variance interpretation rate was higher than 60%, indicating good validity. For the validity tests of the pre-surveys, only the KMO and Bartlett spheroid tests were performed. The closer the KMO value is to 1, the more

suitable it is for the validity test: when the Bartlett value is less than 0.05, it indicates that the factor analysis can be done. The pre-survey data of this study were imported into SPSS27.0, and the data results are shown in Tables 15 to 17:

(1) For the validity test for the questionnaire, see Table 15:

Table 15. KMO and Bartlett tests.

| | |
|--|------------------------|
| Number of KMO sampling suitability quantities. | .919 |
| Bartlett | Approximate chi square |
| sphericity test | free degree |
| | conspicuousness |
| | .000 |

(2) See shown in Table 16:

Table 16. KMO and Bartlett tests.

| | |
|---|------------------------|
| Number of KMO sampling suitability quantities | .874 |
| Bartlett | Approximate chi square |
| sphericity test | free degree |
| | conspicuousness |
| | .000 |

(3) Meituan Selection questionnaire validity test see Table 17:

Table 17. KMO and Bartlett tests.

| | |
|--|------------------------|
| Number of KMO sampling suitability quantities. | .956 |
| Bartlett sphericity | Approximate chi square |
| test | free degree |
| | conspicuousness |
| | .000 |

According to the results of the above exploratory factor premise test, it can be seen that the coefficient result of KMO

test is 0.919, and the significance is infinitely close to 0, less than 0.05. According to the above test criteria, the validity of this questionnaire is good. At the same time, using the principal component analysis method, for research variables, based on the characteristic value is greater than 1 standard, extract eight factors, and this paper of eight model variables: distribution speed, variety richness, packaging integrity, freshness, product price, payment, method of service level, product quality is consistent, and the cumulative eight factor of 71.64%, can explain the larger proportion of all items. Based on the above analysis, it is determined that the pre-survey questionnaire of this study has good validity, and the study can be continued.

4. Data Analysis

4.1. Correlation Analysis

Using correlation analysis of Meituan Selection, Hema Fresh, Duoduo maicai distribution speed, variety richness, packaging integrity, freshness, product price, payment, service level, product quality, the differences of variables such as analysis results said: fresh electric business platform distribution speed, variety richness, packaging integrity, freshness, product price, payment, service level, product quality, there is a significant positive correlation between purchase times, $P < 0.05$. Therefore, it can be roughly inferred from the correlation that the hypothesis of this study was preliminarily verified, and further verification of the relationship between variables through regression analysis.

4.2. ANOVA

Using multi-factor variance analysis of Meituan Selection,

Table 18. Comparative analysis of the significance level of the variance.

| terrace | Delivery speed | Variety richness | Packaging integrity | Fresh degree | product price | mode of payment | service level | Product quality | mean |
|-------------------|----------------|------------------|---------------------|--------------|---------------|-----------------|---------------|-----------------|------|
| Duoduo maicai | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| Hema fresh | .000 | .004 | .049 | .001 | .006 | .000 | .000 | .000 | .007 |
| Meituan Selection | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

Can be seen from the table above, variable distribution speed, variety richness, packaging integrity, freshness, product price, payment, service level, product quality of Meituan Selection platform and the influence of shopping platform is more significant, but overall, Meituan Selection variable factor of greater influence on its business operation model, its market competitiveness is stronger.

Table 19. Comparison and analysis of the regression models.

| terrace | model | mean square | | F | conspicuousness |
|-------------------|-------|-------------|----------|--------|-----------------|
| | | regression | residual | | |
| Duoduo maicai | 1 | 6.079 | .427 | 14.220 | .000 |
| Hema fresh life | 1 | 26.277 | 1.037 | 25.349 | .000 |
| Meituan Selection | 1 | 16.079 | .759 | 21.183 | .000 |

As can be seen from the above table, according to the theoretical basis, the smaller the mean variance and the F

Hema Fresh, Duoduo maicai platform distribution speed, richness, packaging integrity, freshness, product price, payment, service level, product quality difference one-way variance analysis, the result is the P value between the variables are less than 0.05, shows that there are significant differences in different variables and purchase intention. Among them, the significance level of variables such as distribution speed, category richness, packaging integrity, freshness, product price, payment method, service level and product quality is more prominent, indicating that these variables have a stronger influence on the purchase intention.

4.3. Regression Analysis

The regression analysis was conducted between the variables of Meituan Selection, Hema Fresh and Duoduo grocery shopping platform. The model summary data shows that the variables affecting the fresh e-commerce platform have a significant positive impact on the purchase intention, and the hypothesis is true.

4.4. Comparative Analysis of Meituan Selection, Hema Fresh and Duoduo Maicai

4.4.1. Comparative Analysis of Variance

For Meituan Selection, Hema Fresh, Duoduo maicai three platform of multiple factor variance results of significance analysis, inspection distribution speed, variety richness, packaging integrity, freshness, product price, payment, service level, product quality and other factors of greater influence on which platform, compare the results as follows in table 18:

4.4.2. Comparison and Analysis of the Regression Models

The regression results of Meituan Selection, Hema Fresh and Duoduo maicai were comprehensively analyzed, and the regression models of the three platforms were compared. The comparison results are as follows: Table 19:

difference, the smaller the model difference, and the greater the influence of the independent variable on the dependent variable.

Among the three fresh platforms, the regression mean square and residual mean square of Duoduo maicai are much lower than those of Meituan; Meituan is 10.000 and 0.332 from the

residual value. From this perspective, Meituan's preferred business model in today's digital economy is more competitive in the market than Hema Fresh and Duoduo maicai.

4.5. Mode Comparison Analysis

4.5.1. Meituan Selection E-commerce Platform

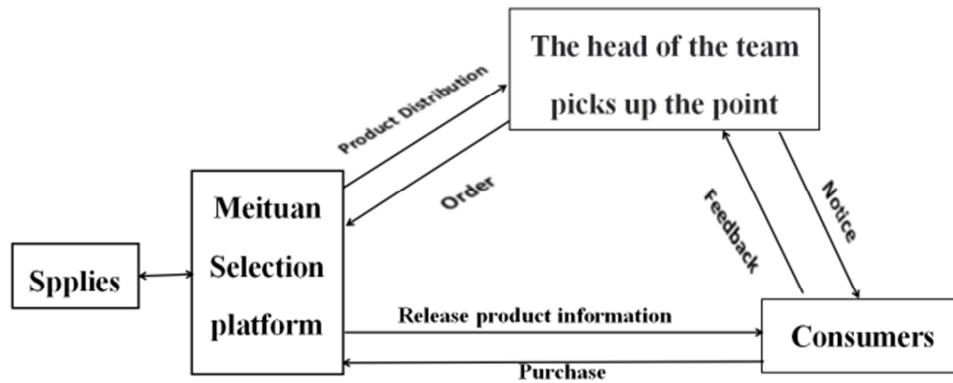


Figure 1. Meituan Selection, flow chart of business operation.

In the analysis and comparison, it is found that Meituan Selection company has a good service advantage, competitive advantage and bargaining power advantage.

4.5.2. More Food Shopping Platform

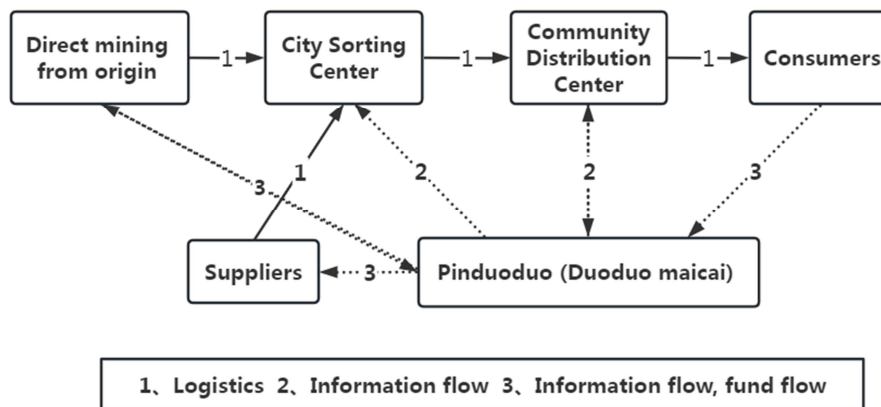


Figure 2. Flow chart of commercial operation of Duoduo maicai.

Duoduo maicai platform has the following characteristics: low threshold, strong bargaining advantage, product homogeneity, lack of core competitiveness, supply chain distribution system is not complete, resulting in quality cannot be guaranteed.

4.5.3. Hema Fresh Platform

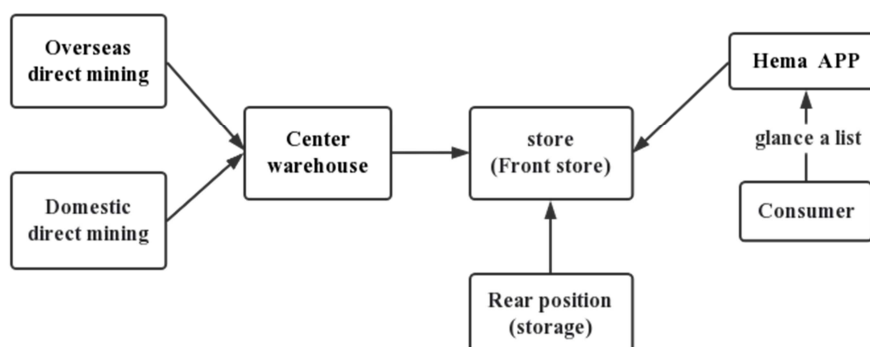


Figure 3. Flow chart of commercial operation of Hema Fresh.

In the flow chart, we found that Hema Fresh has the following characteristics: fast delivery, one-stop shopping, profit model, diversified sales channels.

4.6. Meituan Selection, Buy More Vegetables, Hema Fresh Audience Comparison

This paper takes the three representative Chinese fresh platforms of Meituan Selection, Duoduo maicai and Hema Fresh as examples, makes a comparative analysis, and finds that there are certain differences in their business operation mode, and the platform business and customer revenue are different:

Table 20. Comparison of platform operation modes.

| brand | enterprise | pattern | featured | Guest group |
|---------------------|------------|----------------------------|---|---------------------------------------|
| Meituan Selection | Meituan | Pre-purchase + self-pickup | Fresh retail online and offline accelerated integration | After 90 and after 00 |
| Buy more vegetables | Pinduoduo | Pre-purchase + self-pickup | Commodity transactions between the communities | After 80, after 90 treasure mother |
| Hema fresh life | Alibaba | New retail | It can be delivered within 30 minutes per kilometer of the store. | After 80 and 90 |

Meituan Selection will further enhance the diversification of the platform, further extend the business hours, supply more products and a wider range of solutions, and help Meituan Selection related stakeholders to complete the digital transformation. Further investment in improving the diversification of supply products, and intelligent push products to users to increase the transaction frequency. The platform deploys its resources to promote innovation. As more, different services and transaction scenarios continue to penetrate into the low-level urban population and more mature population, more potential transaction users will be attracted to the platform. The platform continues to focus on improving delivery networks and infrastructure, helping the entire fresh industry undergo digital transformation, capture consumer needs and meet their needs, and enhancing market confidence.

4.7. Meituan Selection Business Strategic Advantage

4.7.1. Advantages of Marketing Strategy

- (1) Commodity quality control. Most of the users who choose community group buying still expect the cost performance of goods, so the platform should strengthen the control of commodity quality, optimize the quality control of source procurement and continuously optimize the supply chain, and reduce the loss caused by goods in the process of performance.
- (2) Customer channel control. Offline customer acquisition not only depends on the leader to expand the community users around the store. As a platform, we can think about how to bring more users to the leader through the efforts of the platform side.
- (3) Platform supervision and control. The head leader is an important person with multiple identities. He occupies an important position in the normal operation of the platform and is an important core resource for the industry competition at the present stage.

4.7.2. Advantages of Enterprise Management

- (1) Enterprise management strategy. Meituan Selection implement diversification strategy, the development of community group business, thanks to Meituan has

strong business development ability, offline shops management ability, rich online consumer users and in the city distribution of powerful technology, the four core competitiveness is very conducive to the development of community group, can let Meituan at lower cost into the track, it is easier to ensure the platform management, this is the basis of Meituan development community group business. First, during the group buying period, the business expansion ability and rich merchant resources can enable the rapid development of Meituan as the "leader". Second, the existing offline business management ability of Meituan is conducive to the management of Meituan. Third, the user group accumulated by Meituan enables Meituan to quickly obtain customer resources. Fourth, Meituan's intra-city distribution technology, positioning technology and information flow technology can reduce the cost of developing community group buying business.

- (2) Internal management system. Commodity control, channel control and platform supervision control are all need to improve the internal management system. Therefore, for Meituan Selection, the role positioning, process docking and problem handling of the platform optimization of regulatory functions all need more optimized process management. Compared with other competitive platforms, the head of the prosperous preferred training has been in a relatively perfect stage, from the head of the qualification selection to the operation training are very detailed. To ensure that the leader can carry out the business smoothly and quickly, and having a reasonable commission system and service system is an important factor for Meituan to have competitive advantages.

5. Conclusion

This paper with fresh electricity as the research object, through the Meituan fresh, fresh box and buy three fresh business model of electric business platform strategy of research and case comparative analysis, survey Meituan

Selection, Duoduo maicai, Hema Fresh three fresh electric business platform management mode for the influence of consumer purchase intention, through the corporate image, product / service image, consumer image, brand identity, purchase intention, perceived risk six variable analysis.

- (1) Delivery speed. Meituan is preferred to adopt the community distribution mode, based on the delivery of couriers, with a faster delivery speed. Hema Fresh adopts the cloud storage and distribution mode, and can achieve fast distribution speed through its own cold chain logistics network. Duoduo maicai adopts the fast delivery mode based on cold chain logistics, but there may be a long delivery time.
- (2) Variety and richness. Meituan's preferred product category is more comprehensive, which can meet people's various fresh needs. Hema provides a wider variety of products, including seafood, meat, vegetables and fruits and other fresh products. Buy vegetables has a relatively small range of products.
- (3) Packaging integrity. The preferred packaging of Meituan is relatively accurate and ensuring that the goods are in good condition. Hema Fresh pays attention to the packaging and preservation of products, and has a high degree of packaging integrity. More vegetables also ensure that the packaging of the product is intact, but it may be due to the procurement channel problems, sometimes there will be a small number of defects.
- (4) Freshness degree. Both Meituan Selection and Hema promise to provide fresh products with a mechanism to ensure their freshness. The freshness of goods provided by Duoduo maicai is also high, but there may be problems in the supply chain, which will affect the freshness of some products.
- (5) Product price. The prices of Meituan Selection, Hema and Duoduo maicai are relatively high, mainly because they provide high quality and freshness fresh products.
- (6) Payment method. All three platforms support online payment, and Duoduo maicai also supports payment on delivery.
- (7) Service level. Meituan Selection, Hema Fresh and Duoduo Mai Mai all provide quality customer service, can timely answer users' questions and actively deal with after-sales problems.
- (8) Product quality. Both Meituan Selection and Hema have their own standards to ensure product quality and pay attention to food safety and freshness. Buy More vegetables also provides high-quality fresh products, but perhaps because of the instability of the supply chain, there may sometimes be certain risks to product quality.

The above factors are the main aspects of people's purchase intention, and the problems existing in these aspects can be improved through reasonable suggestions. Comprehensively improve the healthy development of Meituan Selection.

Meituan Selection, Duoduo maicai and Hema Fresh have all adopted different business model strategies. As an

emerging industry, the fresh electricity business industry needs to constantly innovate and iterate to provide better services to meet the diversified needs of consumers. Based on the methods of consumer research and multi-case comparative analysis, this paper will discuss the business model, enterprise strategy management, product quality assurance, and human resource guarantee, and customer relations and sales channels. Starting with product positioning, supply chain management, marketing strategy and other aspects, we reveal the business model innovation of Meituan Fresh, and make a comparative analysis with Hema Fresh and Duoduo maicai to summarize the advantages and disadvantages of Meituan Fresh. At the same time, we will also pay attention to the impact of digital economy on the fresh electricity market, summarize the business model and strategy of Meituan fresh, and discuss the future trend and development direction of the future fresh electricity market. Through in-depth analysis of the Meituan fresh business model, to provide reference and inspiration for other fresh e-commerce enterprises, and promote the healthy development of the industry.

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