Research on the Evaluation and Management Optimization of "Moe Economy" based on Structural Equation Model

Chunzhao Chen, Yan Zhuo, Hao Yang, Jingyi Zha

Anhui University of Finance and Economics, Bengbu, 233000, China

Abstract

"Meng culture"is not only spreading as a new cultural fashion, but also integrating with economy as an economic new form of "Meng economy". Starting from the fact that the public has a low awareness of "Cute economy", this paper uses factor analysis to reduce the dimension of the index for the existing consumers, it divides into four dimensions: edge perception, consumption perception, experience perception and prospect cognition, and constructs the model of perception-perception-cognition satisfaction, thus reflects the existing consumer satisfaction status quo. Finally, some suggestions are put forward for the innovation and development of "Meng Economy"from three levels: government, consumer and operator, so as to promote the sustainable development of "Meng Economy".

Keywords

"Moe Economy"; Development Status; Factor Analysis; Structural Equation.

1. Introduction

In today's society, the development of culture and cultural industries has become a hot issue as the national government continues to push forward the construction of socialist culture with Chinese characteristics, by the state, the government and the community of close attention. As a unique economic phenomenon, from the buzzword used in the two sessions to the wechat emoji we use every day, "Meng economy"is gradually changing from a niche to a universal economic phenomenon, in particular, the market value has been rising steadily, with a huge market of nearly 100 billion yuan per year [1].

In the past, the research on traditional culture and new economic form mostly focused on the cognition of the combination of traditional cultural elements and new economic form, and the research on the influencing factors, mostly focused on the description of the current situation and the analysis of superficial causes, the survey was broad and unfocused. On the basis of general investigation, this paper further determines the new youth group as the main investigation object, and focuses on exploring the level of the new youth consumer group's preference for the cute culture, this paper sets up an evaluation model of customer satisfaction in Mengeconomy, and analyzes the factors affecting customer loyalty from the aspects of consumer trust, satisfaction and intrinsic value of products, etc. , look for barriersto customer loyalty. Finally, pertinence provides new ideas and suggestions for the development of Moe economy.

2. Methodology based on the Structural Equation of the MOE Economic Consumption Experience Evaluation Model

2.1. Consumer Experience Indicator System

In this paper, we analyze the validity and factor of the following 11 factors which influence the economic growth of sprout economy, and simplify and reduce the dimension of these factors.

The KMO value is 0.802, the Bartlett value is 0.635, the level of significance is 0.000, less than 0.05, which shows that under 95% confidence level, the rejection correlation matrix is the original assumption of the unit matrix[2]. Specific indicators are shown in Table 1 below:

Table 1. Indicators of consumer experience impact factors

Consumer Experience Impact Factor Index	Symbols
Pet breeding experience	A_1
How much do you like anime	A_2
Understanding of cuteness economy	A_3
Cuteness preference	A_4
Cultural awareness of cuteness	A_5
Product satisfaction	A_6
Service satisfaction	A_7
Brand loyalty	A_8
Emotional factor	A_9
Limiting factor cognition	A_{10}
Push for action	A_{11}

2.2. Construction of Perception-detection-cognition Model based on Analytic Hierarchy Process

Using SPSS 22.0 software to extract principal component factors, the characteristic root and variance contribution rate of principal component factors were obtained, as shown in Table 2 below:

Table 2. Contribution to variance

Composition	Initial eigenvalue			Extract square sum load			Rotate square sum load		
	Total	% of variance	Cumulative%	Total	% of variance	Cumulative%	Total	% of variance	Cumulative%
1	4.353	39.57	39.57	4.353	39.57	39.57	4.057	36.885	46.885
2	1.2	10.911	50.481	1.2	10.911	50.481	1.45	13.18	60.066
3	1.065	9.684	60.165	1.065	9.684	60.165	1.083	9.842	79.907
4	1.021	9.283	69.447	1.021	9.283	69.447	1.049	9.54	89.447
5	0.827	7.514	76.961						
6	0.656	5.959	82.92						
7	0.638	5.8	88.721						
8	0.448	4.075	92.795						
9	0.34	3.094	95.889						
10	0.326	2.965	98.854						
11	0.126	1.146	100						

According to Table 2, the above 11 indexes can be condensed and extracted into 3 principal component factors, whose cumulative variance contribution rate reaches 89.447% . In order to reduce the subjectivity of explanation, the orthogonal rotation method is used to rotate the factor load matrix, and the four factors are named [3] , as shown in Table 3.

In principal component 1, pet breeding experience, animation love degree, understanding degree of cuteness economy, cuteness preference and cuteness culture cognition were all related to consumers' cuteness culture edge perception, therefore, it is called "Edge perception", and in principal component 2, the Brand loyalty and emotional factors are related to consumers' consumption feeling, so it is called "Experience discovery" In principal component 3, product satisfaction, service satisfaction and consumer satisfaction are related, so it is named

"Consumer satisfaction" The cognition and promotion of principal component 4 are related to consumers' cognition of Meng Economic Development, so it is called "Prospect Cognition". As a result, the overall value of consumer experience is composed of the sum of the four principal components.

Table 3. Summary of factor load matrix after rotation

Indicators	Component 1	Component 2	Component 3	Component 4	Factor naming
Pet-breeding experience	0.654	0.274	0.004	-0.15	Edge perception
How much do you like anime	0.797	-0.014	0.16	-0.037	
Understanding of cuteness-economy	0.915	0.155	0.063	-0.082	
Cuteness preference	0.763	-0.118	-0.077	0.095	
Cultural awareness of cuteness	0.711	0.167	-0.002	-0.189	
Product satisfaction	-0.018	0.181	0.767	0.161	Consumer satisfaction
Service satisfaction	-0.05	-0.023	0.972	0.027	
Brand loyalty	0.349	0.505	-0.403	0.034	Experience Discovery
Emotional factor	0.454	0.629	-0.04	-0.013	
Limiting factor cognition	-0.048	0.055	-0.023	0.868	Perspective Cognition
Push for action	0.121	0.066	0.035	0.937	

2.3. Consumption Experience Evaluation Model based on Structural Equation Modeling

(1). Thinking of model establishment

The variables of consumption experience index model are composed of latent variable and explicit variable.The latent variables of the model refer to the variables that can not be directly measured. Prospect cognition and edge perception are the cause variables reflecting consumption satisfaction, and there are direct or indirect effects between them. Model explicit variables refer to variables that can be measured directly, the explicit variables are used to describe the corresponding latent variables, and the corresponding descriptive variables are determined according to the latent variables determined in this paper, which are measured from four dimensions: product satisfaction, service satisfaction, brand loyalty and emotional factors [4].

The consumption satisfaction index model established in this paper consists of 4 latent variables and 11 explicit variables. The exogenous observation variable is represented by X and the endogenous observation variable is represented by Y. the determined variables of consumption experience model of sprout economy are shown in Table 4 [4].

(2). The establishment of consumption experience structural equation model

①Structural equation model

The equation of the structural model is as follows:$\eta = B\eta + F\varepsilon + \zeta$ In whichηIs the vector of endogenous latent variable (m (1); ε Is the vector (n (1) composed of exogenous latent variables;B is the path coefficient matrix of endogenous latent variables to describe the interaction between endogenous latent variables; F is the path coefficient matrix (m (n) of exogenous latent variables, which describes the influence of exogenous latent variables on endogenous latent variables.ζIs the residual variable (m (1) [4]

Table 4. Variables of consumption experience index model

Latent variable	Explicit variable	identification
Edge perception	Pet rearing experience	Y_1
	Love degree of animation	Y_2
	Meng economic understanding degree	Y_3
	Meng preference	Y_4
	Meng cultural cognition	Y_5
Experience-exploration	brand loyalty	X_1
	Emotional factors	X_2
Prospect cognition	Constraint factor cognition	X_3
	Promote awareness of initiatives	X_4
Consumer satisfaction	Product satisfaction	X_5
	Service satisfaction	X_6

The equation of the measurement model is:

$$y = \Lambda_y \eta + \varepsilon_y$$
$$x = \Lambda_x \eta + \varepsilon_x$$

Where y is the vector composed of endogenous explicit variables (p(1)), which is η The observation index; X is a vector (q(1)) composed of exogenous explicit variables, which is ε The observation index; Λ_y Is p(m load matrix; Λ_x Is q(n load matrix; ε_y P(1 residual vector; ε_x Q(1 residual vector [4].

②the establishment of satisfaction structure model

Basic path assumption:

H1: Edge perception has a significant positive impact on consumer satisfaction.

H2: Experience discovery has a significant positive impact on consumer satisfaction.

H3: Consumer satisfaction has a significant positive impact on outlook cognition.

H4: Edge perception has a significant positive impact on experience discovery.

H5: Experience discovery has a significant positive impact on prospective cognition.

H6: Marginal perception has a significant positive impact on prospective cognition.

Using AMOS software, draw the path map of the model according to the above assumptions. According to the obvious variables and latent variables determined by the consumer satisfaction index model, the structural model of consumer satisfaction is established. The model is shown in Figure 1, where E is the residual of the model.
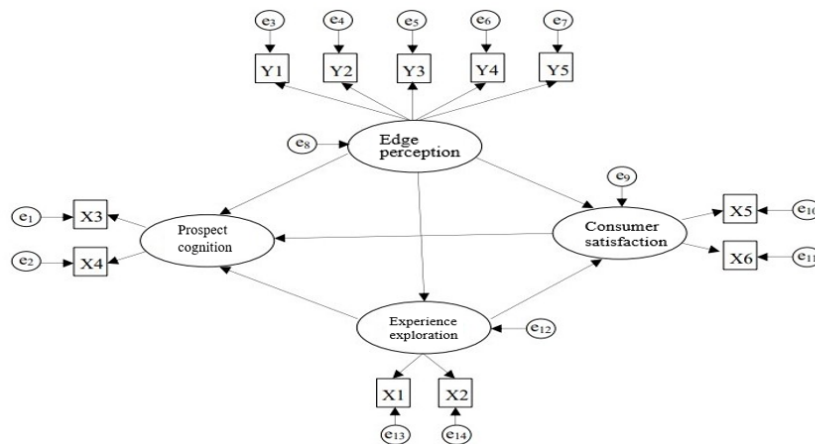

Figure 1. Meng economic consumption experience structure model

(3) Model fitting test

Maximum likelihood estimation method is used to estimate the parameters of structural equation model, which is the most widely used method and the estimation result is more accurate. The standardized path coefficient means that the independent variable changes by a standard deviation, and the dependent variable changes with it, and the standardized path coefficient is not greater than 1, which shows that the model assumption is reasonable. It can be seen from the figure that each path coefficient value is in the normal range,And all of them meet the requirement of significance. The model fitting results are shown in Table 5.

Table 5. Test results of model fitting degree

Fit test index	Ideal standard	Model result	Is it up to standard?
CMIN/DF	<3	2.732	be
RMSEA	<0.05	0.038	be
IFI	≥0.9	0.954	be
TLI	≥0.9	0.956	be
CFI	≥0.9	0.971	be

From Table5, it can be seen that all inspection indexes of the model have reached the standard, and the model has a good fitting degree, which meets the inspection requirements.

(4) Analysis of the effects among latent variables of satisfaction

Path coefficient is the direct effect between latent variables, and the interaction between latent variables also includes indirect effects[5]. The direct effect, indirect effect and total effect among latent variables in the model are shown in Tables 6, 7 and 8.

Table 6. Direct effect of standardization

Latent variable	Prospect cognition	Experience exploration	Edge perception	Consumer satisfaction
Experience exploration	0.236	—	—	—
Edge perception	0.265	0.283	—	—
Consumer satisfaction	0.254	0.348	0.382	—

Table 7. Indirect effect of standardization

Latent variable	Prospect cognition	Experience exploration	Edge perception	Consumer satisfaction
Experience exploration	—	—	—	—
Edge perception	0.067	—	—	—
Consumer satisfaction	0.187	0.106	—	—

Table 8. Total effect of standardization

Latent variable	Prospect cognition	Experience exploration	Edge perception	Consumer satisfaction
Experience exploration	0.236	—	—	—
Edge perception	0.332	0.283	—	—
Consumer satisfaction	0.441	0.454	0.382	-

From Table 9, it can be seen that edge perception indirectly affects prospect perception by influencing experience detection to a great extent, and consumer satisfaction is mainly influenced by experience detection and edge perception.

Table 9. Structural path coefficient

	Estimate	S.E.	C.R.	P
Edge perception-> prospect perception	0.236	0.017	19.639	***
Edge perception-> experience detection	0.283	0.038	12.95	***
Edge perception-> consumer satisfaction	0.348	0.025	7.295	***
Consumption satisfaction-> prospect cognition	0.254	0.018	10.877	***
Experience exploration-> prospect cognition	0.265	0.027	26.8	***
Experience exploration-> consumer satisfaction	0.382	0.026	15.741	***

Table 10. Assumption result of structural equation

| suppose	Is the hypothesis true?
H1: Edge perception has a significant positive impact on consumer satisfaction.	found
H2: Experience discovery has a significant positive impact on consumer satisfaction.	found
H3: Consumer satisfaction has a significant positive impact on outlook cognition.	found
H4: Edge perception has a significant positive impact on experience discovery.	found
H5: Experience discovery has a significant positive impact on prospective cognition.	found
H6: Marginal perception has a significant positive impact on prospective cognition.	found
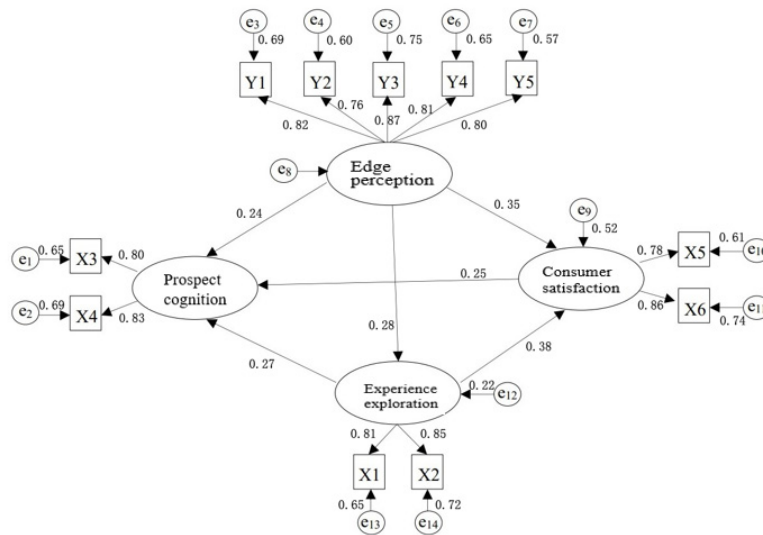
Figure 2. Structural equation model diagram

The relationship between potential variables :The regression coefficient between the consumer satisfaction factor and the edge perception factor is 0.35, which indicates that the edge perception factor increases by one percentage point, the consumer satisfaction factor will increase by 0.35 percentage point, and the path coefficient between the consumer satisfaction factor and the experience detection factor is 0.38, which means that the golden experience detection also has a positive impact on the consumer satisfaction. At the same time,The correlation coefficient between the consumption satisfaction factor and the prospect cognitive factor is 0.25, which indicates that the consumption satisfaction factor will increase by one

percentage point and the prospect cognitive factor will increase by 0.25 percentage point. It can be seen that entry-level consumers don't know enough about Meng culture, don't have enough consumption experience, don't have a good purchasing experience for Meng products, and have a low brand repurchase rate.This also affects its satisfaction evaluation of Meng's economic consumption. For this kind of crowd, we can guide consumers through the publicity of Meng culture, and then businesses that establish supply-demand relationship with them need to improve the service quality, so as to gradually establish the satisfaction of customers' needs and achieve a higher repurchase rate.

The relationship between potential variables and observed variables :In addition to analyzing the relationship between potential variables, we can also analyze the relationship between potential variables and observed variables in the influencing factor model of consumption satisfaction, so as to explore the observed variables that are closely related to potential variables and compare the observed variables within each potential variable.

Among the marginal perception factors, the regression coefficient of Meng's economic awareness is 0.87, the regression coefficient of pet rearing experience is 0.69, the regression coefficient of animation preference is 0.60, and the regression coefficient of Meng's preference is 0.65. The three factors have similar influence degrees, while the regression coefficient of Meng's cultural cognition is 0.57, which shows that the economic awareness is the most important influencing factor.Therefore, improving consumers' understanding of Meng economy can most effectively strengthen edge perception; The regression coefficients of two factors in the prospective cognitive factors are similar, and the influence degree is similar. The regression coefficient of emotional factors and brand loyalty is 0.72 and 0.69, respectively. Emotional factors are more important than brand loyalty.Therefore, Meng economic consumption should focus on providing feelings and pleasure, so as to enhance consumer satisfaction.

3. Advice

As for the government,first of all, the development and inclusiveness of traditional culture and traditional elements should be improved. Take the Palace Museum Wenchuang series products as an example. For cultural creators, government departments and cultural departments should provide them with re-creation elements and IP property rights. At the same time, because the flood of piracy is a huge blow to an emerging industry,It will seriously disturb the order of consumer market and the initiative of creators. Therefore, the market supervision department should severely crack down on piracy, protect the original market of Meng products and promote the brand building of Meng products in China. Finally, the government can use Meng elements in many ways, and imperceptibly make the audience accept Meng culture and Meng products, so as to gain more recipients and followers.

As for consumers,the youth groups need to improve their understanding of Meng economy while conducting rational consumption behaviors, actively participate in the research and design of Meng economy innovation, give advice and suggestions on the convergence of local excellent traditional culture and Meng culture, marketing and promotion of Meng culture products, etc., in order to improve the new vitality of the development of Chinese cultural and creative industries and promote the Chinese cultural Meng culture brand to go abroad.Go to the world and contribute your own strength. At the same time, lead by example, insist on buying genuine copies, improve their own copyright awareness and maintain normal market order.

As for the businesses ,they still need to improve their awareness and help consumers improve their awareness. At present, for the merchants who operate Meng products, on the one hand, at this stage, they need to learn about Meng culture, and can convey it to consumers in business and sales, for example, through online push, interior decoration, discussion and sharing

meetings and offline activities, etc., so that the consumption environment is full of Meng culture elements.So as to stimulate deep emotions between commodities and consumers; On the other hand, the appropriate sales strategy is also particularly important. As the trend of self-pleasing consumption appears, it is necessary to combine "selling cute" with experiential consumption, pay attention to communication and interaction with consumers, and attract customers' participation, especially to carry out entertainment marketing through new media. When consumers have emotional resonance with products,Not only will they not dislike marketing activities, but they will have great enthusiasm for participation and willingness to spread. Merchants can also take this opportunity to build product brand culture, unite consumers, and make them form a sense of community belonging, thus improving sales performance and customer stickiness as a whole.

Acknowledgments

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