Study on the Value Promotion and Development Strategy of Smarter Tourism

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Abstract. This article uses SPSS17.0 to do empirical analysis through the questionnaire. After that it put out four core value of smarter tourism which are science and technology innovation value, industrial support value, economic contribution value and social pull value. By using the correlation analysis to analyze the correlation of the four core value, thus put forward development strategies, which makes smarter tourism become the gripper to ascend tourism industry science and technology value and to improve the strategic position of tourism industry.

The Value Study of the Smarter Tourism's Development

About the research of smarter tourism's core value, this study adopts the form of questionnaire, in May 2017 ,270 questionnaires were sending through the electronic and field, eliminate some Invalid questionnaires, finally a total of 238 valid questionnaires were received, effective recovery was 88.15%. This research mainly adopts the statistical analysis software spss17.0 version, has carried on the questionnaire of the reliability and validity analysis, exploratory factor analysis and correlation analysis to study the smarter tourism's core value and its relevance.

Reliability and Validity Analysis

Do the exploratory factor analysis of samples by the SPSS17.0, before doing the factor analysis we should do the reliability and validity test of samples firstly, then find the result by measuring the reliability of the detection index of smarter tourism's core value research (see table 1).

Analysis by the data, the value of the Cronbach's α reliability is 0.951; it shows that the reliability of the survey data is reliable. At the same time, in order to determine whether the data can do factor analysis, this study adopts KMO and Bartlett sphere test such two kinds of the most popular validity testing method. SPSS analysis test results show that (table 2), KMO measure value is 0.904, Bartlett sphere inspection approximate chi-square value is 1268.278, through the Bartlett's spherical degree test (and p close to zero, less than significant coefficient 0.05. KMO test value > 0.9 illustrates the data is just fit to carry on the factor analysis, very suitable for factor analysis); Bartlett sphere test statistic probability p is equal to zero, less than significant coefficient 0.05, this result rejected the sphere test null hypothesis and showed that the correlation coefficient matrix have significant differences, also further verified the data is suitable for factor analysis.

Table 1. Reliability statistics.

Cronbach's Alpha	Cronbach's Alpha Based on the standardization of the item	F value	sig	Item number
.950	.951	11.183	.000	24

Table 2. KMO and Bartlett inspection.

The degree of sampling enough Kaiser - Meyer - Olkin metric		.904
Bartlett spherical degree test	Approximate chi-square	1268.278
	df	171
	Sig.	.000

Exploratory Factor Analysis

This paper does the exploratory factor analysis of the measurement indicators to the smarter tourism's core value by using the SPSS17.0 (table 3). According to the method of Straub, the intercept point of factor loading is 0.5, delete items that any factor less than 0.5 or more factors greater than 0.4. Do the exploratory factor analysis of the sample data, and test sample's KMO value and significant value. Then it extracts communality and exploratory factor loading, etc.

Table 3. Exploratory factor analysis result.

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.152	48.168	48.168	4.352	22.905	22.905
2	2.182	11.485	59.653	3.377	17.771	40.676
3	1.426	7.504	67.157	3.338	17.568	58.244
4	.886	4.663	71.820	2.579	13.576	**71.820**
5	.737	3.878	75.699			

The analysis result shows that the core value of smarter tourism measurement data is highly reliability. At the same time KMO reaches 0.904, indicating that the sample is appropriate which is appropriate for factor analysis. Bartlett's spherical degree test P value is close to zero, which reach a significant level also means the sample data is very suitable for factor analysis. Through the Kaiser standardized maximum variance orthogonal rotation, all 19 measurement were gathered to four characteristic root which are greater than 1 effective factor. From the contribution of the variance, first four component factor accumulated explained 71.820% of information, has over the variance contribution ratio of the minimum standard (60%). So the extraction of these four factors is acceptable. It can be seen from the factor analysis results (table 3), in the first common factor F1 explained 22.905% of the information, which states the value of the smarter tourism in science and technology, so it can be named the "scientific and technological innovation value"; The second common factor F2 explained 17.771% of the information, can be understood as the smarter tourism in industry support , so it can be named "industry support value"; The third common factor F3 explained 17.568%, can understand the economic contribution value, named it "economic contribution value"; Similarly, the fourth common factor F4 named it "social pulling value".

Analysis each factor measurement of four common, the results such as shown in table 4, each dimension data Cronbach 's α in the 0.84 to the 0.890, and sig value is less than 0.05.This indicates that the research data' internal reliability is well, and have higher consistency.

Table 4. The common factor confirmatory analysis.

Common factor	Cronbac α reliability	F value	sig
Technological innovation value	0.844	1.445	.030
industry support value	0.845	6.605	.000
economic contribution value	0.881	5.477	.000
social pulling value	0.890	21.491	.000

Correlation Analysis

To study the relationships between the four core values of smarter tourism, we do the correlation analysis by using SPSS17.0, the results such as shown in table 5.

Table 5. The common factor correlation analysis.

Common factor	technological innovation value	industry support value	economic contribution value	social pulling value
Technological innovation value	1	.686**	.418**	.717**
industry support value	.686**	1	.686**	.622**
Economic contribution value	.418**	.686**	1	.594**
social pulling value	.717**	.622**	.594**	1

** Correlation is significant at the 0.01 level (2-tailed).

The results shows that it is in 0.01 significant levels, the four core value of smarter tourism is significant, and the correlation coefficient is bigger which shows that the four values promote each other. Economic contribution value and social pulling value belongs to the macroscopic level value; Industry support value belongs to the medium level value; Science and technology innovation value belongs to the microscopic level value, the four value covered all levels, constitute the smarter tourism complete value system, as the"3 m" value system framework shown in figure 1, namely Macro (Macro), medium (Mid) and Micro (Micro).
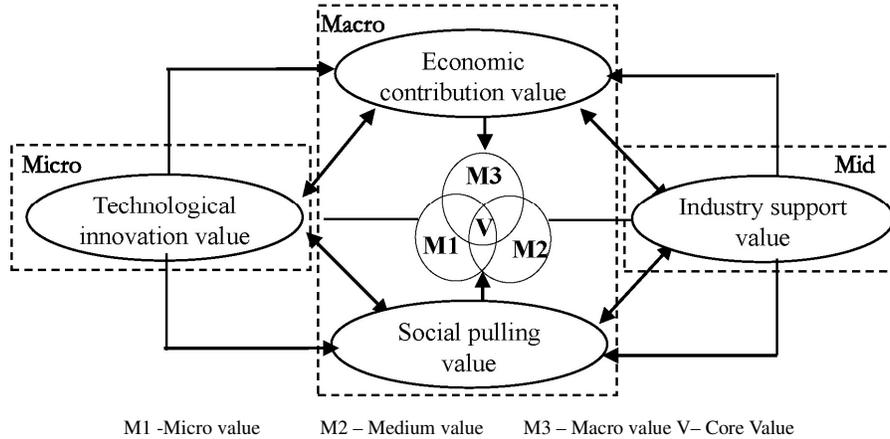

M1 -Micro value   M2 – Medium value   M3 – Macro value   V– Core Value

Figure 1. The 3M core value system of smarter tourism development.

From figure 1 and table 5, the core value of smarter tourism's development includes micro, mid and macro .The three levels are closely tied to the syntheses and promoted each other. Science and technology innovation values can be converted into industrial endogenous power, to improve the content of science and technology industry, and promote the rapid development of industry, so as to create the huge economic contribution value and social pulling value; On the other hand, the development of economy and the progress of society, also innovating the science and technology, promoting the boom of industrial.

The Value Promotion and Development Strategy of Smarter Tourism

The Leaping of Tourism Industry Integration Development

From the perspective of tourism industrial characteristics, it has strong comprehensive and high correlation. Smarter tourism as a highly integrated product for science information and tourism industry, has brought a historic leap of tourism development and enhanced the tourism industry science and industry value. But the future of smarter tourism not only is limited to the integration of science information and tourism, and to widen the industrial convergence diameter. Based on the fusion of tourism industry and science information, accelerate the integration of smarter tourism with the first industry (mainly agriculture, forestry, animal husbandry and fishery), the second industry (mainly industrial), the third industry (mainly modern service industry), broad the application space of smarter tourism, and enhancing the application value.

The Leaping of Tourism Smarter Platform Building

The smarter tourism has three keys. The first one is digital which achieves comprehensive perception, the second one is interconnection which mainly relies on transmitting technology, and the third one is smarter in order to provide human service. Among them, interconnection needs to have the smarter platform to complete the database work such as coding, authentication, visa and accounting, namely the Internet management center .It   acting as a communication server which is central part to communicate between the cloud computing and user. If mishandling or lacking of the smarter platform, the smarter tourism system or smarter tourism process will be interrupted. So realizing the leaping of the smarter tourism platform's building is an important way to boosting smarter tourism great-leap-forward development.

The Leaping of Tourism Information Highland Building

The development of information technology makes tourism become a new experience. The production and development of smarter tourism can't live without the packaging and support of information. The development of smarter tourism has three stages, the first is professional stage, namely building up huge amounts of database, showing by the data; the second is information stage, namely achieve information coverage comprehensive; the third is smarter stage, namely the application of smarter tourism, such as smarter government, smarter scenic spot, smarter traffic, smarter hotel and so on. In fact, the first and second stages are the process of building information highland. The bases for the development of smarter tourism are collect data, build database and reach information coverage comprehensively. Therefore, in the future development of smarter tourism, we should achieve the leaping of building more and more tourism information highland in addition to build cloud computing center which is a center that have huge amounts of mobile data.

The Leaping of Tourism New Formats' Innovation and Development

Tourism new formats, such as tourism equipment manufacturing industry, which is derived based on modern machine technology, computer technology, system technology, automatic control technology and new type of raw materials. It can not only increase the quality of service, but also become an industry, which is defined as one of the "Ten innovation direction of Chinese tour research in the new period" by Shi Peihua, the dean of Chinese tour research institute. New format and smarter tourism can promote each other in large scale. Developing a variety of new tourism format innovatively, and adding the new blood into the development of smarter tourism, can help to promote the sustainable development of smarter tourism; also can make the whole tourism industry full of vitality and energy all the time.

Summary

Smarter tourism is the trend of world tourism's future development, and is the needs in strategic for Chinese tourism industry of the transformation and upgrade. Strengthen enlarges study the smarter tourism technology, application and model development, and the smarter tourism related talents reshadowing of intelligent platform, the information highland updating continuously, the continuing emerge from new format, the fast spreading of marketing channels and the support of professional talents. It is good for our country to have competitive advantage in the world tourism industry structure .Also it is helpful to promote our country tourism overall service level and service quality. In one word, its development prospect and application prospects.

Acknowledgement

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