

# Problems and Strategies of Self-Driving Travel Supply System in Jing-Jin-Ji Area

Yan Qian

Tianjin Vocational Institute  
Tianjin, China 300402

**Abstract**—In recent years, self-driving travel has become the first choice for many people to travel. The free and casual leisure mode of self-driving travel has formed a huge impact on the current travel agency operation. This paper is mainly about the research to understand the problems in the supply system of self-driving travel in Jing-Jin-Ji area and gives the corresponding countermeasures for the problems, and also provides some reference for the development of traditional travel agencies.

**Keywords:** *self-driving travel, supply, demand*

## I. INTRODUCTION

The United States first proposed the concept of "self-driving tourism". Self-driving tourism nowadays is more and more popular. Until the end of 1990s, self-driving tourism gradually rose in our country, and gradually became one of the favorite ways of tourism. The diversified demands conform to the development trend of the times. Therefore, self-driving tourism is very popular.

In recent years, there are many researches on the behavior of tourists abroad, mainly on the tourism motivation, tourism decision-making behavior, tourism consumption behavior, tourists' spatial behavior and tourism flow. The domestic research on self-driving travel mainly focuses on the following six aspects: the definition and connotation of self-driving tour; the summary and classification of the characteristics of self-driving tour; the analysis of the causes and influencing factors of the formation of self-driving tour; the analysis of the construction of supporting facilities related to self-driving tour; the discussion of the organization form and product development of self-driving tour; the market training of self-driving travel Ideas and suggestions for education.

To sum up, the literature on self-driving travel supply from the perspective of supply and demand is still lacking, so this paper mainly studies the cultivation of self-driving travel supply supporting system and environment based on demand characteristics and demand orientation.

## II. THE DESIGN, INVESTIGATION AND ANALYSIS OF QUESTIONNAIRE

In order to better understand the current situation of self-driving tourism, the author completed the design of the

questionnaire of self-driving tourists' behavior in Tianjin area under the guidance of relevant experts, combined with the relevant literature on self-driving tourism research and the interview content of self-driving tourists. This questionnaire consists of two parts, 23 questions in total. The first part is the main part of the questionnaire, which consists of 18 questions. The first 17 questions are multiple choice questions, which investigate the travel motivation, access to travel information, influencing factors of travel decision-making, travel time, travel partners, purchase of travel insurance, travel frequency, travel consumption and post travel perception of self-driving tourists. The 18th question is open-ended, which collects the suggestions and suggestions of the respondents on the development of self-driving tourism Opinion. The second part of the questionnaire includes five questions, mainly involving the basic information of the respondents, including the gender, age, education background, occupation type, monthly income and other information of the respondents. Considering that many respondents are not willing to disclose their basic information, this questionnaire puts the basic information of the respondents in the last part of the questionnaire.

### A. Questionnaire survey

From May to early July, 2015, members of the research team conducted an investigation on self-driving tourists in Panshan, Huangyaguan and other places. 370 questionnaires were sent out and 370 were recovered, including 357 valid ones, with a recovery rate of 100% and an effective rate of 96.49%.

### B. Statistical analysis and methods

This paper mainly uses SPSS statistics 17.0 statistical analysis software to analyze the original data collected. Frequency analysis and description analysis are mainly used. Frequency analysis mainly analyzes the frequency, percentage, effective percentage and cumulative percentage of variables to grasp the overall distribution of data. The main purpose of description and analysis is to compare the mean value and standard deviation of each variable and get the distribution law of each variable. Through frequency analysis and description analysis, we can get the relevant laws of the behavior characteristics of self-driving tourists in Tianjin.

### III. AN ANALYSIS OF THE TRAVEL CHARACTERISTICS OF SELF-DRIVING TOURISTS

#### A. Analysis on the channels of self-driving tourism information acquisition

Based on the investigation of the channels for self-driving tourists to obtain information about self-driving tourism in Tianjin, the results show that the most important way for self-driving tourists to obtain information is to obtain information about self-driving tourism through the Internet. The second channel for information collection is through "friends and relatives". Of all respondents, 246 chose this option, accounting for 68.9% of all respondents. Secondly, among all the respondents, 126, 102 and 71 tourists chose to obtain information related to self-driving tourism through TV, travel brochures, newspapers and magazines, accounting for 35.3%, 28.6% and 19.9% of the total respondents respectively. There are 67, 60, 59, 15 and 3 people who get the information of self-driving travel through outdoor advertising, travel agency, car club, car club, radio and other channels, respectively, accounting for 18.8%, 16.8%, 16.5%, 4.2% and 0.8% of the total respondents. It can be seen that there are less self-driving tours organized by travel agencies and car clubs, and the market share of self-driving tours by travel agencies and car clubs is relatively low. Therefore, travel agencies and car clubs should use the power of network, media and so on to increase publicity and expand their market share.

To sum up, the Internet and friends are the main channels for self-driving tourists to obtain self-driving tourism information. TV, travel brochures, newspapers and magazines, outdoor advertisements, travel agencies, car clubs, car club publicity, radio, etc. are not the main channels for self-driving tourists to obtain self-driving tourism information.

#### B. An analysis of travel decision factors

In order to study the influencing factors of self-driving tourists' travel decision-making in more detail, in addition to the frequency of various factors, the author uses Likert five-point scale to study the influencing factors of self-driving tourists' travel decision-making in Tianjin. The author divides the importance of these influencing factors into five levels, each of which has different scores. Among them, 5 points for very important, 4 points for important, 3 points for general, 2 points for unimportant and 1 point for very unimportant. SPSS17.0 was used to calculate the mean value and standard deviation of the influencing factors of self-driving tourists' travel decision-making in Tianjin. After calculation, the standard differences of the influencing factors of travel decisions are all about 1, which shows that the sample value is not very discrete and the mean value is representative. Among all the influencing factors, the score of "safety problem" is the highest, which is 4.68. This proves that "safety problem" is the most important factor influencing the travel decision-making of self-driving tourists. Similarly, the scores of "leisure time", "health condition", "weather condition", "whether there is private

car", "traffic condition", "travel companion", "destination attraction", "gas station and other supporting services" are all above 4 points. This also shows that these factors are the most important factors that affect the travel decision-making of self-driving tourists.

### IV. PROBLEMS OF SELF-DRIVING TRAVEL SUPPLY SYSTEM IN JING-JIN-JI AREA

Through three months and more than 300 questionnaires, it is found that 40%, 35% and 25% of self-driving tourists are not satisfied with the self-driving supply system in Beijing, Tianjin and Hebei. The main problems are that the construction of the automobile camp is not perfect, the information service is not timely, the six elements of tourism are not easy to meet, and the self-driving travel and security system are not perfect.

#### A. Imperfect construction of automobile camp

Automobile campsite is the main body of tourists with self-driving and RV as the target, and a comprehensive tourism service body integrating self-driving maintenance, camping, leisure and entertainment. At present, there are many automobile campsites in Beijing, Tianjin and Hebei, but there are many defects in the construction and operation. Car camp services mainly include: car camp accommodation services, car camp camping services, car camp catering services, car camp leisure entertainment, car camp maintenance, maintenance and rescue. According to the survey, a new self-driving touring car base in Tianjin is mainly engaged in car barbecue camp, horse farm, youth development and training base, wild fishing, etc., but tourists generally have a low evaluation on it. First of all, there are few entertainment projects that can not be guaranteed to be opened, such as fewer equestrian shows, and commentators are not professional. There are only a few peacocks and peacocks in the youth development base zoo Rabbit; secondly, there are cases of cheating consumers, the tickets of group buying are inconsistent with the explanations of the scenic area staff; thirdly, the supporting facilities are not perfect, there are few places to eat and the types are single.

#### B. Self-driving travel information service is not timely

Self-driving travel information service mainly includes self-driving travel consulting service (whether the service attitude is warm, friendly, etc.), self-driving travel logo service (whether the logo is clear, easy to understand, etc.), self-driving travel Internet service (whether the Internet information is reliable, comprehensive, etc.). At present, the Jing-Jin-Ji Area is not perfect in these aspects, and the tourists' satisfaction is low. For example, although the number of car camps is large, most of them do not have their own special website, so it is difficult to find relevant information on the network. In addition, the website of China self-driving travel alliance is a relatively large self-driving travel website, with 20000 visitors coming out on the same day. However, when searching for activities in Tianjin station, there are only a few scenic spots, hotel names and brief introductions. In the hotel introductions, all the contact

methods are the same mobile phone number; and more than 90% of the activities on the website are travel routes of travel agencies, What's more is the rental price of the destination.

#### *C. Six elements of tourism are not easy to obtain*

Self-driving tourism reception service is to provide self-driving tourists with food, housing, transportation, tourism, shopping, entertainment and other services. A good self-driving tourist reception service is conducive to enriching the tourist experience of self-driving tourists, improving the rate of tourists' revisiting, and improving the image of tourist destinations. Beijing, Tianjin and Hebei gradually opened 25 NEW RV self-driving camps in 2016-2017. According to the expected plan, nine campsites have been opened, but so far, although the infrastructure of RV base has been completed, due to the lack of tourists, supporting catering, entertainment, shopping, or not yet operating or closing doors to thank customers, even basic water consumption becomes a problem when tourists arrive at the destination.

#### *D. The self-driving travel security system is not in place*

The self-driving travel guarantee system mainly includes self-driving travel rescue service, self-driving travel safety service, self-driving travel insurance service, community residents' support and self-driving travel professional talent guarantee. According to the investigation, there are many professional auto rescue companies in Beijing, Tianjin and Hebei at present, but the fees are generally high and the arrival time is not guaranteed in remote areas; and the self-driving activities launched by the website have no rescue guarantee, so they can only rely on external forces; China's emergency rescue website has announced 42 rescue teams, but there is no one in Beijing, Tianjin and Hebei. In terms of self-driving travel safety, unless organized by travel agencies, it is generally difficult to guarantee self-driving travel. Vehicle safety inspection depends on personal habits. However, professional self-driving travel activities on the website generally specify car maintenance points; this is suspected of cheating money. Lack of professional talents in self-driving tour, most of the tourists design their own routes, do not know the location of vehicle maintenance points and gas stations in the destination, and rarely detect the potential safety hazards in the destination.

### V. SUGGESTIONS ON THE OPTIMIZATION OF SELF-DRIVING TRAVEL SUPPLY SYSTEM IN JING-JIN-JI AREA

#### *A. Paying attention to quality while increasing the number of car camps*

In order to implement the "accelerating the construction of self-driving RV campsites and building 500 campsites in 2016" proposed by the State Council, the National Tourism Administration, together with the Ministry of public security and other six ministries and commissions, issued the notice on accelerating the construction of self-driving RV campsites in 2016, including 25 new campsites in Beijing, Tianjin and Hebei. In recent years, the number of automobile camps in Beijing, Tianjin and Hebei has increased dramatically, but at

the same time, I think we should pay attention to the following issues. First of all, in terms of catering services in the auto camp, in addition to meeting the requirements of barbecue for self-driving tourists, catering services with local characteristics should be provided; second, in terms of leisure and entertainment in the auto camp, the number, normal opening and quality of entertainment items should be guaranteed; finally, in terms of accommodation services in the auto camp, a certain price discount should be given to self-driving tourists.

#### *B. Strengthening self-driving travel information network publicity*

With the development of Internet technology, most tourists will search for information on the Internet before they go out. In view of this, on the one hand, the auto camp and self-driving travel guarantee system in the self-driving travel supply system should establish a regional special website or enterprise's own website, strengthen the web page maintenance and information update, and have a fixed consulting phone and service consultant; on the other hand, the auto camp and self-driving travel Hot activity scenic spots should often hold some self-driving activities, and the activities should be publicized on the Internet, newspapers, Wechat, QQ and other chat software in advance; finally, on the way to hot self-driving scenic spots, self-driving routes and road signs should be planned and set to provide convenience for self-driving tourists.

#### *C. Cooperation between government and enterprises to strengthen publicity and ensure the supply of six elements of Tourism*

Like any kind of tourism, self-driving tourism is inseparable from six basic contents, and because of its special way of tourism, self-driving tourism puts forward different requirements for these infrastructure from traditional tourism. There is no problem to ensure the supply of six elements for tourists in self-driving destinations, but it is necessary to pay attention to the lack of tourists. For enterprises, they should hold regular activities to increase the interest of self-driving camps and ensure the normal supply of all facilities and services; for the government, they should pay attention to publicity to ensure that the local self-driving camps have sufficient tourists.

#### *D. Establishing a perfect self-driving travel guarantee system*

At present, in the aspect of self-driving travel security system, the main problems focus on rescue, safety and professional talents. In terms of self-driving travel rescue service, it should be reasonable and convenient. In terms of safety services, safety is the premise and foundation of tourism activities, and also the biggest problem of self-driving tourism. In order to eliminate the safety concerns of self-driving tourists, it is necessary to establish a supporting safety service guarantee system for self-driving tourism, which mainly includes good social security, perfect traffic rescue system and medical rescue system. In terms of

professional talents, although self-driving tourism is the transformation of tourism mode, it needs to establish a supporting special service guarantee system different from popular tourism to meet the needs of self-driving tourists, for example, the services of long-distance tourists and tourists with license and no car, and the personalized services of self-driving on the way of travel.

#### VI. CONCLUSION

Through the investigation and research, the main conclusion of this paper is to strengthen the improvement of supporting facilities in the auto camp, to ensure the normal use of various service facilities in the auto camp; to improve the information communication channel of self-driving tour, to do a good job in the transmission of self-driving tour information through multi-channel and main channel; to strengthen the popularity of self-driving tour supply enterprises through the linkage of government and enterprises, enterprises should also ensure the supply of six elements of tourism; to establish and improve The self-driving tour guarantee system is used to excavate and cultivate professional talents.

#### REFERENCES

- [1] Liu Dan. Study on the optimization of Zhangjiajie service system [D]. Hunan: Xiangtan University, 2012
- [2] Army. Research on the development of Guangxi self-driving tourism camp [J]. Journal of tourism, 2007, (223): 35-39
- [3] Zhong Yingfeng. Problems and Countermeasures of self-driving tourism in China [J]. Journal of Zhuzhou Normal University, 2006: 85-87
- [4] 2016 national self-driving RV camp construction project table.