



A study on public acceptance of self-driving cars based on structural equation modeling in the city of Chongqing

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Abstract. This study constructs a novel theoretical framework to uncover the effects of perceived ease of use, perceived usefulness, perceived risk, original trust, and behavioral attitude on people's acceptance of self-driving cars. A survey data on potential users for the public acceptance of self-driving cars from one city in China were empirically examined using structural equation modeling. We use validation to examine the factors that would influence people's willingness to adopt self-driving cars and provide strategies from both corporate and government perspectives. Our results show that perceived ease of use of self-driving cars would eliminate perceived risk; perceived usefulness would have a strong positive effect on original trust, as well as a strong positive effect on willingness to accept; perceived ease of use would have a moderately positive effect on perceived usefulness and a positive effect on original trust; perceived ease of use would reduce perceived risk. This research provides new evidence and serves as an insightful decision-making reference for policymakers and operators seeking to encourage people's acceptance of self-driving cars.

Keywords: self-driving cars; willingness to accept; structural equation modeling property service Introduction

1 Introduction

The manufacturing industry is the foundation of a nation and the basis of a strong nation. General Secretary Xi Jinping pointed out that a country must have the right strategic choice, and our strategic choice is to continue to grasp the manufacturing industry, and the high-quality development of manufacturing is the top priority of China's high-quality economic development ^[1]. As an emerging commodity, self-driving cars need to abide by the market rules, follow the market laws and adapt to the market environment. For the current economic development, the market is the scarcest resource, and China happens to have a population size of more than 1.4 billion and 400 million middle-income groups, corresponding to the world's largest market size and consumption potential. At present, the application of self-driving cars is still in its infancy, still stumbling along in experimentation and practice. The only way to better promote its development is to clearly understand and firmly sweep away the difficult

challenges encountered in its development.

These difficulties and challenges can continue to promote the supply-side reform of enterprises and industries to better adapt to the diversified and forward-looking needs of consumers, and can also prompt enterprises and industries to turn inward and lead consumers with superior technology and advanced product quality. Specific contradictions require an in-depth market, and in-depth consumer, for this reason, the public survey on the willingness to accept self-driving cars, from the demand side to take a good pulse, to do the right medicine, the precise policy is particularly important.

2 Literature review and hypothesis development

Willingness to accept reflects the degree of public recognition and acceptance of self-driving cars and is the main indicator for judging the public's willingness to accept self-driving cars.

Huang Bit ^[2] established an integrated multi-attribute model to provide some theoretical basis for future research on consumers' attitudes and preferences toward self-driving cars. Qing Sandong ^[3] studied the preference for driverless car-sharing usage based on the Bayesian efficiency test. Xu Gang ^[4] conducted a three-day field survey on 1068 people in the waiting room of Zhenjiang Railway Station to study the acceptance of single-vehicle intelligence and vehicle-road cooperative autonomous driving technology. Li Yuanyuan ^[5] provides a reference for the construction of the ethical rule system of self-driving cars by exploring the influence of social contextual factors on the public's ethical judgment of self-driving cars and investigating the public's behavioral preferences for self-driving cars.

Most of the evaluation systems mentioned above analyze the direct association between factors and satisfaction, but the correlation between factors is not studied deeply enough. The various factors of public acceptance willingness are studied by structural equation modeling, and the magnitude and interaction between them are identified to provide a reference for the application of structural equation in enhancing the acceptance willingness of autonomous vehicles.

2.1 Perceived usefulness (PU)

Perceived usefulness reflects the extent to which respondents believe that self-driving cars can enhance the driver experience. According to the technology acceptance model, perceived usefulness affects willingness to accept, and also has an impact on travel choice and raw trust. Given the above analysis, the following hypotheses are proposed:

H1: PU positively impacts initial trust (IT).

H2: PU positively impacts initial trust (IT).

H3: PU positively impacts acceptance intention (AI).

2.2 Perceived ease of use (PEOU)

Perceived ease of use reflects the extent to which respondents perceive self-driving cars

to be more convenient and less stressful. According to the technology acceptance model, perceived ease of use affects willingness to accept and has an impact on perceived usefulness and raw trust. Hence, we hypothesize the following:

H4: PEOU has a moderately positive effect on PU.

H5: PEOU positively impacts IT.

H6: PEOU positively impacts AI.

2.3 Perceived risk, initial trust, and attitude

Perceived risk reflects the extent to which respondents are concerned about the risks and pitfalls of self-driving cars. If people are more worried about self-driving cars, their willingness to choose self-driving cars for travel and their trust in self-driving cars will decrease; similarly, if people perceive self-driving cars as more convenient and hassle-free, their willingness to accept them will increase.

Initial trust affects consumers' emotional dispositions and behavioral attitudes toward self-driving cars, influencing consumer choice through the role of primitivity

Behavioral attitudes also largely determine consumers' acceptance of self-driving cars, while raw trust influences consumers' behavioral attitudes toward self-driving cars. In conclusion, the following hypotheses are presented:

H7: IT hurts perceived risk (PR)

H8: IT positively impacts ATT.

H9: ATT positively impacts AI.

2.4 Acceptance intention (AI)

Based on the above hypotheses' development, the integrated theoretical model of this research is depicted in Figure 1.

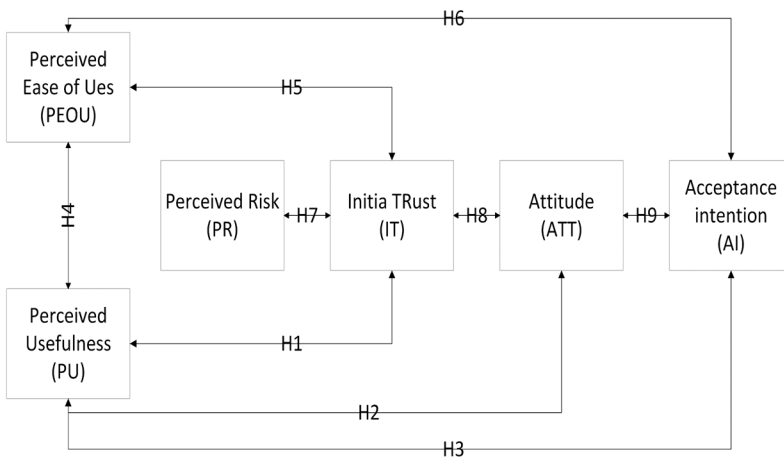


Fig. 1. Latent variable relationship diagram

Structural equation models are generally composed of measurement models and structural models. The measurement model describes the relationship between the latent and observed variables. The structural model reflects the relationship between the latent variables. The measurement model and the structural model are constructed separately below.

$$\eta = B\eta + \Gamma\xi + \zeta \tag{1}$$

Where B is the coefficient matrix between the endogenous latent variables η ; Γ is the coefficient matrix of the effect of the exogenous latent variables on the endogenous latent variables; and ζ is the error term of the structural equation. Due to the exclusion of exogenous latent variables in the structural equation model, the simplified model is combining literature studies and surveys, we make the following assumptions about the structural model:

$$\eta = B\eta + \zeta \tag{2}$$

For the relationship between the latent and observed variables, the following measurement equation is usually written:

$$Y = \Lambda Y \eta + \varepsilon \tag{3}$$

$$X = \Lambda X \xi + \delta \tag{4}$$

where Y is a vector of endogenous observed variables; η is a vector of endogenous latent variables; ΛY responds to the relationship between endogenous observed variables and endogenous latent variables and is a factor loading matrix of endogenous observed variables and endogenous latent variables; ε is a vector of residuals of endogenous observed variables.

X is the vector of exogenous observed variables; ξ is the vector of exogenous latent variables; ΛX responds to the relationship between exogenous observed variables and exogenous latent variables and is the factor loading matrix of exogenous observed variables and exogenous latent variables; δ is the residual vector of exogenous observed variables.

In summary, our proposed model includes 6 latent variables and 22 observed variables, and the relationships between the latent variables and their corresponding observed variables are shown in Table 1.

Table 1. Measurement model table

latent variable	Observed variables	Meaning
PR	PR1	System security / device failure (e.g. privacy breach, hacking, etc.)
	PR2	Emergency response capability (e.g. in heavy rain, haze, etc.)
	PR3	Criteria for determining liability for traffic accidents (e.g., the primary responsible party should be a human driver, self-driving car manufacturer, etc.)
	PR4	Driving technology is not as good as human

latent variable	Observed variables	Meaning
	PR5	Deprive me of driving pleasure
PU	PU1	Allows drivers to perform other tasks while on the road
	PU2	Can relieve traffic congestion and shorten travel time
	PU3	Reduce the likelihood of traffic accidents
	PU4	Reduces driving fatigue
	PU5	Reduce air pollution
PEOU	PEOU1	I think learning and mastering the takeover behavior in autopilot is easy for me
	PEOU2	Taking back control of the vehicle in case of system problems or unexpected situations does not make me feel nervous and scared
	PEOU3	Taking over and controlling the vehicle again in case of system problems or unexpected situations does not bother me
IT	IT1	I trust self-driving cars that have been approved by government authorities
	IT2	I trust traditional car makers or new car makers to produce self-driving vehicles
	IT3	I think the use of self-driving vehicles appears to be reliable
ATT	ATT1	Prospect Expectations
	ATT2	Self-driving cars bring the feeling
	ATT3	I think it is reliable to use self-driving cars
AI	AI1	I plan to ride in a self-driving car in the future
	AI2	I plan to buy a self-driving car in the future
	AI3	I would recommend my family and friends to use self-driving cars

3 Methodology

3.1 Survey design

To ensure the scientific nature of the sampling survey, the survey was divided into two parts: a pre-survey and a formal survey, through which the number of formal questionnaires was determined, and the content of the questionnaires was adjusted and amended. In the sampling method, this survey adopts a probability sampling method combining stratified sampling and three-stage sampling, and three-stage sampling is conducted in each layer.

According to the feedback of the questionnaire results, question 11 has the problem of unclear semantics. In this regard, we add explanations to the corresponding options, such as "system security/device failure" followed by a note "such as privacy leakage, hacking, etc." for an explanation. For question 12, we suggest adding the indicator "reduce air pollution", and for question 15, we suggest adding the option "I plan to take a self-driving car".

3.2 Data acquisition

A total of 71 questionnaires were collected in this pre-survey, with 56 valid questionnaires and an effective rate of 78.87%. According to the Seventh National Census of Chongqing, the total number of people in the 38 districts and counties of Chongqing is 32,054,200. The optimal sample size for the official sampling was determined based on the proportion of residents in the pre-survey who were accepting or not of self-driving cars, where the absolute error was linked by the following formula:

$$f = \frac{n_0}{N} \quad (5)$$

$$v(p) = \frac{1-f}{n_0} \frac{N}{N-1} p(1-p) \quad (6)$$

$$d = t\sqrt{v(p)} = t\sqrt{\frac{N-n_0}{N-1} \frac{p(1-p)}{n_0}} \quad (7)$$

where f is the sample proportion; N is the total number of survey units sampled in the pre-survey, i.e., the total number of pre-survey questionnaires distributed; n_0 denotes the valid number of questionnaires returned in the pre-survey; t is the critical value at a confidence level of 95%, $t=1.96$. Among the valid questionnaires returned in the pre-survey, 71.43% of the residents showed an accepting attitude toward self-driving cars, so $p=0.71$; d is the absolute error value and brought into the above equation yields $d=0.056$.

Before correction, the formula for the optimal sample size n is as follows:

$$n = \frac{t^2 p(1-p)}{d^2} \quad (8)$$

The calculation yields $n=252$, that is, 252 is the optimal sample size obtained at a 95% confidence level by the requirement that the absolute sampling error does not exceed 5%. We took the multi-stage questionnaire design effect coefficient approximation of $deff=1.83$ by reviewing the data and combining it with the previous survey experience, the valid sample size that should be recovered is 461.

$$n^* = n * deff = 252 * 1.83 \approx 461 \quad (9)$$

Considering that the sampled residents may give up filling in the questionnaire, fill in the questionnaire invalid, or make the questionnaire invalid due to other problems, we assume that the invalid ratio is 20%, then the actual sample size of the survey to be distributed is 576.

$$n' = n \div 0.8 = 461 \div 0.8 \approx 576 \quad (10)$$

From January 2023 to March 2022, this survey used a probability sampling method combining stratified sampling and three-stage sampling. According to the population distribution, stratified sampling was adopted to draw the permanent residents of nine districts and counties in Chongqing, including Shapingba District, Jiangbei District, Nanan District, Tongnan District, Rongchang District, Yongchuan District, Kaizhou District, Fengjie County, and Yunyang County. Three stages of sampling were adopted, in the first stage PPS sampling was used to draw districts and counties in each stratum as primary sampling units; in the second stage simple random sampling was used to draw streets in districts and counties as secondary sampling units; in the third stage systematic sampling was used to draw residents in streets as basic sampling units.

Then, a random sample of residents/owners who met the requirements were selected from each district. Inclusion criteria for the study population: permanent residents aged 18-65 in Chongqing. A total of 675 questionnaires were distributed, 650 questionnaires were collected, 637 valid questionnaires were returned, and the questionnaire efficiency rate was 98%.

3.3 Data analysis

The survey is divided into 2 parts, part 1 collects the basic information of the personnel. Part 2 is the main body of the questionnaire, with a total of 22 measurement indicators, measured on a Likert 5-point scale, from 1 to 5 in the order of disagree/dissatisfied, not quite agree/not quite satisfied, average, more agree/more satisfied, and strongly agree/strongly satisfied. The basic information of the owners is shown in Table 2.

Table 2. Basic information of the owner

Information	Projects	Frequency	Percentage/%
Gender	Men	236	37
	Women	401	63
Age	18-25	389	61
	26-35	159	25
	36-55	76	12
	55-65	13	2
Driving experience	No driver's license	194	30.5
	0-1 year	218	34.3
	2-5years	168	26.3
	More than 6 years	57	8.9
Academic qualifications	High School and below	70	11
	College	70	11
	Undergraduate	376	59
Revenue	Master and above	121	19
	Under 3000 RMB	169	26.6
	3000-5000 RMB	152	23.9
	5000-7500 RMB	113	17.7
	7500-10000 RMB	73	11.4
	More than 10000 RMB	130	20.4

3.4 Questionnaire reliability test

The reliability of the questionnaire reflects the correlation between the questions of the questionnaire and confirms whether it can ask valid questions about the measured variables. The Cronbach Alpha (α) reliability coefficient method was used, and the results are shown in Table 3 below. It is concluded that the Alpha coefficient of implicit variables such as maintenance service is higher than 0.7, and the Alpha coefficient of the total table reaches 0.912, which indicates that the questionnaire data has good credibility.

Table 3. Results of confidence analysis

Projects	Number of projects	α confidence coefficient
Perceived ease of use	3	0.910
Perceived usefulness	5	0.909
Perceived Risk	5	0.917
Original Trust	3	0.908
Behavioral attitude	3	0.909
Willingness to accept	3	0.916
Overall Reliability	22	0.912

The methods used for the validity analysis were Bartlett's sphericity test and KMO value analysis. The two tests mentioned above were performed on the survey data, and the results showed that the survey data had a p-value of 0.000 ($p < 0.001$), which passed Bartlett's sphericity test, yielding a non-unit matrix for the relationship and satisfying the condition of explaining most of the variance with the smallest factor. The KMO value of the survey data was 0.846, which was greater than 0.60, indicating that the requirements of factor analysis were met and that factor Extraction.

4 Results

4.1 Measurement model evaluation

The exploratory factor analysis of the data was performed with the help of principal component analysis in factor analysis, and the correlation results yielded that there were five common factors with initial eigenvalues greater than 0.8 and a cumulative variance contribution of 72.251%, which meets the need for common factors to explain more than 60% of the variance cumulatively [6], as shown in Table 4.

Table 4. Total variance explained

Indicators	Total	Initial Eigenvalue		Sum of squared rotating loads		
		Variance %	Accumulation %	Total	Variance %	Accumulation %
1	8.350	43.947	43.947	3.657	22.596	22.596

2	2.948	15.517	59.464	3.261	17.162	39.759
3	1.189	6.260	65.724	2.876	15.139	54.898
4	0.815	4.289	70.013	2.384	12.549	67.446
5	0.805	4.239	74.251	1.293	6.805	74.251

As shown in Table 5, we observed the factor loadings of each group of measurement variables through the rotated matrix components and saw that all, but three of the 22 measurement variables had factor loading values greater than 0.5, and only two of the SMC reliability coefficients were smaller for ATT, indicating that the measurement variables in the observed model had a significant effect on willingness to accept overall.

Table 5. Table of measurement results

latent variable	Measurement variables	Factor loading amount	SMC
ATT	ATT1	0.43	0.49
	ATT2	0.37	0.51
	ATT3	0.48	0.62
AI	AI1	0.86	0.74
	AI2	0.90	0.81
	AI3	0.95	0.91
IT	IT1	0.86	0.75
	IT2	0.78	0.61
	IT3	0.83	0.69
PEOU	PEOU1	0.78	0.60
	PEOU2	0.89	0.70
	PEOU3	0.95	0.89
PR	PR1	0.82	0.67
	PR2	0.94	0.88
	PR3	0.87	0.76
	PR4	0.83	0.69
	PR5	0.54	0.27
PU	PU1	0.71	0.51
	PU2	0.81	0.65
	PU3	0.90	0.81
	PU4	0.83	0.69
	PU5	0.87	0.76

4.2 Structural model evaluation

We used AMOS 26.0 to construct the structural equation model. The model normalization path diagram is shown in Figure 2.

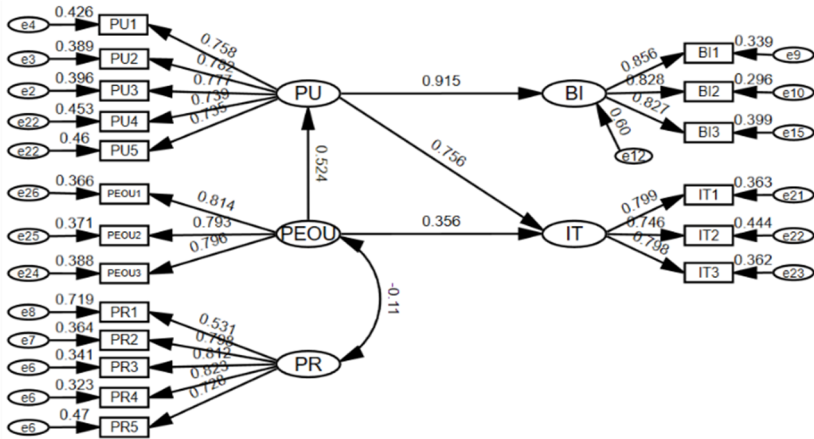


Fig. 2. Model normalization path

In terms of model fit assessment, the higher the model fit, the better the fitness, which represents the higher validity of the model and the more the estimation of parameters reflects the actual situation. After removing the ATT term, the model fit assessment is performed. The assessment is divided into two aspects: intrinsic quality assessment, which tests the fit of the model with the help of three fit indicators, and overall fitness assessment, which tests the fit of the model with the help of four fit indicators. The model fit results are shown in Table 6, and all the indicators of the structural model satisfy the fit criteria, so the structural model passes the fit test.

Table 6. Model adaptation results

Inspection index		Adaptation standards	Test results	Adaptation judgment
Intrinsic Quality Inspection	Standardized factor loadings	>0.8 for a good adaptation	0.838	Good adaptation
	Standard error	The smaller the better	0.125	Reasonable adaptation
	Correction of indicators	<5 for a reasonable adaptation	3	Good adaptation
Overall suitability		<5 for a reasonable adaptation		
	CMIN/DF	<3 for a good adaptation	2.897	Good adaptation
	RMSEA	<0.05 for a good adaptation	0.012	Good adaptation

Inspection index	Adaptation standards	Test results	Adaptation judgment
	<0.08 for a reasonable adaptation		
GFI	>0.9 for a good adaptation >0.8 for a reasonable adaptation	0.895	Reasonable adaptation
AGFI	>0.9 for a good adaptation >0.8 for a reasonable adaptation	0.820	Reasonable adaptation

The result that there is an interaction between the acceptance willingness influence variables can be derived with the help of the model standardized path diagram in Figure 2. The analysis of the model path and the judgment of whether the hypothesis is feasible are the assumptions in Section 5.2, as detailed in Table 7.

Table 7. Model estimation results

Path Relationships	T	P	Hypothesis testing
H1: IT ← PEOU	2.271	0.020	Supported
H3: AI ← PU	2.380	0.013	Supported
H4: PU ← PEOU	3.679	0.000	Supported
H5: IT ← PEOU	2.371	0.006	Supported
H10: PR ← PEOU	5.990	0.000	Supported

The results of the model evaluation in Table 7 indicate that our hypotheses (H1, H3, H4, H5, H10) are supported. For H1, all other things being equal, each unit increase in perceived usefulness increases raw trust by 0.756 units. This suggests that public trust in self-driving cars stems in large part from their usefulness and the various positive impacts they have on the environment and society. For H3, all other things being equal, each unit increase in perceived usefulness increases willingness to accept by 0.915 units. This indicates that perceived usefulness, as the foundation of self-driving cars, has a strong impact on public willingness to accept. For H4, all other things being equal, each unit increase in perceived ease of use increases perceived usefulness by 0.524 units. This suggests that the more the self-driving car is manipulated, the more useful it is perceived by the public. For example, increasing the level of visualization of the user interface and reducing the difficulty of operation can enhance the public's acceptance of self-driving cars. For H5, all other things being equal, each unit increase in perceived usefulness can increase raw trust by 0.356 units. This indicates that perceived ease of use can increase public trust in self-driving cars to some extent. For H10, it indicates that reducing the difficulty of operating self-driving cars can enhance the public trust in them and play a positive influence on a certain extent.

5 Discussions

5.1 Research findings

It can be seen from the model that the safety, practicality, and maneuverability of self-driving cars have a significant impact on the public's willingness to accept them.

(1) The safety of self-driving cars causes widespread public concern. Theoretically, self-driving cars can respond faster than human drivers and will not drive drunk, text while driving, or feel tired, which can improve driving safety. However, at this stage, the development of autonomous driving technology is still immature, and there are uncertainties and risks in system safety and emergency response capabilities, which have caused widespread and high levels of public concern. Although "safety" is currently the focus of many self-driving car manufacturers, most of the public believes that the manufacturers' propaganda is exaggerated. This is especially true in recent years when safety accidents have continued to emerge, and the "speculative" hype of public opinion has further reduced the public's trust in self-driving cars. It can be seen that the only way to enhance public acceptance is to speed up the iteration and upgrade of self-driving technology, enhance its safety performance and eliminate its safety hazards.

(2) The usefulness of self-driving cars is the focus of public attention. Perceptual usefulness is the foundation of self-driving cars. The public's perceived usefulness of self-driving cars has a great impact on their willingness to choose because they pay more attention to whether self-driving cars can effectively solve practical functions such as travel difficulties, energy crises, and traffic accidents. At the same time, the public's trust in self-driving cars largely stems from the practical functions of self-driving cars. For example, if the public feels that self-driving cars are of great use to them and can effectively meet their needs such as comfort and economy, then their trust in self-driving cars will greatly increase, which has a greater effect on the public's willingness to accept them.

(3) The maneuverability of self-driving cars affects the degree of public trust and acceptance. Perceived ease of use is the brick in the door of self-driving cars. The public's perceived ease of use of self-driving cars can enhance their trust to a certain extent. For example, improving the level of visualization of the user interface and reducing the difficulty of use and operation can reduce the level of public distrust and doubt in self-driving cars and enhance the public's experience of their benefits. Therefore, for self-driving cars to be widely promoted, it is extremely important to simplify the operating interface and lower the threshold of use, so that only by making it easy for most people to get started can public acceptance be increased. At the same time, enhanced operability will reduce the public's perception of risk and increase their confidence in dealing with unexpected situations promptly. Enhancing the perceived ease of use of self-driving cars and reducing their operational difficulty will be a powerful means of increasing the public's willingness to accept them.

(4) The public's expectations and concerns about self-driving cars coexist. Research shows that at this stage, most people have a high degree of satisfaction with self-driving cars, and believe that self-driving cars have many advantages such as effectively

relieving traffic congestion and reducing driving fatigue; they believe that self-driving cars are less worrying, and it is easier to learn and control them; they have a high degree of trust in self-driving cars made by government-approved manufacturers and manufacturers with a good reputation; they are willing to use and recommend. The willingness to use and recommend self-driving cars for travel is high. However, the public is generally concerned about the safety hazards of self-driving cars and thus has a negative attitude such as uncertainty or even skepticism about their future development. This shows that the future development of self-driving cars will be difficult and long.

In general, the public is generally looking forward to the emergence of new technologies and is optimistic about the life changes brought about by self-driving cars. However, changes in behavior and attitudes do not happen overnight, and as a product of long-term inculcation in the living environment and cultural atmosphere, it relies on long-term accumulation of word-of-mouth and habit penetration, which requires long-term investment and public opinion building by self-driving car manufacturers.

5.2 Policy implications

Suggestions for automakers. First, technology upgrade to supply traction demand. It is recommended that auto manufacturers strengthen the technological research and development of self-driving chips, high-performance sensors, computer platforms, and operating systems to eliminate the safety risks of self-driving cars and stimulate the public's desire for consumption. Second, operational upgrade, to promote reality with virtual. Auto manufacturers can vigorously promote VR-assisted virtual driving for potential users to enhance the ease of use and operability of self-driving cars with interactive surreal experiences. Third, trust upgrades, to achieve peace with intelligence. It is recommended that car manufacturers establish user emotion monitoring systems and real-time data transmission systems to ensure the safety of user driving behavior and continuously improve the level of public trust. Fourth, identity upgrade, and marketing to boost consumption. Auto manufacturers can target the consumption needs of various groups of people to strengthen publicity and marketing, develop and implement targeted marketing and publicity strategies, innovate business promotion models, and scientifically guide consumption. Fifth, upgrade the positioning and cultivate advantages with characteristics. It is recommended that auto manufacturers combine Chongqing's market characteristics, location characteristics, and consumption characteristics to promote self-driving car projects in Chongqing, convert regional characteristics into industry development advantages, and cultivate advanced manufacturing clusters with international competitiveness.

Policy recommendations for the government. First, policy guidance. It is recommended that the government implement policies such as financial subsidies, tax incentives, and low-interest loans for self-driving car manufacturers to guide and support industrial development, stimulate consumer momentum, and accelerate the cultivation and protection of the self-driving market. Second, comprehensive coordination. The government can establish a comprehensive system of "human assistance + autonomous driving + road condition collection + data transmission",

strengthen the construction and guarantee capacity of autonomous driving infrastructure, and meet the needs of diverse IOT scenarios. Third, unified standards. The government should establish a unified and perfect standard system to guide and regulate the autonomous driving industry and promote the orderly development and healthy competition of the autonomous driving industry. Fourth, improve regulations. It is recommended that the government revise existing laws, fill legal gaps, draw on the experience of developed countries and Shenzhen, etc., and accelerate the construction of a complete legal system for autonomous driving to create a good legal environment for the autonomous vehicle market.

6 Conclusions

This paper empirically tests the proposed property service satisfaction evaluation model, and the results show that perceived usefulness has a strong positive effect on original trust and willingness to accept. Perceived ease of use has a moderately positive effect on perceived usefulness and a positive effect on original trust. Perceived ease of use hurts perceived risk.

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