

User characteristics and demand insight of hatchback car market

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Abstract: Since entering the automobile market of our country, although the car has experienced a short market "warm spring", it has not become the mainstream of consumption due to the influence of the traditional concept. In recent years, major car companies have innovated the shape, performance, texture and other aspects of hatchback cars to seek a breakthrough in this market segment. At the same time, with the younger and diversified needs of mainstream consumers, the traditional "bias" of hatchback may be ended by the post-90s generation, and the increasingly rational car consumption will bring new opportunities to the hatchback market. Therefore, combined with the development of the hatchback car market, understanding the characteristics of users and insight into their car purchase needs can provide certain reference for car companies' planning ideas and marketing strategies. Based on desk research, big data analysis, quantitative and qualitative research methods, this study analyzes the development and current situation of the hatchback car market, and gives in-depth insight into the characteristics and needs of hatchback car users.

Keywords: Hatchback car; Marketing strategies.

1. Research background

1.1. Hatchback car

Hatchback car refers to the car whose cab is integrated with the backup luggage compartment and whose engine has independent layout [1]. Compared with a standard car, it has no standard luggage compartment and a shorter body, so it is easier to handle and more flexible. Hatchback cars originated in Europe and flourished in France. Due to the development history of automobiles and urban road conditions, they are popular in the European market and welcomed by consumers [2]. In our country, in the eighties of last century, private cars are very few, people's cognition of cars stays in "official car", "the rich", "high position" and so on, face and style is an important attribute of the car, and the lack of tail hatchback car will undoubtedly become alternative. Later, our country entered the era of family cars, and private consumption began to rise, most of which are urban users. The hatch car has innate advantages in price, convenience and other aspects [3,4]. With the introduction of models such as Golf, Nissan Versa and Focus Versa, hatchback models in the Chinese market have gradually become rich. The attributes of "large hatchback", which can carry large luggage and is more flexible, have been recognized by consumers. In recent years, the level of national income of our country is rising, and it is affected by new energy models, SUV models and other impact. Therefore, the hatchback car market is transforming from traditional household to style personality, sports fashion, luxury quality and other directions to meet the personalized and diversified consumption needs of mainstream consumers.

1.2. Market Situation

As shown in Figure 1, from 2013 to 2015, hatchback cars were gradually recognized by consumers and experienced a "warm spring" in the market. At the same time, hatchback cars were very rich in the market, and the sales volume increased year by year. After 2015, the hatchback car market space is squeezed by other models, and the product line has changed

from many to fine. Hatchback cars have gradually become the representative of niche and personalized.

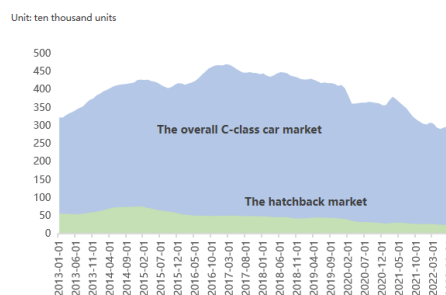


Figure 1. Overall sales volume of hatchback car market (moving year)

As shown in Figure 2, the representative models of hatchback cars are mainly joint venture brands, covering Japan, Germany and the United States. The best-selling models include Golf, Versa, Focus Hatchback, Audi A3 Hatchback and Civic Hatchback, etc. Among them, the Golf and the Focus hatchback once became the mainstay of the hatchback market by virtue of their own advantages. In recent years, the sales have declined and become stable. Despite this, the Golf is still the benchmark model in the hatchback market.

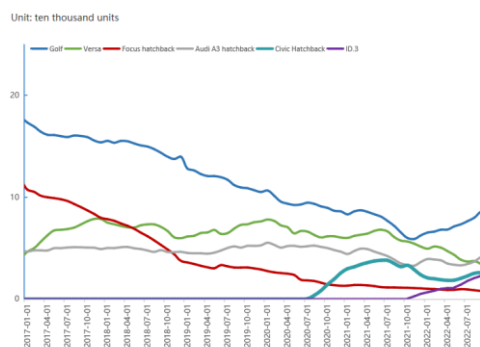


Figure 2. Sales of representative models in hatchback car market (moving year)

1.3. Layout of automobile enterprises

In recent years, hatchback cars have been affected by the advantages of new energy models and SUV models, such as more fashionable and personalized modeling and more comprehensive functions. At the same time, the industry has ushered in electric changes, and various car companies have entered hybrid and pure electric models, further squeezing the gasoline-based hatchback car market. Therefore, the major car companies actively layout, launched to meet the diversified needs of consumers hatchback cars, in order to seek market opportunities. Among them, FAW-Volkswagen Golf continues its tradition of "performance small steel gun", relying on the golf GTI as a high-end performance model, continuously enriches its product line to meet the needs of consumers in three aspects: household, control and high performance [5]. At the same time, create the concept of digital cockpit, help golf intelligent, digital transformation, enhance product competitiveness. Saic Volkswagen launched a pure electric hatchback sedan ID.3 to comply with the trend of industry electrification. Nissan Versa, which has focused on home and convenience, has seen tedious sales in recent years. Focus on the comprehensive innovation of shape and power, the new dynamic shape design, carrying four-cylinder machine to save the user's reputation. The Audi A3 hatchback version of FAW-Audi has always occupied a place in the market segment by virtue of its positioning as a luxury compact sedan, featuring luxury appearance, high performance and rich configuration. Dongfeng Honda launched the Civic box version, which continues and carries forward the sports gene of the Civic series, and focuses on fashion sports modeling and performance control. It is deeply loved by the appearance level party, the performance party and the feeling party.

1.4. Topic Proposal

With the young and diversified demand of mainstream consumers, automobile consumption is becoming more and more rational. In order to promote the development of hatchback car market, help car companies to put forward accurate planning ideas and reasonable product layout to meet consumer needs and find new opportunities for market segments, this study combined with the hatchback car market situation, in-depth insight into the characteristics and needs of hatchback car users, and predict future demand trends.

2. Research idea and method

2.1. Big Data Research

Big data research has been widely used in automotive product and market research in recent years. It crawled and screened a large amount of data from automotive vertical websites such as Autohome and Understand Car emperors and service social networking sites such as Sina Weibo and car friend's forum, and obtained product word of mouth, user information, mutual mention of models and other data. So as to analyze the product competition pattern, product evaluation, user portrait and so on.

2.2. Quantitative and qualitative research

Quantitative research refers to research methods that design logical questionnaires for a certain hypothesis or assumption, conduct closed and structured interviews with a certain number of representative samples, and then use statistical methods and related models to sort out and analyze

survey data, so as to obtain comprehensive product and user information, and verify hypotheses or conclusions through comprehensive analysis. Based on the preliminary desk research and research needs of the hatchback car market, the research models, the screening principles of cities and the boundary conditions of user samples in this study are as follows. First, based on the analysis of sales volume and market competition pattern of hatchback cars, the research models of this study are screened and determined, among which the hatchback gasoline models (PET) include: Civic Hatchback, Golf, Audi A3 hatchback, Focus Hatchback, three-car gasoline models include: Link & Co 03, Civic Hatchback, gasoline electric hybrid model (HEV) Rayling dual engine and pure electric model (EV) : XPeng P5, while increasing a small number of potential users who may buy hatchback car sample. Secondly, after analyzing the market segments of hatchback cars and the sales of representative models of competing products in various cities, the layout of automobile enterprises and the future market development capacity, it is determined that the research cities of this time are Wuhan and Guangzhou, and 200 quantitative samples are set in each city. Finally, the sample boundary conditions are set to ensure the quality of the survey. According to the previous survey data, the ratio of male to female users was determined to be 7:3. Young people aged 20-40; College degree or above; A car budget of more than 100,000 yuan and a personal car. The user is the main decision maker of the purchase and the main user of the vehicle. The purchase time is from June 2021 to June 2022, and meet the circumvention conditions of industry market research. For potential users, mainly young teachers/graduate students, including those who have tried driving a hatchback car in 4S stores and plan to buy a hatchback car within six months. The design of the questionnaire includes products, users, prices, publicity, sales services and financial policies.

Qualitative research usually refers to the research method of mining user information, characteristics and needs with the help of theoretical models, logical access and other forms for a specific topic. Qualitative research and quantitative research complement each other, each has its own emphasis and there is a certain complementary relationship. It mainly includes focus user group seminars, in-depth interviews with users/dealers/industry experts and co-creation workshops. Among them, the focus user group symposium aims to verify the positioning of various aspects of the product, understand the satisfaction and demand concerns, and clarify the improvement direction. This study sets up two group symposiums in Wuhan and Guangzhou respectively (designated car acceptance group and hesitant group), and the symposium samples are obtained by screening quantitative samples. At most one female user per group; Able to accurately describe the reasons for buying a car and the whole process of buying; Think clearly and speak clearly. After each focus user group discussion, a user representative is selected to invite him to visit the house. Combined with the first two stages of research, the obtained data and conclusions are further excavated to gain insights into their life patterns and key information, and perceived user portraits. In addition, in each city, three interview samples of relevant car dealers are set up to verify the market, products, users, publicity and other aspects of the situation, and obtain the views and suggestions of the store, and include sales manager or above in FAW Volkswagen, Dongfeng Honda, FAW Toyota, Geely Linker and other 4S stores, with more than 5 years of

experience and familiar with the car market situation.

3. Research results and findings

3.1. Competitive pattern of hatchback car market

By analyzing the data of mutual mention of models and product reputation in the market segment, the competition pattern of hatchback car market is obtained. The mainstream hatchback cars on the market include Civic hatchback, Golf, Audi A3, focus hatchback and the newly entered independent brand Link & Co 02 hatchback, etc. Most of them focus on performance and sports. The traditional family hatchback car, such as versa, has faded out of the mainstream market segment. In addition, compact car also has a certain competitive relationship with hatchback cars, such as Levin, Corolla, Asian Lion, Axela, etc., and its users can be transformed and absorbed by hatchback cars to a certain extent.

3.2. Basic characteristics of users

Table 1. User characteristics of hatchback cars

hatchback cars user characteristics	
gender	male: 74.8%
	female: 25.2%
age	20-25: 19.1%
	26-30: 51.4%
	31-35: 20.1%
	36-40: 13.3%
qualification	junior college: 40.7%
	regular college course: 55.0%
	master: 3.9%
annual household income	20000-90000: 4.6%
	90000-150000: 11.9%
	150000-210000: 20.1%
	210000-250000: 13.6%
	250000-300000: 17.9%
	300000-400000: 13.8%
lifestyle	400000-500000: 9.0%
	sport: 47.2%
	game: 41.2%
	movie: 28.6%
	tourism: 22.8%
marital status	social events : 17.9%
	spinsterhood: 54.5%
	Married without children: 14.3%
Smart product ownership	married with children: 31.2%
	smartwatch: 72.2%
	intelligent audio system: 57.6%
	smart home: 47.9%

In terms of age, the post-90s and post-00s have become the

mainstream consumer groups in the current and future hatchback car market, mainly young users aged 20-35, of which 26-30 years old account for the highest proportion (about 51.4%). More than 60% of the users are only children, more than 70% are male, the proportion of unmarried is slightly higher than that of married, and about 60% of the first purchase users. Mainly for junior college or above education, including bachelor degree accounted for about 55%. Engaged in the industry of manufacturing, computer services and software industry, wholesale and retail, hotel and entertainment services. Daily hobbies and pastimes mainly include sports activities, playing video games, watching movies, socializing with friends, and traveling. Their consumption view is overall rational, belonging to the active leading type, the consumption of large-value products is not conformity, and they are willing to pay for their own preferences. Car users' pursuit of smart watches, smart audio, smart home and other intelligent equipment is prominent, and they are willing to try fresh intelligent products.

They are active in daily work, willing to pursue a better life, have a wealth of entertainment in their free time, pay attention to sexual excellence, and have a certain potential to lead consumption. They think that the car is not only a means of transportation, but also a toy and friend. They regard the car as their own interest and are willing to study the car and enjoy the fun of driving.

3.3. User demand for car purchase and use

Vehicle demand mainly involves two aspects: car purchase and car use. Car purchase demand is mainly the core concern of users when selecting and purchasing cars. Car demand is mainly the pain and itching points and expected improvement points after users' actual car experience [6,7].

In terms of the core reasons for car purchase, the top five reasons for car purchase by hatchback car users are appearance (37.0%), safety (29.5%), handling (26.9%), power (26.4%) and brand reputation (20.8%). It can be seen that such users tend to have fashionable appearance, personality, strong power, and fun driving cars, and their car purchases are mainly for personal use and supplemented by family. At the same time, they are more rational and have higher requirements for vehicle safety. When buying a car, most of them are out of their interest in buying a car, like seeking new and different.

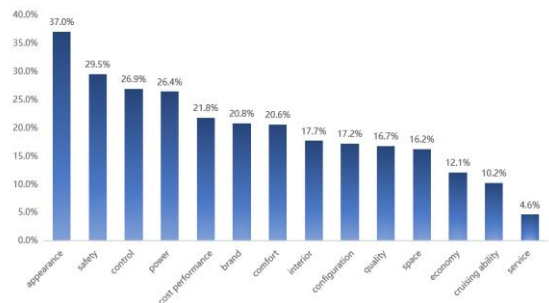


Figure 3. Users pay attention to the reasons for buying a hatchback car

From the actual satisfaction evaluation after driving, hatchback car users have a high degree of satisfaction with the core concerns such as appearance, handling and safety, which indicates that hatchback car can basically meet the needs of users. From the point of view of the dissatisfaction index, the use of space (24.6%), configuration (23.9%), interior (22.1%) and other aspects of the vehicle are the major

dissatisfaction indicators of such users in the process of driving.

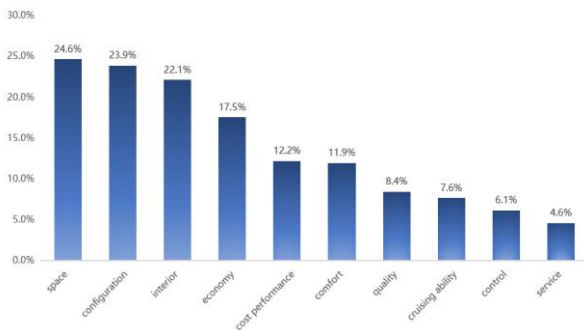


Figure 4. Dissatisfaction index of hatchback car users

3.4. User characteristics and demand trend prediction

Model of car of our country hatchback market is more diversified, satisfy the differentiation demand of consumer. After years of market cultivation, the consumption concept of the main users is becoming more and more rational, from the earliest "face consumption" to the family step to the present pursuit of individuality and exquisite pleasure. As for the reason, on the one hand, under the guidance and cultivation of consumption environment in our country, automobile users' consumption concept is inclined from "quantity" to "quality". They pay more attention to the satisfaction of their own internal emotional and spiritual needs while paying attention to the functional needs of vehicles [8]. In addition, due to the diversification of the supply end product line, it caters to the more individual and diverse needs of hatchback consumers.

The users of hatchback car are still 20-35 years old, with a younger trend. They have a higher level of education, a deeper knowledge and understanding of cars, and enjoy the pleasure of driving. In the future, the demand degree of hatchback car users for appearance, power, handling and other aspects will still be at a high level and show an upward trend. In addition, through in-depth interviews, it is found that users have an increasing demand for the configuration of hatchback cars, mainly including intelligent driving assistance configuration, safety configuration, intelligent car machine, etc., and have higher demands for the quality sense of vehicle interior and driving comfort.

With the general trend of electrification in the industry and the influence of policies, future hatchback car users may have higher demand for hybrid and pure electric hatchback models due to indicators, economic and environmental protection, and driving experience.

The development direction of product indicators is determined by combining the relationship matrix between the importance of purchase consideration and vehicle performance satisfaction of hatchback car users. Among them, the high importance of purchase consideration is regarded as a priority indicator, and the low satisfaction evaluation is regarded as an urgent indicator [9,10]. As shown in Figure 5, appearance, control and power are the indicators for future automobile companies to continue to maintain and improve. Interior, comfort, cost performance is the future of car company's priority to improve, enhance the direction. At present, the hatchback car has basically met the needs of users in terms of appearance, power and control, and users 'demands for interior texture, driving comfort and performance-price ratio have gradually increased.

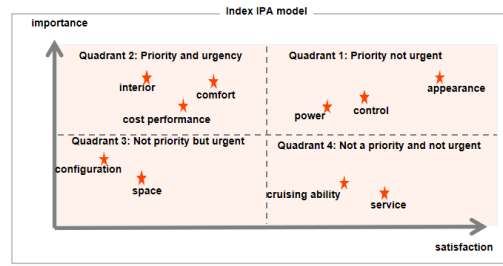


Figure 5. Index IPA model of hatchback car user

4. Conclusion and Future work

Car market from the traditional family to personalized, diversified transformation. The characteristics of consumers are more distinct, and the demand is becoming more rational. The pursuit of car purchase is to show individuality and delicately satisfy themselves. At present, thanks to the clear grasp and active layout of the hatchback car market positioning by various car companies, users are highly satisfied with the appearance, power and control of hatchback cars. In the future, users have higher pursuit for the texture, cost performance, driving comfort, and intelligent configuration of science and technology in the vehicle. In addition, hybrid and pure electric hatchback cars may become a new opportunity in the hatchback market. All major automobile companies should continue to pay attention to and gain insight into the attribute characteristics and lifestyle of hatchback car owners, excavate their needs and preferences, so as to respond to market changes and find market opportunities.

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