

## Customer Loyalty and Improving Strategies of China Open

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Received November 18, 2021 & Revise October 27, 2023 & Accepted December 31, 2023

### Abstract

The development of sports industry in modern time has been a highlighted issue, and sports performance industry is the very industry which shows the direct relationship between sports industry and the development of economy. And China Open has set a good example for the mutual integration of Socialist economy with Chinese characteristics and world economy. Whereas the key element of successful China Open is the improvement of customer loyalty. In order to attract more audiences to experience the games on site, the officials should imitate intensive research on how to improve customer loyalty. The development of sports industry in modern time, would immensely affect the economic benefit of sports industry. This paper began with illustration of both the background of sports industry development and its meaning, which includes the theoretical meaning and practical meaning, and decides the reason of my study. Secondly, by looking up related documents, conclusions were made, and assumptions were brought up. Then I decide the research objects and methods, finished the design of questionnaires, and made record of the questionnaires. At last, I came up with the conclusion and its meaning by analyzing the result of my study. As for the consumption from the race watching, in fact, the audiences pay for the experience services catered by the sports games. Therefore, high-quality experiencing enjoyment from high-quality services and high-quality visual sense should be the core of the marketing, and also the vital acceleration of customers and the games. The game host should focus on high quality, and the satisfaction of customers'

sentimental value demand.

**Keywords :** Customer Loyalty, Improving Strategies, Chaina Open

## Introduction

According to Opinions of the State Council on Accelerating the Development of Sports Industry and Promoting Sports Consumption in 2014, it says “ "We should give full play to the positive interaction between the sports industry and the sports cause, promote the all-round development of various categories and forms of the sports industry, promote the mutual integration of the sports industry and other industries, and realize the coordinated development of the sports industry and the economy and society" Li Ni-wei, et al.(2006) Economic development and scientific-technical progress is the premise of profession tennis games. With the development of our life quality, audiences' aesthetic standard is rising too. Customer satisfaction and more fantastic games on site are the key elements of the vitality and competitive force of professional tennis games in the future. Therefore, the research on the development of professional tennis games which has been mature business operation setting in new economic development trend becomes an important subject.

## Objective

1.To study According to the path coefficients of basic model (see table 10) which is constructed on the basis of questionnaire data collected from audiences on site, and the following various path coefficients of experiencing data, we can estimate whether the model assumption

## Literature Review

### 1. Research of customer loyalty

As for customer loyalty, foreign researches mainly focus on three points. First, analysis of customer's behavior, loyalty means the loyalty of behavior. Loyal behavior equals to loyal customer. Second, analysis of customer's emotional attitude, loyal means loyal attitude, therefore loyal attitude equals to loyal customer. Qingjun Y.(2005) Third, it's the selective connections of the key elements from the first and second ones above, that is, behavioral loyalty comes along with choices of emotional attitude.

With in-completion of research system, the research level on customer loyalty within China is much lower than the international counterparts. So far, The Relationship between Corporate Profitability and Customer Loyalty in B2C Environment by Heying Deng(from China) is in the leading position, Qingjun Y.(2005). which discusses how Customer satisfaction and loyalty deal with the impact of new business-economic model. This paper gives specific suggestions of disguising loyal customers, and establishing a scientific customer relationship management model under the one-to-one marketing strategy mode. Scholar Yinhua Wang suggests that customer satisfaction degree should be enhanced from the perspective of core values improvement, guiding concept establishment and customer's needs studying, consequently the quantity of loyal customers would rise. (Yugang. L.(2004)

### 2. Research on customer loyalty of the sports industry

It is necessary to study customer loyalty based on the sports industry. Sports events require consumer assistance from spectators, and whether spectators are loyal spectators directly affects whether sports events can expand and develop better. Liang. L.(2015). The audience's loyalty determines the number of stable consumer customer groups, and also lays a mass foundation for the development of sports event extension products. Customer loyalty in the sports industry is different from other industries. For example, the national football team always missed the World Cup, but they still have loyal supporters. In this regard, the research

on customer loyalty in the sports industry has always been a hot spot. From the initial use of attendance to refer to the number of loyal audiences, to the comprehensive measurement of audience loyalty in terms of viewing times, self-evaluation, and interest intentions, it was finally summarized in attitude and behavioral loyalty. Follow-up theoretical research uses these two types of loyalty as basis. (Wei. W.(2009).

Overseas researches on customer loyalty in the sports industry have made abundant achievements. Domestic loyalty research on this is based on foreign research ideas. On this basis, it includes research on enriching sports loyal customers and lacks innovation. Customer loyalty in the sports industry has always been a hot spot in sports research in recent years. Any company expects to keep in touch with customers. Customer loyalty is of great significance to the development of its industry. Loyalty also means the improvement of company's service and product quality.

## **Research Hypotheses**

### **1. Influence of customer experience on customer satisfaction**

In the sports performance, customer's experience feeling is the key of one successful game, and also an important criteria of an effective marketing result. You can't call it excellent marketing unless it improves the customer's experience, only then could the customers be attracted, satisfaction degree be high, along with loyalty.

Customer's sensory experience means various sensory feelings that customers harvest in the process of consumption. Great environment creates fantastic experiencing expression, which is helpful to get customers indulged in the environment, and enjoy it. The degree of sensual satisfaction is an important standard of evaluating the experience marketing implement effect of sports performance industry.

Hence the research hypotheses were put forward:

- 1)Sensory experience has positive influence on customer satisfaction

- 2) Sensory experience has positive influence on functional satisfaction
- 3) Sensory experience has positive influence on emotional satisfaction
- 4) Sensory experience has positive influence on social satisfaction

Customer scene experience describes customer's understanding and feeling towards the experiencing environment, it not only shows customer's perception to the environment, but also is the evaluation of the scene which is set by enterprises, catering to customer's satisfaction. Customer satisfaction is affected by the scene experience, and also affect the visual perception towards the enterprises. This research hypotheses were put forward:

- 1) Scene experience has positive influence on customer satisfaction
- 2) Scene experience has positive influence on functional satisfaction
- 3) Scene experience has positive influence on emotional satisfaction
- 4) Scene experience has positive influence on social satisfaction

Customer reflectional experience refers to the cognitive process from initial experience of enterprises's arrangement to a deeper level, it also means a process from customer's interest to active thinking. It is a high-level experience cognitive ability, which is optimistic. Such cognition would also affect its satisfaction degree. The research hypotheses were put forward:

- (1) Reflectional experience has positive influence on customer satisfaction
- (2) Reflectional experience has positive influence on functional satisfaction
- (3) Reflectional experience has positive influence on emotional satisfaction
- (4) Reflectional experience has positive influence on social satisfaction

Customer actionable experience not only includes customer's visual feeling towards the games, but also the body movements imitation when they are completely indulged in the games physically and mentally. Therefore they get involved in more in the sports performance industry, and it is also an improvement of the atmosphere created by enterprise. It is a kind of emotional in habitation for customers, which enhances the degree of satisfaction. This research hypotheses were put forward:

1. Actional experience has positive influence on customer satisfaction
2. Actional experience has positive influence on functional satisfaction
3. Actional experience has positive influence on emotional satisfaction
4. Actional experience has positive influence on social satisfaction

Customer interactional experience is relatively special, which refers to a sense of mutual approval raised in the games or performances watching while they are expressing their emotions. This kind of approval deepens the degree of appreciation and approval towards the games, it is also an important way of improving the experience feeling. This research hypotheses were put forward:

- 1) Interactional experience has positive influence on customer satisfaction
- 2) Interactional experience has positive influence on functional satisfaction
- 3) Interactional experience has positive influence on emotional satisfaction
- 4) Interactional experience has positive influence on social satisfaction

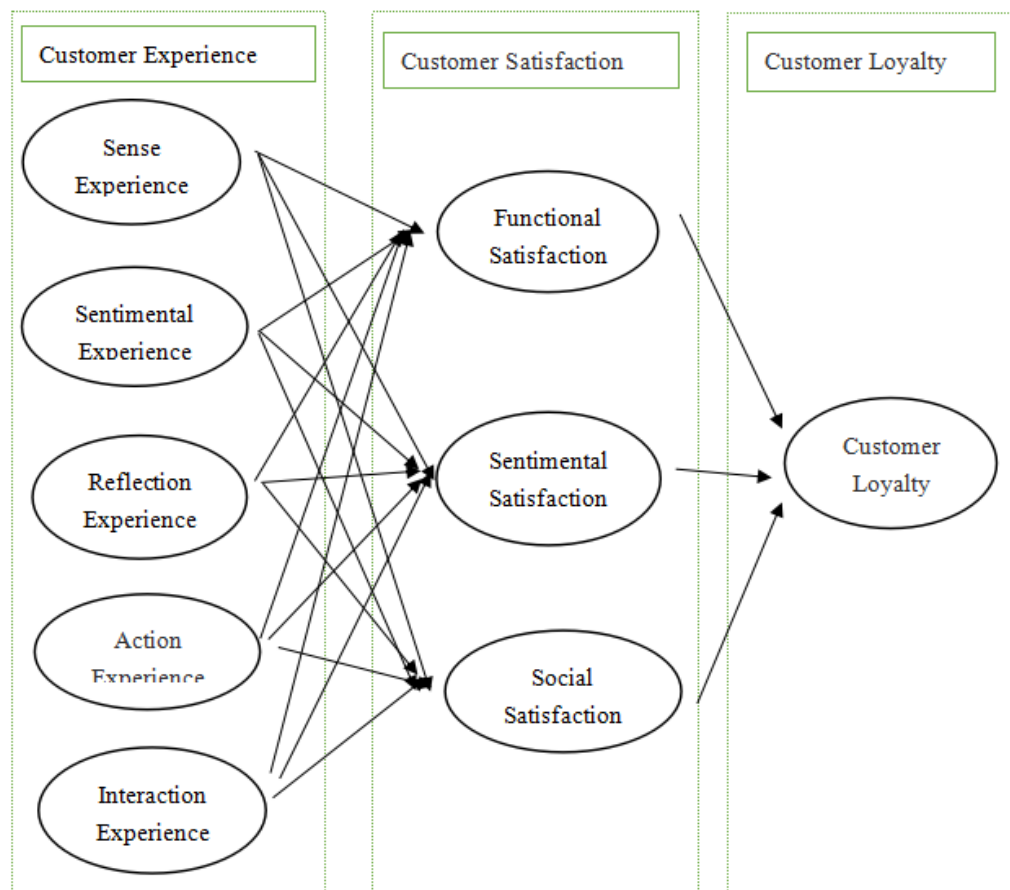
## **2. Influence of Customer satisfaction on customer loyalty**

In the last chapter, I analyzed the influences of customer satisfaction degree that customer experience has. Low conversion cost and low audience threshold are the main features of sports industry, which leads to low cost when customers switch to another sports item. For the audiences, this is advantage, whereas disadvantage to enterprises. However, customer satisfaction once in a while won't affect the overall customer experience. Only the enterprises remains a high degree of customer satisfaction that can they maintain a long-term customer loyalty, and long-term customer satisfaction leads to final customer loyalty. And customer's real loyalty would be affected through the change of their behavior and attitude if they have more satisfaction towards the games. A few hypotheses are made as follows:

- 1) Customer satisfaction has positive influence on customer loyalty
- 2) Functional satisfaction has positive influence on customer loyalty

- 3) Emotional satisfaction has positive influence on customer loyalty
- 4) Social satisfaction has positive influence on customer loyalty

Summary: by means of research assumptions, the author figured out that the interactive effects of sensory experience, scene experience, recreational experience, actional experience and interactional experience have positive influences on customer's functional satisfaction, emotional satisfaction and social satisfaction. Besides, the author thought that the integration of all the five types of customer experiences would be better than single dimension of customer experience. And customer experience-loyalty concept model of China Open was created, as Figure 1 shows below.



**Figure 1** Customer experience-loyalty concept model of China Open

## Research Methodology

### 1. Questionnaire design

The main part of the questionnaire sets up nine structural variables, corresponding to the relevant items, and uses the Likert scale to design the main part. The content of the scale is divided into 5 levels, namely 1, 2, 3, 4, and 5, corresponding to the five contents of disagree, disagree, unclear, relatively agree, and completely agree. The questionnaire is based on the customer's actual viewing environment, with 42 concise and clear representative questions, which are divided into nine parts. Six question items in the contextual part are set up for the physical and mental characteristics of customers, and the contents of the questionnaire are detailed in the appendix.

### 2. Data collection

The questionnaire is formulated based on the actual situation of the China Tennis Open, and the questionnaire is distributed through the Internet and on-site. The China Tennis Open starts on September 25th and ends on October 9th every year. This questionnaire survey time is concentrated in the first ten days of October. The survey will start on the 1st day, and on-site questionnaires will be distributed every other day. Questionnaires are mainly distributed on the outside of several stadiums, and the questionnaires are returned immediately after the competition. The questionnaires are distributed in a random manner, with one or two questionnaires being distributed to each person at a time.

There are 1000 copies in all, being affected by the complicated factors of actual courts, only 973 copies were distributed, actually, and 973 copies returned, among which 86 copies invalid. The collecting rate is 100%. There are two kinds of invalid questionnaires-54 incompleting copies and 32 single-answer copies. That means I collected 887 valid copies, which accounts for 91.2%.



## Results

### 1.Descriptive analysis

#### (1) Gender

Table 1 is the statistics of the gender data, it shows that, the total numbers of both gender, each percentage and relative information, Male is almost as twice as the female. There are 615 male samples, which accounts for 69.3%, and female 272, with 30.7%. The data proves that male audiences are the main stream.

**Table 1** Gender

	number	percentage	Valid percentage	Cumulative percentage
Male	615	69.3	69.3	69.3
Female	272	30.7	30.7	100.0
In total	887	100.0	100.0	

#### (2) age

The composition of each age group can be analyzed through this age statistics. Table 2 shows the audience numbers of each age group, and its percentage-there are 142 audiences younger than 20 years old, which accounts for 16.0%; and from 21 to 30, 467 people, which accounts for 52.6%; audience from 31 to 40 accounts for 20.4%, 181 people in all; 97 people older than 40, which accounts for 10.9%. Given the percentage of each age group, it proves that the main audiences of tennis game are under 40 years old, young people is the main stream.

**Table 2** Age

	number	percentage	Valid percentage	Cumulative percentage
Below 20	142	16.0	16.0	16.0
21-30	467	52.6	52.6	68.7
31-40	181	20.4	20.4	89.1
Above 40	97	10.9	10.9	100.0
In total	887	100.0	100.0	

## (3) Education

From the feedback of field survey on the educational data, we can analyze the sample data of educational level. In table 3, it shows that audiences whose educational level is lower than vocational school account for 14.7%; audiences with bachelor degree 76.4%, and the vocational school group 13.1%. It is concluded that people with high educational level are the main target of tennis open games.

**Table 3** statistics of educational degree

	number	percentage	Valid percentage	Cumulative percentage
Below senior high school	37	4.2	4.2	4.2
Senior High school or training school	56	6.3	6.3	10.5
Vocational school	116	13.1	13.1	23.6
Bachelor	521	58.7	58.7	82.3
Master or above	157	17.7	17.7	100.0
In total	887	100.0	100.0	

**(4) Profession**

From the feedback of questionnaires on site, we can analyze the occupational structure of audiences. As table 4 profession statistics shows, office workers and students account for 39.7% and 32.8% respectively, which are the most. The unlisted free lancer and others just account for 2.9%. It shows that the contents of this tennis court customer questionnaire survey are quite representative.

**Table 4** Profession

	number	percentage	Valid percentage	Cumulative percentage
Office worker	352	39.7	39.7	39.7
Free lancer	103	11.6	11.6	51.3
Government staff	50	5.6	5.6	56.9
Public institution staff	65	7.3	7.3	64.3
Student	291	32.8	32.8	97.1
others	26	2.9	2.9	100.0
In total	887	100.0	100.0	

## (5) Income

From the feedback data analysis of the questionnaire on audience's pretax income. As it shows in table 5, people who don't earn 3000 Yuan accounts for the most, which is 32.5%; and people earn 12000 Yuan or more accounts for 14.8%. From the date of their pretax income, medium income group is the main attraction of this game, and high income group relatively few. Of course, false information is not excluded.

**Table 5** Income

	number	percentage	Valid percentage	Cumulative percentage
Below 3000 Yuan	288	32.5	32.5	32.5
3001—5000 Yuan	132	14.9	14.9	47.4
5001—8000 Yuan	183	20.6	20.6	68.0
8001—12000Yuan	153	17.2	17.2	85.2
12001—20000Yuan	77	8.7	8.7	93.9
20001 Yuan or above	54	6.1	6.1	100.0
In total	887	100.0	100.0	

## (6) Residence

From the feedback of questionnaires on the audiences on site, I analyzed the residence information. In table 6, it shows that local customers are the main audiences of tennis open games, people from Beijing account for 75.2%, and Shanghai only 1.8%.

**Table 6** residenc

	Number	percentage	Valid percentage	Cumulative percentage
Beijing	667	75.2	75.2	75.2
Shanghai	16	1.8	1.8	77.0
Others	204	23.0	23.0	100.0
In total	887	100.0	100.0	

## 2.Normal distribution test

The Kolmogorov-Smirnov test is used in this tennis court customer survey. This method is used to test whether the data conforms to the characteristics of normal distribution. The significance standard is set to 0.01. As can be seen from the following table 7, the two-tailed

detection of each variable The significant result values for are: 0.06, 0.15, 0.32, 0.58, 0.49, 0.10, 0.16, 0.39. All exceeded the standard, and the questionnaire data basically conformed to the characteristics of normal distribution.

**Table 7** Single sample Kolmogorov-Smirnov checklist

		A	C	D	E	F	G	H	I
	N	887	887	887	887	887	887	887	887
extreme	absolute	.115	.206	.173	.120	.148	.208	.135	.166
difference									
	Positive	.088	.182	.167	.117	.109	.180	.133	.152
	Negative	-.115	-.206	-.173	-.120	-.148	-.208	-.135	-.166
	<b>Significance</b>	.06	.15	.32	.58	.49	.10	.16	.39

Summary: from the feedback results of customer questionnaires, we could figure out the characteristics of the data in China Open a follows:

- (1) Male audiences are more than the female
- (2) Adolescent customers are more than other age groups
- (3) Relatively High educational groups are the main part.
- (4) Distribution of customer's profession is all-sided, and the data is authentic.
- (5) Low percentage of high-income group, false information is possible.
- (6) Most audiences are local, income and time may become the main factors.

### 3. Structural equation test of the basic customer experience-loyalty model

#### (1) The overall goodness of fit test

In order to observe the degree of deviation between the observed value of the questionnaire survey data and the theoretical value, the chi-square test of the degree of freedom ratio data difference is used to show the difference between the sample and the expected difference. The best sample number is 200. I use the ratio of chi-square value to degrees of freedom. The sample size of this study is about 900. Generally speaking, the best value range of the ratio of chi-square value to degree of freedom ratio ( $\chi^2/df$ ) is 2~3, when the value is less than or equal to 5. The conditions are also met at the time. The degree of freedom in the field questionnaire data research is 303; the chi-square value is 1069.33; the significance probability is  $0.000 < 0.05$ ; the ratio of the chi-square to the degree of freedom is 3.529, see Table 8 for details.

**Table 8** Structural equation CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	102	1069.322	303	.000	3.529
Saturated model	405	.000	0		
Independence model	27	12502.276	378	.000	33.075

In order to further understand the content of the questionnaire information feedback in the competition field, RMSE is adopted, that is, the asymptotic residual mean square and square root, to test the goodness of fit of the data model and calculate the overall model complexity. RMSEA is a standard indicator of this test method, and its value is negatively linearly related to the degree of model adaptation. The specific standard is that the value is less than 0.01 is excellent; 0.01 to 0.10 is good; when the value is greater than 0.10, it is poor. The RMSEA value of the data model in this study is 0.53, which is located in the second paragraph. See

Table 9 for details. It can be seen that this model has good adaptability.

**Table 9** Structural equation RMSEA

Model	RMSEA	LO90	HI90	PCLOSE
Default model	.053	.050	.057	.051
Independence model	.190	.187	.193	.000

## 2. Parameter estimation

After testing the fitting degree of the customer experience-loyalty model, we found that the relevant data of the research model, that is, the overall customer experience model, are in compliance with the standard and the fitting degree is high. Based on this, we have expected expectations on multiple paths of the model Hypothesis test. The research includes both external and internal latent variables: there are four variables in part one, which are reflectional experience, experience, interactional experience and actional experience; and four variables in part two, which are customer loyalty, emotional satisfaction, functional satisfaction and social satisfaction.

## 3. Hypotheses test

According to the path coefficients of basic model (see table 10) which is constructed on the basis of questionnaire data collected from audiences on site, and the following various path coefficients of experiencing data, we can estimate whether the model assumption is true or not.



**Table 10** Path coefficients of structural equation model

	Estimate	S .E	C. R	P	Standard Estimate
functional satisfaction<---sensory experience	.452	.074	6.112	***	.330
Emotional satisfaction<---sensory experience	.229	.045	5.128	***	.245
Social satisfaction<---sensory experience	.322	.058	5.534	***	.258
Emotional satisfaction<---interactional experience	-.049	.050	-.986	.324	-.051
Social satisfaction<--- interactional experience	.375	.068	5.487	***	.290
Functionalsatisfaction<--- interactional experience	.347	.084	4.114	***	.245
Functional satisfaction <--- reflectional experience	.145	.091	1.591	***	.097
Emotional satisfaction <--- reflectional experience	.492	.060	8.244	***	.482
Social satisfaction<--- reflectional experience	.345	.073	4.701	***	.253
Social satisfaction<--- actional experience	.114	.066	1.722	***	.104
Emotional satisfaction<--- actional experience	.135	.040	3.347	***	.182
social satisfaction<--- actional experience	.063	.053	1.201	***	.064
Customer loyalty<---functional satisfaction	.132	.026	5.066	***	.235
Customer loyalty<---emotional satisfaction	.312	.041	7.625	***	.380
Customer loyalty<---social satisfaction	.172	.028	6.116	***	.281

The content in the first column of Table 10 is the preset paths of the structural equation model; and the content in the second column is the regression coefficients of the estimated values of several preset paths; the content in the third column is the error standard of the estimated values of several preset paths The content of the column refers to the ratio of the regression coefficient to the estimated value, that is, the standard error; the content of the fifth column represents the probability of significance, 0.05 is the significance standard, when the number is less than 0.001, it is ignored as \*\*\*; the sixth column is used to compare The first

column is the standardized regression coefficient of the control. In the fifth column of numerical data, it can be seen that only the evaluation of the social experience that is satisfied with the emotionality does not reach the significance level, and the values of the other paths all meet requirement that the value is less than 0.05, which reaches the significance criterion

## Conclusions

1) This research is set in China Open, with customer experience as its independent variable and customer loyalty dependent variable, and then found its relationship between them. We found that all the four experiencing dimensions set by this experiment have positively affected customer loyalty through customers' satisfaction.

Based on the comprehensive influences of various dimensions on customer satisfaction, it is found that the influences of customer satisfaction from customer experience is not single but multiple dimensions.

2) Customer experience—loyalty model is based on the content and audiences data of China Open, with the connection of performing characteristics of Industrialization of sports competition, and its rationality has been testified through actual data analysis. And therefore, eight basic dimensional models are created, with each includes internal & external causes.

3) Audiences involving in China Open are mainly male, which is about 70%, and ages from 21 to 30, almost 60% of them possess bachelor degree, and most of them are students and office workers, which reaches 73%. Audiences who earn 8000 Yuan or less counts the most, which is 66%, and most of them inhabit in Beijing, which is 75%.

## Suggestions

1) As for the consumption from the race watching, in fact, the audiences pay for the experience services catered by the sports games. Therefore, high-quality experiencing enjoyment from high-quality services and high-quality visual sense should be the core of the

marketing, and also the vital acceleration of customers and the games. The game host should focus on high quality, and the satisfaction of customers' sentimental value demand.

2) Customers' demands are not just limited in the visual aspects, physical & psychological experience and emotion connection are also included. The audiences are usually indulged in the emotion resonance created by the environment on site. Therefore, the tennis match need get to know different understanding from different audience groups, in order to satisfy their consumption concept and respect their consumption needs, excellent service offering to different income and age groups is quite necessary.

3) In order to get more audiences involved more in the tennis games, the host should do more homework on the marketing strategies, which includes the construction of racing environment, and face-to-face high-quality experiencing service. For example, a few bonus scenes which is like the ones in the movies could be prepared in advances, the players can interact with audiences with balls sharing, or pick up audiences at random to communicate with the players face to face. With these activities, audiences will get more involvement with the games, and have stronger bond with it.

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