



# Research on Improving Service Satisfaction of Fitness Club Based on Peak-End Rule

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**Abstract.** Peak-End Rule reveals the role of the customer experience formed at the critical moment of the service process in the overall customer experience perception. The correct management of the customer experience can improve customer value. Therefore, taking AB-Fitness Club as an example, this paper firstly analyzes the critical links that customers pay attention to in the fitness service experience through in-depth interviews, collection of website customer evaluation and questionnaire statistics. The qualitative analysis software NVivo is selected to conduct qualitative analysis on the data to determine the core needs of customers at the Peak-End time in the process of fitness. Second, the study finds out the core needs of customers at the peak-end time in the whole fitness process according to the customer journey map of AB-Fitness Club. Third, the service blueprint is put forward to meet the customers' core needs at the peak-end time. Finally, according to the problems presented by the research object, this paper puts forward some suggestions to optimize the customer experience and service satisfaction.

**Keywords:** service marketing · China's fitness club · peak-end rule · service blueprint

## 1 Introduction

### 1.1 The Shifting Fitness Industry with a Sinking Market

According to the Santiyun Sports Data Center statistics (2021), the total number of fitness club stores in China in 2020 is 44,300, a decrease of 5,550 from the previous year and a decrease of 11.1% from the previous year [9]. The success of China's COVID-19 prevention and control work has made China the only major economy in the world to achieve positive growth in 2020. As a result, China's sports and fitness industries have also recovered quickly. However, there exists a positive impact of the COVID-19. The people's health awareness and literacy are awakened, and the demand for fitness is also continuously growing. The number of people participating in fitness increased from 68.12 million last year to 70.29 million this year, an increase of 3.19%. In the future, as the per capita sports consumption expenditure of Chinese residents continues to increase, the sports consumption market and the segmented fitness consumption market will have a lot of room for growth. However, there are still a large number of gaps in the fitness market in second- and third-tier cities as consumption upgrades and demand releases. It will become a new fast-growing position for future fitness clubs.

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## 1.2 The Low Penetration Rate and a Huge Potential Market

Despite the rapid development of fitness clubs in recent years, the number of fitness members in the entire fitness industry in China is about 70.29 million (excluding Hong Kong, Macao and Taiwan). With a total population of 1.4 billion, the penetration rate of China's fitness population is only 5.02%, an increase from last year. 3.19%, mainly in first-tier cities such as Beijing, Shanghai, Guangzhou and Shenzhen. Compared with 15.20% in the United States, there is a nearly three-fold gap, and compared with the European average of 8.1%, there is also a gap of about 1.6 times. The low penetration rate of the fitness population in China indicates that China has a huge potential user market, and the growth space of China's fitness market is extremely broad.

China's support for the promotion and supervision policies of the sports and fitness industry has made the sports and fitness industry flourish. Among them, the promotion policy includes the theme of mass fitness and fitness and leisure industries for all, and the specific micro aspects include sports and fitness consumption, rehabilitation and fitness for the disabled, the reform of "licensing and license separation" in the field of sports, home fitness, resumption of work and production, and construction of fitness venues and facilities. The faster development of the fitness industry is yet to come. At the same time, the training and management of fitness trainers, the management of outdoor fitness equipment construction, and the supervision during and after the event in the sports field regulate the steady development of the fitness industry.

In addition, in the past five years, China has accelerated the implementation of the innovation-driven development strategy, firmly grasped the opportunities of the new round of scientific and technological revolution and industrial transformation, increased R&D investment, developed scientific and technological innovation service industry, and vigorously promoted the Internet of Things and cloud computing. The widespread application of a new generation of information technology, such as big data, etc., has spawned a large number of new industries, new formats and new models, such as the sharing economy, digital payment, and cross-border e-commerce, changed the traditional production and consumption methods, and satisfied the growing people. It also provides technical support for the fitness industry and other service products (Table 1 and Fig. 1).

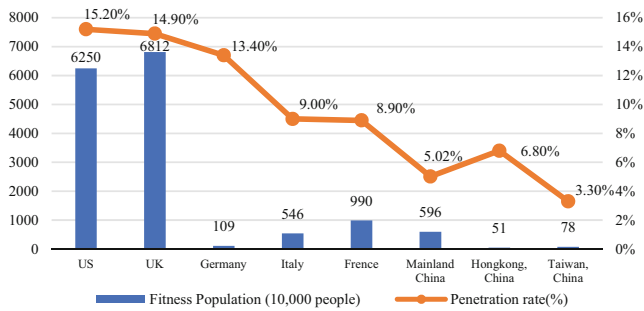
## 1.3 Return to the Service

For a fitness club, service is the essence of its business. But for a long time, gyms and fitness clubs in China, coaches' lectures, and private teaching hours are used to evaluate coaches' performance, making many gyms forced to focus on course selling instead of service quality. Returning to the essence of business, improving service quality, and digging deep into service value is the focus of the survival and development of fitness clubs in the future. The Marketing Mix Theory of 7Ps is developed based on the 4P, aimed at tangible marketing products. In contrast, the 7Ps marketing mix theory is developed for the service industry. For a fitness club, service is the essence of its business. But for a long time, gyms and fitness clubs in China, coaches' lectures, and private teaching hours are used to evaluate coaches' performance, making many gyms forced to focus on course selling instead of service quality. Returning to the essence of business, improving service quality, and digging deep into service value is the focus of the survival and development of fitness clubs in the future.

**Table 1.** Comparison of the Scale of the Fitness Industry and the Penetration rate of Fitness Population between China and Europe and the United States (Million)

Region	Fitness Club	Total Population (Million)	Fitness Population (Million)	Penetration Rate
U.S.	39125	329.00	50.00	15.20%
Mainland, China	44305	1400.00	70.29	5.02%
Hongkong, China	756	7.48	0.53	7.09%
Taiwan, China	305	23.58	0.71	3.01%
Germany	9669	83.20	11.66	14.00%
U.K.	7239	66.43	10.40	15.60%
France	4540	67.06	6.20	9.20%

The European population is calculated as of 2020.1; the population of China, Hong Kong, and Taiwan is calculated as of December 2019; (Source: The United States, Hong Kong, China, and Taiwan. The data comes from the 2020 IHRSA Global Report; German, English, and France data comes from European Health & Fitness Market Report 2020).



**Fig. 1.** China’s Fitness Population and Penetration Rate in 2020 (Unit: 10,000 people, %)

## 2 Theoretical Fundamentals

### 2.1 Peak-End Rule

Fredrickson and Kahneman (1993) put forward the Peak-end rule, which reveals that the feelings in the peak state of negative and positive experience and the feelings at the end of experience determine the individual’s memory of the whole experience [1]. This rule reveals the characteristics of experience according to the subconscious of the human cerebral cortex: after experiencing an event, the human brain can only remember the feelings at two points: the first is the climax in the event, that is, the “peak”; The second is the end of the event, which is called “end”. Suppose the customer’s experience is pleasant at the peak and end of an experience. In that case, his feeling of the whole experience is pleasant, even if the experience is generally less pleasant or even painful.

Peak-end rule visualizes the formation law of customer satisfaction to a great extent. It will help to decompose the key factors in the construction of customer satisfaction.

## 2.2 Service Blueprint

G Lynn Shostack (1982) put forward the Service Blueprint to summarize the whole customer experience process, known as the customer journey [11]. And the Peak-end rule points out the impact and role of the quality and content experienced by customers at the key moment of service on customer service evaluation. The use of a service blueprint can intuitively and clearly reflect the relationship between service details and link arrangements and customer experience, help enterprises effectively grasp the key points of customer concern, point out the weak links and key points related to service quality, and clarify the specific direction to improve customer experience and service quality [2].

## 3 Applying Peak-End Rule to Improve Service Satisfaction

### 3.1 IKEA'S USD 1 Ice-Cream

IKEA's shopping route is designed according to the Peak-end rule. Although the customer journey shows some bad experiences, such as the complex shopping route, too few employees to help customers, self-service of carrying goods from the shelves by ourselves, a long checkout line, etc., its peak-end experience is good [7]. Peak time is a small surprise in the process, such as intimate product detail design, the deals-of-the-day gadgets, immersive scene home furnishings, etc. End time is the famous USD 1 ice cream [4]. According to the customer journey map (see Fig. 3), find the peak point of positive feeling in the very gratifying-gratify-satisfy area, in which there are four peak points, No.6, 8, 9 and 14, and the final point, No.20, is USD 1 ice cream cone. In terms of cost, it may lose money for selling ice cream in USD 1, but this small investment brought IKEA an endpoint of inestimable value [8].

### 3.2 AB-Fitness Club's Peak-End Rule

Based on the above two theories, the process of improving the marketing of AB-Fitness Club includes the following three steps: Step 1, clarifying the whole process of members' service experience from arrival to departure. The entire process includes arrival, reception, price and checkout, locker room, fitness process, shower, leave and tracking services; Step 2: according to the results of in-depth interview and questionnaire, mapping out the customer journey map from the perspective of members (see Fig. 4); Step 3: depicting the behaviour flow chart of front and back-office employees according to the customer behaviour; Step 4: according to the above flow chart, listing the relevant, physical evidence of each step, and putting forward the service blueprint shown in Fig. 2 [5]. Therefore, the author conducted a questionnaire survey on 350 registered fitness members, and selected 30 of them for in-depth interviews [13].

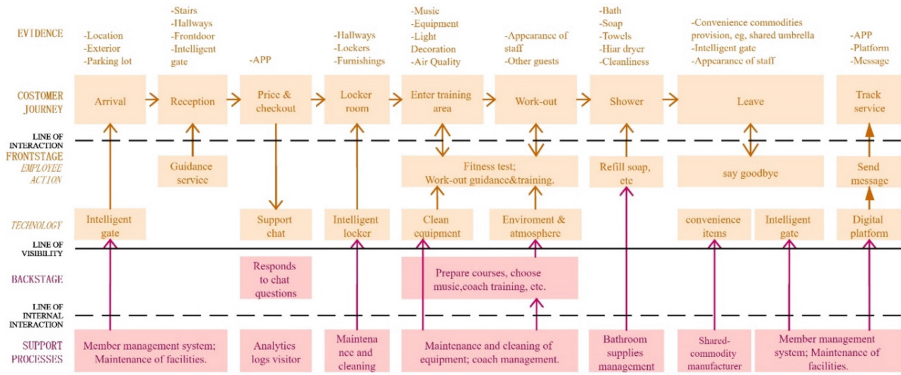


Fig. 2. Service Blueprint of AB-Fitness Club

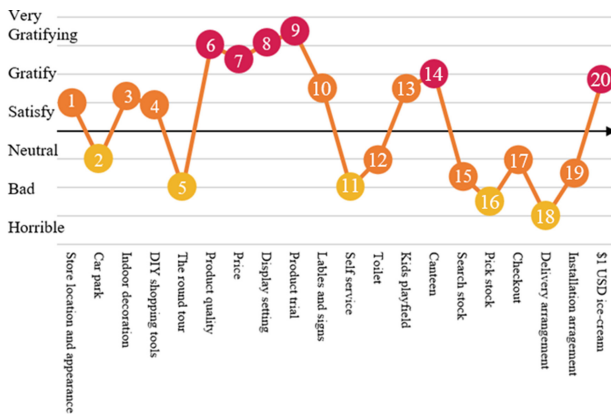


Fig. 3. Customer Journey Map of IKEA

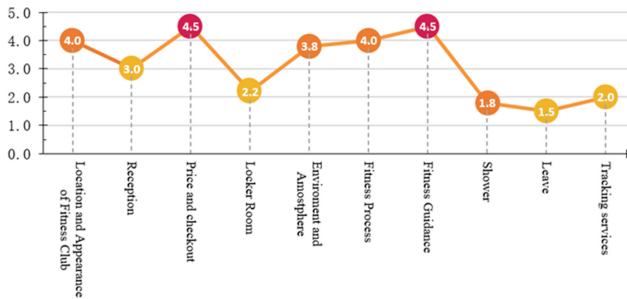


Fig. 4. Customer Journey Map of AB-Fitness Club

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According to the customer journey map of AB-Fitness Club in Fig. 4, the time point of "price and checkout (4.5)" and "fitness guidance (4.5)" are the highest scores, while the time point of "reception (3.0)", "locker room (2.2)", "shower (1.8)", "leave (1.5)", and "tracking services (2.0)" all get low scores. And the terrible feeling of the endpoint is easy to reduce consumers' overall satisfaction with the whole service experience [12]. Therefore, it is suggested to focus on strengthening the experience of leave and tracking services and putting forward standardized service processes to ensure the service quality of each branch.

## 4 Suggestions to AB-Fitness Club

### 4.1 Service People

Everyone in the consumption process directly or indirectly affects the customer's perception of service. According to the "Service Profit Chain" theory put forward by Heskett, Jones, Loveman, Sasser, and Schlesinger (1994), profit depends on: customer loyalty brought about by continuous customer satisfaction, and customer satisfaction is determined by service value. The value of service depends on the satisfaction and loyalty of employees [3].

For commercial fitness clubs, the relationship between profit, members, coaches and the company should follow the "service-profit chain" theory. For all employees, the fitness club needs to have a standardized store process, including employee recruitment process, experience class and formal class process, employee handbook, store manager work, etc.; for coach management, there should be a scientific performance appraisal system and incentive system and training programs. For customers and members, satisfaction surveys and complaints should be conducted on members on a regular basis.

### 4.2 Service Process

In the entire fitness service process, there are four factors that will affect consumers' perceptions. One is communication between customers. For example, if customer complaints are not handled properly, current or potential customers will be negatively

affected; the second is communication between employees. A harmonious employee relationship will have a positive impact on the entire service environment and services; the third is the communication between customers and employees. The appearance and attitude of employees will affect consumers' perceptions of service quality; the fourth is the hardware facilities of service places, and the appearance of service facilities is the physical evidence of the services provided.

- 1) *The Standardized Service Process*: If an enterprise wants to expand its market share, it must pay attention to its own service quality. The way to guarantee service quality is to establish a standardized service process model [6]. With the large-scale development of AB-Fitness Club, it is necessary to have the ability to replicate and standardized service procedures to ensure service quality quickly. During the three years of establishing AB-Fitness Club, we have tried our best to maintain standardization of store construction, from a visual image, function division, and equipment purchase. They have formed their unique style of yellow theme, but this part of the service process has not yet clearly defined a standardized process, resulting in a large gap in the overall service quality evaluation of each branch in the questionnaire results (Table 2).
- 2) *Strengthen Customer Complaint Management*: AB-Fitness Club's efficiency and attitude in dealing with the complaint directly affect customer satisfaction and loyalty. Therefore, it is suggested to pay great attention to failed services and the remedy and return visit of bad comments. However, according to the survey, the specific implementation of different stores is different, and many users are not satisfied. Therefore, AB-Fitness Club needs to improve the process and system further, strengthen complaint management, and implement various systems.
  - To set up a special team for service supervision or complaint handling, classify the complaint content, and hand it over to the professional team for handling.
  - To evaluate the complaint. The staff should assess whether the customer complaint content is reasonable according to the recorded information, appropriately communicate with the customer, eliminate the customers' misunderstandings and take appropriate remedial measures.
  - To analyze the causes of complaints.
  - To draw the solution. It is suggested to formulate problem solutions according to the requirements and actual situation of complaints.
  - The senior management is suggested to give instructions to the solutions.
  - To implement the plan, punish the relevant persons complained of, give customers feedback on the results.
  - To summarize the reasons, solutions, and feedback of complaints. It is suggested to write a summary report, analyze the shortcomings and formulate improvement plans.
- 3) *Add Interaction, Complaint and Suggestion Functions in APP*: Set up an effective system to deal with customer complaints, sincerely care for customers and understand customer needs, open accounts on multiple different platforms, add customer

**Table 2.** Standardized Service Process of Fitness Club

stage	content	Standardized service process
First visit	First impression	Enthusiastic and generous, lead customers to visit and introduce, introduce AB's brands, coaches, products, and fill out health questionnaires.
Fill in the table	Know the customer	Learn more about customers' fitness needs, and understand their daily name and contact information. Establish a tacit relationship and make an appointment.
Physical test	risk assessment	Detailed posture assessment, physical test, movement screening, professional data analysis, help clients develop training programs
Experience class	Customer experience	Take the formal class as the standard
Receives an order in the SaaS system	Make a class plan	Customers must receive the plan (overall plan and training plan on the day) before arriving at the store
Before the customer arrives at the physical store	Preparation before class	Pack the equipment and venue; wear clean clothes, wear work clothes, and hang a stopwatch
When the customer arrives at the physical store	Welcome to the store	Enthusiasm, shout out the form and position of the customer (except in class)
Before the customer attends class	Warm up	5–15 min, aerobic, foam roller
Class time	Class as planned	Drink water every 15 min
Customer after class	Stretching, taking photos for comparison	For 10 min, men do not wear clothes to shoot; women wear underwear to shoot or part of the shoot (all with the customer's consent)
Customer dismissal	Encourage customers	Ask customers about their feelings and encourage them; the rotating store manager reminds customers to evaluate in the system
When the customer leaves	Send the customer to the door of the store	Say goodbye to the customer. If it rains, give the customer an umbrella or the shoe cover prepared in advance

*(continued)*



**Table 2.** (continued)

stage	content	Standardized service process
The first day after class	Customer care	Ask if the customer is in any condition
Between two classes	Supervision and daily care	Make regular appointments with customers to learn about their latest physical condition
After one stage of training (one month)	<i>Analysis of data, evaluation, photo comparison</i>	<i>Thirdly, the body measurement evaluation is carried out, and the data of the two times are compared and analyzed to summarize the results of this stage</i>

service communication function in the app, and strengthen communication with customers. Provide users with targeted suggestions to further improve user loyalty. At the same time, it is necessary to strengthen communication with users and improve the brand affinity of AB-Fitness Club.

### 4.3 Physical Evidence

G Lynns Shostack (1977) introduced the term “service display management” to explain the management of tangible clues related to the delivery of services to improve consumers’ perceived value of services [10]. When consumers purchase products and services, they are accustomed to obtaining initial impressions through touchable things and making purchase decisions accordingly. In the process of sales of fitness services in fitness clubs, obviously the service is not directly perceivable. It is abstract in itself and cannot convey tangible characteristics to customers. Therefore, companies need to use tangible displays to replace intangible services to convey the characteristics and advantages of their services and brands to customers. In other words, fitness clubs often need to use all tangible clues such as internal physical environment, employee image, employee service behaviour, external brand carrier, business information, etc., to convey the characteristics and advantages of their own services, so that consumers can expect, deepen the experience and form memory.

The tangible display can help consumers build consumer confidence and promote the enterprise. For consumers, when they first consume, they will have hesitation and worry due to various uncertain factors, which will affect their consumption decision; or excessive consumption expectations will bring dissatisfaction after consumption. The tangible display is to help the corporate image vividly convey service promotion information. For companies, physical evidence can be used as an entity part of the company to establish a brand image, allowing consumers to remember the overall image of the company, thereby increasing visibility; tangible display can create a good working environment, help employees position themselves, and encourage them Provide customers with quality service. A high-quality service environment can provide service personnel with a good working environment so that employees feel that the company cares about

them and encourage them to provide high-quality services to consumers; tangible displays can also improve the quality of interaction among all participants in the service process. For example, the equipment and facilities in the fitness club will affect the communication between service staff and customers, and between customers and customers. For example, adjusting variable factors such as the distance between treadmills, the size and location of rest tables and chairs in a service place can define the possibility and limits of communication between consumers and service personnel or consumers.

## 5 Conclusion

With the help of the Peak-end rule, this article puts forward practical suggestions on the marketing strategies of AB-Fitness Club from the customer journey map and service blueprint according to the data collected from the questionnaire and in-depth interview. The development concept of team building and service-oriented, deeply understand and master the needs of customers, improve the quality and effect of products and services, find diversified development paths, and enable the club to embark on a healthy and sustainable development path.

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