



## REVIEW

# Service Quality Measurement and Competition Strategy Analysis of Online Shopping

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### ARTICLE INFO

#### Article history

Received: 28 October 2019

Accepted: 31 October 2019

Published Online: 15 November 2019

#### Keywords:

Online shopping

Importance-Performance Analysis Model

Service quality

Competition strategy

### ABSTRACT

E-Commerce refers to such business behavior as conducting trades on a virtual network through the Internet. The core elements contributing to the success of online stores include not only the web-based presentation and the low-price strategy but the quality of online service as well. Importance-Performance Analysis is a method frequently used to evaluate performance and analyze competition strategies. Using IPA, this study analyzed and investigated the service quality of the online shopping of a case company and proposed 10 indexes to measure the service quality of online shopping. A number of suggestions on competition strategies were provided for the case company to improve its competition strategies.

## 1. Introduction

In the face of the diverse online shopping models adopted by consumers, existing online businesses must focus on and get to know consumer demands. Moreover, they must strive to increase the browsing rate and the re-visit rate of their websites, so as to convert such visits into actual transactions and make profits. For new online shopping businesses, the competition in the online market is fierce because the threshold of entering the market is low. Therefore, they need to achieve an accurate market orientation and division and prevent their products or management models from being imitated in order to create their strengths in the competition.

E-commerce refers to such business behavior as conducting trades on a virtual network through the Internet. E-commerce is classified according to the scope of the en-

terprise function and the category of the client. Common classifications are as follows<sup>[1-2]</sup>:

(1) Business to Business (B2B): B2B is an interaction between enterprises that connects the suppliers, customers, and relevant enterprises sharing the same objective. The supply chains are combined through the Internet to engage in enterprise resource planning management, which can save costs and increase efficiency.

(2) Business to Customer (B2C): B2C refers to an enterprise's marketing for its customers. An enterprise puts its products onto the Internet and sells them online. Apart from offering adequate information and interfaces to attract customers, it enables customers to order products on the Internet.

(3) Customer to Customer (C2C): In most cases, the seller and the buyer are not wholesale businesses. With the aim of selling their objects, they do business in a trade

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market of a specific type. The website operator does not offer logistics services but establishes a trade platform for the gathering of products. The seller and the buyer follow the transaction procedure.

(4) Customer to Business (C2B): The product dominance is given by businesses to customers. Consumers form a community according to demand and then seek business opportunities through the collective price negotiation of the community. The C2B model focuses on replacing the traditional shopping center crowded with suppliers with a demand aggregator.

According to Zeithaml, Parasuraman & Malhotra<sup>[3]</sup>, the core elements contributing to the success of online stores include not only the web-based presentation and a low-price strategy but the quality of online service as well. Rust and Kannan<sup>[4]</sup> believed that the services offered by online stores are no longer confined to the delivery of a transaction order and the immediate response to customer problems; a real online service is supposed to provide customers with an experience of information interaction and is taken as an approach to enhance consumer satisfaction and loyalty<sup>[5]</sup>.

Importance-Performance Analysis is a method frequently used to evaluate performance and analyze competition strategies. Using IPA, this study analyzed and investigated the service quality of the online shopping of a case company. The research results could be utilized by the case company to improve its competition strategies.

## 2. Literature Review

### 2.1 Features of Online Shopping

Online stores sell products without a physical store. They have many distinctive features and strengths that cannot be found in a physical store, including:

(1) A lower management cost: Size, location, and customer flow must be taken into consideration for a physical store, so the investment in and management costs of a physical store are relatively higher. Running a virtual online store will not only save the fixed cost but also sell products to customers in different places around the world thanks to the wide coverage of the Internet.

(2) A larger market: Different from a physical store, which is limited by location and cannot expand its products or services within a short time, an online store can increase quantities and product lines without limitation to expand its market. For instance, Amazon.com started with the selling of books and then reached out to gifts and CDs. An online store offers more diverse products than a physical one.

(3) Abundant information about products: The information about the products of an online store is released on

the Internet and is accessible to consumers throughout the day. Its diverse products, complete information, and immediate response time have significantly improved upon traditional transactions, which are difficult to perform due to the inaccessibility of product information and information asymmetry before the purchase.

(4) Convenient shopping and little pressure: Consumers can purchase products without stepping out of their houses if they shop online. They do not need to worry about bad weather, nor do they have to carry a shopping bag. Instead, they can stay at home and buy things in a relaxing way while enjoying the trip across the virtual world.

### 2.2 Service Quality of Online Shopping

According to Zeithaml, Parasuraman & Malhotra<sup>[6]</sup>, the traditional dimension of online service quality is not applicable to the online transaction context, because traditional transactions are conducted by staff but online transactions are performed through the interactions between website and client. There is a difference in the cognition of service quality.

Parasuraman, Zeithaml and Malhotra<sup>[7]</sup> gave a clear definition of e-Service Quality (e-SQ). For them, e-SQ means a “website can promote shopping and increase the efficiency and efficacy of product and service delivery”.

Parasuraman et al.<sup>[7]</sup> proposed the following seven important dimensions of online service quality: efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact.

As a whole, the service quality of online shopping can be defined as the degree of the overall comments of customers on the shopping service delivered by online shopping service suppliers through the Internet. In addition, online shopping and product delivery are also included in the service quality of online shopping.

In order to eliminate the weaknesses in the traditional measurement methods of service quality, increase the effectiveness of measurement, and analyze the operation strategies of shopping websites, this study proposed 10 indexes to measure the service quality of online shopping and gave some suggestions on competition strategies. The details about these 10 indexes are shown in Table 1.

## 3. Research Method

The basic framework related to Importance-Performance Analysis (IPA) was first proposed and put into practice by Martilla and James<sup>[8-10]</sup>. IPA converts the average score of the importance and performance of service property into a two-dimensional diagram, with the vertical axis representing importance and the horizontal axis representing

performance, as shown in Figure 1 [11-13].

The four quadrants in the IPA method have their own definitions, as noted below [14-16]:

(1) Keep up the good work: This means that customers pay close attention to the service quality items in this quadrant and are satisfied with the service performance of the enterprises. Therefore, the service quality items in this quadrant belong to “keep up the good work”.

(2) Concentrate here: This means that customers pay close attention to the service quality items in this quadrant but are not satisfied with the service performance of the enterprises. Hence, the service quality items in this quadrant fall into “concentrate here”.

(3) Low priority: This means that customers pay little attention to the service quality items in this quadrant and are not satisfied with the service performance of the enterprises. Therefore, the service quality items in this quadrant belong to “low priority”.

(4) Possible overkill: This means that customers pay little attention to the service quality items in this quadrant but are satisfied with the service performance of the enterprises. Hence, the service quality items in this quadrant fall into “possible overkill”.

By dividing different areas, managers can make the most effective use of limited resources, recognize the strengths and weaknesses of market competition, and offer the priority of improvement, so as to enhance customer satisfaction [17-18]. IPA is a method which can directly reveal the quality and improvement of quality. It has been introduced by many scholars to other fields to define the priority of quality improvements and offer the tools expected by clients [19-20].

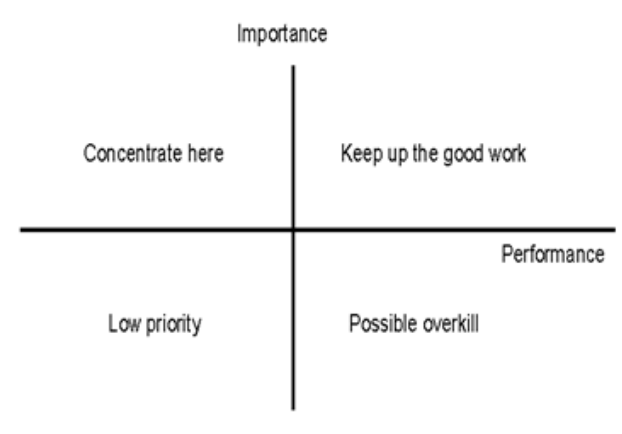


Figure 1. IPA chart

## 4. Research Results and Discussion

### 4.1 Case study

Company X is a B2C shopping website that ranks among

the top three in Taiwan. Taking Company X as a case, this study analyzed its service quality and competition strategies. A Likert 7-point scale was applied to this questionnaire, which consisted of 10 measurement indexes. In the investigation, 560 copies of the questionnaire were distributed among the consumers of shopping websites, and 418 valid ones were retrieved, for a valid retrieval rate of 74.64%.

### 4.2 Research Results and Discussion

In this study, the average importance (5.83) and the average performance (5.65) were taken as a standard coordinate to evaluate the performance of all indexes. The details are shown in Table 1.

Table 1. Service Quality Measurement and Competition Strategies of Online Shopping

No.	Item	Importance	Performance	Competitive Strategy
1.	Desired information can be easily found on websites.	5.4	5.5	Low priority
2.	Transactions can be done quickly on websites.	5.3	5.5	Low priority
3.	Websites are easy to use.	5.9	5.5	Concentrate here
4.	Websites are always in normal operation.	6.1	5.9	Keep up the good work
5.	Websites have high popularity.	6.2	6.0	Keep up the good work
6.	The products sold on websites are genuine.	5.9	5.8	Keep up the good work
7.	Products can be correctly delivered with clear promise.	6.1	5.8	Possible overkill
8.	Compensation is made for problematic transactions.	5.7	5.8	Possible overkill
9.	Websites will protect information about online shopping.	5.9	5.5	Concentrate here
10.	Websites will not share personal information with each other.	6.00	5.2	Concentrate here
Average		5.83	5.65	

According to the research results, “Websites are always in normal operation”, “Websites have high popularity”, “The products sold on websites are genuine”, and “Products can be correctly delivered with clear promise” fell into “Keep up the good work”. These represent the strengths of the service quality of Company X and should be kept to maintain high service performance.

“Websites are easy to use”, “Websites will protect in-

formation about online shopping”, and “Websites will not share personal information with each other” belonged to “Concentrate here”. These are the weaknesses of Company X regarding competition. Therefore, it must focus its resources on improving the service quality and performance of these three indexes to enhance its competitiveness.

“Products can be correctly delivered with clear promise” and “Products can be correctly delivered with clear promise” fell into “Possible overkill”. Company X performs well, but this fails to bring it higher service satisfaction. Hence, it should try shifting its resources to other competition indexes.

“Desired information can be easily found on websites” and “Transactions can be done quickly on websites” were included in “Low priority”. These two service quality indexes can be improved if Company X has more resources.

## 5. Conclusions

The competition in the online shopping market is quite fierce, therefore enterprises should achieve an accurate market orientation and division and prevent their products or management models from being imitated in order to create their strengths in the face of competition. Most importantly, they must get to know the elements consumers consider in the evaluation of the service quality of online shopping and meet customer needs. Using IPA, this study analyzed and investigated the service quality of the online shopping of a case company and proposed 10 indexes to measure the service quality of online shopping. A number of suggestions on competition strategies were provided for the case company to improve its competitiveness.

The research findings showed that “Websites are always in normal operation”, “Websites have high popularity”, “The products sold on websites are genuine”, and “Products can be correctly delivered with clear promise” fell into “Keep up the good work”. These are the strengths of the service quality of Company X and should be kept to maintain high service performance.

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