# RESEARCH ON INFLUENCING FACTORS OF SERVICE QUALITY SATISFACTION OF ONLINE EDUCATION COMPANIES

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#### **ABSTRACT**

The purpose of this study was to explore the factors affecting students' and parents' willingness to learn online in Binzhou City, Shandong Province. A quantitative study of population in Zouping City, Binzhou City, Shandong Province, China was carried out through simple sampling. The research tool was questionnaire survey and servqual model was used to obtain the views and opinions on current online education. Online education is the crossover integration of Internet and education industry. Through network information technology, the teaching management and evaluation of the education industry are improved, which not only improves the efficiency of the education industry, but also provides a different education environment and optimizes the process and model. It changes the basic flow, basic operating rules, basic form, basic mode, basic flow and basic flow of education service. This brings the innovation of teaching, management and service system in education industry.

Keywords: Online education, SERVQUAL model, quality of service

#### INTRODUCTION

#### 1.1 Background

In primitive society, the mainstream of education is small and personalized education. After the industrial society, the teaching content is divided into different subjects, set up different courses according to the class, and then carry out unified teaching. This method of teaching improves the coverage of education on a large scale, but loses the advantage of individualized teaching. It can be said that the Internet of education, to a certain extent, has realized the personalized education and high coverage. The development of online education in China can be divided into the following stages: The beginning stage of online education: From the late 1990s to 2005, the Internet was just starting in China, and the experience of online education was poor. Second, explore the survival stage. From 2006 to 2012, the network bandwidth service has been perfected, online educational video courseware has become the mainstream, and the business enterprise model is being explored. Third, rapid growth stage: from 2013 to 2017, Internet technology upgrading and mobile Internet provided space for the development of online education. Since 2018, market resources have been integrated, technological progress has been made, service upgrades have been made, and service models have been continuously

innovated. At the same time, the market competition is fierce, the product system is mature. In addition, the pandemic has forced the teaching scene to shift from offline to online, which has changed users' learning habits to some extent. The rapid increase in industry penetration has greatly promoted the development of online education industry.

#### 1.2 Research Questions

How does servqual's content in several dimensions affect people's satisfaction with the quality of online education services

# 1.3 Research Objectives

- 1. To explore servoual's several dimensions affect the service quality of online education
- 2. To obtain people's satisfaction with the service quality of online education

#### 1.4 Research Hypothesis

- H1: Tangibility have a positive effect on the quality of service.
- H2: Responsiveness have a positive effect on the quality of service.
- H3: Reliability have a positive effect on the quality of service.
- H4: Empathy have a positive effect on the quality of service.

#### LITERATURE REVIEW

#### 2.1 The concept of online education

Online education, as the name implies, is a web-based teaching method. Through the Internet, students and teachers can teach even if they live thousands of miles apart. In addition, with the help of network courseware, students can learn anytime and anywhere, truly breaking through the limitations of time and space. Distance education is the most convenient way to learn in a busy workplace where learning time is not fixed. It also refers to the learning in the electronic environment composed of communication technology, microcomputer technology, computer technology, artificial intelligence, network technology and multimedia technology, which is based on technology.

The method of content dissemination and rapid learning through the application of information technology and Internet technology. Online education includes e-learning, efficient learning, exploratory learning, experiential learning, expanded learning, extended learning, easy-to-use learning and reinforcement learning (Xiao Gang, 2012).

Many education platforms are poorly positioned and do not have a clear analysis of who their products are intended for. As a result, the business model and system of online education are unclear and cannot meet the real needs of learners, leading to the loss of students (Xiong Bingqi). The following is a brief introduction to the four major education platform models.

#### B2B model

Online education enterprises provide services to organizations such as enterprises or universities, such as management and marketing training for enterprises, and multimedia learning content for university libraries. Online education enterprises provide a complete set of solutions to the needs of users, mainly education services, more inclined to consult and solve practical problems;

### B2C model

Online education businesses provide services to individuals. For example, the network school model reflects the education system of traditional universities on the Internet, which pays more attention to the dissemination of professional knowledge. Even in many cases, they have to accept exam-oriented education and help users obtain relevant qualifications to meet the needs of users.

#### C2C mode

Online education enterprises do not directly participate in education work, but platform online education enterprises build a platform for educators and learners to communicate with each other. Based on information content, they check the entry threshold of educators and improve the drainage of learners as operational means, and gather everyone's strength to improve the comprehensive content of the platform.

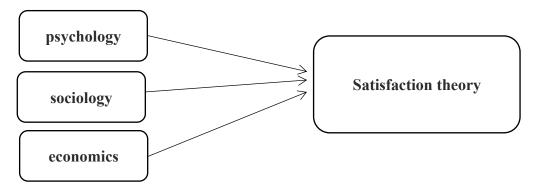
#### O2O model

This model is a combination of online and offline education. Due to the limitations of some teaching contents and existing technologies, offline education is needed to better enable learners to master the learning content, such as art, sports and natural science. Education enterprises can develop better only by recognizing the characteristics of their own products, correctly distinguishing the actual needs of customers and clarifying the educational mode of enterprises.

# 2.2 Concept of satisfaction

Satisfaction is a state of mind that refers to a person's subjective assessment of the quality of a relationship. It is the feeling of pleasure after customers' needs are met, and the relative relationship between customers' expectations of products or services in advance and actual feelings after using products or services. If there is a number to measure this state of mind, it is called satisfaction, and customer satisfaction is the basic condition of customer loyalty (Taylor Peplau Sears)

The theoretical basis of customer satisfaction



# 2.3 Discussion on service quality based on SERVQUAL Scale

SERVQUAL, short for "service quality", first appeared in an article titled "SERVQUAL: A multi-question Measurement scale for customer perception of service quality" co-authored by Parasuraman, zethaml, Berry and other authors. SERVQUAL theory is a new service quality evaluation system based on total quality management (TQM). The core of Servqual's theory is the Service quality gap model. The Quality of Service scale contains 22 items in five dimensions.

Parasuraman, Zeithaml and Berry divided the service quality scale into five dimensions, including:

- (1) Tangible assets: tangible assets include physical facilities, equipment and lists of service personnel.
- (2) Reliability: Reliability refers to the ability to fulfill service commitments reliably and accurately.
  - (3) Responsiveness: Responsiveness refers to a quick response or solution to customer needs.
- (4) Warranty: Warranty refers to the employee's knowledge, etiquette and ability to express confidence and trustworthiness.
- (5) Empathy: Empathy refers to caring for customers and providing customers with personalized services.

Excellent service should exceed customers' expectations of service quality, and the core point of providing excellent service should exceed customers' expectations. Many dimensions affecting service quality were finally summarized into 5 dimensions and subdivided into 22 items by PZB. The SERVQUAL measurement tool has been used and copied in the industry. Although the SERVQUAL measurement method is controversial, it has scientific guiding significance and practical significance.

# 2.4 Customer satisfaction theory

Customer satisfaction has always been the focus of research in all walks of life, and customer repeat purchase will be affected by customer satisfaction. After customers are satisfied with the products of the enterprise, they may recommend them to relatives and friends for wordof-mouth communication. Moreover, good word-of-mouth communication can enhance the company's image and bring benefits. If an enterprise wants to stand out in the market, winning

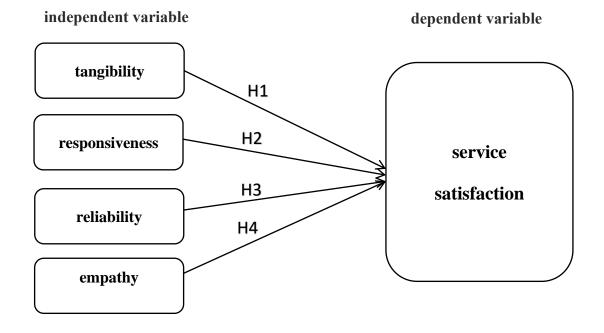
the favor of customers is the top priority. At the same time, one of the most effective ways is to make the company's customers satisfied, and on this basis, keep the customers loyal to the company. Thorsten, Hennig-Tulau point out that customer satisfaction with a company's product or service is often seen as key to its success and long-term competitiveness. Moreover, in the context of relationship marketing, customer satisfaction is often seen as the core determinant of customer retention.

#### 2.5conceptual framework

To sum up, firstly, due to the diversity of the service industry, the characteristics and importance of service quality evaluation are different, but mainly customer evaluation. Service quality is basically composed of five dimensions, but the analysis dimensions of service quality are also different due to different research fields and service objects. In the process of online education services, among the problems highly concerned by customers, online education institutions pay close attention to teachers, teaching evaluation, learning resources, teaching activities, questions, information consultation, institutional mission, complaints and feedback and other indicators. SERVQUAL is widely used in higher education, but there are relatively few cases of SERVQUAL being used in online education. To make the SERVQUAL model more realistic, the traditional dimensions need to be modified appropriately for different research objects and domains.

The research framework of this chapter is as follows:

Research framework



#### **METHODOLOGY**

# **Correlation analysis:**

The coefficient of independent variable X1 (corporeal) is 0.226, the standardization coefficient is 0.181, the T-value is 3.030, and the significance level is 0.003, indicating that corporeal influence on the dependent variable is significant and positively correlated. The tangibility has the greatest influence on the dependent variable.

The coefficient of independent variable X2 (reliability) is 0.113, the standardization coefficient is 0.098, the T-value is 1.731, and the significance level is 0.084, indicating that reliability has no significant influence on the dependent variable.

The coefficient of independent variable X3 (responsiveness) is -0.029, the standardization coefficient is -0.027, the T-value is -0.499, and the significance level is 0.618, indicating that the influence of responsiveness on the dependent variable is not significant.

The coefficient of independent variable X4 (empathy) was 0.190, the standardization coefficient was 0.145, the T-value was 2.748, and the significance level was 0.006, indicating that the influence of empathy on the dependent variable was significant and positively correlated. The following is the support of the independent variables for this study:

# Hypotheses Result

No.	Hypotheses	Result
H1	The service tangibility of online education companies will have a	supported
	positive impact on service quality	
H2	The service responsiveness of online education companies has a	Supported
	positive impact on service quality	(non-
		significant)
Н3	The service reliability of online education companies will have a	Supported
	positive impact on service quality	(non-
		significant)
H4	The service empathy of online education companies has a positive	supported
	impact on service quality	

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