RESEARCH ON THE INNOVATIVE APPLICATION OF CUSTOMER RELATIONSHIP MANAGEMENT IN MANAGEMENT SYSTEM CERTIFICATION INSTITUTIONS ACM CERTIFICATION (CHINA) LIMITED IN SHANGHAI, CHINA

Shuaiqing Du
Copyright by Suan Sunandha Rajabhat University
E-Mail: 64563829062@ ssru.ac.th

ABSTRACT

At the beginning of the 21st century, marketing gradually shifted from focusing on brand centricity to customer centricity; Enterprises must have the ability to access, manage, and use information, with a customer-centric approach, in order to generate competitive advantages and achieve sustainable operations. Customer Relationship Management (CRM) is a management methodology that focuses on treating a company's customers as the most important resource. Through continuous improvement of customer service and in-depth analysis of customer needs, it meets customer needs and expectations, continuously providing maximum value to customers while realizing the company's own value and social value. Studying the application of CRM in different industries is an important branch of current marketing studies.

Keywords: Credibility, pricing, service quality, policy orientation, customer relationships

INTRODUCTION

1.1 Background Analysis

The certification bodies in China are different from those in foreign countries. Most of them are administrative, public, or state-owned enterprises established by the government and are products of planned economy. For a long time, certification agencies have lacked awareness of serving customers and only have objects of supervision. The concept of no customer relationship management is mainly manifested in: 1. When accepting customer authentication services, there is little proactive inquiry about the customer's true needs, and there is little explanation or solicitation of customer opinions; 2. The certification body is only responsible to the higher-level administrative department, not to direct customers, and the degree of transparency of the certification process to customers is not sufficient; 3. Rarely communicate proactively with customers regarding any anomalies, deviations, or other issues that may occur during the certification process; When there is a dispute over the certification result, it is rare to actively negotiate with customers. In short, customers basically have no right to know, let alone supervision, and can only accept the certification results provided by the certification agency.

1.2 Understanding Customer Relationship Management

In recent years, CRM has been increasingly valued by various organizations, and enterprises need to use CRM methods to strengthen their relationships with customers. There are two important factors: firstly, the improvement of enterprise quality management and

service awareness, and the full attention to the "customer-centric" business philosophy. Secondly, the rapid development of information technology combines the "customer-centric" business philosophy with information technology, which can comprehensively enhance the relationship with customers. Especially in industries where monopolistic behavior has existed for a long time, it is challenging to implement CRM. With the development of market economy and the trend of global trade integration, monopolistic industries are gradually shifting from market competition to service quality competition. Enterprises that rely on monopolistic behavior will find it increasingly difficult to compete within the industry in the future.

1.3 Significance of research

CRM is a set of methods and technologies used by enterprises to manage customer relationships. The use of CRM can enable management system certification agencies to conveniently, quickly, and effectively manage customer relationships. The relationship with customers is crucial for any management system certification agency. Customers are the foundation for the survival and development of a company. Without customers, an enterprise has no meaning of existence. Therefore, in order to survive, enterprises should prioritize meeting customer needs, clarify who their customers are, actively understand their needs, study how to meet their needs and expectations, and maintain relationships with customers.

1.4 Research questions

(1) What are the industry overview, risks, and opportunities of China's management system certification?

(2) What are the factors that affect the implementation of customer relationship management in the Chinese management system certification industry?

(3) What are the common issues and corresponding improvement measures in the framework of China's management system certification industry?

(4) What are the common issues and corresponding improvement measures in the workflow of China's management system certification industry?

(5) How to use customer relationship management to balance the interests of customers and other stakeholders?

1.5 Research Objectives

(1) Through a questionnaire survey, common issues in customer relationship management in the Chinese management system certification industry were identified, including implementation status, system framework, and workflow;

(2) Propose targeted improvement measures;

(3) Propose opinions on balancing the interests of customers with those of other stakeholders;

(4) Provide reference for other management system certification agencies to promote customer relationship management.

1.6 Explanation of Terms

Customer relationship management (CRM): refers to the process in which an enterprise, in order to improve its core competitiveness, uses the corresponding information technology and Internet technology to coordinate the interaction between the enterprise and customers in sales, management and service, so as to improve its management performance and provide customers with innovative and personalized customer interaction and services. Its ultimate goal is to attract new customers, retain old customers, and turn existing customers into loyal ones, thereby continuously increasing market share.

LITERATURE EXPLORATION

This article aims to study customer relationship management in the Chinese management system certification industry, and conduct in-depth analysis of the main research variables from domestic and foreign websites, databases, academic databases, and government information. The main variables studied in this article include credibility, price, service quality, policy orientation, and the correlation between analysis and customer relationship management; Establish research hypotheses based on the data from the above variables.

2.1 Industry Situation

The construction of quality infrastructure continues to advance, and China's internationally recognized calibration and measurement capabilities have jumped to the third place in the world. The consistency between standards in the main consumer goods field and international standards has reached over 95%. The number of certification and accreditation certificates issued and the number of certification organizations have both ranked first in the world. Measurement foundation, standard guidance, qualification evaluation, and policy incentives effectively help to increase variety, improve quality, and create brands, and the quality qualification rate of manufacturing products remains stable at over 90%.

2.2 Competitor Analysis

Internationally renowned certification bodies have a large scale, sufficient capital, numerous branch offices, complete equipment, and sufficient personnel. These institutions can provide a large number of different types of collaborative service effects on a global scale with their abundant resources. The scale of China's management system institutions is relatively small, mainly composed of private institutions, including capital and total assets, with operating income far from internationally renowned institutions.

2.3 Customer Relationship Management

2.3.1 Definition of Customer Relationship Management

As an emerging management concept, customer relationship management has been defined by researchers and institutions. Scholars have their own focuses on the definition of customer relationship management.

2.3.2 Classification of Customer Relationship Management Research

Customer relationship management can be divided into research on humanistic management and research on information technology, as shown in Table 2. The research object of customer relationship management is to treat customer relationships as a static entity, study customer relationships and related topics; Another approach emphasizes more on the dynamic characteristics of customer relationships, studying the process of cultivating and establishing customer relationships.

2.4 Credibility

Credibility is the power that instills public trust, and the concept of credibility originates from the English word credibility, which refers to the responsibility to report, explain, and defend something; Take responsibility for your actions and accept questioning. Credibility in social public life, public power exhibits a fair, just, efficient, humane, democratic, and responsible trust in the face of time differences, public interactions, and exchange of interests. Credibility is not only a form of social system trust, but also a true expression of public authority. Certification is a third-party evaluation activity based on integrity and with the mission of transmitting trust, and credibility is the lifeline of certification work.

2.5 Price

In modern market economics, prices are generated by the mutual influence and balance between supply and demand. In the process of economics and business, price is a numerical value set for goods, services, and assets in the form of currency. In microeconomics, price is one of the important variables in the process of reallocating resources between demand and supply. In the daily application of modern society, price generally refers to the price or currency that the buyer needs to pay when conducting transactions. In classical and Marxist economics, price is the external manifestation of the intrinsic value of a commodity.

2.6 Service Quality

A large amount of research has been conducted on service quality issues abroad, and scholars from different academic backgrounds have different definitions of quality based on different purposes. Seven aspects of measuring service quality: safety, consistency, attitude, completeness, moderation, usability, and timeliness. Analyzed the three essential qualities of service, namely technical quality, functional quality, and corporate image. And service quality depends on the corporate image, and functional quality is more important than technical quality. The eight element model, which includes performance, characteristics, reliability, consistency, persistence, service, aesthetics, and customer satisfaction, all have an impact.

2.7 Policy orientation

A fundamental system for strengthening quality management and improving market efficiency under market economy conditions. In recent years, China's quality certification system has been continuously improved, industry institutions have flourished, and international exchanges and cooperation have deepened. The 2018 Opinions of the State Council on Strengthening the Construction of Quality Certification System and Promoting Total Quality Management adhere to the principle of quality first and efficiency first, with the promotion of supply side structural reform as the main line. In accordance with the overall deployment of implementing the strategy of building a strong quality country and quality improvement actions, using international advanced quality management standards and methods, a unified management, joint implementation, authoritative public trust, and universal mutual recognition quality certification system is constructed to promote industry development and innovation, strengthen comprehensive quality management, comprehensively improve product, engineering, and service quality, significantly enhance China's economic quality advantage, and promote economic development into the quality era.

2.8 Research hypotheses

2.8.1 Credibility

In the application of customer relationship management in the Chinese management system certification industry, certification agencies hope to establish a high image for customers, and the credibility of reputable institutions is one of the methods.

Assumption H1: There is a positive correlation between credibility and customer relationship management

2.8.2 Price

The price of the service industry in a market economy is an important indicator for customers to measure how to choose certification agencies. Different pricing will affect customers' strategies when choosing certification agencies.

Assumption H2: There is a positive correlation between price and customer relationship management

2.8.3 Service Quality

The Chinese management system certification industry belongs to the tertiary industry, namely the service industry, and service quality is the most concerned option for customers. Therefore, in customer relationship management, it is important to ensure that service quality satisfies customers.

Assumption H3: There is a positive correlation between service quality and customer relationship management

2.8.4 Policy orientation

The government is responsible for formulating policies for the supervision and management system certification industry, so policy orientation is the guiding ideology on which the industry is based. Enterprises must cooperate with policy orientation to succeed.

Assumption H4: There is a positive correlation between policy orientation and customer relationship management

RESEARCH METHODS

3.1 Research Steps

For different research topics, appropriate research methods should be selected according to the actual situation. This article is a mixed method design of literature analysis and case investigation, divided into 8 steps: background analysis (1.1), research questions (1.4), research objectives (1.5), literature exploration (2), establishment of research framework (3.2), data analysis (3.4), questionnaire (3.7, design, distribution, collection), conclusions and suggestions (5). The first-hand information is obtained through questionnaire survey method, but after designing the preliminary questionnaire, a face-to-face interview method is first used to solicit questions from the preliminary questionnaire, which is then modified to form a formal questionnaire.

3.2 Research Architecture

The main variables of this study are credibility, price, service quality, policy orientation, and the relationship with customer relationship management, as shown in Figure 1.

Figure 1
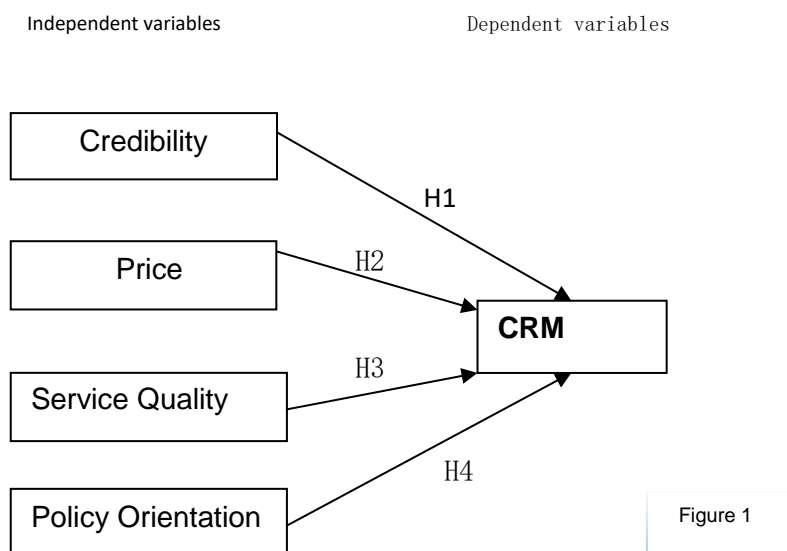
3.3 Sample Selection

The first-hand data collection of this study used a questionnaire survey method to conduct a case empirical study on the A management system certification body. The questionnaire subjects included employees, customers, partners, employees of competitors, and government supervisors of the A management system certification body. The selection of questionnaire samples is divided into two stages; The first stage is the "pre test of the questionnaire", which involves selecting 10 survey respondents from the A management system certification body for group interviews. The opinions of the interviews are then modified and used to develop the "formal questionnaire". The second stage is the "formal questionnaire", with sample selection sent to 320 respondents from A management system certification institutions for questionnaire survey.

3.3.1 Questionnaire design

Questionnaire survey is a survey method widely used in the survey industry at present - that is, the survey organization designs various questionnaires according to the purpose of the survey, then uses random sampling or overall sampling to determine the survey samples, completes the pre designed survey items through the sample interviews of investigators, and finally, obtains the survey results through statistical analysis tools (such as SPSS). It strictly follows the principles of probability and statistics, therefore, the survey method has strong scientificity and is also easy to operate. The impact of this method on the survey results is not only dependent on factors such as sample selection, investigator quality, and statistical methods, but also on the level of questionnaire design.

3.3.2 Definition and measurement of research operability

The operational design and measurement of this study questionnaire were based on the Service Quality Gap Model (5GAP Model), which includes five dimensions of service quality detection methods and tools for measuring service performance and service quality; The method for measuring the dimensions of service quality scope is based on literature such as the Minnesota Satisfaction Scale, and the questionnaire design is designed to facilitate the operability of using SPSS analysis tools.

3.3.3 Draft questionnaire

The initial draft of this questionnaire is divided into three parts: the first part consists of five questions, which is a survey of the basic personal information of the respondents; The second part consists of 30 questions, which are used to understand the internal and external environmental factors of Chinese management system certification bodies and the relevant factors affecting customer relationship management. The main focus of this study is on the data collected through research questionnaires. The purpose of collecting questionnaire data is to analyze its characteristics and establish theoretical relationships. The questionnaire in this article refers to the scales used by previous scholars to study customer relationship management factors, as well as the answers designed to match the content of this article. Due to personal privacy reasons, the respondents filled out the answers anonymously and selected the option that suits them. After completing the survey, all preliminary questionnaire data will be cleared.

3.4 Analysis tools

The quantitative analysis of this article was conducted using the Statistical Program for Social Sciences SPSS 26.0 software. SPSS is a series of software developed by IBM for statistical analysis, data mining, predictive analysis, and decision support tasks. This software is recognized as a good set of data analysis software by domestic and foreign universities. This

article uses descriptive analysis, reliability analysis, validity analysis, and correlation analysis of SPSS to statistically analyze the data of the formal questionnaire.

3.5 Data analysis methods

3.5.1 Descriptive analysis

Descriptive analysis is the first step in social survey statistical analysis, which involves preliminary organization and induction of a large amount of data obtained from the survey, in order to identify the inherent patterns of these data - concentrated and dispersed trends. Single factor analysis is mainly conducted using various statistical measures represented by data, such as mean, percentage, etc. The characteristic of descriptive analysis is the ability to utilize key performance indicators. Therefore, descriptive analysis can deeply analyze data, revealing detailed information such as event frequency, operating costs, and root causes of failures.

3.5.2 Reliability analysis

Designed a degree evaluation standard. Cronbach's α The value of the coefficient is between 0 and 1. If α The coefficient does not exceed 0.6, and it is generally considered to have insufficient reliability; When it reaches 0.7-0.8, it indicates that the scale has considerable reliability, and when it reaches 0.8-0.9, it indicates that the scale has very good reliability. Different researchers have different opinions on the threshold values of reliability coefficients, and their research suggests that Cronbach's α A coefficient value between 0.7 and 0.98 is a high reliability value; When the coefficient value is below 0.3, it must be deleted. This study used SPSS 26.0 analysis software to analyze variables through Cronbach's α Perform reliability analysis using coefficient testing.

3.5.3 Validity analysis

Validity analysis refers to the analysis of the accuracy of a scale in achieving measurement indicators. Validity is relative and only applicable to specific goals, so there is only a degree of difference. Validity can be divided into intrinsic validity and extrinsic validity; Intrinsic validity refers to the degree to which there is a clear causal or correlated relationship between the independent and dependent variables of an experiment. Items that do not reach a significant level are considered invalid, while items that reach a significant level are considered valid scales. The steps of validity analysis first analyze the KMO value: if this value is higher than 0.8, it indicates that the validity is very good; Between 0.7 and 0.8, indicating good validity; Between 0.6 and 0.7, it indicates that the validity is within an acceptable range. Between 0.5 and 0.6, it indicates poor validity 0.5 indicates extremely poor validity.

3.5.4 Related analysis

Explaining correlation analysis focuses on discovering various correlation characteristics between random variables. The degree of correlation between two variables is represented by the correlation coefficient r. The value of the correlation coefficient r is between -1 and 1, and can be any value within this range. When positively correlated, the r value is between 0 and 1; When negatively correlated, the r value is between -1 and 0. The closer the absolute value of r is to 1, the stronger the correlation between the two variables. The closer the absolute value of r is to 0, the weaker the correlation between the two variables. The evaluation criteria for r value.

3.6 Group Interviews

On December 2, 2022, this study conducted a group interview with 10 people at the A Management System Certification Institution in Shenzhen. Two hours of interviews, group interviews thoroughly reviewed each part of the initial draft of the questionnaire, attempted to fill out the questionnaire, deleted the same questions, modified the grammar, and used the commonly used SPSS format to form a formal questionnaire.

3.7 Formal questionnaire

The formal questionnaire content of this article (Attachment 1) is divided into two parts: The first part is a survey of basic personal information of the respondents, consisting of 5 questions, including gender, age, education level, relationship with A management system certification agency, and estimated interaction time with A management system certification. The second part is to identify the main factors that contribute to the success of customer relationship management in the management system certification industry, and to conduct in-depth discussions on the main variables of credibility, price, service quality, and policy orientation.

3.7.1 Research Object

The sampling population of this study includes 600 employees of A management system certification agency, partners, customers, competitors, and government supervisors, including major stakeholders in the Chinese management system certification industry, with sufficient industry representation.

3.8 Sample size

This study is a factor analysis, and scholars believe that the optimal ratio of items to subjects is 1:5, with a total sample size of no less than 100 people. It is recommended to have a sample size of 300 or more; Or at least 100 valid samples need to be collected. The sample size of this study is 600, which meets the sample size requirements proposed by different scholars.

REFERENCE

Hogan et al. (2002). Customer Equity Management. Hogan, John E., Katherine N. Lemon, & Ronald T. Rust (2002), Charting New Directions for Future of Marketing," Journal of Service Research, 5 (1), 4-12.

Zhang Guofang、Jin Guodong (2003). customer relationship management. Overview of the Application and Theoretical Research of CRM (Customer Relationship Management), Huazhong University of Science and Technology.

Reinartz et al.(2004）. Customer Relationship Management Process. Its Measurement and Impact on Performance, Journal of Marketing Research, 41 (August), 293-305.

Sue & Morin (2001). A Strategic Framework for CRM. A Strategic Framework for CRM, (accessed April 13, 2002), [available at http://www.crm-forum.com].

Winer (2001）. A Framework for Customer Relationship Management. A Framework for Customer Relationship Management, California Management Review, 43 (Summer), 89-105.

Grabner-Kraeuter & Moedritscher (2002). Alternative Approaches Toward Measuring CRM Performance. paper presented at the Sixth Research Conference on Relationship Marketing and Customer Relationship Management, Atlanta (June 9-12).

Payne & Frow (2005). A strategic Framework for Customer Relationship Management. A strategic Framework for Customer Relationship Management, Journal of Marketing, Vol. 69, October.

Davidson (2002). The Committed Enterprise. The Committed Enterprise. Oxford: Butterworth-Heinemann.

Prahalad & Ramaswamy (2004). Co-creation experiences. The next practice in value creation, Journal of Interactive Marketing, Vol. 18, Issue 3, 5-14

Li Wenlong（2006）. How far is China's testing and certification market from the intermediary testing and certification market. China Petroleum and Chemical Standards and Quality，CNKI:SUN:HGBJ.0.2006-02-002

CCAA（2019）. Basis of management system certification. Chapter 2: Introduction to Management System, 2.6 Focusing on Customers