# A Framework Examining the Customer's Expectation and Cellular Phone Service

Jengchung V. Chen, National Cheng Kung University, Taiwan; E-mail: victor@mail.ncku.edu.tw Yu-Hsien Wang, National Cheng Kung University, Taiwan; E-mail: h5492126@mail.ncku.edu.tw

### ABSTRACT

This paper shows how to evaluate service quality, improve service deficiency and understanding the needs of customers are the most important issues in mobile value-added service market these days. This study identifies gaps between customers and service providers by a conceptual "Gap model". Based on this study, service providers could obtain higher revenue of mobile value-added service by reducing these perceptive discrepancies.

Keyword: Service; Service quality; Mobile value-added service; Expected service; Perceived service.

#### **1. INTRODUCTION**

#### 1.1 Study Background

The market of mobile communication in Taiwan is almost full. Therefore the mobile value-added service will become one of the most competitive facilities for mobile service providers. Unhealthy competition in the mobile service industry has compelled many service providers to initiate quality programs. Achieving high quality standards along with high profitability and great market share is now an important part of strategic planning. The literatures of marketing are also reflecting an awareness of quality. Some of the recent studies have provided the theoretical frameworks of customer expectation of service quality, and some of them have already developed quantitative models to measure service quality.

#### **1.2 Study Motivation**

In today's mobile value-added service market, each firm has to provide high quality services to appeal to their customers. Hence how to evaluate service quality, improve service deficiency and understand the needs of customers are the most important issues. For example, with the fast growth of the mobile communication market, people already have more intention to have more services and applications which they can choose from. Among the mobile communication services, text message, voicemail and answering ringing are most popular and widely used today. To ensure the quality of mobile communication service, service providers have to provide convenient, enjoyable and novel services for users. Since more subscribers will create more profits, advertisers will be more willing to cooperate with service providers.

#### 1.3 Study Objectives

This study will discuss the relationship of expectations and perceptions between customers and service providers. Furthermore, it can be applied in the mobile value-added services market.

### 2. LITERATURE REVIEWS

#### 2.1 Service Quality

#### 2.1.1 Service

Service is identifiable, but essentially intangible activities which are offered by people as products such as delivery and repair. Based on a review of previous research and an exploratory study, Zeithaml(1988, p4) suggested that "perceived value is the customer's overall assessment of the utility of product base on perceptions of what is received and what is given." If perceived service value is similar

to the concept of perceived product value, which can be considered to involve a trade-off between a customer's expectation of benefits of using a service and the expectation of cost of using the service. Customers' assessments of service value are hypothesized to influence purchase intentions and behaviors.

#### 2.1.2 Characteristics of Service

There are three well documented characteristics of services as follows:

- 1. Intangibility: Most services cannot be counted, measured, stored, tested, and verified before selling to customers. Because of intangibility, the firm may find it is difficult to understand how consumers perceive their services and evaluate service quality. (Zeithaml, 1981)
- Indivisibility: As a consequence, the quality of services cannot be engineered at the manufacturing plant and then delivered to the consumers. That is, quality occurs during services are delivered, usually in an interaction of the customer and the employee of the service providers. (Lehtinen & Lehtinen,1982)
- 3. Heterogeneity: The performance of services often varies from frim to firm, from customer to customer, and from day to day. Consistency of behavior of service personnel is difficult to assure (Booms & Bitner, 1981). What the firm intends to deliver may be entirely different from what the consumer receives, so the services are heterogeneous.

#### 2.1.3 Service Quality

Service quality is a measurement of the level of how well the service matches the customer expectation. (Lewis & Booms, 1983)

Recent marketing researches, such regarding customers' attitudes toward service, have been focused on perceived service quality. Perceived service quality is defined as the customer's assessment of overall performance of service. (Zeithaml, 1988)

Parasuraman et al.(1985,1988) considers the customer's assessment of overall service quality depends on the gap between customer expectation and perception of actual performance of service.

#### 2.1.4 Dimensions of Service Quality

Consumers' expectations are based on verbal information, personal needs, experience and commercial information. Parasuraman et al. (1985) identified a number of discrepancies in the relationship between the clients and the service providers. During interviews in focus groups, they established ten dimensions of service quality as follows:

- 1. Tangible features: physical facilities, equipment, and front-line employees.
- Reliability: ability to perform the promised service dependably and accurately.
- Responsiveness: willingness and readiness to help clients and provide them services.
- 4. Communication: providing information in words that clients understand.
- 5. Credibility: honesty and truthfulness.
- 6. Security: ensuring clients from physical and financial risks.
- 7. Competence: adequately trained and skilled employees.
- 8. Courtesy: helpfulness, respect and a friendly attitude to clients.
- 9. Knowing: understanding customers and their needs.
- 10. Access: openness and interaction with clients.

#### 1606 2007 IRMA International Conference

#### 2.2 Gap Model

Research (Thompson, DeSouza & Gale, 1985) and company experience (Rudie & Wansley, 1985) revealed that performing high service quality will result in measurable profits, cost saving, and market share growth. Therefore, knowledge of service quality and how it is achieved in organizations have become the important points for research. Parasuraman, Zeithaml and Ben brry (1985) previously developed service quality model to indicate that consumers' perceptions of service quality are influenced by a series of five distinct gaps occurring in organizations (as figure 1 illustrated). These gaps on the service provider's side may impede high quality performance of services that consumers perceive.

# *Gap 1: Difference between Expected Service and Management Perceptions of Consumer Expectations.*

Service provider executives may not always connote the high quality features to consumers, which attributes what a service must have in order to meet consumers' needs, and the levels of performance on those features are necessary to deliver high quality service. (Langeard et al., 1981; Parasuraman & Zeithaml, 1983)

#### *Gap 2: Difference between Management Perceptions of Consumer Expectations and Service Quality Specification.*

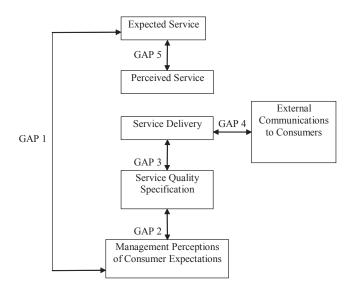
Managers may not always have the ability to establish the standard of service quality that can conform to consumer expectation and transfer the standard into the realized ones.

*Gap3: Difference between Service Quality Specifications and Service Delivery* There is discrepancy between the specifications of service and the actual delivery of the service. It can be referred to as the "service performance gap". That is, it is the extent which service providers do not perform service at the level consumers expected. The service performance gap occurs when employees are unable or unwilling to perform the service at the desired level. (Zeithaml, Berry & Parasuraman, 1985)

# *Gap 4: Difference between Service Delivery and External Communications to Consumers*

The discrepancy between service delivery and external communications means exaggeratory promises or the absence of information about service delivery. It may affect consumer perception of service quality.

#### Figure 1. Conceptual model of service quality



*Gap5: Difference between Expected Service and Perceived Service* This gap is defined by the PZB model which suggested consumers feel the difference between expected service and perceived service. Hence, gap5 is a function of gap1 to gap4.

#### **3. RESEARCH HYPOTHESES**

A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associate with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a high quality service which consumers expected. The connection between expected service and perceived service is impossible to completely match. In other words, the exaggeration of marketing will influence the difference.

We suggest that the activity of reducing the gaps between expectations, perceptions and the practical actions, is to understand the customers' needs and then service providers will provide the services for matching the needs. Since the higher levels of service quality are related to higher levels of customer satisfaction.

Based on the results of the difference, we have formulated the following hypotheses.

- H-1: There are significant discrepancies in customers' expectations of mobile value-added service and management perceptions of these expectations.
- H-2: There are significant discrepancies in customers' expectations of mobile value-added service and the service delivered.
- H-3: There are significant discrepancies between managers and service providers of the perceptions of customers' expectations of mobile value-added service.
- H-4a: Discrepancies between customers' expectations of mobile value-added service quality and management perceptions of such expectations will have negative impact on the quality of mobile value-added service.
- H-4b: Discrepancies between customers' expectations of mobile value-added service quality and the service delivered will have negative impact on the quality of mobile value-added service
- H-4c: Discrepancies between managers and service providers of the perceptions of customers' expectations of mobile value-added service will have negative impact on the quality of mobile value-added service.

#### CONCLUSION

The number of users of mobile communication market in Taiwan is very large, but the revenue of mobile value-added service is still insignificant. In other words, there is still potential growth in the mobile value-added service market. By the development of communication technology, it is possible to develop more variety of mobile value-added service today. For developing successful new services, it is important to match the users' needs. We have identified the gaps between customers and service providers above. Based on this study, service providers could obtain higher revenue of mobile value-add service by reducing these perceptive discrepancies.

#### REFERENCES

- Ahmad, R., & Buttle, F. (2002). Customer retention management: A reflection of theory and practice. *Marketing Intelligence and Planning*, 20(3), 149–161.
- Abod, A.K., Hishamuddin, I., and Venu, T. (2002). What a Drive Customer Loyalty: and Analysis from the Telecommunication Industry. *Measurement* and Analysis for Marketing, Lodon, 2002 Sep.
- Bendapudi, N., & Berry, L. L. (1997). Customers' motivations for maintaining relationships with service providers. *Journal of Retailing*, 73(1), 15–37.
- Babakus, E. & Boller, G.W. (1992). An empirical assessment of SERVQUAL scale. *Journal of Business Research*, 24, 253-268.
- Babakus, E. & Mangold, W.G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health Services Research*, 26, 767-786.

Copyright © 2007, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

#### Managing Worldwide Operations & Communications with Information Technology 1607

- Bellman, S., Lohse, G. L., & Johnson, E. J. (1999). Predictors of online buying behavior. *Communications of the ACM*, Vol. 42, Iss. 12, 32-38.
- Bouman, M., & Van Der Wiele, T. (1992). Measuring service quality in the car service industry: building and testing an instrument. *International Journal of Service Industry Management*, 3, 4-16.
- 8. Carman, J. M. (1990). Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66, 33-35.
- Campbell, S. J., Donnelly, M., & Wisniewski, M. (1995). A measurement of service. *Journal of the Scottish Libraries Association*, 50, 10-11.
- Clarke, I. III. (2001). Emerging value propositions for M-commerce. *Journal of Business Strategies*, Vol.18, Iss. 2, 133-145.
- Cronin, J. J. Jr., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58, 125-131.
- Gartner Research. Mobile phone estimates for 2004 (2004) from http://www4. gartner.com/press\_releases/asset\_62091\_11.html.
- Lam, S. K. (1997). SERVQUAL: a tool for measuring patients' opinions of hospital service quality in Hong Kong. *Total Quality Management*, 8, 145-152.
- Ruby, R. D., & Nikhilesh D. (2004). Mobility and markets: emerging outlines of m-commerce. *Journal of Business Research*, Vol. 57, Iss. 12, 1391-1396.
- Mort, G. S., & Drennan, J. (2002). Mobile digital technology: Emerging issues for marketing. *Journal of Database Marketing & Customer Strategy Management*, Vol. 10, Iss. 1, 9-23.
- 16. Naumann, E. (1995). Creating Customer Value: The Path to Sustainable Competitive Advantage (Cincinnati, Thomson Executive Press).
- Keen, P., & Mackintosh, R. (2001). The Freedom Economy: Gaining the Mcommerce Edge in the Era of the Wireless Internet. Osborne/McGraw-Hill, Berkeley: CA.
- Kim, Moon-Koo, Park, Myeong-Cheol, & Jeong, Dong-Heon. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services. *Telecommunications Policy*, Vol. 28, Iss. 2, 145-159.

- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41- 50.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: a multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1991). Refinement and reassessment of SERVQUAL scale. *Journal of Retailing*, 67, 420-450.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. *Journal of Marketing*, 58, 111-124.
- Siau, K., Lim, E. P., & Shen, Z. (2001). Mobile commerce: Promises, challenges, and research agenda. *Journal of Database Management*, Vol. 12, Iss. 3, 4-13.
- 24. Sureshchandar, G. S., Rajendran, C., & Kamalanabhan, T. J. (2001). Customer perceptions of service quality: a critique. *Total Quality Management*, 12, 111-124.
- Reeves, C. A., & Bednar, D. (1994). Defining quality: alternatives and implications. Academy of Management Review, 19, 419-445.
- Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: an assessment of a reassessment. *Journal of Marketing*, 58, 132-139.
- Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: an assessment of a reassessment. *Journal of Marketing*, 58, 132-139.
- Tribe, J., & Snaith, T. (1988). From SERVQUAL to HOLSAT: holiday satisfaction in Varadero, Cuba. *Tourism Management*, 19, 25-34.
- Tsalgatidou, A., & Pitoura, E. (2001). Business Models and Transactions in Mobile Electronic Commerce: Requirements and Properties. *Journal of Computer Networks*, Vol. 37, Iss. 2, 221-236.
- Varshney, U., & Vetter, R. (2002). Mobile Commerce: Framework, Applications and Networking Support. *Journal on Mobile Networks and Applications*, Vol. 7, Iss. 3, 185-198.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-global.com/proceeding-paper/framework-examining-customer-expectation-</u> cellular/33430

# **Related Content**

# Business Innovation and Service Oriented Architecture: An Empirical Investigation

Bendik Bygstad, Tor-Morten Grønli, Helge Berghand Gheorghita Ghinea (2011). International Journal of Information Technologies and Systems Approach (pp. 67-78).

www.irma-international.org/article/business-innovation-service-oriented-architecture/51369

# A Survey on Supervised Convolutional Neural Network and Its Major Applications

D. T. Maneand U. V. Kulkarni (2017). *International Journal of Rough Sets and Data Analysis (pp. 71-82).* www.irma-international.org/article/a-survey-on-supervised-convolutional-neural-network-and-its-major-applications/182292

# Conceptual Foundations for Interactive Programming Activities with the Conjunction of Scratch4OS and Open Sim

Pellas Nikolaos (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 4776-4786). www.irma-international.org/chapter/conceptual-foundations-for-interactive-programming-activities-with-the-conjunction-ofscratch4os-and-open-sim/112922

# Changing Expectations of Academic Libraries

Jennifer Ashley Wright Joe (2018). Encyclopedia of Information Science and Technology, Fourth Edition (pp. 5204-5212).

www.irma-international.org/chapter/changing-expectations-of-academic-libraries/184225

# Making Sense of IS Project Stories

Darren Dalcher (2018). Encyclopedia of Information Science and Technology, Fourth Edition (pp. 5660-5668). www.irma-international.org/chapter/making-sense-of-is-project-stories/184266