

Effects of service quality on customer satisfaction of the import-export agents in the central region of Thailand

ผลกระทบของคุณภาพการบริการต่อความพึงพอใจของลูกค้าของตัวแทนนำเข้า-ส่งออกในภาคกลางของประเทศไทย

ฉัตรธาร ลิ้มอุบลรัตน์¹, นัทธ์หทัย อีอนอก², มาริษา เทศป्लीม³

Chattharn Limoubpratum¹, Nuthatai Ounok², Marisa Thespluem³

Faculty of Business Administration, Thonburi University^{1,2}, Graduate School, Thonburi University³

Chattharn@hotmail.com¹, nuthatai.ounok@gmail.com², Marisa1912008@hotmail.com³

Abstract

The aim of the present research was to study (1) service quality of import-export agents in the central region of Thailand, (2) customer satisfaction with the service offered by the import-export agents in the central region of Thailand, and (3) the relationship between service quality and customer satisfaction with the service offered by the import-export agents in the central region of Thailand. Questionnaire was used as the data collection tool and the research sample comprised of 400 individuals. The results show that the import-export agents in the central region of Thailand offer the highest level of service quality, eliciting high customer satisfaction. The study findings further reveal that tangibility, reliability, responsiveness, and assurance are the key service aspects that positively affect customer satisfaction at the statistical significance level of 0.01.

Keywords: service quality, customer satisfaction, import-export agents, the central region of Thailand

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ (1) ศึกษาคุณภาพการบริการของตัวแทนนำเข้า-ส่งออกในภาคกลางของประเทศไทย (2) ศึกษาความพึงพอใจของลูกค้าต่อการรับบริการโดยตัวแทนนำเข้า-ส่งออกในภาคกลางของประเทศไทย และ (3) ศึกษาความสัมพันธ์ระหว่างคุณภาพบริการและความพึงพอใจของลูกค้าต่อการรับบริการโดยตัวแทนนำเข้า-ส่งออกในภาคกลางของประเทศไทย เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูล ได้แก่ แบบสอบถาม โดยมีกลุ่มตัวอย่างจำนวน 400 คน ผลการวิจัย พบว่า ตัวแทนนำเข้า-ส่งออกในเขตภาคกลางของประเทศไทยมีคุณภาพการบริการระดับสูงสุด แสดงถึงความพึงพอใจของลูกค้า และพบว่าความเป็นรูปธรรม ความน่าเชื่อถือ การตอบสนอง และการประกัน เป็นปัจจัยสำคัญในการบริการที่มีผลต่อความพึงพอใจของลูกค้าในระดับนัยสำคัญทางสถิติที่ 0.01

คำสำคัญ : คุณภาพการบริการ, ความพึงพอใจของลูกค้า, ตัวแทนนำเข้า-ส่งออก, ภาคกลางของประเทศไทย

Introduction

Import-export agents are an important entity in the negotiating process, as they act as an intermediary between supply chain parties. They play important roles in the country's economy because of the expertise in freight management and import-export acceleration. Moreover, having effective import-export agents can lead to competitive advantage in importing and exporting products (Thairath Newspaper, 2017).

However, the effective import-export agents in Thailand are presently not meeting the aforementioned expectations. First, the overall customer satisfaction is quite low because of poor service quality offered by the import-export agents, due to late shipment, as well as unskilful and inefficient workers (Patcharawalai, 2016). Second, the current policy of import-export agents is not aligned with the government and taxation policies. Third, import-export agents lack the expertise in document preparation, which leads to data deficiency issues. In most cases, issues occur when data and documentation is not adequately translated or is lost due to incompetence (Chaphapha, 2017). Fourth, products are often lost or damaged during transportation, as customers typically have no control of how products are packed and shipped. Thus, losses become excessive when import-export agents are inexperienced. Lastly, import-export agents tend to charge high prices (Rungrit & Wisitnitikija, 2015). Given these issues, there is a need to examine the relationship between the service quality of import-export agents and customer satisfaction that has been served by the import-export agents in the central region of Thailand.

Research Objectives

The present study aims to fulfil three objectives:

1. To study service quality of import-export agents in the central region of Thailand
2. To study customer satisfaction with the import-export agents in the central region of Thailand
3. To study the effect of service quality on customer satisfaction with the import-export agents in the central region of Thailand

Literature Review

Concepts and Theories on Service Quality

Service quality relates to customer expectations regarding the alignment between the expected service and the actual service provided (Crosby, 1979). According to Rhee and Rha (2009) and Vilkait-Vaiton and Papšien (2016), service quality plays an important role in the service sector due to its influence on firm performance, as well as customer satisfaction and loyalty. Findings yielded by extant studies indicate that service quality can influence customer satisfaction (Curry & Gao, 2012; Zameer, Tara, Kausar, & Mohsin, 2015).

Parasuraman, Zeithaml, and Berry (1988) and Tengwongwattana (2016) argued that the quality of service is what customers or users expect to receive from the service provider. Five measurements are usually adopted to assess service quality, namely: (1) concrete or tangible service, defined as a

service that has a physical element; (2) trust (or reliability), which is an aspect indicating that service meets all promises made to the customers or users; (3) responsiveness, indicating the degree of helpfulness when dealing with customers; (4) assurance, indicating that the service providers have the knowledge and ability to provide accurate information; and (5) understanding and perception (or empathy), an element of service indicating that each customer or service user is treated with care, respect, and friendliness.

Concepts and Theories on Customer Satisfaction

Customer satisfaction is defined as a customer's pleasure or displeasure that results from perceiving the service provided as adequate or inadequate relative to the expected level of service. Thus, the highest level of customer satisfaction can be attained when the service quality exceeds the expectation (Kombo, 2015). On the other hand, customers would rate the service unfavourably when there is a significant disparity between the expected and obtained service (Nimako & Mensah, 2014).

Millet (1954) and Changwetchay (2018) proposed that customer satisfaction is achieved by focusing on the following five elements: (1) equitable service, i.e., ensuring that all customers are treated equally; (2) timeliness, i.e., ensuring that service is offered in the timely manner; (3) adequacy (or ample service), i.e., ensuring that the right (required) amount of service is offered in the right place at the right time (such as the right amount of supplies, staff, and equipment); (4) continuity, i.e., service must be always available to the customers (in other words, service providers must always be on the job, always ready and prepared to serve customers); and (5) progressiveness, which is achieved by continually striving to improve service performance and quality in order to meet (or ideally exceed) customer expectations.

Service quality and customer satisfaction are extensively studied topics in the marketing and management fields (Zameer, Wang, Yasmeen, & Ahmed, 2019). Rabbani, Qadri, and Ishfaq (2016) examined the relationship between service quality and customer satisfaction with Indian banks and found a positive relationship between these factors. Sivadas and Baker-Prewitt (2000) similarly studied service quality, customer satisfaction, and store loyalty in the context of retail stores, reporting positive relationship among these constructs. However, academic literature related to the direct relationship between service quality and customer satisfaction in supply chain management and logistics area is limited, prompting the need for the present investigation. Therefore, the following hypothesis was tested in this study:

H1: Service quality has a positive effect on customer satisfaction with the import-export agents in the central region of Thailand

Conceptual Framework

Given that the key concepts of interest for the present study are well defined, the definitions put forth by other authors were adopted when developing the conceptual framework presented in

Figure 1. As can be seen from the graph, the conceptual framework adopted in this study comprises of two main concepts, with ten sub-components (or measurement items):

1. Service quality, which consists of five measurement items—tangibility, reliability, responsiveness, assurance, and empathy.
2. Customer satisfaction, comprising of five measurement items pertaining to service—equitable, timely, ample, continuous, and progressive.

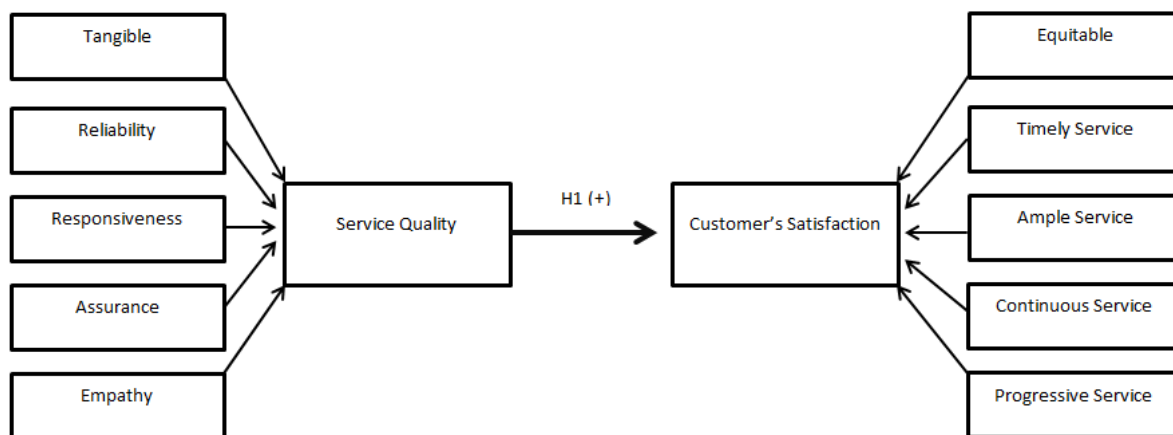


Figure 1 Conceptual framework
(Limounpratum, Ounok;& Thespluem, 2019)

Methodology

An empirical research method and survey-based research are common approaches in the field of marketing and management (Flynn, Sakakibara, Schroeder, Bates, & Flynn, 1990). Survey-based research allows the researcher to elicit attitudes or perceptions of participants, which is known as perceptual measure. Therefore, survey technique was employed in this study to elicit respondents' views pertaining to the study objectives.

Questions or measurement items employed in this study were adapted from the measures established in previous studies (Parasuraman, Zeithaml, & Berry, 1988; Tengwongwattana, 2016; Millet, 1954; Changwetchay, 2018). In order to make responses uniform and facilitate subsequent analyses, all questionnaire items required responses on a 5-point Likert-type scale, anchored at 1 = "strongly disagree" and 5 = "strongly agree." Thus, by adopting this approach, data and results could be interpreted and presented more clearly (Blumberg, Cooper, & Schindler, 2008).

The survey was administrated to 1,000 customers, i.e. one customer restricted to one company, who have used import-export agents in the past five years in the central region of Thailand. Import-export agents in this study are restricted to middleman service. They do not take title to the goods but provide services. The agents' role is to get orders and earn a commission for the services. However, despite sending a reminder after three weeks, only 400 individuals completed the

questionnaire, representing a response rate of 40%. The survey was carried out during the 4 February–24 February 2019 period. The questionnaire was tested for reliability, yielding Cronbach's Alpha of 0.92.

Data Analysis

Statistics, such as frequency, percentage, average, mean, and standard deviation, were used to analyse the descriptive data in order to explain the service quality of the import-export agents in the central region of Thailand and user satisfaction with this service.

Confirmatory factor analysis and structural equation modelling were also employed to identify the most relevant observed variables pertaining to each latent variable, as well as to test the relationship between exogenous variables (independent variables) and endogenous variables (dependent variables).

Research Results

Summary of the Sample Characteristics

The analyses revealed that 348 (87%) of the survey participants are exporters, and 285 (71.25%) of the respondents declared agricultural products as their main focus. On the other hand, 299 (74.75%) of the respondents stated that they primarily used vessel transportation service, and 314 (78.50%) of the participants have been using the service provider for 4–6 years.

Level of Service Quality Offered by the Import-Export Agents in the Central Region of Thailand

The survey data analysis revealed that most of the import-export agents in the central region of Thailand offered high-quality service (Mean = 4.62, S.D. = 0.19). Specifically, customers rated the tangible aspect of service at the highest average level (Mean = 4.73, S.D. = 0.26), followed by reliability (Mean = 4.67, S.D. = 0.26) and responsiveness (Mean = 4.59, S.D. = 0.31) as shown in Table 1.

Table 1 Level of Service Quality of Import-Export Agents in the Central Region of Thailand

Rank	Service quality	Mean	S.D.	Results
1	Tangibility	4.73	0.26	highest
2	Reliability	4.67	0.26	highest
3	Responsiveness	4.59	0.31	highest
4	Assurance	4.55	0.33	highest
5	Empathy	4.54	0.30	highest
Overall		4.62	0.19	highest

Level of Customer Satisfaction with the Import-Export Agents in the Central Region of Thailand

The survey data analysis revealed that most of the participants were very satisfied with the service offered by the import-export agents in the central region of Thailand (Mean = 4.58, S.D. = 0.19). In particular, customers rated provision of equitable service at the highest level (Mean = 4.63, S.D. = 0.27), followed by service timeliness (Mean = 4.63, S.D. = 0.29) and adequacy (Mean = 4.52, S.D. = 0.32), as shown in Table 2.

Table 2 Level of Customer Satisfaction in the Central Region of Thailand

Rank	Customer's satisfaction	Mean	S.D.	Results
1	Equitable Service	4.63	0.27	highest
2	Timely Service	4.63	0.29	highest
3	Ample Service	4.61	0.28	highest
4	Continuous Service	4.52	0.32	highest
5	Progressive Service	4.49	0.29	highest
	Overall	4.58	0.19	highest

The Relationship between Service Quality and Customer Satisfaction with the Import-Export Agents in the Central Region of Thailand

Confirmatory factor analysis of service quality. The results of confirmatory factor analysis show that four measurement items—tangibility ($\beta = 0.60$; $p < 0.01$), reliability ($\beta = 0.39$; $p < 0.01$), responsiveness ($\beta = 0.82$; $p < 0.01$), and assurance ($\beta = 0.44$; $p < 0.01$) are adequate indicators of service quality because the data fitted the latent variable well, with $\chi^2 = 4.686$, $DF = 2$, $p = 0.096$, $CMIN/DF = 2.343$, $GFI = 0.989$, $AGFI = 0.944$, $NFI = 0.961$, $TLI = 1$, $CFI = 0.977$, $PCLOSE = 0.220$, and $RMSEA = 0.079$ (Figure 2).

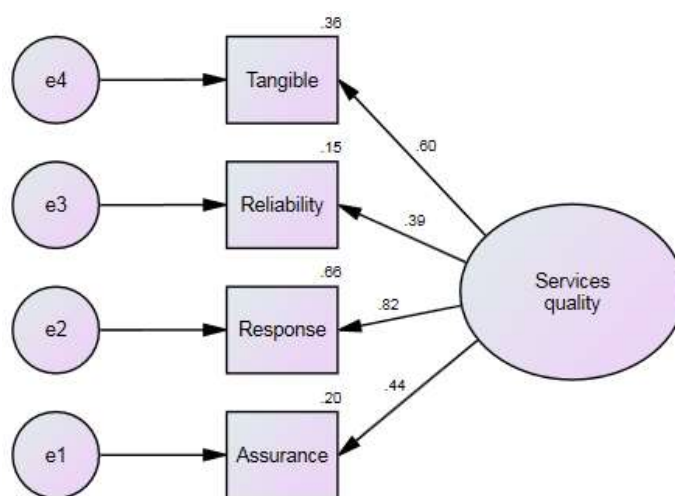


Figure 2. Confirmatory factor analysis of service quality
(Limounpratum, Ounok;& Thespluem, 2019)

Confirmatory factor analysis of customer satisfaction. The results of confirmatory factor analysis show that four measurement items—equitable service ($\beta = 0.17$; $p < 0.01$), timely service ($\beta = 0.63$; $p < 0.01$), ample service ($\beta = 0.87$; $p < 0.01$), and progressive service ($\beta = 0.34$; $p < 0.01$) are adequate indicators of customer satisfaction because the data fitted the latent variable well, with $\chi^2 = 1.526$, $DF = 2$, $p = 0.466$, $CMIN/DF = 0.763$, $GFI = 0.996$, $AGFI = 0.982$, $NFI = 0.985$, $TLI = 1$, $CFI = 0.961$, $PCLOSE = 0.628$, and $RMSEA = 0.000$ (Figure 3).

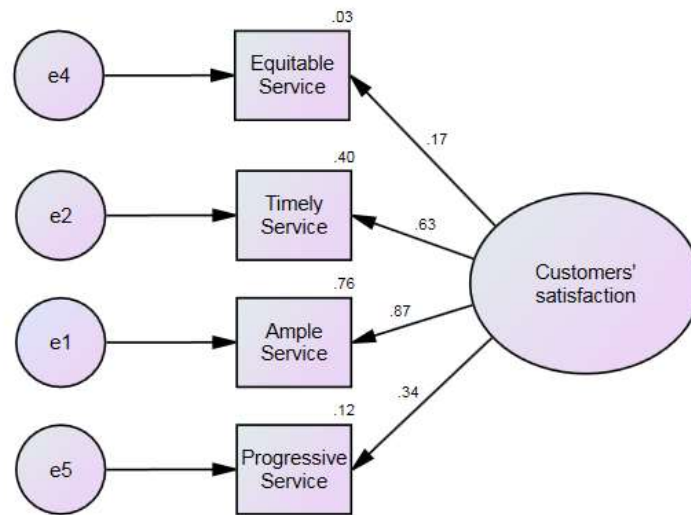


Figure 3 Confirmatory factor analysis of service quality
(Limounpratum, Ounok;& Thespluem, 2019)

Hypothesis testing of service quality effect on customer satisfaction with the import-export agents in the central region of Thailand. Figure 4 presents the structural model of the hypothesised model, standardised loading, and the p value of the hypothesised model. All measurements had standardised loading that was significant at $p < .01$. The data fitted the model very well, with $\chi^2 = 27.457$, $DF = 19$, $p = .094$, $CMIN/DF = 1.445$, $GFI = .972$, $AGFI = .947$, $NFI = .892$, $TLI = .968$, $CFI = .962$, $PCLOSE = .540$, and $RMSEA = .046$. Based on the goodness-of-fit indices, it can be concluded that the hypothesised model had an adequate level of fit.

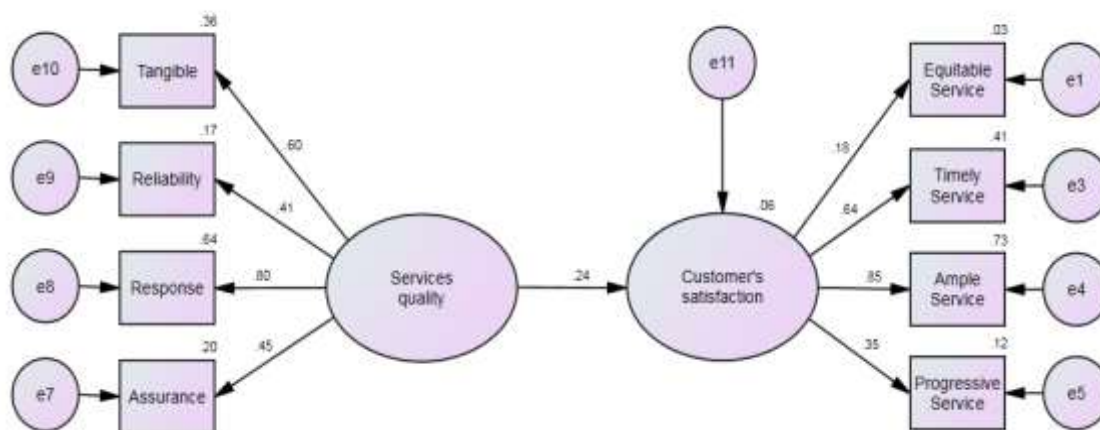


Figure 4 Structural model of the hypothesised model

(Limounpratum, Ounok;& Thespluem, 2019)

As the results provided support for Hypothesis 1, it is accepted, indicating that there is a positive relationship between service quality and customer satisfaction. Specifically, the analysis results indicate that service quality significantly and positively affects customer satisfaction ($\beta = 0.24$; $p < 0.01$).

The results further indicate that service quality is significantly explained by the following service aspects: tangibility ($\beta = 0.60$; $p < 0.01$), reliability ($\beta = 0.41$; $p < 0.01$), responsiveness ($\beta = 0.80$; $p < 0.01$), and assurance ($\beta = 0.45$; $p < 0.01$). Respondents perceived these dimensions as significant factors for achieving service quality, which directly influenced customer satisfaction.

The analyses also revealed that customer satisfaction is significantly explained by equitable service ($\beta = 0.18$; $p < 0.01$), timely service ($\beta = 0.64$; $p < 0.01$), ample service ($\beta = 0.85$; $p < 0.01$), and progressive service ($\beta = 0.35$; $p < 0.01$). Respondents perceived these dimensions as critical elements of customer satisfaction.

Discussion and Suggestions

Objective 1: To Study Service Quality of Import-Export Agents in the Central Region of Thailand

Respondents concerned the overall service quality of import-export agents in the central region of Thailand, as they were mostly concerned with the tangibility, reliability, responsiveness, and assurance components of service. This result is supported by the findings reported by Parasuraman et al. (1988), who noted that customers expect to receive tangible service that is timely, accurate, appropriate, and consistent, and is provided by knowledgeable, helpful, and reliable staff. Jantaraget (2013) similarly found that service providers that are seen as reliable and ready to respond to the needs of their customers are typically rated highly.

Objective 2: To Study the Customer Satisfaction with the Import-Export Agent Business in the Central Region of Thailand

Most of the respondents were highly satisfied with the service offered by the import-export agents in the central region Thailand. This rating results from equitable and on-time service that benefitted from the new technology and advanced information systems, such as bar code system and radio frequency identification. Millet (2012) argued that, to ensure customer satisfaction with the service, service providers must focus on ensuring that their service is equitable, timely, adequate, and continuous, while employing advanced technology. Patcharawalai (2016) similarly noted that service providers must pay attention to the adequacy of access to services, convenience, and facilities. Patcharawalai (2016) argued that the development of service quality can uplift loyalty and customer satisfaction by paying attention when responding to the needs of customers, as well as offering fast and accurate service, while using advanced equipment and information technology.

Objective 3: To Study the Relationship between Service Quality and Customer Satisfaction with the Import-Export Agents in the Central Region of Thailand

The results yielded by the present study show that customer satisfaction with using import-export agents in the central region of Thailand is positively affected by service quality, with the statistical significance at the level of .01. This positive relationship suggests that those agents should concentrate on making sure that their service is tangible, reliable, and effective, while offering assurance to improve the satisfaction of their customers. Jantaraget (2013) observed that customers were satisfied with the service quality of the logistics company in the Saraburi province, Thailand, when convenient and reliable services were provided, which was statistically significant at the level of .05. Mongkolratanasiri (2016) similarly reported that assurance and tangible service are the most important factors for improving Thai customers' satisfaction and loyalty.

From the results obtained in the present study, several suggestions regarding service quality can be made:

1. *Tangible aspect*: The management should focus on the development of the physical characteristics, appearance, readiness, and capacity of the facilities to provide the best service to their customers.
2. *Reliability aspect*: The management should strive to provide consistent services, and should strictly maintain service standards with honesty, integrity, and clarity. Moreover, services must be professionally provided by all agent representatives.
3. *Responsiveness aspect*: The management should give priority to readiness and willingness to provide service as soon as requested via advanced technology, in order to be comprehensive and ensure fast response.
4. *Assurance aspect*: The management should give priority to ensuring that customers always receive the best service. Service provider representatives must be gentle, expressive, and willing to provide assistance, while continually improving their knowledge and skills.

Several suggestions regarding customer satisfaction can also be made:

1. *Equitable aspect*: Customers require equal attention and same standards without discrimination in receiving services offered by services providers.

2. *Timely aspect*: Customers prefer quick response, such as rapid delivery of the relevant documents in time for the scheduled work.

3. *Ample aspect*: Customers will be satisfied when the agents provide enough staff to accommodate their requirements, especially in urgent cases. Services that have sufficient amount of support are also highly valued.

4. *Progressive aspect*: Customers prefer agents that implement advanced technology and have modern facilities, as this allows them to receive effective service. Customers also require special assistance when faced with problems or emergencies, which can be facilitated by information technology that can track the status of the solution.

The positive effect of service quality on customer satisfaction leads to the following observations:

1. Tangibility, reliability, responsiveness, and assurance are the main service aspects that positively affect equitable service. Therefore, management should develop services that are convenient for the customers in terms of location, consultant availability, and equal service with the same standards.

2. Tangibility, reliability, responsiveness, and assurance are the main service aspects that positively affect timely service. Therefore, management should focus on providing effective services at the specified time, as well as delivery of the relevant documents in a timely manner.

3. Tangibility, reliability, responsiveness, and assurance are the main service aspects that positively affect ample service. Therefore, management should ensure that the staff is able to support customers adequately and effectively. The agent should have sufficient personnel when there are many customers that need to be served at the same time.

4. Tangibility, reliability, responsiveness, and assurance are the main service aspects that positively affect progressiveness. Therefore, management should give priority to assisting customers by providing convenient and fast service. Modern technology would improve service quality and efficiency in emergencies.

References

- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (Vol. 2). London: McGraw-Hill Higher Education.
- Changwetchay, B. (2018). *Service Quality Affecting Passenger Satisfaction offered by Bangkok BTS Skytrain* (Master's Thesis, Bangkok University). Retrieved January 15, 2020, from http://dspace.bu.ac.th/bitstream/123456789/2844/1/benchapa_chan.pdf
- Chaphapha, S. (2017). A study of the way to promote the service qualities of the shipping in accordance with four Sangkhawatthus. *Journal of MCU Social Development*, 2(1), 97–108.
- Crosby, P. B. (1979). *Quality is free: The art of making quality certain* (Vol. 94). New York, NY: McGraw-Hill.
- Curry, N., & Gao, Y. (2012). Low-cost airlines—a new customer relationship? An analysis of service quality, service satisfaction, and customer loyalty in a low-cost setting. *Services Marketing Quarterly*, 33(2), 104–118.

- Flynn, B. B., Sakakibara, S., Schroeder, R. G., Bates, K. A., & Flynn, E. J. (1990). Empirical research methods in operations management. *Journal of Operations Management*, 9(2), 250–284.
- Jantaraget, T. (2013). *The users' satisfaction with the quality of the bus service of the Transport Company Limited at the Saraburi Bus Terminal* (Master's Thesis, Rajamangala University of Technology, Thanyaburi). Retrieved January 11, January 2020, from <http://www.repository.rmutt.ac.th/xmlui/bitstream/handle/123456789/779/Binder1.pdf?sequence=1>
- Kombo, F. (2015). Customer's satisfaction in the Kenyan banking industry. *Journal of International Studies*, 8(2), 174–186.
- Limounpratum, C., Ounok, N., & Thespluem, M. (2562). *Effects of service quality on customer satisfaction of the import-export agents in the central region of Thailand*. (Research, Thonburi University).
- Millet, J. D. (1954). *Management in the public service*. New York, NY: McGraw-Hill Inc.
- Mongkolratanasiri, S. (2016). *User's satisfaction with the services provided by Bangkok Bank Public Company Limited* (Master's Thesis, Rajamangala University of Technology, Rattanakosin). Retrieved February 3, 2020, from <https://www.rmutr.ac.th/e-research/>
- Nimako, S. G., & Mensah, A. F. (2014). Exploring customer dissatisfaction/satisfaction and complaining responses among bank customers in Ghana. *International Journal of Marketing Studies*, 6(2), 58–71.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perception. *Journal of Retailing*, 64(1), 12–40.
- Patcharawalai, P. (2016). *The effect of satisfaction with service quality and image perception of the Bank on consumers' loyalty to specialized financial institutions* (Master's Thesis, Bangkok University). Retrieved January 23, 2020 from <http://library.bu.ac.th/index.php/th/>
- Rabbani, M. R., Qadri, F. A., & Ishfaq, M. (2016). Service quality, customer's satisfaction and customer loyalty: An empirical study on banks in India. *VFAST Transactions on Education and Social Sciences*, 11(2), 1–9.
- Rhee, S. K., & Rha, J. Y. (2009). Public service quality and customer's satisfaction: Exploring the attributes of service quality in the public sector. *The Service Industries Journal*, 29(11), 1491–1512.
- Rungrit, P., & Wisitnitikija, C. (2015). Factors affecting land transport service of World Heart Shipping and Transport Co., Ltd. *Journal of Graduate Studies: Suan Sunandha Rajabhat University*, 2(2), 102–111.
- Sivadas, E., & Baker-Prewitt, J. L. (2000). An examination of the relationship between service quality, customer's satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*, 28(2), 73–82.
- Tengwongwattana, W. (2016). *Service quality, price consciousness, brand image, and word of mouth affecting the decision to use private companies' domestic parcel shipping services of customers in Bangkok* (Master's Thesis, Bangkok University). Retrieved February 9, 2020, from http://dspace.bu.ac.th/bitstream/123456789/2111/1/worachanok_teng.pdf
- Thairath Newspaper. (2017). Anticorruption by the custom department and freight forwarder organization. *Thairath Online*. Retrieved March 1, 2020, from <https://www.thairath.co.th/content/654907>
- Vilkait-Vaiton, N., & Papsien, P. (2016). Influence of customer loyalty program on organizational performance: A case of airline industry. *Inžinerin Ekonomika*, 27(1), 109–116.

Zameer, H., Tara, A., Kausar, U., & Mohsin, A. (2015). Impact of service quality, corporate image and customer's satisfaction towards customers' perceived value in the banking sector in Pakistan. *International Journal of Bank Marketing*, 33(4), 442–456.

Zameer, H., Wang, Y., Yasmeen, H., & Ahmed, W. (2019). Modeling the role of service quality, customer's satisfaction and customer loyalty in building service brand equity. *International Journal of Asian Business and Information Management (IJABIM)*, 10(2), 55–72.