Evaluating the Citizen Satisfaction on Service Quality Using the SERVQUAL Model : The Case of Kaeng Khol Municipality, Thailand

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ABSTRACT

Purpose: This study aims to deploy the SERVQUAL model to identify the citizen satisfaction factor of the service quality at the local government, Kaeng Khoi Municipality. **Methodology**: The study consisted of 249 samples that used services for various departments at the local government, Kaeng Khoi Municipality. The data were analysed using multiple regression analysis based on the SERVQUAL scale. **Findings**: The original hypothesis model from the point of view of SERVQUAL users shows five service quality attributes: 1. reliability 2. responsiveness 3. assurance 4. empathy, and 5. tangibles. The study reveals there is no significant relationship between reliability and citizen satisfaction. The impact factors are assurance, empathy, tangibles and responsiveness by order. **Research Limitations**: This study was limited to the citizens who used the local government of Kaeng Khoi Municipality service. The duration of data collection and the accessible population was 1-30 November 2021. The different venues and times might give differing results. There are also many other service quality dimension measurements using the SERVQUAL model. **Originality / Value**: The finding of this study is a guideline for the local government and policymakers to improve the service quality to taxpayers. Secondly, there has been no previous research regarding the local government service quality of Kaeng Khoi Municipality.

Keywords: *service quality, SERVQUAL, citizen satisfaction, public service, taxpayer satisfaction*

1 INTRODUCTION
1.1 Background of the Study

Public-sector organisations confront more challenges than private-sector organisations to improve customer service (Donnelly et al., 1995). On the other hand, service quality initiatives in the private sector have nothing to do with the social good and aim to enhance the organisation's bottom line for its long-term profitability. As a result, investment in these efforts can be justified and gained by providing a financial return (David, 2013; Suwandi &

Warokka, 2013). Customer service projects are frequently funded on a shoestring or by budget reallocation away from other operations in the current public sector budgetary climate. Every organisation in the private sector usually finds it easy to define existing and potential consumers. They are those customers who are willing to pay the current market price for the goods or services in question (Aitken et al., 2020; Lehmann, 2017). Contrastly, most public sector companies have diverse "clients" for their various services. Some of these are comparable to private-sector customers who pay directly or indirectly for services. Others are beneficiaries or users of services and sometimes unwillingly but contribute little or nothing financially to their supply. Some clients may pay for a particular public service but not get its benefits through direct use. In this regard, the role of other stakeholders, particularly elected members, is ambiguous (Jiang & Iles, 2011; Khatab et al., 2019; Lehmann, 2017). Thus, studying the relationship between public service quality and citizen satisfaction is essential.

1.2 Problem Statement

Why should governments measure citizen, client, and stakeholder satisfaction? Many recent academic studies show the relationship between external performance measurements like customer satisfaction and objective measures of business financial success, including revenue growth, profitability, stock market performance, etc. (Shahbaz et al., 2018). In the private sector, customer satisfaction is measured because satisfied customers are more loyal, and loyal customers are more profitable. In other words, satisfaction assessment and management is crucial and organically justified for the business bottom line (Ali et al., 2021; Kozlowiec & Kozlowiec, 2019). The government does not operate in a free market, and unsatisfied citizens cannot readily switch governments as consumers do in a free market. Despite these concerns about the government's need to monitor citizen contentment, counter-arguments that quasi-monopoly power of the government and high switching costs make it necessary (Morris et al., 2015; Salamon & Toepler, 2015). More explanations for this technique have been presented, demonstrating why it is valuable and vital. Increasing transparency, accountability, or public trust, improving process and service quality, or any of the other goals described above, citizen satisfaction assessment may and should play a significant part in government performance evaluation. While these objectives differ from commercial firms, they are still critical. It is the responsibility of the government to improve its service in response to taxpayer demand and expectations (Gatt & Owen, 2018; Park & Blenkinsopp, 2011). If the elected government performs to the citizen satisfaction, the government administrator team will likely be re-elected in the next election campaign (Curini et al., 2015; Park & Blenkinsopp, 2011). Therefore, it is critical to evaluate the citizen satisfaction on service quality using the SERVQUAL model in the public sector.

1.3 Research Objective

To identify the significant predictors for citizen satisfaction using the SERVQUAL Model for the Kaeng Khoi Municipality.

1.4 Research Question

What are the significant predictors for citizen satisfaction on service quality using SERVQUAL MODEL at Kaeng Khoi Municipality?

1.5   Research Significance

The citizen satisfaction research on government service quality is rarely found in Thailand. This study brings new knowledge for the relevant authority to identify the top expectation from taxpayers. The study result also can be used in planning to improve the service. Furthermore, it can be used as a guideline for further improvement and development of the local government services.

2   LITERATURE REVIEW

This study evaluates citizen satisfaction on service quality using the SERVQUAL Model: Case of Kaeng Khoi Municipality, Thailand. The researchers studied the concepts, theories, and research related to the study's variables. From academic papers and research from various sources, the content was divided into five parts:

- Public Services
- Citizen Satisfaction
- Public Service Quality
- Previous Research and Hypothesis Development
- Conceptual Framework Model

2.1   Public Services

According to Grout & Stevens (2003), public service is any service delivered to a significant number of people. When a public institution offers the services, a potential major market failure (broadly understood to encompass equity and efficiency) necessitates government participation in production, finance, or regulation (Suwandi & Warokka, 2013). According to Spicker (2009), public services have four distinguishing characteristics:

- They exist for policy purposes.
- They provide public services.
- They are redistributive, and
- They serve as a trust.

Because society is dynamic, public services must continually adapt to changes in society (Hartley, 2005). In this instance, the government will have to negotiate and work on various public interests for public services to meet public expectations.

2.2   Citizen Satisfaction

Citizen satisfaction could be analysed in various ways using customer satisfaction theories, but in general, satisfaction was defined as fulfilling a person's demands or requirements. Early customer satisfaction concepts could be regarded as evaluative judgments made after a decision has been made. The expectancy-disconfirmation model was established by Oliver & Linda (1981), in which consumer pleasure in a product or service results from subjective expectations and perceptions' comparisons. Later research by Parker & Mathews (2001) looked at customer satisfaction via the lens of value–percept theory. A cognitive evaluation procedure elicited an emotional response among customers, termed customer satisfaction. Customers' satisfaction is the consequence of a cognitive process, according to

the expectancy-disconfirmation model studied by Oliver & Linda (1981) and Spreng & Olshavsky. But the value-percept theory expands customer satisfaction into a cumulative experience with service (Eggert & Ulaga, 2002). Citizens' satisfaction can be defined as a customer's overall assessment of the quality of a public institution's service and overall performance. Various methodologies and elements have been used to examine the satisfaction–performance link. Holzer et al. (2009) investigated methods involving factors such as trust (Bouckaert & van de Walle, 2003; Yang & Holzer, 2006), bottom-up spillover effects (Sirgy et al., 2000), expectation – perception gaps (Parasuraman et al., 1985; VAN Ryzin, 2004; Roch & Poister, 2006), disconfirmation (Stradling et al., 2007). When comparing regular and infrequent users, (Van Ryzin & Charbonneau, 2010) looked at how performance survey scores differed. The realised information about service quality aspects held by municipal authorities may vary dramatically from citizens' perceptions of service quality. It demonstrates how difficult public institutions' ability to objectively gauge customer satisfaction with public services (Kelly & Swindell, 2002). Budget (cost per input of given quality) data, quantity and quality of outputs data, efficiency data, effectiveness data, value for money data, equity data, responsiveness to service needs data, and overall citizen satisfaction data are all covered by a comprehensive set of administrative or survey measurements. The researchers adopted the SERVQUAL Model developed by Parasuraman et al. (1985) to examine service quality and citizen satisfaction in this study.

2.3 Public Service Quality

Because improving the quality of public services is one of the most critical goals in improving public administration worldwide, many foreign scholars have looked into the topic. Because the government serves as the primary public servant, it is morally obligated to continue improving the service quality. Service delivery success is judged by whether the community receives the required and expected services. Because the government serves as the primary public servant, it is morally obligated to continue improving the service quality. All actions of public sector organisations in the context of providing goods or services to all levels of society and funded by tax revenues are included in the public service (Broadbent & Guthrie, 2008). Conflicts of interest, misuse of information, nepotism, bribery, extortion, abuse, and indecisiveness in the imposition of sanctions and legal uncertainty about corruption negatively affected governance, mainly public services, in several previous studies (Rakhman, 2019).

2.4 SERVQUAL Model

SERVQUAL is a multi-dimensional research instrument developed by Parasuraman et al. (1985). SERVQUAL captures consumer expectations and impressions of service along five dimensions that indicate service quality. The SERVQUAL model was divided into five dimensions, which are detailed below:

1. Tangibility or tangibles refer to the service's physical aspects, such as physical premises, service provider-employee appearance, equipment, and materials utilised to communicate with clients (Presbury, 2009). The tangibility element in the private sector (hotel) involves the equipment, facilities, and service provider-employee appearance (Aleshaiwy et al., 2015).

2. Reliability refers to the ability to consistently and reliably deliver the promised service (Presbury, 2009). The private sector (hotel) recognises the importance of on-time promised delivery. Customers' unfavourable sentiments are exacerbated when promises are not kept, potentially resulting in a negative corporate (hotel) image. This dimension virtually always influences customer satisfaction, and it is a source of competitive advantage (Aleshaiwy et al., 2015).

3. Responsiveness relates to the willingness of a service provider to assist or aid clients by offering prompt and correct service (Presbury, 2009). Responsiveness refers to personnel and is frequently considered another essential aspect of service quality in the hospitality industry (hotel). It is due to the expectation that workers respond to guests' wants and demands on time (Aleshaiwy et al., 2015).

4. Assurance relates to the service provider's understanding and civility and their capacity to provide confidence and trust as they interact with consumers and provide service (Presbury, 2009). The service sector (hotel) must establish confidence in their visitors to feel safe while staying with them. This factor substantially impacts customer satisfaction (Aleshaiwy et al., 2015).

5. Empathy relates to the service provider's ability to comprehend each unique customer's needs and give service in a caring manner (Presbury, 2009). From the standpoint of the hotel sector, this dimension necessitates a high level of communication to comprehend the wants of the visitor and pay maximum attention to them. Although many service providers (hotels) offer additional amenities, guests are frequently dissatisfied by personnel' inappropriate behaviour (Aleshaiwy et al., 2015).

2.5 Previous Research

According to a study conducted by Lau et al. (2013) to assess the service quality of Hong Kong-based banks, tangibility, responsibility, reliability, and assurance were more critical in boosting customer satisfaction, whereas empathy was the least important factor. According to Salleh et al. (2019), the relationship between assurance and empathy considerably impacts customer satisfaction, whereas reliability, responsiveness, and tangibility have little impact. Furthermore, according to a study by Najjar & Bishu (2006), reliability and responsiveness are the two most essential elements of service quality, and they are linked to overall service quality. Nonetheless, few studies have been undertaken concerning Thailand's local municipal government organisations.

2.6 Hypotheses Development
2.6.1 Relationship Between Reliability and Citizen Satisfaction

The reliability dimension measures employees' ability and commitment to offer services in line with the agreement. The decision was made out of a desire to adjust performance to consumer expectations, which means that all clients will receive the same level of service (Ngaliman et al., 2019). Service provided by a reputable service provider enhances a business's life (automobile) and prevents it from breaking down unexpectedly. Therefore, the hypothesis is advanced as below.

H1: Reliability has a positive effect on citizen satisfaction.

2.6.2 Relationship Between Assurance and Citizen Satisfaction

Assurance is one of the main aspects of service quality to measure customer satisfaction. According to Johnson & Karley (2018), the process of gaining knowledge being demonstrated by employees in executing their terms of preference throughout service delivery can be very reassuring to customers. It gives clients trust that the service delivery representative will carry out their responsibilities professionally and ethically, increasing the possibility of positive word-of-mouth activity, particularly in financial institutions (Johnson & Karley, 2018). Therefore, the hypothesis is advanced as below.

H2: Assurance has a positive effect on citizen satisfaction.

2.6.3 Relationship Between Tangibles and Citizen Satisfaction

The tangibles dimension refers to organisations' physical tools to generate and perform work. Supporting equipment and the appearance of customers who serve customers might leave an impression that they will remember. Consumers also experience excellent conditions when transacting with the company's services. As a result, the tangible dimension is becoming more critical as staff are expected to respond quickly to customer requests. The better the organisation's tangibles are, the better the service supplied to customers (Ngaliman et al., 2019). Therefore, the hypothesis is advanced as below.

H3: Tangibles have a positive effect on citizen satisfaction.

2.6.4 Relationship between Empathy and satisfaction

Faarooq et al. offered evidence that higher-quality people services will result in higher levels of customer satisfaction (Farooq et al., 2018). Customers will remain unhappy with service quality if empathy is lacking. As a result, empathy significantly impacts customer satisfaction (Johnson & Karley, 2018). Therefore, the hypothesis is advanced as below.

H4: Empathy has a positive effect on citizen satisfaction.

2.6.5 Relationship between Responsiveness and satisfaction

The ability of personnel in a company to act quickly and disseminate information in response to customer requests is known as responsiveness. Consumers will rate employees' capacity to respond to what they own favourably, allowing them to develop capabilities when servicing customers. Customer satisfaction improves when personnel are motivated to solve the difficulties consumers encounter while using the services (Ngaliman et al., 2019). Therefore, the hypothesis is advanced as below.

H5: Responsiveness has a positive effect on citizen satisfaction.

2.7 Conceptual Framework Model

From concepts and theories and related research results, the researchers had studied the factors that can improve the service quality for the people who used the agencies' services in Kaeng Khoi Municipality. Saraburi. The variables that affect the research were identified as follows:

The independent variables were the perceptions toward service quality dimensions served by the Kaeng Khoi Municipality Office personnel in Saraburi Province. The service quality consists of 1. reliability 2. assurance 3. tangibles 4. empathy 5. responsiveness based on the SERVQUAL model of Parasuraman et al. (1985). The dependent variable was the personal factor that satisfies the service recipient, namely citizen satisfaction. The researchers

developed independent and dependent variables in the conceptual framework, as shown in figure 1.
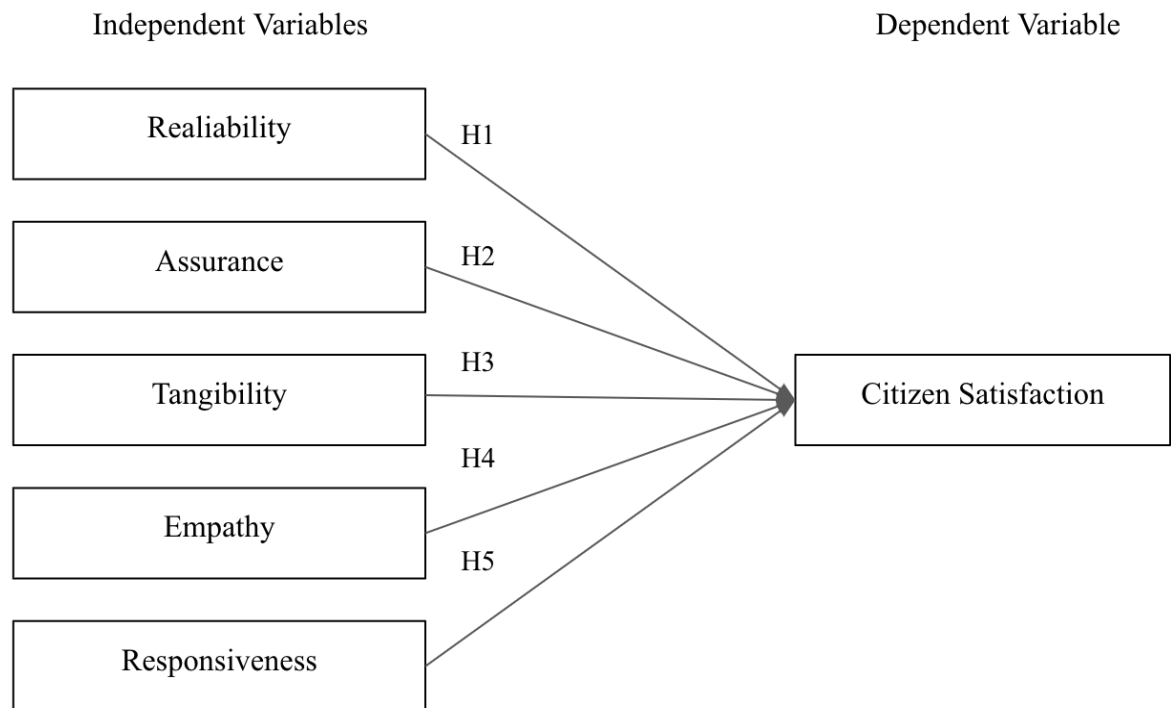
Independent Variables   Dependent Variable

Figure 1. Conceptual Framework

3 RESEARCH METHODOLOGY

This research aims to study "assessment of service quality in Kaeng Khoi Municipality using SERVQUAL model in Kaeng Khoi Municipality, Saraburi, Thailand, study and conduct a quantitative survey on the service user citizen of the Kaeng Khoi Mueang Municipality in Saraburi, Thailand.

3.1 Target Population

The population and sample in this research were the Kengkhoi Municipal office's service users in Saraburi, Thai citizens. Accessible from 01 November to 30 December 2021.

3.2 Sample Size

The researchers surveyed all the Kengkhoi Municipal office users from 01 November to 30 December 2021. To determine the appropriate sample size, the researchers used the ready-made tables of Roscoe (1975); a simple principle was proposed if the number of participants in the questionnaire should be greater than 30 and less than 500. Roscoe (1975) states that in multivariate research, such as multiple regression analysis, the sample size should be at least ten times or more of the number of variables in the study. The researchers obtained a total of 249 specified samples. The researchers selected the sample group to answer the questionnaire using the random sampling method.

3.3 Research Instruments

This research used a questionnaire as a data collection tool for research purposes, which the researchers created to assess the quality and satisfaction of service recipients. It was divided into two parts as follows:

The researchers adopted the previous research items based on the SERVQUAL model of Parasuraman et al. (1985) to ensure instrumental validity. Citizen satisfaction questions were based on Van Ryzin et al. (2004). The pretest of the questionnaire was tested on 35 samples. The reliability analysis presented that the Cronbach's Alpha's value of 6 constructs and 26 measurement items ranged between 0.921 and 0.938, as shown in table 2. This range of Cronbach's Alpha's value reached the criterion value of 0.70 or higher than 0.70 according to Hair et al. (2006), suggesting that these criterion values are acceptable.

3.4 Data analysis

Data analysis when collecting data is completed according to the amount the data were analysed statistically by using the Statistic package of the social science SPSS for Windows as follows:

Statistics using descriptive statistics are percentage ratio, frequency, arithmetic mean, and standard deviation to measure the average and distribution of the data and present it in a tabular form along with portrayal to study citizen satisfaction towards service quality of Kaeng Khoi Municipality Mueang Kaeng Khoi District Saraburi.

4 RESEARCH FINDINGS

Table 1. General Data Characteristics of the Respondents (n=249)

General Information		Frequency	Percentage
Gender	Male	89	37.5%
	Female	160	64.3%
Age	Less than 18 years old	12	4.8%
	18-25 years old	47	18.9%
	26-35 years old	44	17.7%
	36-45 years old	51	20.5%
	46-55 years old	43	17.3%
	56-65 years old	44	17.7%
	More than 66 years old	8	3.2%
Education	Lower than junior high school	17	6.8%
	Junior high school	22	8.8%
	Senior high school	39	15.7%
	Diploma	54	21.7%
	Bachelor's degree	103	41.4%
	Higher than bachelor's degree	14	5.6%

Occupation	Student	44	17.7%
	Self-employed	52	20.9%
	Government officer	25	10.0%
	Business owner	52	20.9%
	Business employee	51	20.5%
	Farmer	5	2.0%
	Unemployment / retirement	20	8.0%
Income	Over 5,000 THB and less than 10,000 THB	71	28.5%
	Over 10,000 THB and less than 20,000 THB	66	26.5%
	Over 20,000 THB and less than 30,000 THB	56	22.5%
	Over 30,000 THB and less than 40,000 THB	22	8.8%
	Over 40,000 THB and less than 50,000 THB	13	5.2%
	Over 50,000 THB	21	8.4%
	Total	249	100%

Table 2. Mean, Standard Deviation, Factor Loadings and Cronbach's Alpha (n=249).

Items	Cronbach's Alpha	Factor Loadings
Reliability	0.926	
I think the staff is reliable. (Mean=3.84, SD.=0.739)		0.851
I think the staff is genuinely interested in solving my problems. (Mean=3.78, SD.=0.780)		0.898
I think the staff explains, clarifies, and recommends the service. (Mean=3.86, SD.=0.785)		0.889
I think the service period is suitable for my needs. (Mean=3.78, SD.=0.789)		0.866
I think the staff is collecting and recording the information correctly. (Mean=3.80, SD.=0.760)		0.885

Items	Cronbach's Alpha	Factor Loadings
Responsiveness	0.929	
I think the information channel is easily accessible. (Mean=3.78, SD.=0.840)		0.878
I think the service is fast. (Mean=3.78, SD.=0.795)		0.885
I think the staff is happy and willing to serve. (Mean=3.84, SD.=0.809)		0.882
I think the staff is very convenient and has a hassle-free service process. (Mean=3.80, SD.=0.791)		0.873
I think the staff is ready to serve. (Mean=3.86, SD.=0.818)		0.895

Items	Cronbach's Alpha	Factor Loadings
Assurance	0.923	
I have a good feeling and am impressed after receiving the service. (Mean=3.85, SD.=0.761)		0.905
I think the staff of this office keeps benefiting me. (Mean=3.87, SD.=0.795)		0.907
I think the staff is polite to me. (Mean=3.88, SD.=0.822)		0.897
I think the staff has the knowledge and skill to answer my questions. (Mean=3.83, SD.=0.806)		0.899

Items	Cronbach's Alpha	Factor Loadings
Empathy	0.921	
I think the opening hours are convenient for me. (Mean=3.85, SD.=0.789)		0.892
I think the staff serves equitably without discrimination. (Mean=3.80, SD.=0.881)		0.902
I think the staff of this office has given importance to service to me. (Mean=3.80, SD.=0.788)		0.903
I think the staff understands my needs. (Mean=3.87, SD.=0.777)		0.904

Items	Cronbach's Alpha	Factor Loadings
Tangibles	0.925	
I think the service agency is diverse. (Mean=3.78, SD.=0.785)		0.898
I think the service location is clear and easy to understand when getting the service. (Mean=3.94, SD.=0.765)		0.893
I think the served equipment and tools are modern. (Mean=3.80, SD.=0.861)		0.913
I think the service location is clean. (Mean=3.93, SD.=0.832)		0.912

Items	Cronbach's Alpha	Factor Loadings
Citizen Satisfaction	0.938	
Overall, I think the service quality of this office is good. (Mean=3.86, SD.=0.798)		0.917
Overall, I think I am satisfied with the service provided by this office. (Mean=3.91, SD.=0.770)		0.911
Overall, I think the service of this office meets my expectations. (Mean=3.84, SD.=0.805)		0.926
Overall, I think the service from this office is worth the tax I paid. (Mean=3.76, SD.=0.896)		0.922

Table 3. Multiple Linear Regression of Factors on Satisfaction

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
1 (Constant)	-0.122	0.099		-1.239	0.217
Reliability (X1)	0.074	0.050	0.067	1.491	0.137
Assurance (X2)	0.311	0.063	0.297	4.911	0.000***
Tangibles (X3)	0.194	0.053	0.189	3.680	0.000***
Empathy (X4)	0.253	0.062	0.245	4.106	0.000***
Responsiveness (X5)	0.201	0.062	0.191	3.240	0.001**

R-Squared	0.880	Adjusted R-squared	0.878	
F-statistic	357.168	Prob (F – Statistic)	0.000	

a. Dependent Variable: Citizen Satisfaction
b. Predictors: (Constant), Empathy, Tangibles, Responsiveness, Reliability, Assurance
Note: ***$p<0.001$, **$p<0.01$, *$p<0.05$.

Multiple regression is to understand more about the link between independent or predictor factors and a dependent variable, using multiple regression. Table 3 (above) shows the regression model result. It demonstrates the service quality dimensions that can lead to citizen satisfaction of the people who use the agencies' services in Kaeng Khoi Municipality, Saraburi. The values above indicate that at least one of the model coefficients is nonzero. The model can explain that predicting citizen satisfaction of 88.00% of the sample variations.

The statistical conclusion shows that the regression coefficient of reliability=0.07, t=1.49, p>0.05, indicating that reliability and citizen satisfaction are unrelated. As a result, Hypothesis 1 is rejected. Hypothesis 2 is accepted. The assurance variable has a regression coefficient of 0.31. It means that if confidence rises by one unit, citizen satisfaction increases by 0.31, and vice versa, all other parameters remain constant. Hypothesis 3 is accepted. The result demonstrates a substantial positive link between tangibles and citizen satisfaction, with a value of 0.19, t=3.68, and a p-value of 0.001. The stronger perceptions for tangibles, the more citizen satisfaction will be. Hypothesis 4 has gained widespread acceptance. The empathy variable has a regression coefficient of 0.25, t=4.1 and a p-value of 0.000. It means that increasing empathy by one unit enhances citizen satisfaction by 0.25 and vice versa, assuming all other factors remain unchanged. Hypothesis 5 is accepted. The study demonstrates a significant positive link between responsiveness and citizen satisfaction with a coefficient of 0.20, t = 3.24, and a p0.001. The higher level of responsiveness, the stronger citizen satisfaction will incur. It means that increasing responsiveness by one unit will result in a 0.20 increase in pleasure, and vice versa, assuming all other factors remain unchanged.

Table 4. The Summary of Hypothesis Testing Results

No.	Hypotheses	Results	Actions
H1	Reliability -> Citizen Satisfaction	0.137	Rejected
H2	Assurance -> Citizen Satisfaction	0.000	Accepted
H3	Tangibles -> Citizen Satisfaction	0.000	Accepted
H4	Empathy -> Citizen Satisfaction	0.000	Accepted
H5	Responsiveness -> Citizen Satisfaction	0.001	Accepted
	Reliability, assurance, tangibles, empathy, responsiveness -> Citizen Satisfaction	$R^2 = 0.88$	Service Quality (reliability, assurance, tangibles, empathy and responsiveness) can predict citizen satisfaction by 88%.

a. Dependent Variable: Citizen Satisfaction
b. Predictors: (Constant), Empathy, Tangibles, Responsiveness, Reliability, Assurance

5 DISCUSSION, CONCLUSION, AND RECOMMENDATION

5.1 Discussion and Conclusion

This paper explores what service quality factors influence citizen satisfaction of the people who used the agencies' services in Kaeng Khoi Municipality, Saraburi. Relationships among five areas were investigated. This finding is consistent with the extant literature that found SERVQUAL three or four-dimensional constructs rather than a five-dimensional one (Al-Tamimi & Al-Amiri, 2003). Therefore, the four-dimensional model is consistent with the SERVQUAL literature: responsiveness, assurance, empathy, and tangibles. In other words, the people who come to use the agencies' services in Kaeng Khoi Municipality, Saraburi, focus on four dimensions of service quality since the agencies' services may not concentrate on reliability sufficiently to customers' needs.

Reliability

Reliability is the ability to perform promised services dependably and accurately. The result shows that the relationship between reliability and satisfaction is not significant. This result is consistent with the previous studies conducted by Sanjuq (2014) and Kumar (2017), Reliability has no significant impact on customer satisfaction due to the increased popularity of the phone, telecom, and internet banking market, which gives customers an alternative to face-to-face customer service. Customers now place higher demands on the reliability of machines than on humans when dealing with banks and people who use the service of Kaeng Khoi Municipality, Saraburi. Additionally, Mohamed & Ali (2019) found that reliability in service quality showed no significant positive association with public satisfaction. It showed that reliability does not contribute to citizen satisfaction at Urban Transformation Centre. This result contradicts the previous study of Akroush et al. (2015), which indicates that reliability is an important factor supporting the original model of SERVQUAL and other empirical studies. Yemeni mobile service subscribers' focus on reliability and other dimensions of service quality since the mobile service operators in Yemeni may not be responsive sufficiently to customers' needs (Akroush et al., 2015)

Responsiveness

Responsiveness is a willingness to help customers and provide prompt service. The result shows that responsiveness and satisfaction have a significant positive relationship. The more strength of responsiveness influences the higher satisfaction. The service operators can provide delivery processes and respond more to customers' requests. This result is consistent with the previous studies (Lagat & Uyoga, 2019). The study concludes that customer responsiveness would be directly related to customer satisfaction among Airline Passengers in Kenya, that customer responsiveness is accurate and robust and worth pursuing further. Additionally, Mohamed & Ali (2019) summarised that responsiveness was one of the essential factors in service quality that contributed to public satisfaction at the Urban Transformation Centre.

Assurance

Assurance is knowledge and courtesy of the staff and their ability to inspire trust and confidence. The result shows that assurance and satisfaction have a significant positive

relationship. The more strength of assurance influences the higher satisfaction. This result is consistent with the previous study of Akroush et al. (2015). The study concludes that assurance-empathy has positively and significantly influenced customer satisfaction in the Yemeni mobile service market.

Empathy

Empathy is caring and individualised attention the firm provides its customers. The result shows that empathy and satisfaction have a significant positive relationship. The more strength of empathy influences the higher satisfaction. This result is consistent with the previous studies (Kumar, 2017). The study concludes that empathy significantly affects customer satisfaction in the Indian Telecom Industry. Additionally, Mohamed & Ali (2019) found that empathy also contributed to the public satisfaction in service quality at Urban Transformation Centre.

Tangibles

Tangibles are the appearance of physical facilities, equipment, personnel, and communication material. The result shows that tangibles and satisfaction is a significant positive relationship; the more tangible influences, the higher satisfaction. This result is consistent with the previous studies conducted by Akroush et al. (2015) that the tangible dimension of service quality has positively and significantly influenced customer satisfaction in the Yemeni mobile service market.

5.2 Implications of the Research

The service quality dimensions (reliability, responsiveness, assurance, empathy, tangible) and customer satisfaction should be followed and implemented effectively. This study has shown that the SERVQUAL model is still the most effective model to measure citizen satisfaction in the local government agencies. The result of this study can provide the managers precious insight into the item statements that reflect citizens' perceptions. Managers should focus on public service activities and look at the customers' needs. Hence, customers pay more attention to the functionality of service encounters in terms of responsiveness, assurance, empathy, and tangibles as the determinants of citizen satisfaction. The services of agencies in the municipality of Kaeng Khoi, Saraburi, pay less attention to the service quality stability determinants, which means that service operators should pay great attention to this vital element of service quality by delivering the required service as promised and at the right time.

Managers should implement customer relations training for all frontline staff. This study has shown that the SERVQUAL model is still the most effective model to measure customer satisfaction in agencies' services in the municipality of Kaeng Khoi, Saraburi. Service quality measurement can provide specific data in quality management; hence, service organisations can monitor and maintain quality service. Service quality evaluation and a better understanding of how various service quality dimensions would enable organisations to design the service delivery process efficiently. By identifying the strengths and weaknesses of service quality dimensions, the strengths and weaknesses of service quality dimensions, organisations can better allocate resources to provide better service and ultimately better

service to external customers. Hence, the service provider should understand the public's needs to increase the level of service quality as well as public satisfaction when the needs and wants of their customers are known, met, and satisfied. According to Parasuraman et al. (1988), understanding customer expectations better than competitors in providing the necessary customer service at any time without any inconvenience will strongly influence the level of customer satisfaction. Future efforts should continue to advance the understanding of the concept and the means to measure and improve service quality.

In conclusion, there is no relationship between reliability and citizen satisfaction, while the impact factors are assurance, empathy, tangible and responsiveness. The results were like this, maybe because of the advancement of technology. Therefore, self-service technology was adopted, with less face-to-face interaction between users and service. Kaeng Khoi Municipality and its service area are small towns, so it is possible that the citizens or users feel like the casual contact would give them satisfaction and comfort.

5.3   Limitations and Recommendations for Further Study

The first limitation of this study is that the questionnaires were only administered to respondents who use the service in Kaeng Khoi, Saraburi. Future studies could be extended to a broader population. Furthermore, the use of self–report data may induce a possibility of biases and inaccuracies. The exploratory research should conduct both qualitative and quantitative approaches to deepen more insights with respondents; a semi-structured interview approach was adapted for participants to discuss and show their thoughts freely and their feelings, opinions, and behaviour. Unexpectedly, the responsiveness dimension of service quality is found to have almost no effect on customers' satisfaction in contrast to the majority of the previously discussed literature review. This investigation could utilise qualitative or quantitative research design and methodologies to determine the causes of such differences.

A potential area of future research is to extend the research instrument into other service industries to shed more light on SERVQUAL in other public service authorities, conducting comparative and cross-cultural studies on service quality.

REFERENCES

Aitken, M., Toreini, E., Carmichael, P., Coopamootoo, K., Elliott, K., & van Moorsel, A. (2020). Establishing a social licence for Financial Technology: Reflections on the role of the private sector in pursuing ethical data practices. *Big Data & Society*, *7*(1).

Akroush, M. N., Dawood, S. A., & Affara, I. B. (2015). Service quality, customer satisfaction and loyalty in the Yemeni mobile service market. International Journal of Services, Economics and Management, 7(1), 53–73.

Aleshaiwy, Y. S. M., Chen-McCain, S.-L., Hadgis, N. J., & Lolli, J. C. (2015). Generation Y's perception of service quality in the hotel industry. The thesis for the degree of Master of Science in Hospitality Management.

Ali, B. J., Saleh, P. F., Akoi, S., Abdulrahman, A. A., Muhamed, A. S., Noori, H. N., & Anwar, G. (2021). Impact of Service Quality on the Customer Satisfaction: A case study at Online Meeting Platforms. *International Journal of Engineering, Business and Management*, 5(2), pp. 65-77)

Al-Tamimi, H. A. H., & Al-Amiri, A. (2003). Analysing service quality in the UAE Islamic banks. Journal of Financial Services Marketing, 8(2), 119–132.

Bouckaert, G., & van de Walle, S. (2003). Comparing Measures of Citizen Trust and User Satisfaction as Indicators of "Good Governance": Difficulties in Linking Trust and Satisfaction Indicators. International Review of Administrative Sciences, 69(3), 329–343.

Broadbent, J., & Guthrie, J. (2008). Public sector to public services: 20 years of "contextual" accounting research. Accounting, Auditing & Accountability Journal, 21(2), 129–169. Eggert, A., & Ulaga, W. (2002).

Curini, L., Jou, W., & Memoli, V. (2015). *Why Policy Representation Matters: The consequences of ideological proximity between citizens and their governments*. Routledge.

Customer perceived value: a substitute for satisfaction in business markets? Journal of Business & Industrial Marketing, 17(2/3), 107–118.

David, Mc. A. B. (2013). Service Quality and Customer Satisfaction in the Airline Industry: A Comparison between Legacy Airlines and Low-Cost Airlines. *American Journal of Tourism Research*, *2*(1), 67-77.

Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of Service Quality on Customer Satisfaction in Malaysia Airlines: A PLS-SEM Approach. Journal of Air Transport Management, 67, 169–180.

Gatt, L., & Owen, O. (2018). Direct Taxation and State-Society Relations in Lagos, Nigeria. *Development and Change*, *49*(5), 1195-1222.

Grout, P. A., & Stevens, M. (2003). The Assessment: Financing and Managing Public Services. Oxford Review of Economic Policy, 19(2), 215–234.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis (Vol. 6). Pearson Prentice Hall Upper Saddle River, NJ.

Hartley, J. (2005). Innovation in Governance and Public Services: Past and Present. Public Money & Management, 25(1), 27–34.

Holzer, M., Charbonneau, E., & Kim, Y. (2009). Mapping the terrain of public service quality improvement: twenty-five years of trends and practices in the United States. International Review of Administrative Sciences, 75(3), 403–418.

Jiang, T., & Iles, P. (2011). Employer-Brand Equity, Organizational Attractiveness and Talent Management in the Zhejiang Private Sector, China. *Journal of Technology Management in China*.

Johnson, E., & Karley, J. (2018). Impact of service quality on customer satisfaction. http://www.diva-portal.org/smash/record.jsf?pid=diva2:1246475

Kelly, J. M., & Swindell, D. (2002). A multiple–indicator approach to municipal service evaluation: Correlating performance measurement and citizen satisfaction across jurisdictions. Public Administration Review, 62(5), 610–621.

Khatab, J. J., Esmaeel, E. S., & Othman, B. (2019). The Influence of Service Quality on Customer Satisfaction: Evidence from Public Sector and Private Sector Banks in Kurdistan/Iraq. *International Journal of Advanced Science and Technology*, *28*(20), 865-872.

Kozlowiec, J., & Kozlowiec, M. (2019). The application of "the patient satisfaction assessment" as a method for assessing hospital management efficiency. Polish Journal of Public Health, 129(2).

Kumar, A. (2017). Effect of service quality on customer loyalty and the mediating role of customer satisfaction: an empirical investigation for the telecom service industry. Journal of Management Research and Analysis, 4(4), 159–166.

Lagat, C., & Uyoga, D. (2019). Relationship between customer responsiveness, service performance and satisfaction among airline passengers in Kenya. Journal of Emerging Trends in Economics and Management Sciences, 10(2), 61–69.

Lau, M. M., Cheung, R., Lam, A. Y. C., & Chu, Y. T. (2013). Measuring service quality in the banking industry: a Hong Kong-based study. Contemporary Management Research, 9(3). http://www.cmr-journal.org/article/view/11060

Lehmann, O. F. (2017). Customer Projects: What is the Future of the Business?'. PM World Journal, 4(2).

Mohamed, N., & Ali, A. J. M. (2019). Service Quality and Public Satisfaction at Urban Transformation Centre (UTC) Kuala Lumpur (KL). International Journal of Academic Research in Business and Social Sciences, 9(6).

Morris, M. H., Neumeyer, X., & Kuratko, D. F. (2015). A portfolio perspective on entrepreneurship and economic development. Small Business Economics, 45(4), 713-728.

Najjar, L., & Bishu, R. R. (2006). Service Quality: A Case Study of a Bank. Quality Management Journal, 13(3), 35–44.

Ngaliman, Mika, G. E. J., & Suharto. (2019). The Effect Of Tangibles, Responsiveness, And Reliability On Customer Satisfaction Of Delivery Services. http://www.internationaljournalssrg.org/IJEMS/paper-details?Id=310

Oliver, R. L., & Linda, G. (1981). Effect of satisfaction and its antecedents on consumer preference and intention. ACR North American Advances. https://www.acrwebsite.org/volumes/9746

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(4), 41–50.

Park, H., & Blenkinsopp, J. (2011). The roles of transparency and trust in the relationship between corruption and citizen satisfaction. International Review of Administrative Sciences, 77(2), 254-274.

Parker, C., & Mathews, B. P. (2001). Customer satisfaction: contrasting academic and consumers' interpretations. Marketing Intelligence & Planning, 19(1), 38–44.

Presbury, R. (2009). Service quality in Sydney hotels: A perspective from managers, staff and customers[search.proquest.com]. https://search.proquest.com/openview/2bf0fa154100da375c3ab43fc85f1d6e/1.pdf?pq-origsite=gscholar&cbl=2026366&diss=y

Rakhman, F. (2019). Budget implementation in a risky environment: evidence from the Indonesian public sector. Asian Review of Accounting, 27(2), 162–176.

Roch, C. H., & Poister, T. H. (2006). Citizens, Accountability, and Service Satisfaction: The Influence of Expectations. Urban Affairs Review, 41(3), 292–308.

Salamon, L. M., & Toepler, S. (2015). Government–Nonprofit Corporation: Anomaly or Necessity?. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *26*(6), 2155-2177.

Salleh, M. Z. M., Abdullah, A., Nawi, N. C., & Muhammad, M. Z. (2019). Assessing the service quality and customer satisfaction on Islamic banking by using SERVQUAL model. Research in World Economy, 10(2), 79.

Sanjuq, G. (2014). The impact of service quality delivery on customer satisfaction in the banking sector in Riyadh, Saudi Arabia. International Journal of Business Administration, 5(4), 77.

Shahbaz, M. S., Rasi, R. Z. R. M., Zulfakar, M. H., Ahmad, M. B., Abbas, Z., & Mubarak, M. F. (2018). A novel metric of measuring performance for supply chain risk management: drawbacks and qualities of good performance. *Journal of Fundamental and Applied Sciences*, *10*(3S), 967-988.

Sirgy, M. J., Rahtz, D. R., Cicic, M., & Underwood, R. (2000). A method for assessing residents' satisfaction with community-based services: a quality-of-life perspective. Social Indicators Research, 49(3), 279–316.

Spicker, P. (2009). The Nature of a Public Service. International Journal of Public Administration, 32(11), 970–991.

Spreng, R. A., & Olshavsky, R. W. (1992). A desires-as-standard model of consumer satisfaction: Implications for measuring satisfaction. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 5(1).

Stradling, S. G., Anable, J., & Carreno, M. (2007). Performance, importance and user disgruntlement: A six-step method for measuring satisfaction with travel modes. Transportation Research Part A: Policy and Practice, 41(1), 98–106.

Suwandi, & Warokka, A. (2013). Fiscal decentralization and special local autonomy: Evidence from an emerging market. Journal of Southeast Asian Research, 1–14.

VAN Ryzin, G. G. (2004). THE MEASUREMENT OF OVERALL CITIZEN SATISFACTION. Public Performance & Management Review, 27(3), 9–28.

Van Ryzin, G. G., Muzzio, D., Immerwahr, S., Gulick, L., & Martinez, E. (2004). Drivers and consequences of citizen satisfaction: An application of the American customer satisfaction index model to New York City. *Public Administration Review*, *64*(3), 331-341.

Van Ryzin, G. G., & Charbonneau, É. (2010). Public service use and perceived performance: An empirical note on the nature of the relationship. Public Administration, 88(2), 551–563.

Yang, K., & Holzer, M. (2006). The performance-trust link: Implications for performance measurement. Public Administration Review, 66(1), 114–126.