(RESEARCH ARTICLE)

A study on audit service quality: Reliability of local independent auditing firms

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Abstract

The main objective of this study was to identify, evaluate, and measure the attributes of audit service quality: reliability in local independent auditing firms in Hanoi through qualitative and quantitative research methods. The study was based on a field survey using a semi-structured questionnaire on a sample of 250 general accountants and chief accountants. The period was from October 2021 to March 2022. By using statistical analytical tools, i.e., Cronbach's alpha analysis, independent T-test, and ANOVA, the study has identified and measured five attributes of audit service quality: reliability in local independent auditing firms in Hanoi. There is not, statistically, a significant difference in the level of audit service quality in local independent auditing firms in Hanoi between these different types of work. There is not, statistically, a significant difference in the level of audit service quality in local independent auditing firms in Hanoi between these different job seniorities. Based on the findings, some recommendations are given for local independent auditing firms to improve the quality of their audit services.

1 Introduction

Quality audit services are provided by auditing firms, including domestic independent auditing firms in Hanoi. Most of the clients of the domestic independent auditing firms perceive the service quality provided by the firms through the components of service quality. The experts interviewed said that the components of good service quality in enterprises will bring satisfaction to customers and maintain customer loyalty.

Providing quality service is considered one of the most important strategies for the success and sustainability of public or private organizations (Zeithaml et al., 2009) [9].

Observing the current situation at domestic independent auditing firms shows that human resources, finance, and activities of domestic auditing firms still face many obstacles that are partly not suitable or adapted to the current situation. current situation and not fully meet the requirements of customers. Although the quality of audit services provided by domestic auditing firms has improved, it is not commensurate with the requirements of customers and is somewhat below par when compared to major international auditing firms. To meet more and more customer requirements, domestic auditing firms need to improve the quality of their audit services. This is not only meaningful for domestic audit firms in increasing their revenue, thereby improving the income for the enterprise's human resources and helping them feel secure to devote themselves to the business, but also meaningful for the enterprise's employees in helping customers use better audit services.

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Service quality, in terms of reliability, is one of the important components of service quality and one of the factors on which customers base their assessment of whether the service is reputable and of good quality, sure and correct or not. In addition, customers also evaluate and consider the level of service responsiveness to customer needs. For the above reasons, this study analyzes, evaluates, and measures the quality of audit services: reliability as assessed by businesses that are clients of domestic independent auditing firms in Hanoi.

2   Literature Review

Based on the research results of Parasuraman et al. (1988) [7], Cronin and Taylor (1992) [1], some authors in Vietnam have studied service quality, typically: Le (2014) [4] conducted a survey of 20 patients using quantitative research methods to determine the relationship model between service quality and patient satisfaction with the medical services of district hospitals in Can Tho City. The research results confirm that the service quality factor: Reliability, including the following scales: (i) the hospital's medical team is experienced; (ii) the hospital always fulfills its promises; (iii) the medical team always clearly informs the patient about the patient's health status; direct and positive impact on patient satisfaction with the medical services of district hospitals in Can Tho City.

Nguyen (2020) [6] studies the influence of service quality and perceived value on customer satisfaction about the quality of business registration services in Can Tho city. The author uses qualitative and quantitative research methods based on secondary data sources, which are reports of the Department of Planning and Investment and the General Statistics Office; Primary data was collected from a direct survey by questionnaire, with 248 enterprises having directly carried out business registration procedures. Research results show that service quality: Reliability includes: (i) the Department of Planning and Investment ensures working hours in accordance with regulations; (ii) enterprises do not have to travel many times when carrying out business registration procedures; (iii) forms and declarations are consistent, clear, and easy to understand; (iv) simple business registration procedures; and (v) the business registration certificate is issued on time and accurately; these have both direct and indirect effects on customer satisfaction.

Nguyen (2021) [5] applies a quantitative method through a survey of 24 observed variables on a 5-level Likert scale to assess the feelings of 172 people right after receiving the results of administrative services and review the quality of services provided at the Receiving and Returning Department, under the People's Committee of Chau Phu District, An Giang Province. The results show that five elements of the SERVPERF scale constitute a valuable tool to measure service quality, including competence, facilities, reliability, service attitude, and empathy, which influence and increase satisfaction. In which trust includes the observed variables: (i) the administrative processes and procedures are fully publicly listed; (ii) the correct publicly listed processes and procedures; (iii) the composition of the dossier to be submitted is correct; (iv) payable fees or fees are in accordance with regulations; (v) the time limit for processing the application is in accordance with the regulations (according to the appointment letter).

In addition to inheriting the research results of previous studies and the opinions of the experts interviewed, we adjusted and supplemented a number of scales of audit service quality: reliability, appropriateness, and the field of study. These scales are presented in Table 1. The scale of the scale is rated according to Likert 5, from 1 = "strongly disagree" to 5 = "strongly agree".

Table 1 Scale of audit service quality: reliability

Code	Description	Sources
REL1	Audit businesses use straightforward, understandable, full documents and contracts.	Parasuraman et al. (1988) [7], Cronin & Taylor (1992) [1], Le (2014) [4], Nguyen (2020) [6], Nguyen (2021) [5] and expert opinions were interviewed.
REL2	The progress, implementation, and conclusion of the audit are in accordance with the contract; auditing firms ensure working time in compliance with legislation.	
REL3	The audit firm accurately and completely lists and discloses the auditing techniques and procedures.	
REL4	The audit service fee is specified in the contract, is explicit, and complies with requirements.	
REL5	Audit reports are completely ready, delivered on schedule, and correct.	

In which the scales REL1, REL3, and REL5 are much different from previous studies. These scales reflect the basic and outstanding characteristics of audit services in auditing firms.

3 Methodology

3.1 Data collection

The author also gathers secondary data from reports of domestic independent auditing firms and professional associations of auditors for the years 2021 and 2022, as well as from scientific studies published in domestic and international journals and textbooks related to the research topic (research overview).

The author collects primary data through a survey using a questionnaire for a period of six months, from October 2021 to March 2022. Survey subjects are customers using the audit services of independent domestic auditing firms in Hanoiom October 2021 to March 2022. Survey subjects are customers using the audit services of independent domestic auditing firms in Hanoi. Respondents selected for the survey are employees of the accounting department of an enterprise who are clients of domestic auditing firms. The author sends the survey by many methods, such as direct submission, emailing, and using Google Docs. The number of samples in this study used for analysis was 250, satisfying the requirement of Hair et al. (2010) for sample size.

3.2 Analytical methods

We use the expert interview method; the respondents selected for interview are chief accountants or members of the Board of Directors of enterprises that are clients of domestic auditing firms. The purpose of the interview was to discuss the current status of audit service quality: reliability, thereby defining and completing the scale (attribute) of audit service quality: reliability.

Quantitative research methods are used with the support of SPSS 26 software with the following techniques: Cronbach's alpha reliability analysis, independent sample T-test, and Anova analysis.

4 Research Results

4.1 Cronbach's Alpha

The audit service quality: reliability of local independent auditing firms in Hanoi has been measured by Cronbach's alpha. The results of testing Cronbach's alpha for attributes are presented in Table 2 below. The results also show that attributes of the dependent variables have Cronbach's alpha coefficients that are greater than 0.6, and the correlation coefficients of all attributes are greater than 0.3. So, all the attributes of the dependent variables are statistically significant (Hoang & Chu, 2008 [3]; Hair et al., 2010 [2]).

Table 2 Results of Cronbach's alpha testing of attributes and item-total statistics

	Cronbach's Alpha		N of Items	
	0.913		5	
	Scale Mean if Item Deleted	**Scale Variance if Item Deleted**	**Corrected Item-Total Correlation**	**Cronbach's Alpha if Item Deleted**
REL1	17.25	7.119	0.794	0.891
REL2	17.16	7.401	0.758	0.898
REL3	17.20	7.363	0.781	0.894
REL4	17.22	7.219	0.791	0.892
REL5	17.21	7.483	0.772	0.896

4.2 Exploratory Factor Analysis (EFA)

Next, tables 3, 4, and 5 show that exploratory factor analysis (EFA) was conducted through component analysis and variance.

The results of factor analysis in Table 3 show that 0.5 < KMO = 0.890 < 1. Bartlett's testimony shows sig. = 0.000 < 0.05, which means variables in the whole are interrelated (Hoang & Chu, 2008 [3]; Hair et al., 2010 [2]).

After implementing the rotation matrix, four components of the audit service quality: reliability with a factor load factor greater than 0.5; eigenvalues greater than 1; and the variance explained as 74.326%. These statistics demonstrate that research data analysis for factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified four components of audit service quality: reliability in local independent auditing firms.

Table 3 KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.890
Bartlett's Test of Sphericity	Approx. Chi-Square	810.581
	Df	10
	Sig.	.000

Table 4 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.716	74.326	74.326	3.716	74.326	74.326
2	0.395	7.910	82.236			
3	0.347	6.942	89.177			
4	0.278	5.563	94.741			
5	0.263	5.259	100.000			

Extraction Method: Principal Component Analysis

Table 5 Component Matrix[a]

	Component
	1
REL1	0.873
REL4	0.870
REL3	0.863
REL5	0.857
REL2	0.847

4.3 Independent T- test

A comparison of assessment results on audit service quality: reliability of domestic independent auditing firms in Hanoi between different job positions is presented in Table 6. According to Table 6, Sig Levene's Test = 0.988 > 0.05, so the variance between job positions is not different. T-Test sig value = 0.838 > 0.05; there is no statistically significant difference in the level of assessment of audit service quality: reliability of domestic independent auditing firms in Hanoi of survey subjects with different working positions (Hair et al., 2010 [2]; Hoang & Chu, 2008 [3]).

Table 6 Differences in the audit service quality: reliability with participants of different job positions - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
REL	Equal variances assumed	0.000	0.988	-0.204	248	0.838	-0.01758	0.08614	-0.18723	0.15207
	Equal variances not assumed			-0.208	233.276	0.835	-0.01758	0.08452	-0.18409	0.14893

4.4 ANOVA

An ANOVA test was needed to make a comparison of the results of the evaluation of audit service quality: reliability in local independent auditing firms in Hanoi between the three subjects, including participants who have worked for less than 5 years, participants who have worked for 5 to 10 years, and participants who have worked for over 10 years. Table 7 shows that the sig Levene statistic is 0.452 (results in a row Based on Mean), greater than 0.05, which means that the hypothesis of homogeneity of variance among the variable value groups (different job seniorities) has not been violated. Therefore, this study uses the results of the Anova test (see table 8).

Table 8 shows that sig. = 0.742 is more than 0.05, which indicates that there is no statistically significant difference in the level of audit service quality: reliability in local independent auditing firms in Hanoi between the mentioned three groups of job seniorities (Hoang & Chu, 2008 [3]; Hair et al., 2010 [2]).

Table 7 Test of Homogeneity of Variances

The audit service quality: reliability

Descriptions	Levene Statistic	df1	df2	Sig.
Based on Mean	0.796	2	247	0.452
Based on Median	0.585	2	247	0.558
Based on Median and with adjusted df	0.585	2	235.028	0.558
Based on trimmed mean	0.701	2	247	0.497

Table 8 ANOVA

The audit service quality: reliability

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.269	2	0.134	0.299	0.742
Within Groups	111.191	247	0.450		
Total	111.459	249			

Next, the line graph shows the relationship between the average service quality assessment: reliability of the independent auditing firm, and each respondents's seniority (Figure 1). Figure 1 shows that this line tends to slope up when the respondents' job experience gradually increases to 10 years, showing that service quality is highly valued and

that the reliability of the respondents' independent audit firm is higher in seniority, from 1 to 10 years. But this line tends to go down when the respondents' work experience is 10 years or higher.
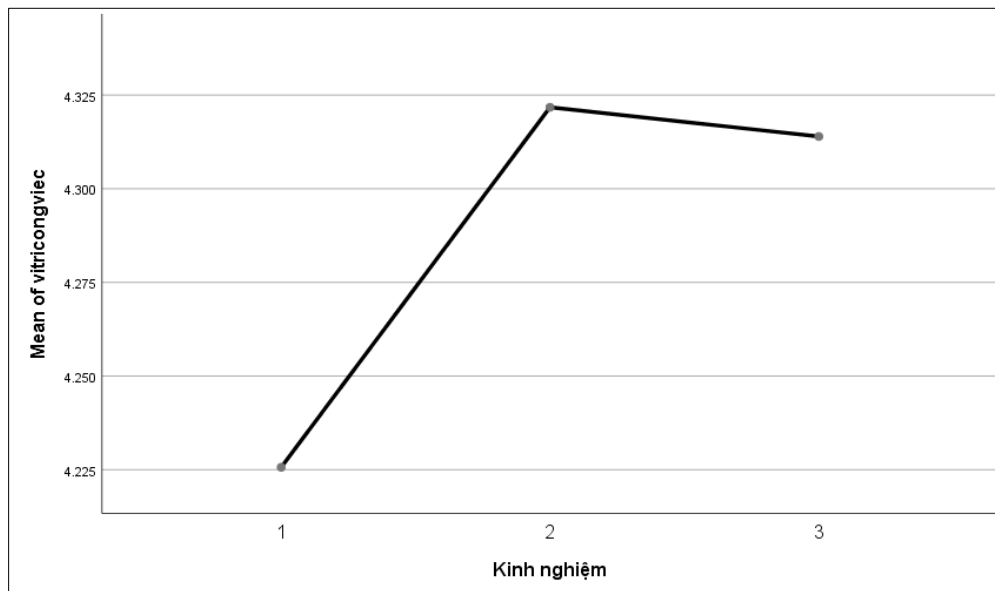

Figure 1 The line graph shows the relationship between the average service quality assessment: reliability of the independent auditing firm, and each respondents's seniority

5   Discussion

The main research results of the article confirm: (i) audit service quality: reliability, including five component attributes; all five of these attributes are assessed by businesses that are customers of audit firms. Domestic independent accounting is highly appreciated, reliable, and statistically significant; (ii) there is no statistically significant difference in the level of assessment of audit service quality: reliability among respondents with different working positions and different working seniority. The results of this study are similar to the results of previous studies. However, the new findings of this study are that the scales (attributes) of audit service quality: reliability, have been adjusted to suit the characteristics of the audit firm and are appropriate to current reality. The REL1, REL3, and REL5 scales are scales that clearly reflect the difference in the quality of audit services and the characteristics of audit firms compared with other services, which are: Independent auditing firms use the program audit process for the audit of financial statements issued by the Vietnam Association of Certified Public Accountants (VACPA) (VACPA, 2019) [8]. The main contents of the sample audit program to audit financial statements include: (i) audit plan; (ii) synthesize, conclude, and make reports; (iii) check the internal control system; (iv) detailed inspection of assets; (v) check details of payables; (vi) check details of funding sources; (vii) check the details of the income statement; (viii) review of other total boxes (VACPA, 2019) [8].

6   Conclusion

Auditing service quality: reliability, including five scales; all five scales have high values, proving that the majority of customers of domestic independent auditing firms are satisfied with the quality of audit services: reliability. In addition, the research results also show that there is no statistically significant difference in the level of assessment of audit service quality: reliability, among respondents of different genders. There is a statistically significant difference in the level of assessment of audit service quality: reliability, among the respondents with different working experiences and among the respondents who are working at enterprises in the same industry.

The independent audit firm's commitments are shown to be certain and accurate through reliability, which stands for credibility. Therefore, the independent audit firms must always finish the work within the deadline set with the client, provide the client with clear and detailed instructions regarding the audit procedures, and apply the greatest level of customer information protection.

Compliance with ethical standards

Disclosure of conflict of interest

The Authors declare that there is no conflict of interest.

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