



# The Effect of Online Communication and Use of Information Systems on Audit Quality

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## Abstract

During the Covid-19 pandemic it became a challenge for the Public Accounting Firm to carry out audit procedures. During the Covid-19 pandemic, physical meetings or communication between auditors or public accountants and a company's clients were limited, so these meetings, which were generally held face-to-face, became online meetings. The main obstacle for auditors or public accountants during the Covid-19 pandemic is that the audit procedures that must be carried out for the 2020 financial statements will be different from the previous year. In general, audit engagements or communication with clients to obtain audit evidence is carried out face-to-face, but to reduce the spread of the Covid-19 virus, such communication is carried out online. Of course, these communication issues must still be guided by Auditing Standard 260 regarding communication with those charged with governance. This study aims to determine the effect of online audit communication and the use of information systems on audit quality. This research is research with the aim of testing the hypothesis. Studies that engage in hypothesis testing usually explain the nature of a particular relationship or determine the independence of two or more factors in a situation. This study uses an explanatory method where the researcher wants to find the cause of one or more problems. This study aims to determine the effect of online audit communication and the use of information systems on audit quality. This research is research with the aim of testing the hypothesis. Studies that engage in hypothesis testing usually explain the nature of a particular relationship or determine the independence of two or more factors in a situation. This study uses an explanatory method where the researcher wants to find the cause of one or more problems. This study aims to determine the effect of online audit communication and the use of information systems on audit quality. This research is research with the aim of testing the hypothesis. Studies that engage in hypothesis testing usually explain the nature of a particular relationship or determine the independence of two or more factors in a situation. This study uses an explanatory method where the researcher wants to find the cause of one or more problems.

*Keywords:* Pandemic, Online Communication, Information System, and Audit Quality.

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## 1. Introduction

During the current Covid-19 pandemic, it has had various impacts on various sectors throughout the world. Until early 2021, the Covid-19 pandemic had not disappeared, this made the economic sector the most affected by the Covid-19 pandemic. The majority of companies take various ways to survive managing their finances, including reducing the number of employees, reducing the amount of employee salaries to restructuring their credit loans to survive during the Covid-19 pandemic.

The Government of the Republic of Indonesia has made efforts to reduce the impact of the Covid-19 pandemic that has hit companies in Indonesia. One of the efforts of the government of the Republic of Indonesia is in the form of business incentives in the form of taxes (Legowo et al., 2021). Business incentives in the form of taxes are by reducing or even eliminating some of the imposition of taxes that have been set, so that with the government's efforts, more or less companies in Indonesia can be helped during the Covid-19 pandemic.

When a company gets a tax reduction or elimination, this will affect the financial statements, especially in the balance sheet and income statement of a company. The company's financial statements ending in 2020 will be different from the previous year with different rates. If there are companies that are still using rates that are not in accordance with the latest rates due to the Covid-19 pandemic, then adjustments are needed in the company's financial statements.

Adjustments in a company's financial statements are the most natural thing to happen when there is an annual audit of financial statements conducted by a public accounting firm. The Covid-19 pandemic period has become a challenge in itself for auditors at Public Accounting Firms to conduct audit engagements, because auditors at Public Accounting

Firms need to understand several new rules or standards and adapt new habits in auditing a company's financial statements due to the Covid-19 pandemic.

During the Covid-19 pandemic, physical meetings or communication between auditors or public accountants and a company's clients were limited, so these meetings, which were generally held face-to-face, became online meetings. The main obstacle for auditors or public accountants during the Covid-19 pandemic is that the audit procedures that must be carried out for the 2020 financial statements will be different from the previous year. Auditors or public accountants who are used to conducting annual audits must change several audit procedures, for example the stages in conducting an engagement, audit procedures and how to communicate with clients in obtaining audit evidence. In general, audit engagements or communications with clients to obtain audit evidence are carried out face-to-face. However, to reduce the circulation of the Covid-19 virus, such communication is carried out online. Of course, these communication problems must still be guided by Auditing Standard 260 regarding communication with those charged with governance (Zarefar et al., 2019).

The constraints of an auditor or public accountant in auditing a financial statement during the Covid-19 pandemic do not only occur with a company's clients, but also with team members from the public accounting firm itself. Members of the audit team or public accountants also experience face-to-face communication problems between audit team members, so this immediately forces audit team members to use the online meeting system to communicate in order to carry out an effective and efficient audit procedure during a pandemic. This Covid-19.

Hendang Tanusdjaja as the Board of Management of the Indonesian Public Accountants Association and the Center for Financial Profession Development said that auditors or public accountants need to make relevant changes, in this case exploring alternative audit procedures due to the Covid-19 pandemic (Luo & Malsch, 2020). In 2020 the Indonesian Association of Public Accountants issued a Technical Newsflash regarding Auditors' Responses to the Covid-19 Pandemic on financial reports, audit procedures and practical considerations supporting audit quality (Albitar et al., 2020).

The auditor's response expected by the Indonesian Institute of Certified Public Accountants is to modify audit evidence gathering procedures, revise the process for identifying and assessing the risks of material misstatement, and changing planned audit procedures or performing appropriate alternative or follow-up audit procedures. In addition, the auditor is required to understand several packages of economic policies, regulations, and non-routine transactions that occurred during this period (Albitar et al., 2020). One way to modify the audit process is with an information system using technology or software to support the audit process.

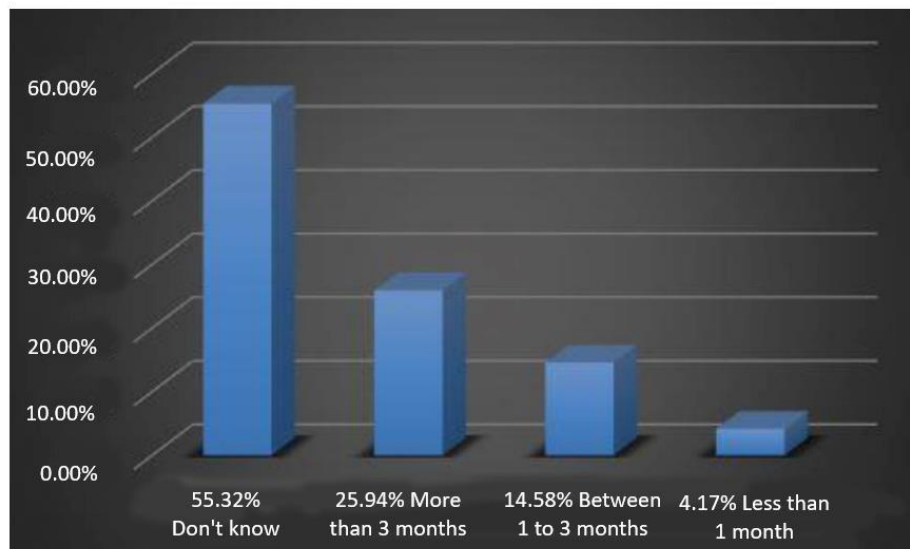
The use of information systems has been widely used by the International Public Accounting Firm. The International Public Accounting Firm has audit information in the form of software which is a Computer Based Audit Technique. Software as a form of information system support greatly assists the Public Accounting Firm in carrying out the audit process effectively and efficiently. Currently, the national Public Accounting Firm in Indonesia rarely uses information systems in the form of software to perform audit procedures, audit techniques, collect evidence and other matters related to the audit process. The majority of the use of information systems in the form of software is used by Public Accounting Firms that have a large number of clients or Internationally affiliated Public Accounting Firms.

Data from the 2020 Directory of the Indonesian Association of Public Accountants shows that the number of Public Accounting Firms registered in Indonesia is 639 Public Accounting Firms (Alimbudiono, 2020). Some of them are Public Accounting Firms that cooperate or are affiliated with International Public Accounting Firms, one of which is the RSM Public Accounting Firm. The Director of the RSM Public Accounting Firm, Amir Abadi Jusuf, said that his Accounting Firm had collaborated with or affiliated internationally with RSM since 1992 and explained that the quality of work, in this case audit quality, is the same as international standards (Giessner, 2016).

In essence, Public Accounting Firms in this digital era can use audit information technology to be in line with the Technical Newsflash guidelines issued by the Indonesian Association of Public Accountants regarding Auditor Responses to the Covid-19 Pandemic (Albitar et al., 2020), in which auditors are advised to explore alternative procedures, including technology. Every Public Accounting Firm is expected to be able to follow the directions in the Technical Newsflash and implement them in order to achieve good audit quality, even though the Covid-19 pandemic is currently underway. Auditors or public accountants must be able to maintain audit quality so that they can support audit opinions that will be issued to clients or companies.

In addition to the Technical Newsflash issued by the Indonesian Institute of Certified Public Accountants, the public accountant or auditor must review Auditing Standard 330, namely the auditor's response to assessed risks. Auditing Standard 330 will be an important guideline for public accountants or auditors during the Covid-19 pandemic in conducting engagements, communications, procedures, assignments, audit techniques and other important matters in the audit process to maintain audit quality, so as to support audit opinions in accordance with company situation.

The audit opinion is very dependent on the results of the quality of the audit by the Public Accounting Firm. The public accounting firm must be able to provide appropriate assurance services, especially related to going concerns during the Covid-19 pandemic. Auditing Standard 570 describes business continuity or going concern which gives responsibility to the public accountant or auditor to assess the entity's ability to maintain its business continuity (Nurbaiti & Permatasari, 2019). The Central Bureau of Statistics conducts a survey on the sustainability of a company's business, while the graph of the survey can be seen in Figure 1.



Source: Analysis of the Results of the Covid-19 Impact Survey on Business Actors by the Central Bureau of Statistics (Redjeki & Affandi, 2021)

**Figure 1:** Graph of Percentage of Business Actors Estimating How Long Companies Can Survive in the Pandemic Period

Based on Figure 1 it can be seen that 55.32% of business actors or companies do not know the sustainability of their company (Redjeki & Affandi, 2021). If a company does not know the continuity of its business during the Covid-19 pandemic, then the challenge for public accountants or auditors when providing assurance services is to carry out appropriate communication, analysis and audit procedures during the Covid-19 pandemic so that audit quality is maintained, so that audit opinions or The published audit report will be in accordance with the company's circumstances, especially if the public accountant issues a going concern audit opinion.

Based on the phenomenon of the Covid-19 pandemic, the limitations of direct communication and the need to use information systems by Public Accounting Firms to support audit procedures or techniques, as well as the results on audit quality that need to be maintained in the midst of the Covid-19 pandemic, the authors are interested in conducting research with the title " The Effect of Online Communication and Information Systems on Audit Quality (Survey of Internationally Affiliated Public Accounting Firms Conducting Engagements During the Covid-19 Pandemic)".

## 2. Literature Review

### 2.1. Online Audit Communication

Audit communication is an integral part of the audit. Starting from assignment planning, implementation, testing to follow-up monitoring, all of them require communication skills to produce the best. By applying communication skills the audit will run effectively and efficiently (effective in the sense, the audit can achieve the desired results, efficient because the audit process can be carried out smoothly so that audit resources are actually used to achieve audit objectives (Zeyn, 2018).

According to Habib et al. (2020) in a digital simulation book that the term "online communication" refers to reading, writing, sharing video cameras and communicating via computer networks. Virtual communication or communication through a computer network. Virtual communication or online communication is a way of communicating in which messages are conveyed through cyberspace or commonly referred to as cyberspace. Virtual communication is developing rapidly Communication is something that needs to be done in supporting the audit process of a financial statement up to an audit opinion report, because there are other parties, namely clients or companies who are the parties being audited or auditees. The public accountant or auditor who will carry out the audit process, of course, needs to obtain audit evidence and carry out audit procedures by communicating with the client or auditee.

Communication is an integral part of an audit. From assignment planning, testing execution, to follow-up monitoring, everything requires communication skills to bring out the best. By applying communication skills, the audit will run effectively and efficiently, (effective in the sense that the audit can achieve the desired results; efficient because the audit process can be carried out smoothly so that audit resources are actually used to achieve audit objectives) (Djalil et al., 2016)

Auditing Standard 260 describes communication with those charged with governance, in this case, the client or the responsible company. The importance of 2-way communication with the client will greatly assist the public accountant or auditor in obtaining audit information and evidence as required in audit procedures (Zarefar et al., 2019). Auditing Standard 260 describes the communication process, including (Zarefar et al., 2019):

1. Establish a communication process  
The auditor shall communicate to those charged with governance the form, timing and general material expected of the communication.
2. form of communication  
The auditor should communicate in writing to those charged with governance regarding significant findings during the audit if, in the auditor's professional judgment, verbal communication is not sufficient. Written communications need not cover everything that arises during the audit process. The auditor must communicate in writing to those charged with governance regarding the independence of the auditor when required in paragraphs.
3. During communication  
The auditor must communicate with those charged with governance in a timely manner.
4. The adequacy of the communication process  
The auditor should assess whether the two-way communication between the auditor and those charged with governance is adequate for the purposes of the audit. If these are not sufficient, the auditor shall assess the effect, if any, on the auditor's assessment of the risks of material misstatement and the ability to obtain sufficient appropriate audit evidence, and shall take appropriate steps.

Auditing Standard 260 mentions matters that need to be communicated on a financial statement audit, including (Zarefar et al., 2019):

- a. The auditor's responsibilities in relation to the audit of financial statements.
- b. The scope and timing of the planned audit.
- c. Significant findings from the audit.
- d. Significant qualitative aspects of accounting practice.
- e. Significant difficulties encountered during the audit.
- f. Significant matters discussed, or which form part of correspondence with management
- g. Other significant matters that are relevant to the financial reporting process
- h. Auditor independence
- i. Additional stuff

## 2.2. Information Systems

The information system consists of 2 elements of the definition of system and information. A system is a series of two or more components that are interrelated and interact to achieve a goal, while information is information which is data that has been managed and processed to provide meaning and improve the decision-making process (Octavia & Widodo, 2015). So it can be concluded that the information system is a series of data components that can be managed and processed to achieve the desired goals so as to be able to make a decision.

The understanding of information systems according to Christiawan, (2002) which explains if the information system is an activity of organized procedures, when executed it will provide information to support decision making and control within the organization.

## 2.3. Audit Quality

The quality of audit services is defined to be the market assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach. The Probability That a given auditor will discover a breach depending on the auditor's technological capabilities, the audit procedures employed on a given audit, the extent of sampling, etc. The conditional probability of reporting a discovered breach is a measure of an auditor's independence from a given client (DeAngelo, 1981).

From this definition it can be said that audit quality is the possibility of an auditor being able to find violations of the accounting system committed by clients and report these violations. The ability to do so is the independence of the auditor in achieving audit quality.

This is in line with Octavia & Widodo, (2015) who explains that audit quality is any possibility where the auditor when auditing the client's financial statements can find violations that occur in the client's accounting system and report them. Christiawan (2002) explains that to obtain audit quality, two factors must be seen, namely competence and independence.

From this definition, it can be said that audit quality is the possibility that an auditor is able to see, find and report findings or violations committed by clients based on the relevant auditing standard guidelines.

## 3. Materials and Methods

### 3.1. Materials

The research object materials studied are online communication and information systems as independent research objects, while the dependent research object is audit quality. The subjects of this study were respondents, namely

auditors or public accountants who work in internationally affiliated public accounting firms or in cooperation with international public accounting firms.

**3.2. Methods**

Research has a goal to do hypothesis testing. Studies that are included in hypothesis testing usually explain the nature of certain relationships or determine the independence of two or more factors in a situation (Gresho & Sani, 1998). This study uses an explanatory method where the researcher wants to find the cause of one or more problems.

The stages of the research are as follows:

1. Analysis of cases using the explanatory method.
2. Data collection uses primary data sources based on research surveys.
3. The sampling technique uses the judgment sampling method.
4. Data collection techniques using the Questionnaire Technique.
5. Testing the data to be examined using the Validity Test and Reliability Test.
6. Testing the normal level of the data to be examined uses the Classical Assumption Test.
7. Testing the relationship between the two independent variables using Multiple Linear Regression Analysis.
8. Perform data analysis using Correlation Testing Analysis, Determination Coefficient Analysis and hypothesis testing t test and F test.

**4. Results and Discussion**

This research was conducted by the authors to determine the partial and simultaneous effects of online auditor communication and information systems on audit quality using the multiple linear regression statistical method. Testing the data is done by using the validity test and reliability test. For testing the classical assumptions using the Kolmogorov Smirnov normality test. The following are the results of data testing.

**4.1. Validity test**

Validity test can be explained in the following table.

**Table 1:** Validity Test Results

<b>Communication Variable (X1)</b>	<b>Sig. Value</b>	<b>Information</b>
Number 1 Communication	0.001	Valid
Communication Number 2	0.011	Valid
Communication Number 3	0.000	Valid
Communication Number 4	0.000	Valid
Communication Number 5	0.000	Valid
Communication Number 6	0.002	Valid
Communication Number 7	0.000	Valid
Communication Number 8	0.013	Valid
<b>Information System Variables (X2)</b>	<b>Sig. Value</b>	<b>Information</b>
Information System 1	0.000	Valid
Information System 2	0.000	Valid
Information System 3	0.000	Valid
Information System 4	0.000	Valid
Information System 5	0.000	Valid
Information System 6	0.000	Valid
<b>Audit Quality Variable (Y)</b>	<b>Sig. Value</b>	<b>Information</b>
Audit Quality 1	0.000	Valid
Audit Quality 2	0.000	Valid
Audit Quality 3	0.000	Valid
Audit Quality 4	0.005	Valid
Audit Quality 5	0.000	Valid
Audit Quality 6	0.000	Valid
Audit Quality 7	0.000	Valid
Audit Quality 8	0.000	Valid

Audit Quality 9	0.050	Valid
Audit Quality 10	0.000	Valid
Audit Quality 11	0.000	Valid
Audit Quality 12	0.000	Valid
Audit Quality 13	0.000	Valid
Audit Quality 14	0.005	Valid
Audit Quality 15	0.000	Valid
Audit Quality 16	0.001	Valid
Audit Quality 17	0.000	Valid
Audit Quality 18	0.001	Valid
Audit Quality 19	0.000	Valid
Audit Quality 20	0.000	Valid
Audit Quality 21	0.000	Valid
Audit Quality 22	0.018	Valid
Audit Quality 23	0.000	Valid

In Table 1, the results of the significance value are below 0.05. Then the data for testing can be declared valid.

**4.2. Reliability Test**

Reliability Test can be presented in the following table.

**Table 2: Reliability Test Results**

Variable	Cronbach's alpha	Information
Communication Variable (X1)	0.634	Reliable
Information System Variables (X2)	0.815	Reliable
Audit Quality Variable (Y)	0.747	Reliable

In Table 2, the Cronbach's alpha value is more than 0.05. Then the reliability test data is reliable or reliable.

**4.3. Classic assumption test**

Classical assumption test is generated and presented in the following table.

**Table 3: Classical Assumption Test Results**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residuals
N		40
Normal Parameters, b	Means	0.0000000
	std. Deviation	4.64463139
Most Extreme Differences	absolute	0.090
	Positive	0.062
	Negative	-0.090
Test Statistics		0.090
asymp. Sig. (2-tailed)		0.200 c,d

From Table 3 it can be seen that the significance value is 0.2 and greater than 0.05. Then the data is normally distributed and multiple regression testing can be done.

#### 4.4. Multiple Regression Analysis

The results of the calculation of multiple regression analysis are presented in the following table.

**Table 4:** F test results

ANOVAa						
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	1333.644	2	666.822	29.325	.000b
	residual	841.331	37	22.739		
	Total	2174.975	39			

From Table 4 it can be seen that the significance value is 0.000 and is less than 0.05. Then the variables of online communication and information systems affect audit quality simultaneously.

**Table 5:** T test results

Coefficientsa						
Model				Standardized Coefficients Betas	t	Sig.
1	(Constant)	7.476	11.270		0.663	0.511
	Total Audit Communications	2.090	0.337	0.672	6.201	0.000
	Total Information System	0.691	0.318	0.236	2.175	0.036

From Table 5 it can be seen that the significance value of the audit communication variable is 0.000 and is less than 0.05. So the online communication variable has a partial effect on audit quality. Furthermore, the information system variable has a significance value of 0.036 and is less than 0.05. Then the information system variable has a partial effect.

#### 5. Conclusion

Based on the results of the questionnaire that has gone through data processing, it can be concluded that audit communication has an effect on audit quality. The phenomenon of decreasing or increasing audit quality due to audit communication was caused by the Covid-19 pandemic which required face-to-face limitations during the audit process. In addition, information systems affect audit quality. The phenomenon of decreasing or increasing audit quality is due to the limited ability to use information systems and information system training during the Covid-19 pandemic. Based on the results of this study it can also be concluded that audit communication and information systems simultaneously influence audit quality.

Based on the results of the research that has been done, it is suggested that the Public Accounting Firm should prepare proper training and development during the Covid-19 pandemic so that audit quality is maintained properly. In addition, the phenomenon of the Covid-19 pandemic can be a lesson for auditors in carrying out the audit process, audit communication and the use of more qualified information systems to maintain audit quality.

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