

THE INFLUENCE OF AUDIT FEES, HUMAN CAPITAL, TIME BUDGET PRESSURE ON AUDIT QUALITY MEDIATED BY REMOTE AUDIT AND AUDIT RISK WITH AUDIT TECHNIQUES AS MODERATION VARIABLES (SURVEY ON PUBLIC ACCOUNTANTS IN CENTRAL JAVA AND SPECIAL REGION OF YOGYAKARTA)

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Abstract

This study aims to determine how the effect of exogenous variables (Audit Fee, Human Capital and Time Budget Pressure on Audit Quality, using the mediating variables Remote Audit and Audit Risk and moderated by Audit Techniques. Data obtained by distributing questionnaires to respondents, namely auditors at the Office Public Accountants in Central Java and Yogyakarta, and from the distribution of the collected questionnaires that can be processed are 97 respondents Using Partial Least Square (PLS) for direct influence it is stated that all independent variables have a significant effect on the dependent variable, except for the influence of human capital variables on risk audit and the effect of time budget pressure on audit quality cannot have a significant effect. For the indirect effect between Human Capital on Audit Quality mediated by remote audit and audit risk is also unacceptable, while audit techniques can moderate remote audits and audit risk on audit quality. Suggestions for future researchers to be able to develop research by adding the internal auditor's role variable and considering the number of findings generated by the auditor in the field as a research variable.

Keywords: Audit Fee, Human Capital, Time Budget Pressure, Remote Audit, Audit Risk, Audit Techniques and Audit Quality

1. INTRODUCTION

At the moment, the pandemic caused by COVID 19 was indeed affecting each and every country on the face of the earth. One of the areas of life that has been affected by the unusual circumstances brought on by the Covid 19 Pandemic is the economy. These changes have been brought about as a direct result of the unusual circumstance. Because of these disruptions to the economy, there is a greater possibility that management's assertions will be materially inaccurate in the financial statements. As a response to these conditions, management and those charged with governance are required to prepare and present financial statements along with other relevant disclosures. These statements are to be prepared and presented based on consideration and analysis of current facts and events that have occurred after the reporting date.

Even if the auditor has trouble gathering evidence in the field owing to unexpected conditions, they are still responsible for maintaining audit quality and gathering enough evidence to back





up their audit judgment. For their part, auditors are supposed to adjust planned audit processes, execute alternative or follow-up audit procedures, and reevaluate the process of identifying and assessing risks of significant misstatement. Because of the public's trust in the auditor's ability to objectively evaluate the financial statements' presentation fairness, audit findings tend to be reliable.

The integrity of an audit depends on whether or not the auditor discovers and reports a problem with the accounts (Deangelo, 1981) and the process conforms to auditing standards. The quality of this audit will become a problem in an unusual situation, namely a pandemic condition, this has also happened in Indonesia, in this condition all activities, especially those related to the economy, have experienced a decline, due to changes in people's lifestyles. Enforcement of social restriction forced in order to prevent the spread of the virus. Many companies or agencies apply work in shifts or work from home, this has an impact on the implementation of the audit.

Field work which is one of the stages in the implementation of the audit becomes an obstacle for the auditor in its implementation, this is a challenge for the auditor in an effort to collect audit evidence. Due to the current state of the Covid-19 pandemic, there will be issues with the quality of audits being conducted. This is because many workers are currently operating Work from Home, and the implementation of social distancing will affect the implementation of audit work, especially during field work, when there are restrictions on community activities.

Research in the UK on audit quality during this pandemic was carried out by Albitar et al. (2020) who stated that the Covid 19 pandemic brought major changes to auditors and their clients. The application of social distancing during the pandemic will affect audit fees, assessment of going concern assumptions, human capital, audit procedures, audit staff salaries and audit efforts in completing audits which as a whole have an impact on audit quality. As such, the authors propose an investment in technology that will facilitate communication between auditors and clients, making it easier as long as they implement work from home, current research has not specifically discussed the potential for remote audits or remote audits, this research seeks to dig deeper the use of remote audit variables in influencing audit quality in Indonesia, particularly at Public Accounting Firms (KAP) in Central Java and Special Region of Yogyakarta (DIY).

The phenomenon in Indonesia is supported by a submission from public accountants delivered in Technical Newflash in April 2020 by the Indonesian Institute of Public Accountants (IAPI), about the auditor's response in facing the Covid-19 pandemic, that there are several factors that can support the quality of audits, namely the influence on the public accountant profession, the network of Public Accounting Firms (KAP), The KAP itself, the development of remote audits and other insurance services (IAPI, 2020). Information from the Ministry of Finance's web. pppk. Reveals that several Public Accounting Firms have had their business licenses frozen owing to violations of audit implementation criteria, providing more evidence of the trend toward deteriorating audit quality.





This study is novel because it attempts to investigate the rarity of remote audits, a practice that emerged during the pandemic but was uncommon before it. This phenomenon is observed by several Indonesian public accountants, and there is existing research in the UK and the response from IAPI regarding the implementation of audits during the pandemic. Indeed, there is currently a dearth of data on how this pandemic's many confounding variables affect the quality of audits.

This study relates various factors that affect audit quality which are related during period pandemic. There are three independent variables that will be used in this study, namely audit fees, human capital and time budget pressure which affect audit quality (Mulyani & Munthe, 2019). This study uses remote audit variables and audit risk as mediating variables and then adds audit techniques as variables that moderate remote audit and audit risk on audit quality.

When we talk about a "Audit Fee," we're referring to the payment that will be made to the auditor once their work has been completed. The standard of the audit declines as the anticipated fee rises. Fees should be mutually agreed upon by the customer and auditor to avoid any discrepancies that could cast doubt on the auditor's independence. Research findings carried by Mulyani & Munthe (2019) corroborate this fact, by showing that audit fees significantly and favorably affect audit quality.

In the context of an asset audit, Human Capital refers to the qualitative qualities of a company's human resources that it owns. Quality of audits is significantly impacted by the level of training, knowledge, and experience of auditors. In order to have a high-quality audit, human capital must be increased so that the auditor can do the audit in a professional manner (Samagaio & Rodrigues, 2016). However, due to the present pandemic crisis, many businesses are delaying or even canceling training activities, consequently hurting the expertise of these auditors, so Human Capital will negatively affect audit quality (Albitar et al., 2020).

Time budget pressure refers to the time constraints that must be met in order to conduct an audit; with less and less time to complete their work, auditors may be tempted to save on quality by rushing through some steps of the auditing process. While some researchers (Widodo et al., 2016) claim that time budget pressure has little influence on audit quality, others (Svanberg & Öhman, 2013) find that it really improves audit quality (Savitri & Dwirandra, 2018).

During a pandemic, such as today, with the implementation of social distancing and Work From Home for both auditors and client companies, audits in the field are reduced in proportion, because everything is replaced by carrying out work remotely, also known as Remote Audit, in which the auditor does not directly deal with clients in gathering evidence and carrying out audit procedures, but simply through virtual means. This Remote Audit is not restricted to the pandemic since, with increased transactions in the digital era, audit implementation has begun to shift toward electronic auditing, making it possible to conduct audits remotely.

Audit risk is increased by the presence of a remote audit, and audit risk is a crucial factor in





deciding audit quality. The integrity of an audit might be impacted by the level of risk involved. Similarly, professional auditors have less to worry about during a quality audit (Saliha & Flayyihb, 2020). The possibility of an unfavorable audit opinion on the financial statements arises when the auditor performs the audit inefficiently (Askary et al., 2018). Sri & Solimun (2019) find that risk does not influence audit quality when it comes to the generation of corporate value.

Audit techniques are also influential during the pandemic, audit techniques include processes carried out during audits, which include observation, confirmation, and stock taking. Audit efforts through an audit process affect the resulting audit quality (Xiao et al., 2020). Several previous studies revealed audit procedures in influencing the resulting audit quality, they did not significantly into the audit technique used, because this audit technique is part of the audit procedure, this research specifically discusses the audit technique, because there are specific things that need to be considered by the auditor regarding the audit technique used during this pandemic. The audit technique in this study acts as a moderating variable between remote audit and audit risk on audit quality.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 Attribution Theory

Attribution theory is put forward to develop an explanation of how to give an assessment to someone. According to Heider in (Handke & Barthauer, 2019), also argues that "a person's behavior is determined by a combination of internal forces, namely factors that come from within a person and external forces, namely factors that come from outside a person's self."

This study uses Attribution Theory with the intention of explaining that an auditor in order to produce a quality audit is influenced by internal factors, namely Human Capital, audit risk and audit techniques. Apart from that, there are also external factors, namely audit fees, time budget pressure, and remote audits.

2.2 Audit Quality

Audit quality is related to the results of the audit process which are expected to be useful for decision making or not. Audit quality is determined by how much the auditor's ability is to find violations of the client's accounting system and the ability to report these violations, his ability depends on various factors including audit technology and audit procedures carried out by the auditor (Deangelo, 1981).

2.3 Audit Fees

Public accountants are external auditors who work and receive fees based on contracts with certain entities. According to Rahmina & Agoes (2014) define audit fee as the fee paid for the annual audit and review of the company's financial statements. The audit fee is in the form of the value of the auditor's services, travel expenses, and other costs required in the audit process. Salehi et al. (2017) states that the audit fee is budgeted and then realized, the result is an audit fee. If the fee obtained by the auditor is not in accordance with the characteristics





of determining the amount of the audit fee, then the motivation to work on the audit will not be maximized. The auditor will work according to the reward for services he will receive. The impact will then affect the high and low quality of the audit.

Research by Suseno (2013) states that the optimal audit fee will get assurance of audit quality, while Lai (2019) states that limiting audit reports with a short period of time, increasing audit fees but reducing audit quality.

2.4 Human Capital

The theory of Human Capital was developed by Theodore Schultz who appeared in 1961, in this theory it is stated that the level of education will increase the level of expertise of personnel and this is a value for an organization (Cruz, 2013). Further, Theodore Schultz highlight that capital is a type of expenditure that creates a productive inventory that is human and can provide more services in the future, human capital in the context of growth is more towards lost income in forming human capital (Schultz, 1972). Increasing Human Capital will affect the audit process thereby increasing audit quality (Samagaio & Rodrigues, 2016);(Bianchi et al., 2020). According to Albitar et al. (2020) who examined the influence of Human Capital on audit quality in this pandemic condition stated that Human Capital could be improved through training, but in a pandemic condition with a large number of postponed training due to social distance it has an impact on improving auditor skills.

2.5 Time Budget Pressure

Time Budget Pressure is the time allocated by the auditor to complete the audit (Widodo et al., 2016). Limited time will make the auditor behave defiantly, so that with limited time it will make the auditor carry out the audit not based on established procedures, therefore the auditor should plan the right time to carry out the audit (Savitri & Dwirandra, 2018).

2.6 Remote Audits

Remote audits is a combination of data analysis and the use of information technology to access and report on the accuracy of internal controls and financial reports, gather evidence electronically, and interact with auditees, from where the auditor is located (Teeter et al., 2014).

Remote audit is a new method that is carried out in the audit stage, in this case there is no face-to-face meeting between the auditor and the client, but face-to-face through virtual technology, namely by video calls, zoom meetings, Microsoft Teams or other virtual applications. The existence of this remote audit will change the traditional audit implementation method to a modern audit, namely with a remote audit which will certainly affect the quality of the resulting audit (Eulerich et al., 2021),whereas Castka et al. (2020) states that not all audit procedures are carried out by remote audit, depending on the willingness of client transactions to use the web and the level of health of each individual, actions carried out by remote audit, for example interviews with management and staff (Castka et al., 2020).



2.7 Audit Risk

As described in International Auditing and Assurance Standards Board (2013), audit risk is a technical term related to the audit process; does not refer to the auditor's business risks such as losses from litigation, adverse publicity, or other events arising in connection with the audit of financial statements. Audit risk is a function of the risk of material misstatement and detection risk.

During the Covid-19 pandemic as it is today, the problem that arises is the collection of audit evidence which is very limited, because it is constrained by the limited activities of auditors in the field because there are some employees who work from home and also consider the level of health of workers which has an impact on not being able to maximize the collection of evidence will increase the risk of detection.

2.8 Auditing Techniques

Audit technique is one of the methods taken by the auditor in detecting misstatements in financial statements, this audit technique is part of the implementation of audit procedures, because audit procedures are the steps that will be carried out by the auditor in carrying out the audit, including audit techniques. This audit technique is carried out by way of inspection, observation, confirmation, cash taking and stock taking (Tandiontong, 2015).

During a pandemic, the implementation of audit techniques will affect its implementation with social distancing and work from home various kinds of audit techniques such as interviews, cash-taking and stock-taking cannot be carried out as usual, thus affecting the quality of the audit.

Based on the description above, the hypothesis is put forward as follows:

- 1. Audit Fee has a significant effect on Remote Audit at Public Accounting Firms throughout Central Java and DIY
- 2. Audit Fee has a significant effect on the Audit Risk of Public Accounting Firms throughout Central Java and DIY
- 3. Audit Fee has a significant effect on the Audit Quality of Public Accounting Firms throughout Central Java and DIY
- 4. Human Capital has a significant effect on the Remote Audit of Public Accounting Firms throughout Central Java and DIY
- 5. Human Capital has a significant effect on the Audit Risk of Public Accounting Firms in Central Java and DIY
- 6. Human Capital has a significant effect on the Audit Quality of Public Accounting Firms throughout Central Java and DIY
- 7. Time Budget Pressure has a significant effect on the Remote Audit of Public Accounting Firms throughout Central Java and DIY





- 8. Time Budget Pressure has a significant effect on the Audit Risk of Public Accounting Firms throughout Central Java and DIY
- 9. Time Budget Pressure has a significant effect on the Audit Quality of Public Accounting Firms throughout Central Java and DIY
- 10. Audit Fee has a significant effect on audit quality mediated by the Remote Audit of Public Accounting Firms throughout Central Java and DIY
- 11. Human Capital has a significant effect on audit quality mediated by the Remote Audit of Public Accounting Firms throughout Central Java and DIY
- 12. Time Budget Pressure has a significant effect on audit quality mediated by the Remote Audit of Public Accounting Firms throughout Central Java and DIY
- 13. Audit Fee has a significant effect on audit quality which is mediated by the Audit Risk of Public Accounting Firms in Central Java and DIY
- 14. Human Capital has a significant effect on audit quality mediated by the Remote Audit of Public Accounting Firms in Central Java and DIY
- 15. Time Budget Pressure has a significant effect on audit quality mediated by the Remote Audit of Public Accounting Firms throughout Central Java and DIY
- 16. Remote Audit has a significant effect on the Audit Quality of Public Accounting Firms in Central Java and DIY
- 17. Audit risk has a significant effect on the Audit Quality of Public Accounting Firms throughout Central Java and DIY
- 18. Remote Audit has a significant effect on Audit Quality with Audit Techniques as a moderating variable for Public Accounting Firms throughout Central Java and DIY
- 19. Audit risk has a significant effect on audit quality with Audit Techniques as a moderating variable for Public Accounting Firms throughout Central Java and DIY

3. METHODOLOGY

This research was a quantitative research with the scope of this study being auditors at public accountants in Central Java and Special region of Yogyakarta (DIY.) While the research method used is the survey method, by distributing questionnaires to respondents, either through google forms, e-mail or coming directly to the object. The data type is quantitative and the data source is the primary data source. With a population of all auditors in public accountants in Central Java and DIY. The sampling technique uses accidental sampling, with the number of data successfully processed by 97 respondents. Hypothesis testing was performed using Partial Least Square (PLS) Analysis.

4. RESULTS AND DISCUSSION

The use of PLS is to test a theory or develop an existing theory (Panca et al., 2017). The stages





in this PLS analysis include (1) The outer model testing stage and (2) the inner model testing stage. In the outer model testing stage, testing is carried out on the validity and reliability of the constructs of all indicators in the model, while at the inner model stage, an influence test will be carried out between variables which will then be used to test the research hypothesis (Natalia et al., 2017).

Based on the results of the PLS estimation using the algorithm technique, it can be seen that all indicators in the PLS model are valid in measuring their constructs, so they are appropriate for measuring all variables in the PLS model. Construct reliability can be assessed from the Composite Reliability and Cronbachs Alpha values of each construct. The value of cronbach's alpha and composite reliability of all constructs has also exceeded 0.7, this shows that all constructs have met the required reliability, so it can be concluded that all constructs are reliable. Based on the results of evaluating the feasibility of the model by looking at the R square, Q square values and with the SRMR model, it can be concluded that the PLS model is feasible to use to test the research hypothesis.

The research results are shown in the following table:

No	hypothesis	Path Coefficient	T Statistics	P Value	hypothesis
1	AF -> REM	0,300	3,403	0,000	accepted
2	AF -> RA	-0,329	3,762	0,000	accepted
3	AF -> KA	0,210	2,340	0,010	accepted
4	HC -> REM	0,217	2,032	0,042	accepted
5	$HC \rightarrow RA$	-0,027	0,256	0,399	rejected
6	HC -> KA	0,261	2,424	0,008	accepted
7	TBP -> REM	-0,314	3,183	0,001	accepted
8	TBP -> RA	0,497	5,386	0,000	accepted
9	TBP -> KA	0,112	1,259	0,104	rejected
10	REM -> KA	0,265	1,998	0,023	accepted
11	RA -> KA	-0,274	2,329	0,010	accepted
12	MOD_REM -> KA	-0,266	2,086	0,019	accepted
13	$MOD_RA \rightarrow KA$	-0,420	3,109	0,001	accepted

Table 1: Results of the Direct Effect Test

Source: processed data (2022)

4.1. Results of the Direct Effect Test

1. Influence of audit fees on Remote Audit

Hypothesis 1 in this study is proven and it is concluded that the audit fee significant effect on remote audit, the results of the analysis in this study indicate that the significance value of the influence of the audit fee on the remote audit is 0.000 with the t statistic of 3.403 and a positive regression coefficient of 0.300. Because the significance value <0.05, t statistic > t table (1.96) and the regression coefficient is positive, Ho is rejected and it is concluded that audit fees have a significant effect on remote audits, the higher the level of audit fees for remote audits, the higher the remote audits.





This is in accordance with research Mulyani & Munthe (2019) and Khoirunnisa (2021) who examine the relationship of remote audits with audit fees, in the event that there are cost savings due to a pandemic, with some social restriction rules, audits are carried out using technology remotely thereby reducing operational costs. Auditors must still be able to improve services to the public, auditors must still be competent and professional, competency is demonstrated by the use of Information Technology, so that audits can still be carried out (Indra et al., 2021).

However, this study contradicts the results of research by Syaiful Rizai and Tri Ratnawati (2022) which state that audit fees have no effect on remote audits, whereas in this study they have an effect on remote audits. In audit theory, the determination of audit fees is determined by several things, namely from the turnover owned by the company, as well as from the number of meetings with clients, if the fee is covered in the audit fee, regardless of other activities (Sutabri, 2012).

Support for several previous research references regarding the results of this study which stated that audit fees had an effect on remote audits, so that high audit fees would increase in the use of remote audits during the pandemic. Research from Alexeyeva and Svasnstrom in Sweden stated that several companies in Sweden were during a crisis during a pandemic, they actually pay high fees, this is because their auditors will try to maintain audit quality, because during a pandemic, with the implementation of audits that have many limitations, it is possible that audit quality will decrease and audit risk will arise, for this reason, auditors try to use various additional efforts to maintain the quality of the audit, thereby increasing the audit fee (Alexeyeva and Svasnstrom, 2015 in(Sari et al., 2022)).

Other research also supports the results of research regarding the increase in audit fees that in the period during the crisis and before the crisis, the results of the study stated that during the crisis, audit fees increased even when the company being audited experienced financial difficulties, this was due to various efforts being made to maintain audit quality (Xu et al., 2013).

The support for the 2 studies above is supported by the opinion of the Indonesian Institute of Public Accountants (IAPI, July 2020) which states that during the pandemic, with changes in the work system of auditors and clients, namely by working from home and conditions of financial difficulty for client companies, KAP infrastructure costs actually experienced the increase is due to IAPI conducting audit planning and calculating audit risk analysis more carefully by applying additional alternative audit procedures with the aim that the auditor obtains adequate assurance to reduce audit risk. During a pandemic, the auditor considers additional alternative audit procedures with the aim of maintaining audit quality.

2. Influence of audit fees on audit risk

Hypothesis 2 in this study states that the audit fee has a significant effect on audit risk, the results of the analysis in this study indicate that the significance value of the influence of the audit fee on audit risk is 0.000 with t statistics of 3.762 and a negative regression coefficient of -0.329. Because the significance value <0.05, t statistic > t table (1.96) and the regression





coefficient is negative, Ho is rejected and it is concluded that the audit fee has a significant effect on audit risk, but has the opposite effect, meaning that a high audit fee will reduce audit risk, and vice versa.

In accordance with the Attribution Theory described in the IAASB (International Auditing and Assurance Standards Board, 2013) that someone acts because there are factors that encourage, namely internal and external factors, one of the external factors is the audit fee, because with a minimum fee the auditor will shorten the audit time to immediately produce an audit report, this raises the problem of possible audit risks arise, because not all audit procedures are performed.

This is in line with the auditing standards of Management Regulation No. 2 of 2016 that fees for financial statement audits that are too low can create threats in the form of personal interests that have the potential to cause non-compliance with the code of ethics of the public accounting profession, therefore public accountants must make prevention by applying fees for auditing financial statements that are adequate so that it is sufficient to perform adequate audit procedures.

This is consistent with Salehi et al. (2017) that in his observation that during the sanction period in Iran there was audit fee pressure, and it was stated that there was a positive relationship between suppressed fees and the misstatement rate at 10% during 2010 while in years before and after 2010, there is no significant effect between audit fees and audit quality. Research by Hua (2019) examines audit fees associated with risk before the financial crisis and after the crisis. The results of the study state that there is a positive relationship between audit fees and restatement of reports which include poor report quality or poor audit quality, and the results show no significant changes during the financial crisis period. Furthermore, An Feng Shiyi (2017) also states that there is a positive relationship between audit fees and risk, but in this case it is the business risk of non-financial companies.

3. Influence of audit fees on audit quality

Hypothesis 3 in this study is proven and it is concluded that audit fees have a significant effect on audit quality, the results of the analysis in this study indicate that the significant value of the influence of audit fees on audit quality is 0.010 with a t statistic of 2.340 and a positive regression coefficient of 0.210. Because the significance value <0.05, t statistic > t table (1.96) and the regression coefficient is positive, Ho is rejected and it is concluded that audit fees have a significant effect on audit quality, the higher the level of audit fees for audit quality, the higher the quality audits. High audit fees make the auditor free to carry out audit procedures, without being constrained by costs, for example for physical inspection of assets,

This is in line with auditing standards by the Indonesian Institute of Certified Public Accountants (IAPI) issuing Decree No. KEP.024IAPIVII2008 dated 2 July 2008 regarding Policy on Determining Audit Fees, where there are several things to consider, namely: client needs; duties and responsibilities according to law; independence; level of expertise and responsibilities attached to the work performed, as well as the level of complexity of the work; the amount of time needed and effectively used by the Public Accountant and his staff to





complete the work, and the basis for determining the agreed fee.

This study is supported by research results (Sunaryono et al., 2019); (Hazaea et al., 2022)and (Lai, 2019), that limiting audit reports with a short period of time will increase high audit fees but will reduce audit quality, (Darmawan Suwandi, 2021); (Hua, 2019) who both conducted research examining the influence of audit fees on audit quality under unusual conditions. (Mulyani & Munthe, 2019) who examined KAPs in DKI Jakarta stated that there was a positive relationship between audit fees and audit quality.

However, this research result is different with (Salehi et al., 2017) who concluded that the relationship between audit fees and audit quality during the Sanctions period in Iran in 2010, and compared with the following years, during the sanctions period in Iran there was audit fee pressure, the impact of the audit pressed fees will cause effect on high and low audit quality.

4. Influence of Human Capital on Remote Audit

Hypothesis4 in this study is proven and concluded that human capital has a significant effect on remote audit, the results of the analysis in this study indicate that the significance value of the influence of human capital on remote audit is 0.042 with a t statistic of 2.032 and a positive regression coefficient of 0.217. Because the significance value <0.05, t statistic > t table (1.96) and the regression coefficient is positive, Ha is accepted and it is concluded that human capital has a significant effect on remote audit, meaning that human capital has an effect on remote audit

In accordance with Steward's theory (1997) human capital is defined as the man himself who can personally be seen by his individual capabilities, commitment, knowledge and personal experience, but not seen solely from an individual but as an audit team that has personal relationships both within and off location.

The results of this study are in line with (Samagaio & Rodrigues, 2016); (Kusumaningrum et al., 2022) both basically state that Human Capital increases through training, workshops and experience in conducting audits, and this affects when senior auditors will consider carrying out remote audits, good Human Capital can create a competitive advantage(Coff & Raffiee, 2015), because of its ability to adapt to technological developments.(Krasniqi & Topxhiu, 2016)states that investment in the form of human resources is important to improve quality through training and education.

Research from Albitar et al., 2020 is not in line with the results of this study because Albitair has not considered that trainings that can be used to improve resource capabilities during a pandemic can be carried out online or virtual, because research from Albitair was carried out at the start of the pandemic so have not considered the use of virtual in the implementation of training.

5. Influence of Human Capital on Audit Risk

Hypothesis 5 in this study was not proven and it was concluded that human capital has no significant effect on audit risk, the results of the analysis in this study indicate that the





significance value of the influence of human capital on audit risk is 0.399 with a t statistic of 0.256 and a negative regression coefficient of -0.027. Because the significance value is > 0.05, t statistic <t table (1.96) and the regression coefficient is negative. Ho is accepted, Ha is rejected and it is concluded that human capital has no significant effect on audit risk.

The results of this study indicate that the presence of high human capital does not always indicate low audit risk, meaning that if human capital is high if it is not accompanied by moral ethics, then human capital will be more skilled in carrying out audits, thereby producing high risks. An example of this case is for example the presence of lapping or kitting that occurs in the client's company, because human capital, in this case, the auditor's expertise is high, but because it is not accompanied by auditor ethics, the auditor actually works with the client not to report proper conditions.

Research with similar results is from(Martín-de Castro et al., 2019); (Mohammadzadeh, 2020); (Lari Dashtbayaz et al., 2020); which states that high Intellectual Capital does not guarantee low audit risk. (Lari Dashtbayaz et al., 2020) states that risk occurs due to a modification of audit opinion, that is the role of audit resources. High human capital does not guarantee a low audit risk, human capital should be viewed from not only education but also professionalism, experience and most importantly in terms of professional ethics so that it is hoped that the higher the auditor's ability will be the more able to produce a low audit risk.

This research is not in line with(Du et al., 2018)which states that human capital in this case in terms of education level has a negative effect on the possibility of financial statement misstatements. Although the effect is opposite but shows the influence of human capital on audit risk. Research from (Krasniqi & Topxhiu, 2016)also stated the importance of human capital investment.

6. Influence of Human Capital on Audit Quality

Hypothesis 6in this study it was proven and concluded that human capital has a significant effect on audit quality. Because the significance value <0.05, t statistic > t table (1.96) and the regression coefficient is positive, Ho is rejected and it is concluded that human capital has a significant effect on audit quality, the higher the level of human capital for audit quality, the higher the quality audits.

This Human Capital can be improved through expertise and professionalism, through training, workshops and experience in handling clients. Increasing Human Capital will affect the audit process and thereby improve audit quality, thus this research is in line with (Samagaio & Rodrigues, 2016); (Bianchi et al., 2020); (Lamboglia & Mancini, 2021);(Dali et al., 2019)However, this is not in line with research (Albitar et al., 2020)because in this study it was assumed that there was social distancing, various types of training were postponed thereby reducing the expertise of auditors, because in this study they had not thought about the existence of webinars that were widely conducted during the pandemic, so that human capital would have a negative effect on audit quality.

This research is in line with the theory of Schultz (1961) which states that humans are a form





of capital or capital, as are other forms of capital such as machines, technology, money and materials. This shows that Human Capital which is formulated using education level, work experience, professional certificates, Continuing Professional Development (CPD) cannot hinder the good quality of auditors at each Public Accounting Firm (KAP).

This is in line with Auditing Standards Section 220 point 1 (SPAP: 2001) which states that independence for a public accountant means not being easily influenced because the auditor carries out his work for the public interest. Therefore, the auditor is not justified in taking sides with anyone, because no matter how perfect his technical expertise is, the auditor will lose the impartial attitude that is really needed to maintain his freedom of opinion (Singgih, 2010).

Human Capital is an asset that is owned by a business unit in the form of quality aspects of human resources, in carrying out an asset audit in the form of Human Capital. Improving the quality of auditor resources can be done through training and the expertise and experience of auditors, this greatly influences audit quality. Similar research from (Basundoro & Purwanto, 2017)which states human capital affects audit quality, but organizational culture will affect human capital, in the sense that an unsupportive organizational culture will affect the quality of its resources, thus it can be interpreted that human capital cannot affect audit quality as long as there is an unsupportive organizational culture.

7. Influence of Time budget pressure on Remote Audit

Hypothesis 7 in this study is proven and it is concluded that time budget pressure has a significant effect on remote audit, the results of the analysis in this study indicate that the significance value of the influence of time budget pressure on remote audit is 0.001 with a t statistic of 3.183 and a negative regression coefficient of -0.314. Because the significance value <0.05, t statistic > t table (1.96) and the regression coefficient are negative. Ho is rejected and it is concluded that time budget pressure has a significant effect on remote audit, but has the opposite effect, meaning that the higher the time level budget pressure, the remote audit will be lower. Because auditors with tight time tend to reduce audit procedures, it is possible that even in a pandemic situation a remote audit is not carried out. But with loose time the auditor can make a schedule so that the audit can be carried out with the aim of obtaining sufficient audit evidence.

This is in line with the theory of Litzenberg & Ramirez (2020) at the Institute of Internal Auditors (IIA) which revealed that there are several advantages and disadvantages of conducting remote audits, including reducing travel costs, increasing inspection intensity, increasing competence, especially in the field of technology. Information that can strengthen documentation and reporting, improve document review results and mitigate audit burden on operational costs.

Research on this matter is supported by research (CA Cassell et al., 2020) which states that audit quality in the first audit assignment is influenced by the time required to understand the client's business, risk assessment and audit implementation, and the amount of time provided by the auditor to carry out Duty. If this research is related to the current pandemic conditions,





the time pressure given will affect the implementation of audits, in this case remote audits. The results of this study are not in line with Syaiful Rizai's research (2021) which states that the time budget does not affect the implementation of remote audits at all or not.

Research from (Zainudin et al., 2021)in this case positioning time budget pressure as a moderating variable between auditor competence and audit quality states that time budget pressure cannot moderate the influence of these two variables, in this case the auditor's competence is viewed from the ability to use information technology in remote audit situations.

8. Influence of Time budget pressure on Audit Risk

Hypothesis 8 in this research is proven and concluded that time budget pressure has a significant effect on audit risk, the results of the analysis in this study indicate that the significance value of the influence of time budget pressure on audit risk is 0.000 with a t statistic of 5.386 and a positive regression coefficient of 0.497. Because the significance value < 0.05, t statistic > t table (1.96) and the regression coefficient is positive, Ho is rejected and it is concluded that time budget pressure has a significant effect on audit risk, the higher the time budget pressure level for audit risk, the more high audit risk, the given time pressure will affect audit risk, because with more time pressure the auditor will eliminate one of the audit procedures, so that audit risk becomes high.(Lestari et al., 2021)that time budget pressure determines the choice of audit sampling while audit risk is influenced by the use of the audit sampling. The existence of time restrictions in audits results in dysfunction of audit behavior(Andreas, 2016). As such, there is a need for a review for the auditor regarding the audit time limit.

This research is in line with the expectancy theory, the motivation of the auditor is to complete the audit task on time. When the auditor is faced with a difficult situation and it is impossible to complete the audit task on time, the auditor tends to carry out the desired behavior even though it is contrary to audit procedures (Suprianto, 2009).

This result is not in line with (Munidewi et al., 2021) that time budget pressure does not affect audit quality produced, auditors still maintain audit quality, because maintaining audit quality is their obligation, so in this study time budget pressure has a negative effect on audit quality. But this will not happen if, as in the research above, the auditor realizes that providing good audit quality is an obligation of the auditor, thus audit risk can still be avoided.

9. Influence of Time budget pressure on Audit Quality

Hypothesis 9 in this research is not proven and it is concluded that time budget pressure has no significant effect on audit quality, the results of the analysis in this study indicate that the significant value of the influence of time budget pressure on audit quality is 0.104 with a t statistic of 1.259 and a positive regression coefficient of 0.112. Because the significance value <0.05, t statistic <t table (1.96) and the regression coefficient is positive, Ho is not rejected and it is concluded that time budget pressure has no significant effect on audit quality, limited time makes auditors sometimes take shortcuts by abbreviating audit procedures, thereby





affecting the quality of the audit, but with the auditor's sense of responsibility, the budgeted time constraints do not affect the auditor in carrying out audit activities, the auditor continues to carry out audit activities according to proper procedures so that they can still produce quality audits. This happens when the auditor has been embedded in himself to be responsible for his audit work.

This research is in line with Suprianto's theory (2009) which states that planning a good audit time is very important for an auditor. If the auditor can allocate his time well, the results of his work can be maximized.

The results of the study are in line with (Widodo et al., 2016) which also states that there is no influence of time budget pressure on audit quality, and is not in line with the results of research (Svanberg & Öhman, 2013) which states that time budget pressure has a positive effect on audit quality, (Fauzan et al., 2021) which states that time budget pressure has a significant effect on audit quality, (Wijiantara et al., 2019) states that time budget pressure has a significant negative effect on audit quality. (Savitri & Dwirandra, 2018) and (Aswar et al., 2021)and using time budget pressure as a moderating variable between various factors and audit quality, (Ayu Amalia et al., 2019) the result is that time budget pressure equally weakens audit quality.

10. Influence of Remote Audit on Audit Quality

Hypothesis 10 in this study was proven and it was concluded that remote audit has a significant effect to audit quality, the results of the analysis in this study indicate that the significance value of the effect remote audits to audit quality is equal to 0.023 with the t statistic of 1.998 and a positive regression coefficient of 0.265, significance value <0.05, t statistic > t table (1.96) and the regression coefficient is positive.

This research is in line with De Angelo's theory (1981) which states that audit quality is the probability of an auditor disclosing violations of a company's accounting system. Meanwhile, remote audit quality shows the auditor's performance in auditing the financial statements of an entity with remote conditions or systems.

This is in line with the Auditing Standards by the Indonesian Institute of Certified Public Accountants (IAPI) (2020) that the remote audit stage is essentially no different from the conventional audit stage, but there are several conditions that have changed due to modifications to the way auditors work through the implementation of remote preaching.

Research from (Castka et al., 2020) states that not all audit procedures are carried out with remote audits, this depends on the willingness of client transactions to use the web and the health level of each individual. Remote auditing was growing at the start of the pandemic, but it is also possible to carry out audits in the future, so learning from this a company is expected to prepare sufficient technology to carry out remote audits (Castka et al., 2020)).

Several studies stated that during the pandemic the use of digitalization in conducting audits really needed to be developed. Research from (Barretto et al., 2022)stated that during the pandemic the use of digital platforms was implemented to develop audit procedures for





planning and conducting audits with the aim of maintaining audit quality.(Zahrawati et al., 2021)connect in the era of society 5.0 and stated that there needs to be a strategy and correct steps for improvement in the use of remote audits in the future. Basically, the use of remote audits has the same stages as conventional audits, but remote audits require the development of Big Data Analysis to support audit activities.

11. Influence of Audit Risk on Audit Quality

Hypothesis 11 in this study is proven and it is concluded that audit risk has a significant effect on audit quality, the results of the analysis in this study indicate that the significance value of the influence of audit risk on audit quality is 0.010 with a t statistic of 2.329 and a negative regression coefficient of -0.274, a significance value < 0.05, t statistic > t table (1.96) and the regression coefficient is negative.

This research is in line with Konrath's (2002) theory of risks that arise because the auditor unknowingly does not modify his opinion properly on financial statements containing material misstatements, in line with Auditing Standard 330 regarding assessed risks for audit quality. Auditors must think about changes in obtaining audit evidence while working in the midst of the Covid-19 pandemic, for example observations that are difficult to carry out due to health considerations.

The results of this study are in line with (Saliha & Flayyihb, 2020). Audit risk affects the quality of the resulting audit. A quality audit carries a small risk, thereby reducing the risk of the auditor's profession. Audit risk occurs when the auditor gives an inappropriate opinion on the financial statements as a result of an incorrect audit process (Askary et al., 2018).(Muslim et al., 2020) stated that the higher the risk, the lower the audit quality. Meanwhile, research from (Sri & Solimun, 2019) is not in line with the results of this study which states that audit quality is not affected by risk in creating corporate value. (Handjojo & Hastuti, 2020) states that management risk which consists of inherent risk, inherent risk and detection risk does not affect audit quality. Also states that audit risk has no significant effect on audit quality.

Research from (C. Cassell & Hunt, 2018) examines risks to audit quality, the risk here is litigation risk, during periods of crisis, and the risks faced by clients arise because of low audit quality, whereas before the crisis audit quality was high.

12. Audit Techniques in moderating the influence of Remote Audit on Audit Quality

Hypothesis 12 in this study is proven and it is concluded that audit techniques can strengthen the influence of remote auditing on audit quality. The results of the analysis in this study show that the significant value of the influence of remote auditing on audit quality is 0.019 with a t statistic of 2.086 and a negative regression coefficient of -0.266. Because the significance value < 0.05, t statistic > t table (1.96) and the regression coefficient is negative, Ho is rejected and it is concluded that audit techniques can strengthen the influence of remote audits on audit quality, auditors with good remote audit skills and have good remote audit techniques Good audits tend to have better audit quality compared to auditors who have good remote audit skills but do not have adequate audit techniques. This is in line with auditing standards by the





Indonesian Institute of Accountants in the State Financial Audit Standards (SPKN) BPK RI No. 01 of 2017 regarding field worker standards that sufficient competent audit evidence must be obtained through inspection, observation, inquiry and confirmation as a basis for expressing an opinion on the report being audited.

The audit process plays an important role in determining the external audit report and as a basis for understanding internal control (Younas & Md Kassim, 2019). The audit process is needed to obtain a substantial picture of improving the quality and transparency of audit conclusions(De Kleijn & Van Leeuwen, 2018).

13. The role of Audit Techniques in moderating the influence of Audit Risk on Audit Quality

Hypothesis 13 in this study is proven and it is concluded that audit techniques can weaken the influence of audit risk on audit quality. The results of the analysis in this study indicate that the significance value of the role of audit techniques in moderating the influence of audit risk on audit quality is 0.001 with a t statistic of 3.109 and a coefficient negative regression of -0.420. Because the significance value is <0.05, the t statistic > t table (1.96) and the regression coefficient is negative, Ho is rejected and it is concluded that audit techniques can weaken the influence of audit risk on audit quality. Audits with high audit risk but poor/adequate audit techniques tend to have lower audit quality than auditors who have high audit risk but have good audit techniques. Determination of audit techniques will strengthen audit implementation in order to produce a quality audit.

(Abdallah et al., 2021)suggests that auditors use the audit risk model in identifying potential misstatements that occur in financial statements and certain account balances in uncovering possible misstatements.

While research from (Hazaea et al., 2022)stated that the time allocated to implement audit procedures increased during the Covid 19 pandemic, auditors maximized audit procedures to protect against emerging risks.

Indirect Path	Original Sample (O)	Sample Means (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
$AF \rightarrow REM \rightarrow AQ$	0,079	0,078	0,047	1,996	0,045
HC -> REM -> AQ	0,058	0,060	0,051	1,136	0,128
TBP -> REM -> AQ	-0,083	-0,077	0,044	2,892	0,030
$AF \rightarrow RA \rightarrow AQ$	0,090	0,094	0,048	2,861	0,032
$HC \rightarrow RA \rightarrow AQ$	0,007	0,009	0,031	0,235	0,407
$TBP \rightarrow RA \rightarrow AQ$	-0,136	-0,143	0,067	2,039	0,021

4.2. Results of the Indirect Effect Test

 Table 2: Indirect Influence Test Results

Source: processed data (2022)





14. Influence of audit fees on audit quality mediated by Remote Audit

In the indirect path of the influence of FA on AQ through REM, obtained a p value of 0.045 with a T statistic of 1.996 and a positive path coefficient of 0.079, because the p value obtained was <0.05, T statistic > 1.96 and an indirect positive path coefficient it is concluded that FA can indirectly influence AQ through REM, the direction of indirect influence is positive, which means that the higher the FA, the more REM height which will then be obtained impact on increasing AQ. However, this result is different with Syaiful Rizal (2021) who concluded that remote audits do not mediate the influence of audit fees on audit quality.

15. Influence of Human Capital on Audit Quality mediated by Remote Audit

In the indirect path of the influence of HC on AQ through REM, a p value of 0.128 was obtained with a T statistic of 1.136, because the p value obtained was > 0.05 and the T statistic was <1.96, it was concluded that HC could not influence indirectly directly to AQ mediated by REM. In this PLS model, REM is proven not to mediate the indirect influence of HC on AQ. Hence, Remote Audit can mediate Human Capital on audit quality, because human capital is in the form of competence and expertise from auditors in adapting to technological developments thereby determining audit quality.

16. Influence of Time Budget Pressure on Audit Quality mediated by Remote Audit

In the indirect path of the influence of TBP on trains through REM, a p value of 0.030 is obtained with a T statistic of 2.892 and a negative path coefficient of -0.083, because the p value obtained is <0.05, T statistic > 1.96 and if the indirect path coefficient is negative, it can be concluded that TBP can have an indirect effect on trains through REM, the direction of the indirect effect is negative, which means that the higher the TBP, the higher the REM, which in turn will have an impact on a decrease in trains. In the research model, REM is proven to act as a mediator of the indirect influence of TBP on AQ. With time pressure and in a pandemic condition, the auditor may omit one of the audit procedures and not carry out remote audits thereby affecting the audit quality.

17. Influence of Audit fees on Audit Quality mediated by Audit Risk

In the indirect path of the influence of FA on AQ through RA, obtained a p value of 0.032 with a T statistic of 2.061 and a positive path coefficient of 0.090, because the p value obtained is <0.05, T statistic > 1.96 and the indirect path coefficient is positive then it can be concluded that FA can indirectly influence AQ through RA, the direction of indirect influence is positive, which means that the higher the FA, the higher the RA, which in turn will have an impact on increasing AQ. In the RA research model it is proven that it can act as a mediator of the indirect influence of FA on AQ. This is in line with research from Chen et al. (2019) that audit fees increase as a result of financial crisis risks and there is a positive relationship between audit fees, and the risk of financial misstatement that will impact audit quality.

18. Influence of Human Capital on Audit Quality mediated by Audit Risk

In the indirect path of the influence of HC on AQ through RA, a p value of 0.407 was obtained with a T statistic of 0.235, because the p value obtained was > 0.05 and the T statistic was





<1.96, it was concluded that HC could not have an indirect effect directly against AQ mediated by RA. In this PLS model, RA is proven not to mediate the indirect influence of HC on AQ. Thus, Audit Risk cannot mediate Human Capital against Audit risk.

19. Influence of Time Budget Pressure on Audit Quality mediated by Audit Risk

In the indirect path of the influence of TBP on AQ through RA, a p value of 0.021 is obtained with a T statistic of 2.039 and a negative path coefficient of -0.136, because the p value obtained is <0.05, the T statistic is > 1.96 and the coefficient If the indirect path is negative, it can be concluded that TBP can have an indirect effect on AQ through RA, the direction of the indirect effect is negative, which means that the higher the TBP, the higher the RA, which in turn will have an impact on decreasing AQ. In the RA research model it is proven that it can act as a mediator of the indirect influence of TBP on AQ. The budgeted time pressure will affect the implementation of the audit by reducing one of the audit procedures thereby affecting the quality of the audit.

5. CONCLUSIONS AND RECOMMENDATIONS

This study examines the direct influence between independent variables (audit fee, human capital and time budget pressure) on independent variables (audit quality), and also tests the direct influence between these independent variables to the mediation variables which in this case are independent variables in direct influence, namely remote audit and audit risk, as well as testing the influence of remote audit and audit risk on audit quality. From the test results using PLS, it was obtained that audit fees, human capital, remote audit and audit risk had a significant effect on audit quality and only time budget pressure did not have a significant effect on audit quality, but for testing the direct influence between the three independent variables on remote audit and audit risk showed that human capital did not affect audit risk.

For testing with moderation variables, namely audit techniques, it is produced that audit techniques are able to moderate between remote audits and audit risks to audit quality. As for testing the indirect influence, only human capital on audit quality cannot be mediated by remote audit and audit risk, this result shows that human capital in this case audit resources will still maintain audit quality, even with remote methods or remote audits and with any audit risk if the auditor already holds a code of ethics as an auditor.

Based on the limitations and results of the research above, it can be suggested that research respondents for further research should be addressed to managers or supervisors who play a more important role in the final decision, and the advice for subsequent research is to use other variables outside this research that affect the quality of the audit, for example the number of audit findings in the field or the role of internal audit in helping to improve the quality of audits.





References

- Abdillah, W., & Jogiyanto. (2015). Partial Least Square (PLS) Alternatif Structural Equation Modelling (SEM) Dalam Penelitian Bisnis. Penerbit: CV Andi Offset (Penerbit Andi). In Yogyakarta: Penerbit Andi (Vol. 22).
- Aboelmaged, M., & Hashem, G. (2019). Absorptive capacity and green innovation adoption in SMEs: The mediating effects of sustainable organisational capabilities. Journal of Cleaner Production, 220, 853–863. https://doi.org/10.1016/j.jclepro.2019.02.150
- Acosta, A. S., Crespo, Á. H., & Agudo, J. C. (2018). Effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMEs). International Business Review, 27(6), 1128–1140.
- 4. Addury, M. M. (2018). Impact of financial inclusion for welfare: Analyze to household level. Journal of Finance and Islamic Banking, 1(2), 90–104.
- Andari, T. T., & Mukmin, M. N. (2020). Serta Inovasi Terhadap Kinerja Ekonomi Produktif Kelompok Usaha Bersama (Uep Kube) Di Kota Bukittinggi Analysis of the Effect of Corporate and Market Orientation and Innovation on the Productive Economic Performance of the Joint Business Business Group . 11(April), 40– 52.
- 6. Assauri, S. (2007). Manajemen Pemasaran. Radja Grafindo Persada.
- 7. Atkinson, A., & Messy, F.-A. (2011). Assessing financial literacy in 12 countries: an OECD/INFE international pilot exercise. Journal of Pension Economics & Finance, 10(4), 657–665.
- Belayeth Hussain, A. H. M., Endut, N., Das, S., Chowdhury, M. T. A., Haque, N., Sultana, S., & Ahmed, K. J. (2019). Does financial inclusion increase financial resilience? Evidence from Bangladesh. Development in Practice, 29(6), 798–807. https://doi.org/10.1080/09614524.2019.1607256
- Buckland, J. (2018). Building financial resilience: Do credit and finance schemes serve or impoverish vulnerable people? In Building Financial Resilience: Do Credit and Finance Schemes Serve or Impoverish Vulnerable People? https://doi.org/10.1007/978-3-319-72419-5
- 10. Camarinha-Matos, L. M. (2014). Collaborative networks: A mechanism for enterprise agility and resilience. Proceedings of the I-ESA Conferences, 7(March), 3–11. https://doi.org/10.1007/978-3-319-04948-9_1
- 11. Carayannis, E. G., & Campbell, D. F. J. (2009). "Mode 3" and "Quadruple Helix": Toward a 21st century fractal innovation ecosystem. International Journal of Technology Management, 46(3–4), 201–234. https://doi.org/10.1504/ijtm.2009.023374
- Chen, J., Qin, G., Wang, J., Yu, J., Shen, B., Li, S., Ren, Y., Zuo, L., Shen, W., & Das, B. (2013). One-step fabrication of sub-10-nm plasmonic nanogaps for reliable SERS sensing of microorganisms. Biosensors and Bioelectronics, 44(1), 191–197. https://doi.org/10.1016/j.bios.2013.01.038
- 13. Das, M., & Rangarajan, K. (2020). Impact of policy initiatives and collaborative synergy on sustainability and business growth of Indian SMEs. Indian Growth and Development Review, 13(3), 607–627. https://doi.org/10.1108/IGDR-09-2019-0095
- 14. Dr. S. Rajamohan and Subha, K. (2014). Information Technology in Financial Inclusion Professor, Alagappa Institute of Management Alagappa. Parpipex-Indian Journal of Research, 3(7), 1–2.
- 15. Eniola, A. A., & Entebang, H. (2017). SME Managers and Financial Literacy. Global Business Review, 18(3), 559–576. https://doi.org/10.1177/0972150917692063
- 16. Fatoki, O. (2014). The financing options for new small and medium enterprises in South Africa. Mediterranean Journal of Social Sciences, 5(20), 748–755. https://doi.org/10.5901/mjss.2014.v5n20p748





- 17. Hagedorn, E. A., Schug, M. C., & Suiter, M. (2016). A collaborative approach to financial literacy in the Chicago public schools. Journal of Private Enterprise, 31(1), 79–90.
- Haug, A., Adsbøll Wickstrøm, K., Stentoft, J., & Philipsen, K. (2020). The impact of information technology on product innovation in SMEs: The role of technological orientation. Journal of Small Business Management, 00(00), 1–27. https://doi.org/10.1080/00472778.2020.1793550
- Hewa Wellalage, N., Hunjra, A. I., Manita, R., & Locke, S. M. (2021). Information communication technology and financial inclusion of innovative entrepreneurs. Technological Forecasting and Social Change, 163(May), 120416. https://doi.org/10.1016/j.techfore.2020.120416
- Idawati, I. A. A., & Pratama, I. G. S. (2020). Pengaruh Literasi Keuangan Terhadap Kinerja dan Keberlangsungan UMKM di Kota Denpasar. Warmadewa Management and Business Journal (WMBJ), 2(1), 1–9. https://doi.org/10.22225/wmbj.2.1.1644.1-9
- 21. Ismail, Y. Y. S. (2016). Review of International Business and Strategy. Review of International Business and Strategy, 26(1).
- Jiang, H., Gao, S., Song, Y., Sheng, K., & Amaratunga, G. A. J. (2019). An empirical study on the impact of collaborative R&D networks on enterprise innovation performance based on the mediating effect of technology standard setting. Sustainability (Switzerland), 11(24). https://doi.org/10.3390/SU11247249
- 23. Kabakova, O., & Plaksenkov, E. (2018). Analysis of factors affecting financial inclusion: Ecosystem view. Journal of Business Research, 89(January), 198–205. https://doi.org/10.1016/j.jbusres.2018.01.066
- 24. Kartika, C. (2017). Pengaruh Entrepreneurial Orientation, Culture Organization Internal Factor terhadap Performance Organization melalui Corporate Entreprenuership Capability pada UMKM Batik Tulis di Jawa Timur. Competence: Journal of Management Studies, 11(1).
- 25. Keh, H. T., Nguyen, T. T. M., & Ng, H. P. (2007). The effects of entrepreneurial orientation and marketing information on the performance of SMEs. Journal of Business Venturing, 22(4), 592–611. https://doi.org/10.1016/j.jbusvent.2006.05.003
- Khalili, H., nejadhussein, syyedhamzeh, & Fazel, A. (2013). The influence of entrepreneurial orientation on innovative performance. Journal of Knowledge-Based Innovation in China, 5(3), 262–278. https://doi.org/10.1108/jkic-09-2013-0017
- Kim, H., & Kim, E. (2018). How an open innovation strategy for commercialization affects the firm performance of Korean healthcare IT SMEs. Sustainability (Switzerland), 10(7). https://doi.org/10.3390/su10072476
- Kimmitt, J., & Muñoz, P. (2017). Entrepreneurship and financial inclusion through the lens of instrumental freedoms. International Small Business Journal: Researching Entrepreneurship, 35(7), 803–828. https://doi.org/10.1177/0266242617700699
- 29. Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. Financial Management, 49(3), 589–614. https://doi.org/10.1111/fima.12283
- 30. Kojo Oseifuah, E. (2010). Financial literacy and youth entrepreneurship in South Africa. African Journal of Economic and Management Studies, 1(2), 164–182. https://doi.org/10.1108/20400701011073473
- Lyver, M. J., & Lu, T. J. (2018). Sustaining innovation performance in SMEs: Exploring the roles of strategic entrepreneurship and IT capabilities. Sustainability (Switzerland), 10(2), 1–27. https://doi.org/10.3390/su10020442
- Mabula, J. B., & Ping, H. D. (2018). Use of technology and SME managers' financial literacy in developing economies. ACM International Conference Proceeding Series, 9(6), 145–152. https://doi.org/10.1145/3241748.3241765





- 33. Makedos, I. (2014). The Collaboration of SMEs through Clusters as Defense against Economic Crisis. Economics Research International, 2014, 1–9. https://doi.org/10.1155/2014/407375
- 34. Masa'deh, R., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. Benchmarking, 25(8), 3117–3142. https://doi.org/10.1108/BIJ-02-2017-0024
- 35. Melania, T. R. (2020). Dampak Financial Quotient Dan Lifestyle Terhadap Financial Behavior Dosen Wanita Di Stie Pancasetia Banjarmasin. Jurnal Ekonomi Dan Manajemen, 11(2), 87–103.
- 36. Mujanah, S., Ratnawati, T., & Kusmaningtyas, A. (2019). The effect of competence, emotional quotient, and financial quotient on the business performance of small and medium enterprises in Surabaya, Indonesia. Proceedings of the 16th International Symposium on Management (INSYMA 2019), August 1945. https://doi.org/10.2991/insyma-19.2019.25
- 37. Mulyana, M., & Sutapa, S. (2016). The impact of entrepreneurial orientation and collaborative networks on creative industries performance. JDM (Jurnal Dinamika Manajemen), 7(2), 166–181.
- Najib, M., Dewi, F. R., & Widyastuti, H. (2014). Collaborative Networks as a Source of Innovation and Sustainable Competitiveness for Small and Medium Food Processing Enterprises in Indonesia. International Journal of Business and Management, 9(9). https://doi.org/10.5539/ijbm.v9n9p147
- Naumenkova, S., Mishchenko, S., & Dorofeiev, D. (2019). Digital financial inclusion: Evidence from Ukraine. Investment Management and Financial Innovations, 16(3), 194–205. https://doi.org/10.21511/imfi.16(3).2019.18
- Nkundabanyanga, S. K., Mugumya, E., Nalukenge, I., Muhwezi, M., & Najjemba, G. M. (2020). Firm characteristics, innovation, financial resilience and survival of financial institutions. Journal of Accounting in Emerging Economies, 10(1), 48–73. https://doi.org/10.1108/JAEE-08-2018-0094
- 41. Ofem, B. (2014). Entrepreneurial Orientation, Collaborative Networks, and Nonprofit Performance. UKnowledge.
- 42. Pandin, M. Y. R., Ratnawati, T., & Yuhertiana, I. (2021). The Influence of Financial Structure, Financial Literacy and Financial Behavior on Household Financial Resilience Using Financial Inclusion and Financial Decision as Interverning Variables on Cancer Survivor s Household in East Java During Covid-19 Pandem. IJEBD (International Journal of Entrepreneurship and Business Development), 04(01), 80–90.
- 43. Passerini, K., El Tarabishy, A., & Patten, K. (2012). Information Technology for Small Business. In Information Technology for Small Business. https://doi.org/10.1007/978-1-4614-3040-7
- 44. Prasad, H., Meghwal, D., & Dayama, V. (2018). Digital Financial Literacy: A Study of Households of Udaipur. Journal of Business and Management, 5(I), 23–32. https://doi.org/10.3126/jbm.v5i0.27385
- 45. Prawirasasra, K. P. (2018). Financial technology in Indonesia: disruptive or collaborative. Reports on Economics and Finance, 4(2), 83–90.
- 46. Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship Theory and Practice, 33(3), 761–787.
- Raymond, L., Uwizeyemungu, S., Fabi, B., & St-Pierre, J. (2018). IT capabilities for product innovation in SMEs: a configurational approach. Information Technology and Management, 19(1), 75–87. https://doi.org/10.1007/s10799-017-0276-x
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. Journal of Consumer Affairs, 44(2), 276–295. https://doi.org/10.1111/j.1745-6606.2010.01169.x





- 49. Rostek, K. (2015). Benchmarking Collaborative Networks A Key to SME Competitiveness. Springer.
- Shafariah, H., Edison, E., & Mattajang, R. (2016). Hubungan Orientasi Kewirausahaan Dengan Pertumbuhan Umkm: Peran Aspek Permodalan Dan Pemerintah Sebagai Moderator. Jurnal Riset Manajemen Dan Bisnis (JRMB) Fakultas Ekonomi UNIAT, 1(1), 61–70. https://doi.org/10.36226/jrmb.v1i1.11
- 51. Shuman, J., & Twombly, J. (2010). Collaborative networks are the organization: An innovation in organization design and management. Vikalpa, 35(1), 1–13. https://doi.org/10.1177/0256090920100101
- Singhry, H. B., & Bogoro, P. (2016). Financial Literacy And Entrepreneurial Intention Of Generation "Y" Graduates: An Analysis Based On The Theory Of Planned Behavior. International Journal of Management Science Research, 2(1), 351–366.
- 53. Souisa, W. (2018). The effects of entrepreneurial orientation and market orientation on business performance. Journal of Entrepreneurship Education, 21(4).
- 54. Swamy, V. (2018). Financial Inclusion And The Resilience Of Poor Households. The Journal of Developing Areas, 53(4). https://doi.org/10.1353/jda.2018.0079
- 55. Syukron, M. Z., & Ngatno, N. (2016). Pengaruh orientasi pasar dan orientasi kewirausahaan terhadap inovasi produk dan keunggulan bersaing UMKM Jenang di Kabupaten Kudus. Jurnal Ilmu Administrasi Bisnis, 5(4), 209–222.
- 56. Teja, A. (2017). Indonesian FinTech business: New innovations or foster and collaborate in business ecosystems? The Asian Journal of Technology Management, 10(1), 10.
- Tumanggor, B., Tarigan, V., & Ompusunggu, V. M. (2020). The Factors Affecting Consumers Pay with Go-Pay on Go-Jek. Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol, 3(3), 1704–1717.
- Varrichio, P., Diogenes, D., Jorge, A., & Garnica, L. (2012). Collaborative Networks and Sustainable Business: A Case Study in the Brazilian System of Innovation. Procedia - Social and Behavioral Sciences, 52(11), 90–99. https://doi.org/10.1016/j.sbspro.2012.09.445
- 59. Wahyuni, N. M., & Sara, I. M. (2020). The effect of entrepreneurial orientation variables on business performance in the SME industry context. Journal of Workplace Learning, 32(1), 35–62. https://doi.org/10.1108/JWL-03-2019-0033
- 60. Weerawardena, J. (2003). The role of marketing capability in innovation-based competitive strategy. Journal of Strategic Marketing, 11(1), 15–35. https://doi.org/10.1080/0965254032000096766
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. Journal of Business Venturing, 20(1), 71–91. https://doi.org/10.1016/j.jbusvent.2004.01.001
- 62. Yang, Y., Hsueh, H., Huang, M., Cho, T., & Kishi, Y. (2017). Effect of fintech on the productivity in the Taiwan banking industry. International Journal of E-Education, e-Business, e-Management and e-Learning, 7(4), 255–263.
- 63. Zeng, S. X., Xie, X. M., & Tam, C. M. (2010). Relationship between cooperation networks and innovation performance of SMEs. Technovation, 30(3), 181–194. https://doi.org/10.1016/j.technovation.2009.08.003

