JURNAL AKSI
Akuntansi dan Sistem Informasi
http://aksi.pnm.ac.id

The Effectiveness Of The Application Of Audit Tools And Linked Archive System (Atlas) On The Financial Statement Audit Process (Case Study at Public Accounting Firm Hari Purnomo & Jaswadi)

Niken Nur Rohmah[1], Jaswadi[2], Indrayati[3]

[1,2,3)] *State Polytechnic of Malang*

ABSTRACT

The development of information technology has significantly impacted various fields, including audit practice. A notable advancement is the ATLAS application, an electronic working paper designed to assist auditors in filling out work papers. This research aimed to examine the application of ATLAS and assess its effectiveness in the financial statement audit process at KAP Hari Purnomo & Jaswadi. Using a descriptive qualitative approach, data were collected through interviews with auditors. The findings revealed that KAP Hari Purnomo & Jaswadi had comprehensively implemented the ATLAS application, covering all stages from pre-engagement, risk assessment, and risk response to reporting. The ATLAS application proved effective, as it streamlined and facilitated auditors' work in inputting audit data. The integration of all audit stages within the ATLAS application demonstrated its efficiency and effectiveness in the financial statement audit process, making it a valuable tool for auditors at KAP Hari Purnomo & Jaswadi.

INTRODUCTION

In the dynamic scene of life that continues to grow, the development of technology and knowledge is a matter of course (Ikhsan et al., 2022). Almost every realm of human activity is now inseparable from the role of technology (Issa et al., 2016). This reflects that technological advances have a significant influence in various aspects of life, one of which is in the field of finance or accounting. The application of computer-based information systems in the realm of accounting has made a substantial contribution in improving the reliability and accuracy of the information produced (Susmoko & Rani, 2023).

An audit is an important mechanism to verify the accuracy and reliability of information based on applicable standards, hence it should be conducted by competent and independent auditors (Arens et al., 2015). In conducting an audit, there are several stages that have to be completed, namely the pre-planning stage, risk assessment, risk response and finally completion and reporting which will result in an independent auditor's report containing the auditor's opinion on the fairness of the financial statements (Nurrohman et al., 2021; Rahayu et al., 2023) .

Electronic Working Paper is an innovation introduced with the aim of optimising the efficiency and effectiveness of the audit process. E-Working Paper contains the entire working paper

documentation from engagement index to final reporting. Audit Working Paper (*Kertas Kerja Audit/*KKA) is a compilation of documentation prepared by the auditor as evidence of the various audit techniques and procedures applied, as well as the conclusions reached during the audit. Audit Working Papers include a comprehensive series of auditor work processes starting from the planning stage, implementation to field identification and observation. This working paper plays a very important role in supporting optimal audit implementation and the preparation of quality audit reports. So that the use of electronic work papers will certainly help performance become more efficient and concise (Anugrah, 2021).

In order to improve the quality and reliability of the audit process, the Ministry of Finance's Center for Financial Professional Development (*Pusat Pembinaan Profesi Keuangan/* PPPK) collaborated with the Indonesian Public Accountants Association (*Institut Akuntan Publik Indonesia/*IAPI) to develop a Microsoft Excel-based application specifically designed as an adequate means and system for carrying out audit procedures and documenting them in providing opinions (Prajanto, 2020). This application, called ATLAS, is a tool used by auditors in examining client financial statements in accordance with the established sequence of audit cycles or procedures (Nurkholis & Wiranti, 2019). The audit cycle in ATLAS adopts the International Standards on Auditing (ISA), which is divided into three main stages, consisting of the risk assessment stage, the risk response stage, and the reporting stage (Diab, 2021; Liudmila, 2020; Manita et al., 2020). The development of the ATLAS application has been harmonised with the applicable Auditing Standard (SA) (Haniifah & Pramudyastuti, 2022).

Based on research conducted by Haniifah and Pramudyastuti (2022) at one of the Public Accounting Firms (*Kantor Akuntan Publik/*KAP), it states that ATLAS has been effective in assessing risk and identifying initial materiality is clear. The limitation in this study is that researchers only analyse the effectiveness of the ATLAS application based on Microsoft Excel (Hammes et al., 2020). Based on previous research, the problem formulation is about the application of the ATLAS application and the effectiveness of using the ATLAS application in the financial statement audit process.

This research is framed by the Task-Technology Fit Theory which is a concept that focuses on how the fit between the task and the technology used can improve the efficiency, effectiveness, and quality of individual performance (Goodhue & Thompson, 1995). This theory argues that when the technology used matches the needs and characteristics of the task to be completed, users will be better able to complete their work better and optimally (Fitriati & Mulyani, 2015). In other words, this theory highlights the importance of selecting the right technology to support specific tasks, so as to maximise productivity and work outcomes.

Audit Tools and Linked Archive System or commonly known as ATLAS is an application used to document audit work papers. This application is Microsoft Excel and Web-based. ATLAS contains all stages of an audit from pre-engagement to reporting. ATLAS was first published in 2017 in November and has an updated version in 2021. General instructions for using the Microsoft Excel-based ATLAS application are as follows: (1) it is recommended to use the Ms 2013 version or later, (2) the laptop/computer has sufficient storage space, (3) only has a reporting period of January to December, (4) can only be run by one user, (5) because it can only be used by one user, tips for management to determine special personnel, (6) on the Home menu, must be filled in before proceeding to the next stage, (7) There are special marks that have information, namely: (a) asterisk, (b) cell colour. The technical instructions in the ATLAS application guidebook contain an explanation of the menu in the application (PPPK, 2019).

Prior research primarily focused on the effectiveness of traditional audit tools without exploring the specific advantages of web-based applications like ATLAS. This study addresses the need for empirical evidence on the effectiveness of modern audit technologies in real-world settings. Previous studies have not thoroughly examined the user experience and limitations of the ATLAS application, particularly its reliance on Microsoft Excel, which restricts multi-user access. This research highlights these limitations and their impact on audit efficiency. There is a lack of comprehensive studies that analyze how technology integration, specifically through applications like ATLAS, affects the various stages of the audit process. This research fills that gap by providing a detailed examination of the application across all audit stages. This research offers a detailed evaluation of the ATLAS application, assessing its effectiveness across all stages of the audit process, from pre-engagement to reporting. This holistic approach provides insights into how technology can enhance audit quality. The study makes significant contributions both to academic literature and auditing practices. Academically, it enriches the theoretical framework by applying the Task-Technology Fit Theory to evaluate the ATLAS application's alignment with auditors' needs. This approach provides a nuanced understanding of how well the technology supports audit tasks, thereby advancing the discourse on technology adoption in the auditing field. Practically, the study offers valuable qualitative insights from interviews with auditors,

shedding light on the real-world implications of using the ATLAS application. These insights enhance the understanding of the application's effectiveness in actual audit scenarios, providing practical recommendations for its implementation and optimization.

MATERIALS AND METHODS

In this study, the method used is a qualitative approach. The main data source used is primary data obtained through the interview method conducted with auditor staff at the KAP Hari Purnomo & Jaswadi. Data collection was carried out using interview and documentation methods. Interviews were conducted involving three auditors as resource persons, while documents were taken in the form of a guidebook for using the ATLAS application as supporting data.

The data analysis used in this study is to use the model developed by Miles and Huberman (Miles & Huberman, 2014). This data analysis model is a process that involves direct data collection, where data analysis is carried out while data collection is ongoing, and also after the data collection process has been completed. During the interview, the researcher has analysed the answers given by the interviewees. If the answer is deemed satisfactory, then the researcher will continue with the next question, until it reaches a stage where the data obtained is considered adequate.

To be able to validate the information obtained, researchers use the source triangulation validity technique. Source triangulation is a technique that involves collecting data from a variety of different sources with the aim of confirming or validating research findings.

RESULTS AND DISCUSSION

Based on the results of research conducted to determine the effectiveness of the implementation of the ATLAS application in financial statement audit procedures, it was found that the ATLAS application is often used as a supporting tool in helping to input audit work papers. This application has adopted the audit standards required by auditors, so that it can provide facilities that facilitate the implementation of audit tasks. This finding was obtained through an interview with a resource person who is an auditor at the Public Accounting Firm (KAP) Hari Purnomo & Jaswadi.

The ATLAS application has organised the audit process into structured and systematic stages, including the pre-engagement stage, risk assessment, risk response, and reporting stages. This finding is in line with previous research conducted by Margaret et al. (Margaret et al., 2023), who concluded that the ATLAS application provides integrated work papers for each stage of the examination, from pre-engagement, risk assessment, risk response to the completion and reporting stages.

The pre-engagement stage includes analysing the acceptance and sustainability of the relationship with the client. The risk assessment stage involves the auditor's assessment of existing risks. The risk response stage relates to the conformity of the client's accounting application with applicable accounting standards, as well as an analysis of transactions with related parties, subsequent events, business continuity analysis, management representations, commitments, and contingencies. The reporting stage contains the independent auditor's report.

After the development of the ATLAS application, filling in the Examination Working Paper (KKP) index at KAP Hari Purnomo & Jaswadi is fully carried out using the procedures contained in the ATLAS application. This reflects the comprehensive adoption of the application in the audit process. Table 1 in the research presents the results of the analysis regarding the implementation of the ATLAS application in the audit process.

Table 1. Results of ATLAS Implementation Analysis

Index KKP	Audit Procedure	Implementation Procedure	
		Before	After
A1	Pre- Engagement		
A110	Client Acceptance and Relationship Continuity Analysis	Carried out manually	Using the ATLAS
A120	Allocation of Service Hours and Other Planning	Carried out manually	Using the ATLAS

Index KKP	Audit Procedure	Implementation Procedure	
		Before	After
A130	Engagement Letter	Carried out manually	Using the ATLAS
A140	Letter of Assignment	Carried out manually	Using the ATLAS
A150	Independence Statement	Carried out manually	Using the ATLAS
A160	Engagement Team Communication	Carried out manually	Using the ATLAS
A170	First Year Engagement	Carried out manually	Using the ATLAS
A2	Risk Assessment	Carried out manually	
A210	Initial Materiality	Carried out manually	Using the ATLAS
A220	Initial Analytical Procedures	Carried out manually	Using the ATLAS
A230	Understanding of Entity and Environment	Carried out manually	Using the ATLAS
A240	Inherent Risk	Carried out manually	Using the ATLAS
A250	Control Risk	Carried out manually	Using the ATLAS
A260	Risk of Material Misstatement	Carried out manually	Using the ATLAS
A270	Communication with TCWG and SPI	Carried out manually	Using the ATLAS
B	Risk Response		
B100	Worksheet	Carried out manually	Using the ATLAS
B210	Accounting Estimates	Carried out manually	Using the ATLAS
B220	Transactions with Related Parties	Carried out manually	Using the ATLAS
B230	Subsequent Events	Carried out manually	Using the ATLAS
B240	Business Continuity	Carried out manually	Using the ATLAS
B250	Management Representation	Carried out manually	Using the ATLAS
B260	Auditor Expert	Carried out manually	Using the ATLAS
B270	Management Expert	Carried out manually	Using the ATLAS

Index KKP	Audit Procedure	Implementation Procedure	
		Before	After
B280	Commitments and Contingencies	Carried out manually	Using the ATLAS
B290	Segment Information	Carried out manually	Using the ATLAS
C	Reporting		
C110	Final Materiality Assessment	Carried out manually	Using the ATLAS
C120	Final Analytical Procedures	Carried out manually	Using the ATLAS
C200	Financial Statement Disclosure Review	Carried out manually	Using the ATLAS
C300	Quality Review	Carried out manually	Using the ATLAS
C400	Evaluation of Audit Evidence	Carried out manually	Using the ATLAS
C510	Review of Independent Auditor's Report	Carried out manually	Using the ATLAS
C520	Audit Final Memorandum	Carried out manually	Using the ATLAS
C530	Final Independent Auditor's Report	Carried out manually	Using the ATLAS

Source: Data processed (2024).

Table 1 summarizes the core functionalities of the ATLAS application, it would detail the specific tools and capabilities provided by the software, such as data analysis features, automation tools, or risk assessment modules. Table 1 also directly links the practical aspects of the application to the theoretical framework of Task-Technology Fit by Goodhue & Thompson (1995). It helps identify specific areas where the application supports or fails to meet task requirements, which is crucial for evaluating its fit and effectiveness. This directly relates to understanding how the technology aligns with the needs of auditors. Before implementing the ATLAS application, the Public Accounting Firm needs to organise a training programme aimed at auditors. The Centre for Financial Professional Development (PPPK) has also developed a guidebook for using the ATLAS application to facilitate auditors in operating the application effectively. There is a positive assessment from auditors regarding the use of the ATLAS application. This application is considered quite effective, especially in its ability to connect and integrate data from various sources that are inputted into the application in an integrated manner.

In order for the ATLAS application to be optimally utilised, auditors are required to have a comprehensive understanding of the application. Although initially there were some challenges faced in implementing this application, the auditors were able to overcome and adapt to the ATLAS application. However, this application has proven to be able to provide significant benefits in facilitating the smooth implementation of audit tasks.

The ATLAS application has both advantages and limitations in its implementation. In terms of advantages, this application is able to facilitate auditors in filling out audit work papers through the features that have been provided, as well as streamline the time to complete the work compared to the manual method. On the other hand, there are limitations regarding the specifications of the laptop device used, where not all types of laptops can optimally operate the ATLAS application. Requirements regarding laptop specifications have been listed in the ATLAS application guidebook. In addition, the ATLAS application is single user, which means that it can only be operated by one user at a time. The obstacles faced by auditors are more about basic understanding of the ATLAS application itself, where auditors are required to understand how the application works and uses by studying the modules or guidebooks that have been provided.

The implementation of the ATLAS application has a positive impact on auditors in increasing work efficiency, especially in terms of filling out audit work papers considering that this application is designed to prepare audit work papers. In addition, the ATLAS application also facilitates auditors in detecting risks earlier.. ATLAS is proven to be able to integrate risk assessment and audit procedures that have not been well integrated in small and medium-sized KAPs.

This study indicates that the implementation of the ATLAS application is quite effective in supporting the financial statement audit process, when compared to the manual method. This finding is corroborated by research from Haniifah and Pramudyastuti (2022), which concluded that the ATLAS application has accommodated audit procedures to be more effective and efficient because it has been systematised and automated properly.

CONCLUSION AND SUGGESTION

Based on the results of the research conducted, the researcher draws the conclusion that the application of the ATLAS application to the audit process has been carried out thoroughly. This application has been implemented at all stages of the audit process, from pre-engagement, risk assessment, risk response, to completion and reporting. The working papers available in the ATLAS application have been aligned with applicable audit standards, thus facilitating audit work more optimally. Although the ATLAS application is based on Microsoft Excel, there are requirements related to laptop device specifications that must be adequate for the application to be operated optimally. But overall, the implementation of the ATLAS application proved to be quite effective and efficient in helping to ease the work of auditors, especially in terms of streamlining the time of filling out audit work papers.

As a recommendation for future research, the researcher suggests integrating analyses related to the use of the web-based Audit Tools and Linked Archives System (ATLAS) application into the scope of the study. Exploring the web-based version of the ATLAS application is expected to provide a more diverse picture of the effectiveness and efficiency of the application of technology in supporting the audit process.

REFERENCES

Anugrah, K. B. (2021). Analisisi Perspektif Mahasiswa pada Penerapan Kertas Kerja ATLAS di Era Digital. *JIATAX (Journal of Islamic Accounting and Tax)*, *4*(1), 1. https://doi.org/10.30587/jiatax.v4i1.2591

Arens, A. A., Elder, R. J., & Beasley, M. S. (2015). *Auditing dan Jasa Assurance*. Penerbit Erlangga.

Darmayasa, I. N., & Putrayasa, I. M. A. (2019). *Detecting Fraud Through Audit Tool and Linked Archive System Working Paper. 354*(iCASTSS), 29–34. https://doi.org/10.2991/icastss-19.2019.7

Diab, A. (2021). The implications of the Covid-19 pandemic for the auditing and assurance processes. *Legal and Ethical Affairs 1 Journal of Legal, Ethical and Regulatory Issues*, *24*(5), 1–8.

Fitriati, A., & Mulyani, S. (2015). Factors that affect accounting information system success and its implication on accounting information quality. *Asian Journal of Information Technology*, *14*(5), 154–161. https://doi.org/10.3923/ajit.2015.154.161

Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS Quarterly: Management Information Systems*, *19*(2), 213–233. https://doi.org/10.2307/249689

Hammes, D. D., De Mattos, L. K., & Flach, L. (2020). Audit report lag determinants: A panel data regression model with all companies listed on the Dow Jones Stock Index. *International Journal of Business Excellence*, *21*(1), 139–152. https://doi.org/10.1504/IJBEX.2020.106954

Haniifah, M. N., & Pramudyastuti, O. L. (2022). Analisis Efektivitas Audit Tool and Linked Archive System Dalam Menunjang Proses Audit Laporan Keuangan. *Jurnal Maneksi*, *10*(2), 169–176. https://doi.org/10.31959/jm.v10i2.747

Ikhsan, W. M., Ednoer, E. H., Kridantika, W. S., & Firmansyah, A. (2022). Fraud Detection Automation Through Data Analytics and Artificial Intelligence. *Riset*, *4*(2), 103–119. https://doi.org/10.37641/riset.v4i2.166

Issa, H., Sun, T., & Vasarhelyi, M. A. (2016). Research ideas for artificial intelligence in auditing: The formalization of audit and workforce supplementation. *Journal of Emerging Technologies in Accounting*, *13*(2), 1–20. https://doi.org/10.2308/jeta-10511

Liudmila, L. (2020). Audits of less complex entities: The challenges in applying the ISA's. *ISCA*, 152–155.

Manita, R., Elommal, N., Baudier, P., & Hikkerova, L. (2020). The digital transformation of external audit and its impact on corporate governance. *Technological Forecasting and Social Change*,

150(August 2019). https://doi.org/10.1016/j.techfore.2019.119751

Margaret, K. A., Novita, N., & Azka, A. F. (2023). Audit Tool and Linked Archive System (ATLAS) in Improving Audit Quality. *Applied Accounting and Management Review (AAMAR)*, *2*(1), 1. https://doi.org/10.32497/aamar.v2i1.4269

Miles, M. B., & Huberman, M. (2014). Qualitative data analysis: An expanded sourcebook. In *Sage Publication* (2nd ed., Vol. 1304). Sage Publication.

Nurkholis, N., & Wiranti, N. A. (2019). Comprehensive performance measurement systems, mental model development, organizational justice, and employee performance: A study in Sharia Banks. *Jurnal Akuntansi & Auditing Indonesia*, *23*(2), 78–89. https://doi.org/10.20885/jaai.vol23.iss2.art2

Nurrohman, A., Tarjo, & Sumanto, A. (2021). Influence of Internal and External Auditors Attribution on Quality Audit with Moderating Auditor Ethics at Public Accounting Office in Surabaya. *Jurnal AKSI (Akuntansi Dan Sistem Informasi)*, *6*(2). https://doi.org/https://doi.org/10.32486/aksi.v6i2.19

Prajanto, A. (2020). Project Based Learning Sebagai Model Pembelajaran Risk Based Audit Dengan Media Aplikasi Audit Tool Linked Archive System (Atlas). *JAKA (Jurnal Akuntansi, Keuangan, Dan Auditing)*, *1*(1), 19–29. https://doi.org/10.56696/jaka.v1i1.3860

Rahayu, R. A., Hariyanto, W., & Maryanti, E. (2023). Audit Quality Determinant at a Public Accounting Firm in Surabaya. *Jurnal AKSI (Akuntansi Dan Sistem Informasi)*, *8*(1). https://doi.org/https://doi.org/10.32486/aksi.v8i1.336

Susmoko, W. A., & Rani, U. (2023). Manfaat Teknik Audit Berbantuan Komputer Terhadap Kualitas Audit. *SENTRI: Jurnal Riset Ilmiah*, *2*(4), 1004–1010. https://doi.org/10.55681/sentri.v2i4.697