# Audit Tools and Linked Archive System (ATLAS) in the Process of Preparing Audit Working Papers: Approach with the End User Computing Satisfaction (EUCS) Model

# Ni Luh Manik Darmayani<sup>1</sup>

Department of Accounting, Universitas Udayana, Indonesia

#### **Abstract**

This study aims to investigate the factors that influence user satisfaction with the ATLAS application for preparing Audit Working Papers, utilizing the Computing End User Satisfaction (EUCS) model. It adopts a quantitative approach with a sample of 83 auditors from KAPs in East Java Province who use the ATLAS application, selected through convenience sampling. Data analysis was performed using Partial Least Squares with SmartPLS 2.0. The findings suggest that content, accuracy, format, and timeliness positively affect user satisfaction with the ATLAS application for preparing Audit Working Papers. However, ease of use does not significantly impact auditor satisfaction as an application user.

**Keyword:** atlas; audit working papers; end user satisfaction

## 1. Introduction

In the era of the Fourth Industrial Revolution, characterized by advancements in digital technology, the field of accounting is undergoing significant changes as well. Information technology has become the essence of transformation in various industrial sectors, including in the audit process. Auditors are necessary continue to improve efficiency and effectiveness in carrying out their audits to remain relevant and competitive in this ever-evolving market. One of the methods taken by auditor is to adopt Computer Based Audit Techniques (TABK) into the process their audit. Through the implementation of TABK, auditors can take advantage of various developments information technology to improve audit quality, reduce risk, and optimize efficient use of resources. One of the uses of Computer Based Audit Techniques (TABK) which has been proven to be effective in the process of preparing Audit Working Papers is through the use of the Audit Tool and application

The Linked Archive System (ATLAS) is a crucial tool for auditors, used to prepare thorough and accountable audit reports. The essence of Audit Working Papers is to verify that the audit process aligns with Audit Standards (SA), the IAPI code of ethics, and Quality Control Standards.

ATLAS is a Microsoft Excel based application specifically designed for assist auditors in preparing Audit Working Papers, especially for medium-sized audit clients down. This application was developed by the Financial Professional Development Center (PPPK). the same as the Indonesian Institute of Public Accountants (IAPI), so it has gone through a series development and adjustments to suit the auditor's needs.

For Public Accounting Firms (KAP) that have adopted the ATLAS application to understand the level of success of the information systems they use. One of the crucial factors

In determining the success of an information system is end user satisfaction to the system. User satisfaction is the main indicator that reflects this the extent to which the application can meet the needs and expectations of users preparing Audit Working Papers effectively and efficiently (Maisyarah, 2019).

Through measuring user satisfaction, KAP can evaluate the performance of the ATLAS application support their audit process. This will help them in identification areas that need to be improved or perfected for the application to deliver greater contribution in improving audit quality and efficiency.

The ATLAS application is still relatively new, with the first version launched in 2017. However, in Malang City, eight out of the twelve public accounting firms (KAP) are already using this application to prepare their Audit Working Papers. This research was driven by several factors. These include the presence of persistent bugs and errors in the ATLAS application, a lack of research evaluating its performance, the need to enhance adoption of this application by KAPs in East Java Province, and the importance of ensuring the quality of audit work produced using ATLAS.

Based on these factors, researchers feel interested in carrying out more research further to the satisfaction of ATLAS application users. In measuring user satisfaction a system or application, The End User Computing Satisfaction (EUCS) model is a relevant option. It is used to assess user satisfaction with a system or application by comparing their expectations with their actual experience. According to Damayanti et al. (2018), the EUCS model is employed to measure user satisfaction with a system or application. This model evaluates the satisfaction level of users by comparing their expectations with the actual system performance. The EUCS model, developed by Doll and Torkzadeh in 1988, consists of five main dimensions: content, accuracy, format, ease of use, and timeliness.. These five dimensions will become independent variables in this research, while user satisfaction is the dependent variable.

Based on previous research related to End User Computing Satisfaction (EUCS), there is an unmet research gap in measuring satisfaction ATLAS application users in making Audit Examination Working Papers. In research This time, an empirical effort was carried out to test EUCS in several Public Accounting Firms in the Province East Java. The main difference between this research and previous research lies in focus on analyzing user satisfaction of the ATLAS application using the EUCS model auditors in East Java Province who actively use the application.

From this background, the problem formulation that will be discussed in this research is whether content, accuracy, format, convenience, and timeliness have an effect on user satisfaction of the Audit Tool and Linked Archive System application in preparing papers Audit Work. This research aims to test and analyze the influence of variables This affects the satisfaction of ATLAS application users in preparing Audit Working Papers. This research explores the relationship between the variables content, accuracy, format, convenience, and timeliness with ATLAS application user satisfaction.

By doing analysis It is hoped that this research will provide a comprehensive understanding of these factors deeper understanding of the factors that influence user satisfaction in using the ATLAS application for preparing Audit Working Papers. Through an empirical approach and careful data analysis, this research aims to contributes to the

understanding of ATLAS application user satisfaction in context of preparing Audit Working Papers. It is hoped that the results of this research will provide valuable insights for Public Accounting Firms and related parties improve the quality and effectiveness of using ATLAS applications in their audit practices.

# 2. Literature Review

# 2.1 Audit Working Papers

According to Wahyudin (2003) in Monika Averina (2013) "audit working papers are notes that made by the auditor regarding audit procedures taken, tests carried out, information obtained, and conclusions regarding the implementation of the audit.

Examination work papers Audit is a key component in the audit process that describes all evidence transactions and related documentation collected by auditors from clients. In practice, This working paper includes various documents such as files, invoices, notes and information others necessary to verify the validity and correctness of the client's accounting records. The audit standards used are the main basis for preparing this working paper, which aims to ensure conformity between accounting records and financial reports or other reported information. Audit working papers must be strong enough to provide sufficient evidence to support them auditor's conclusions regarding the compliance and reliability of the client's financial statements. Auditors document critical information such as audit objectives, scope, and methodology employed in the inspection process. They identify significant findings, propose improvement recommendations, and submit evidence that either supports or weakens these findings.

It is not just a collection of documents, but is also the main tool for internal auditors present audit results in a structured and systematic manner. Through this working paper, the auditor can explain clearly and comprehensively the audit process carried out, the findings found, as well as recommendations for improvements submitted to the client to improve the layout manage and reliability of their financial information.

# 2.2 ATLAS (Audit Tool and Linked Archive System) application.

ATLAS, short for Audit Tool and Linked Archive System, is an auditing application built on Microsoft Excel. It serves a purpose akin to the widely used Excel system in Public Accounting Firms (KAP). However, ATLAS offers an edge as it has been developed by the Ministry's Financial Operations Development Center (P2PK). Finance in partnership with the Indonesian Institute of Public Accountants (IAPI). This application is tailor-made to aid auditors in conducting comprehensive audits of financial statements.

ATLAS provides a wide range of assistance to auditors, starting from the preengagement stage until final reporting. One of its main features is the ability to compose integrated working paper documentation. Auditors can be more efficient in compiling Comprehensive and structured audit working papers. This application also helps to manage various information and documents needed during the audit process, making it easier auditors in carrying out their duties more effectively. ATLAS is a tool that very useful for Public Accounting Firms in conducting audits of client financial reports they.

# 2.3 User Satisfaction

According to Djaslim Saladin (2003), the definition of user satisfaction is a feeling of pleasure or a person's disappointment stems from a comparison of his or her impression of performance (results) a product and its expectations. User satisfaction is a measure of the extent of a user's expectations and needs product or service has been fulfilled by their experience in using the product or the service. This covers various aspects, starting from product functionality and performance or service, ease of use, availability of desired features, to level support and responsiveness from product or service providers. User satisfaction becomes key in ensuring user loyalty, as well as building a positive image for the product or service in the eyes of consumers (Kartajaya, 2006).

# 2.4 EUCS model

End User Computing Satisfaction (EUCS) is a technique employed to assess user satisfaction with an application system. It involves comparing users' expectations with their actual experiences while using the information system. EUCS serves as a crucial tool in gauging the extent to which an application system meets the expectations and requirements of end users (Zviran and Levi, 2005).

This method takes into account various aspects of the user experience, starting from system functionality, user interface, to the level of ease of use and system responsiveness to user needs. Comparing user expectations and actual experience in using the system, EUCS provides an understanding in depth about the strengths and weaknesses of an application system, as well as providing input which is valuable for developers in making improvements and improving system quality to increase user satisfaction.

From the theory developed by (Doll & Torkzadeh, 1998) it can be concluded that End User Computing Satisfaction (EUCS) consists of five constructs that influence satisfaction users in using an information system or application. These five constructs are content, accuracy, format, ease of use of use), and timeliness. The EUCS research model is shown in Fig framework of this research.

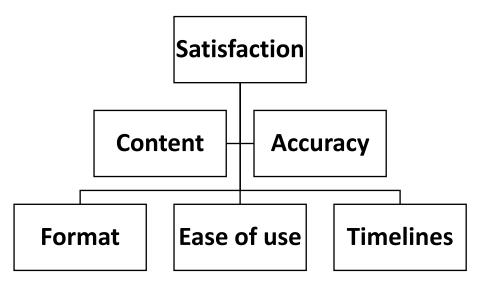


Figure 1. Fig Framework

# Hypothesis:

- H1: Content positively influences user satisfaction with the ATLAS application.
- H2: Accuracy positively influences user satisfaction with the ATLAS application.
- H3: Format positively influences user satisfaction with the ATLAS application.
- H4: Ease of use positively influences user satisfaction with the ATLAS application.
- H5: Timeliness positively influences user satisfaction with the ATLAS application.

## 3. Material and Method

This study is a causal research that aims to assess the satisfaction level of ATLAS application users using the End User Computing Satisfaction (EUCS) model. The researchers conducted interventions at a low level, where the situation was not explicitly controlled, and the research was conducted in the field. The primary focus of this research is to identify the factors that influence user satisfaction with the ATLAS application among auditors at Public Accounting Firms (KAP) in East Java.

# 3.1 Design Study

The population of this research is all auditors at KAP in East Java who have adopted it ATLAS application to prepare their Audit Working Papers. Sampling was carried out using nonprobability sampling methods, specifically convenience sampling, which selects respondents based on their availability and accessibility.

# 3.2 Data Analysis

Data analysis was conducted utilizing the Partial Least Squares (PLS) method through SmartPLS 3.0 analysis software. PLS was selected due to its suitability for research involving complex conceptual models, allowing for testing cause-and-effect relationships between variables even with a limited sample size.

Two types of data analysis tests were performed using the PLS approach. The first involved evaluating the measurement model (outer model), which aimed to test the construct validity and reliability of the instruments used. The second test evaluated the structural model, which describes the cause-and-effect relationships between variables in the proposed conceptual model.

#### 4. Result

The researchers conducted a pilot test to assess the validity and reliability of the research questionnaire among undergraduate students in the Accounting Department, FEB UB, who had completed KKN-P at the Accounting Office where the ATLAS application is used for preparing Audit Working Papers. The pilot test results indicated that the Average Variance Extracted (AVE) and Communality values for all variables were > 0.5, and both Outer Loading and Cross Loading values were > 0.7, except for the X43 indicator.

Based on these findings, it can be concluded that the research instrument meets the requirements for convergent validity and discriminant validity. Convergent validity indicates that the indicators used together represent the same construct, while discriminant validity indicates that the construct measured by each indicator is distinct from other constructs in the research.

Furthermore, the pilot test results revealed that all latent variables exhibited Cronbach's Alpha values > 0.6 and Composite Reliability values > 0.7. This demonstrates that the research instrument is reliable and can accurately measure the constructs under study. Overall, the research instrument has met the standards of validity and reliability necessary for future research aimed at measuring user satisfaction with the ATLAS application using the End User Computing Satisfaction (EUCS) model among auditors in Public Accounting Firms in East Java..

Questionnaire distribution and retrieval data is given in the table below.

**Table 1.** Respondent Demographic Data

| No | Keterangan                    | Jumlah |
|----|-------------------------------|--------|
| 1  | Jumlah kuesioner yang disebar | 157    |
| 2  | Jumlah kuesioner yang diisi   | 83     |

Evaluation of the Measurement Model (Outer Model)

In assessing the outer model with SmartPLS, there are three criteria that must be met assessed, namely Convergent Validity, Discriminant Validity and Composite Reliability,

# 1. Convergent Validity Test

The following results display the outer loading for each indicator of both exogenous and endogenous latent variables in the two research models, derived from data processing using SmartPLS:

 Table 2. Convergent Validity Test

| Variabel | AVE   | Communality |  |  |
|----------|-------|-------------|--|--|
| X1       | 0.695 | 0.695       |  |  |
| X2       | 0.837 | 0.837       |  |  |
| X3       | 0.849 | 0.849       |  |  |
| X4       | 0.740 | 0.740       |  |  |
| X5       | 0.811 | 0.811       |  |  |
| Y        | 0.622 | 0.622       |  |  |

The table indicates that the Average Variance Extracted (AVE) value for all constructs is > 0.5, demonstrating that convergent validity in evaluating model measurements falls within the relatively good category.

## 1. Discriminant Validity Test

(Discriminant Validity) The assessment of measurement models at their core involves comparing the square root of the Average Variance Extracted (AVE) with the correlations between constructs. If the square root of the AVE is greater than the correlation between the constructs, it indicates a good level of discriminant validity. The table below illustrates the comparison between the square root of the AVE and the correlations between the constructs:

Table 3. Discriminant Validity Test

|    | Akar AVE | X1    | <b>X2</b> | X3    | X4    | X5    | Y |
|----|----------|-------|-----------|-------|-------|-------|---|
| X1 | 0.834    | 1     |           |       |       |       |   |
| X2 | 0.915    | 0.562 | 1         |       |       |       |   |
| X3 | 0.921    | 0.567 | 0.391     | 1     |       |       |   |
| X4 | 0.860    | 0.371 | 0.419     | 0.581 | 1     |       |   |
| X5 | 0.901    | 0.430 | 0.477     | 0.362 | 0.445 | 1     |   |
| Y  | 0.814    | 0.629 | 0.594     | 0.569 | 0.504 | 0.583 | 1 |

# 1. Construct Reliability Test

The Cuter model test evaluated the reliability of the latent variable construct by comparing it against two criteria: Cronbach's alpha and the composite reliability of the indicators measuring the construct.

Tabel 4. Nilai Composite Reliability dan Cronbach's Alpha

| Variabel | Composite Reliability | Cronbach's Alpha | Communality |
|----------|-----------------------|------------------|-------------|
| X1       | 0.872                 | 0.782            | 0.695       |
| X2       | 0.911                 | 0.811            | 0.837       |
| X3       | 0.944                 | 0.911            | 0.849       |
| X4       | 0.919                 | 0.882            | 0.740       |
| X5       | 0.896                 | 0.768            | 0.811       |
| Y        | 0.887                 | 0.831            | 0.662       |

Composite Reliability and Cronbach's Alpha values. Research hypothesis testing is carried out by analyzing the path coefficient values where the value This shows the level of significance in hypothesis testing (Abdillah & Hartono, 2015: 197). In this study, statistical testing for each hypothesized relationship is conducted through simulation using the bootstrap method on samples to minimize issues related to data abnormalities. The table below presents the results of the hypothesis tests.

**Table 5.** Path Coefficient (Mean, STDEV, T-Values)

| Hubungan<br>Variabel | Original<br>Sampel (O) | Standart<br>Deviation<br>STDEV | T Statistic<br>IO/STERRI | p-value | keterangan |
|----------------------|------------------------|--------------------------------|--------------------------|---------|------------|
| X1 » Y               | 0.253                  | 0.118                          | 2.150                    | 0.035   | Diterima   |
| X2 » Y               | 0.213                  | 0.102                          | 2,088                    | 0.040   | Diterima   |
| X3 » Y               | 0.194                  | 0.078                          | 2.493                    | 0.015   | Diterima   |
| X4 》 Y               | 0.092                  | 0.087                          | 1.060                    | 0.292   | Ditolak    |
| X5 » Y               | 0.262                  | 0.115                          | 2.283                    | 0.025   | Diterima   |

A construct can be declared reliable if the Cronbach's alpha and composite values reliability > 0.7. so in this research, it can be concluded that the construct has reliability is classified as good.

#### 5. Discussion

From the results of this research, four hypotheses were accepted, while one hypothesis was rejected. Results Hypothesis testing shows that there is empirical support for the four hypotheses proposed in this research. This indicates that there is a relationship significant between the variables studied in the context of application user satisfaction ATLAS with the End User Computing Satisfaction (EUCS) model. However, there is one hypothesis which does not get empirical support from the data analyzed. Hence, research This makes a significant contribution to the understanding of the factors that influencing user satisfaction of the ATLAS application among auditors at Public Accounting Firms in East Java.

# **5.1** The Effect of Content on Usage Satisfaction

The analysis results confirm the first hypothesis of this study. Content positively influences user satisfaction with the ATLAS application. Table 5 shows that content accounts for 25.3% of user satisfaction with the application. This indicates that the quality of content presented by the ATLAS application, including its relevance to user needs, available features, and benefits provided in the process of preparing Audit Working Papers, significantly impacts auditor satisfaction as users of the application. Higher-quality content in the ATLAS app leads to greater user satisfaction in using the application for preparing Audit Working Papers.

# 5.2 The Effect of Accuracy on Usage Satisfaction

The research results confirm that the second hypothesis is accepted empirically. Accuracy has positive influence on ATLAS application user satisfaction. From table 5, it can be seen that accuracy contributes 21.3% to user trust in satisfaction in using the application. This shows that the more accurate the information provided by the ATLAS application and increasingly conforms the application to the guidelines and applicable regulations, such as Audit Standards, IAPI code of ethics, and Quality Control Standards, the higher the level of auditor satisfaction as a user in preparing Working Papers Auditing. Thus, it is important for the ATLAS application to ensure the accuracy of the information and conformity with applicable audit standards to increase user satisfaction in process of preparing Audit Working Papers.

# 5.3 The Effect of Format on User Satisfaction

The results of the analysis show that the third hypothesis in this research is accepted empirically. Format has a positive influence on ATLAS application user satisfaction. From table 5, It can be seen that format contributes 19.4% to user trust on satisfaction in using the application. This indicates that it is getting better ATLAS application format in terms of clarity of appearance, layout and design displayed, the higher the level of auditor satisfaction as a user in preparing Audit Working Papers.

The results of testing the third hypothesis show the importance of format aspects in improving ATLAS application user satisfaction. Good display clarity, layout and design are factors that contribute to creating a good user experience positive and strengthens user confidence in the application. Therefore, ATLAS application developers need to pay attention to these aspects of the format to be sure optimal level of user satisfaction.

## 5.4 The Effect of Ease of Use on User Satisfaction

The test results show that the fourth hypothesis in this study is rejected empirical. Ease of use has no influence on application user satisfaction ATLAS. From table 5, it can be seen that ease of use makes a contribution of 9.2% of user confidence in satisfaction in using the application. This shows that although ease of use is an important factor in application usage, but in the context of the ATLAS application, this factor has no influence significant to the level of user satisfaction.

The explanation for the rejection of the fourth hypothesis could be due to complexity ATLAS application itself. This application is based on Microsoft Excel and consists of hundreds of slides working on Audit Working Papers as well as supporting slides for filling out the worksheet, so operations are quite complicated for auditors. This complexity may be a barrier for users to operate the application easily and feel satisfied with it its use. Therefore, although the ease of use factor is important in increases user satisfaction, but in the case of the ATLAS application, these factors do not have a significant impact.

#### 5.5 The Effect of Timeliness on User Satisfaction

The empirical findings indicate that the fifth hypothesis is supported. Timeliness has a positive impact on user satisfaction with the ATLAS application. According to table 5, punctuality contributes 26.2% to user satisfaction with the application. This shows that increasingly good level of timeliness of the ATLAS application in providing information and processing user commands, the higher the level of auditor satisfaction as a user prepare Audit Working Papers.

The fifth hypothesis test is that the punctuality aspect is very influential increasing user satisfaction of the ATLAS application. The application's ability to deliver information in a timely manner and processing user commands efficiently is key factors that increase user satisfaction in using this application. Therefore Therefore, it is important for ATLAS application developers to continue to improve and improve the degree of timeliness in the provision of information and processing of user commands for maintain a high level of user satisfaction.

# 6. Conclusion, Implication, and Recommendation

This study aims to determine the factors affecting user satisfaction with the ATLAS application for preparing Audit Working Papers. The findings reveal that several factors influence user satisfaction, including content, accuracy, format, and timeliness. However, ease of use does not significantly impact user satisfaction with the ATLAS application. This can be attributed to the new status of the ATLAS application and the majority of users still being in the familiarization phase. the training stage. Besides Therefore, this application is still in the development stage, so it undergoes frequent updates newer version.

For further research, it is recommended that researchers use a random sampling method to obtain a more representative sample and reduce response bias. Deployment questionnaires also need to be better considered, especially in the face of schedules Large-Scale Social Restrictions (PSBB) in cities or research sites. Researchers can too included negative statements in the questionnaire to verify the accuracy of the responses from respondents according to the actual situation.

# 7. Acknowledge

There are several limitations in this research:

- Due to the Covid-19 pandemic, researchers were unable to reach all eligible respondents research criteria. Many Public Accounting Firms (KAP) did not respond or were unable to contacted via electronic mail or telephone.
- It took quite a long time between distributing the questionnaire in Malang City and distributing questionnaires in the City of Surabaya and the City of Sidoarjo due to Social Restrictions Large Scale (PSBB) in both cities. Researchers have to wait for the PSBB to end before You can contact KAP in these cities.
- Without direct supervision during questionnaire completion, there is no assurance that respondents will accurately reflect the actual situation in their responses.

## 8. References

Abdurrahman, D., & Prasetyo, T. F. (2016). Mengukur Tingkat Kepuasan Mahasiswa dalam Pembelajaran dengan Menggunakan Sistem pakar. Jurnal Ensintec, vol.2, 20-24.

Bergensen, B. M. (2008). User Satisfaction and Influencing Issue, HYPERLINK <a href="http://www.iu.hio.no/~frodes/rm/bard">http://www.iu.hio.no/~frodes/rm/bard</a> d. (Diakses pada tanggal 22 Agustus 2020).

Chin, W. W., & Lee, M. K. O. (2000). A Proposed Model and Measurement Instrument for The Formation of Is Satisfaction: The Case of End-User Computing Satisfaction. Proceedings of The TwentyFirst International Conference on Information Systems.175-186.

Damayanti, A. S., Mursityo, Y. T., & Herlambang, A. D. (2018). Evaluasi Kepuasan Pengguna Aplikasi Tapp Market Menggunakan Metode EUCS (End User Computing Satisfaction). Journal of Information Technology and Computer Science Development vol.2, 4833-4839.

Doll, & Torkzadeh. (1998). The Meassurement of End-User Computing Statisfaction. Information Systems Research Center, 259-274.

Maisyarah, R. (2019). Pengaruh Penyusunan Kertas Kerja Audit Terhadap Kualitas Laporan Audit Bidang Instansi Pemerintah Pusat Pada Perwakilan Kantor Badan Pengawasan dan Pembangunan Provinsi Sumatera Utara. Jurnal Akuntansi Bisnis & Publik, vol. 9, 85-97.

Subiyakto, A., Ahlan, A. R., dkk. (2016). The User Satisfaction Perspective of The Information System Projects. Indonesian Journal of Electrical Engineering and Computer Science, vol.4. 215-223.

Zviran, M., Plinskin, N., & Lewi, R. (2005). Measuring User Satisfaction and Perceived Usefulnes in The ERP Context. Journal of Computer Information System, vol.45(3), 43-52