

Research on Behavioral Intention and Behavior in Applying Data Analytics to Auditing and Financial Management

Thi Thuy Nguyen

Associate Professor, PhD,
Thang Long University
Email: nthuy189@gmail.com

Van Duong Ha

Associate Professor, PhD,
Saigon Institute of Economics
and Technology
dhv05@yahoo.com
Corresponding Author

Abstract

A Study of financial managers' and auditors' behavioral intentions and practices in applying data analytics to auditing and financial management in Vietnam by using the Unified Theory of Acceptance and Use of Technology (UTAUT2) model and adding other factors such as Information Technology Skills, User Autonomy. Analysis of SEM (Structural Equation Modeling) model results has highlighted the factors Performance Expectations, Expected Effort, Social Influence have a positive impact on behavioral intention to apply DA. However, User Autonomy has a negative impact on behavioral intention to apply DA in Vietnam. Besides, habits have a positive impact on the behavioral of using DA. Meanwhile, behavioral intention has a positive impact on behavioral of using DA in Vietnam. The results of this model help managers have strategies to develop DA applications in auditing, financial management activities and DA providers identify factors affecting behavioral intentions and DA usage behavior to provide suitable products and services to financial managers and auditors in Vietnam.

Keywords: Behavioral intention, behavior, data analysis, use behavior.

Introduction

In computer science, data analysis refers to a multistep process that involves collecting, examining, analyzing, and interpreting data using appropriate analytical methods to extract valuable insights from raw information (Chiba et al., 2019).

According to Ha van Duong (2022), to be ready for analysis, data must be stored. Data can be stored in a structured or unstructured manner. Structured data has a set of attributes and relationships defined during database design; these data conform to a predefined organization, also known as a schema. In a structured database, all elements in the database will have the same number of properties in sequence. Transactional data are typically structured; they have similar characteristics and are stored in the same way. Structured data is easier to query and analyze. Unstructured data is not specifically formatted. It is flexible to evolve in

form and shape, and reliable attributes may or may not exist. This makes them harder to analyze; but this is an advantage because a lot of data is generated rapidly from new sources such as social media, email, mobile apps and personal devices. Unstructured data has the advantage of being stored as is without having to check that it meets any organizational rules. This makes storing it quick and flexible.

Data analytics is important for many applications. Due to the increasing variety, volume and velocity of data, many sectors place significant demands on data analytics. The variety, volume and velocity of data generation require advanced analytics infrastructure and techniques (Jason and Renwick, 2024). Organizations that apply data analytics use systematic management-oriented techniques to manage significant changes and to ensure that the requirements for the safe use of financial data are fully met. The level of data usage and the application of data analytics and appropriate models in the sectors will bring benefits and improve the efficiency of applying data analytics (Ha Van Duong, 2022).

Therefore, research on auditors' behavioral intentions and behavior in applying DA to auditing and financial management in Vietnam will contribute to promoting and improving the efficiency and quality of auditing and financial management in the digital environment by providing trend and predictive analysis; it can optimize some audit processes and procedures to minimize errors in the audit process, which is an increasingly popular and effective development trend in Vietnam.

Literature and Hypotheses

Behavioral intention, behavior in applying DA and The UTAUT2 Model

In many operations, DA adoption is a growing trend. Advanced automated data analytics has enabled many areas to expand their capabilities. DA has significantly contributed to handling high-volume operations with greater accuracy. This suggests that it is time for many operations and areas to embark on a modernization journey. Operations planning is becoming increasingly data-driven, and more operations are generating more data. The

functions of many operations creating centralized DA roles, coupled with increased automation and continuous monitoring, have driven the need for DA adoption and increased behavioral intention among professionals and operators to adopt DA to collectively execute long-term operational strategies that are more data-centric (Ha Van Duong, 2022).

Hezam et al. (2023) showed that the application of DA is increasingly growing in auditing and financial management. The improvement of audit quality, increased transparency and increased trust in audit results thanks to the application of DA. This shows that DA is a promising field with great potential for auditing and financial management activities, contributing to increasing digital transformation, improving audit efficiency and promoting behavioral intentions to apply DA in auditing and financial management, creating potential new directions and innovative trends towards applying DA in auditing and financial management.

Almagrashi et al. (2023) showed that in DA adoption, auditors' behavioral intention is a motivating factor in DA adoption behavior. In organizations that adopt technology for auditing and financial management activities, the likelihood of DA adoption increases with the strength of the behavioral intention to adopt DA. Therefore, organizations should focus on DA adoption intention to motivate auditors to have a higher likelihood of DA adoption intention.

The development of DA has positively impacted and met the needs of auditors through the application of DA as an important tool for the improvement of the audit quality. At the same time, auditors' intention to use DA positively impacted their DA application behavior during the audit process (Mat Saat et al., 2025).

Venkantesh et al. (2012) combined eight theories of technology acceptance, added factors and developed the UTAUT model to become the UTAUT2 model. The UTAUT2 model includes moderator variables and dependent variables to explain technology acceptance and adoption as can be seen in Figure 1. Research on applying technology and AD in auditing and financial management related to using the UTAUT model and the UTAUT2

model, including: Studies by Mohamed et al. (2019), Suppiah and Arumugam (2023) applied the UTAUT framework to examine behavioral intentions and acceptance of DA in the auditing and financial management field, showing the important role of DA in audit quality and fraud prevention.

Handoko and Liusman (2021) analyzed auditors' intention to adopt technology such as artificial intelligence based on the UTAUT model and found that performance expectancy and facilitating conditions factors positively influenced auditors' behavioral intention to adopt technology such as artificial intelligence. This suggests that auditors' adoption of DA is expected to have the ability to check the transparency in financial statements.

Handoko and Lantu (2021) used UTAUT 2 as a general theory to study and argued that auditors expect technology to compensate for their audit work, as well as see technology as a solution that can catch up with auditors' audit work in the process of technological development. At the same time, the research results found that many factors in the UTAUT2 model, such as performance expectancy, hedonic motivation, effort expectancy and habit positively affect technology adoption behavioral intention. At the same time, auditors' technology adoption behavior is positively influenced by factors such as habits and facilitating conditions.

The study of Mulyawan et al. (2024) on the behavioral intention of auditors applying DA based on the UTAUT model identified all variables such as performance expectancy, effort expectancy, social influence, and favorable conditions have a positive impact on behavioral intention. At the same time, the research results also revealed that the motivation to promote auditors' behavior to adopt technology is created thanks to the application of DA and advanced technologies, contributing significantly to improving audit quality.

Thus, to date, there have been many studies applying the UTAUT model and the UTAUT2 model to study auditors' behavioral intentions and behavior of using DA in particular and technology adoption in general. These studies have provided valuable insights, significantly

contributing to theoretical development and practical application, showing the important applications of the UTAUT model and the UTAUT2 model in examining auditors' behavioral intentions and behavior of using DA.

Hypothesis Development

This study applies the UTAUT2 model (Venkatesh et al., 2012) and adds other factors such as Information Technology Skills, User Autonomy. The addition of these factors, because the information and data need to be collected, stored, processed and managed through computational tools, programming languages and financial databases, requires users to be autonomous in all aspects and have the necessary skills to apply DA (Ha Van Duong, 2022). On the other hand, in the context of auditing and financial management activities, the necessary skills, autonomy and technology application capacity of auditors to adapt to the requirements of current activities, as well as rapid changes in the digital age for auditors to apply technology such as DA in auditing and financial management activities more and more effectively (Mat Saat et al., 2025). Therefore, this study proposes a research model on auditors' behavioral intentions and behavior in applying DA to auditing and financial management in Vietnam as presented in Figure 1.

Performance Expectancy (PE) represents an individual's belief that applying technology to work will contribute to improved job performance (Venkatesh et al., 2012). Iguma and Riccio (2020) revealed that performance expectancy is one of the key factors influencing auditors' behavioral intention in adopting DA. Pratama and Komariyah (2023) found that performance expectancy influence auditors' behavioral intention to adopt DA. Almagrashi et al., (2023) empirically examined auditors' behavioral intention to adopt computer technology and found that performance expectancy is one of the factors that positively influence auditors' behavioral intention to adopt technology in auditing and financial management. The results of Mat Saat et al. (2025) show that performance expectancy have a positive impact on the auditors' behavioral intention to adopt DA. Based on the analysis results, hypothesis H1 is proposed as follows:

H1: Performance expectancy has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

Effort Expectancy (EE) is related to the level of convenience and ease technology adopters feel when applying this technology system (Venkatesh et al., 2012). Shamsudin et al. (2015) found that effort expectancy strongly influences the behavioral intention to adopt DA during the auditors' conduct of audits. In the empirical examination to examine auditors' behavioral intention to adopt computer technology, Almagrashi et al. (2023) found that effort expectancy is one of the factors that positively influence auditors' behavioral intention to adopt technology in auditing and financial management. The study of Pratama and Komariyah (2023) showed that effort expectancy influence auditors' behavioral intention to adopt DA. The study of Mulyawan et al. (2024) on the behavioral intention of auditors applying DA identified effort expectancy has a positive impact on behavioral intention. Therefore, hypothesis H2 is formed as follows:

H2: Effort expectancy has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

Social influence (SI) refers to the social acceptance and the powerful diffusion mechanism of others' opinions that influence users' behavioral intentions to adopt a new technology platform (Venkatesh et al., 2012). Iguma and Riccio (2020) found that social influence is an important factor influencing auditors' behavioral intention in adopting DA. When examining auditors' behavioral intention to adopt computer technology through empirical testing, Almagrashi et al. (2023) revealed that social influence is one of the factors that positively influence auditors' behavioral intention to adopt technology in auditing and financial management. Sujarminto and Putri (2023) demonstrated that social influence is one of the factors that strongly influence the behavioral intention of auditors to adopt technology for auditors to conduct audits. According to Pratama and Komariyah (2023), auditors' behavioral intention to adopt DA is also influenced by other auditors adopting DA. Auditors who have colleagues who

adopt DA will be influenced by their colleagues. The study of Mulyawan et al. (2024) on the behavioral intention of auditors applying DA also found that social influence positively affects behavioral intentions. Mat Saat et al. (2025) show social influence positively and significantly influence the intention to use DA. Therefore, hypothesis H3 is expressed as follows:

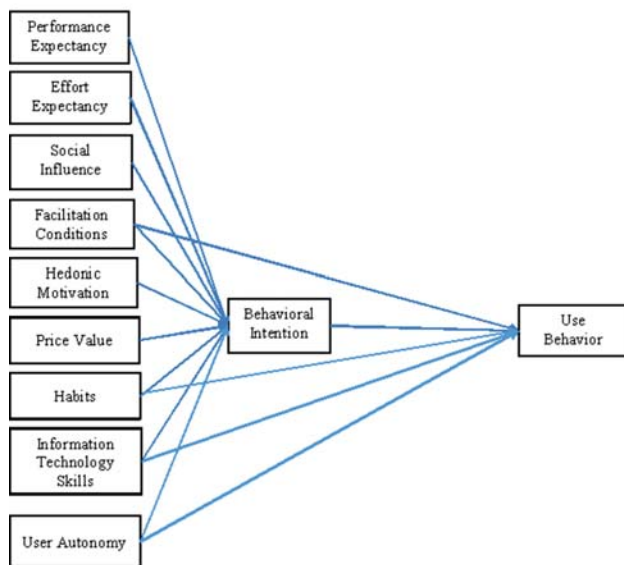
H3: Social influence has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

Facilitation Conditions (FC) are factors that support users' adoption of technology through a technical infrastructure with adequate organizational resources (Venkatesh et al., 2012). Mohamed et al. (2019) described that facilitating conditions positively impact auditors' behavioral intentions in adopting technology platforms for audit activities. The findings of Damer et al. (2021) demonstrate that facilitating conditions and behavioral intentions have a positive impact on auditors' behavioral adoption of technology platforms in auditing and financial management activities. The study of Pratama and Komariyah (2023) revealed that facilitating conditions influence auditors' behavioral intention to adopt DA. Almagrashi et al. (2023) empirically examined auditors' behavioral intention to adopt computer technology and found that facilitating conditions positively influenced auditors' behavioral intention to adopt technology in auditing and financial management. The study of Mulyawan et al. (2024) on the behavioral intention of auditors applying DA also found that favorable conditions have positively affected behavioral intentions. Mat Saat et al. (2025) reveal that facilitating conditions positively and significantly influence the intention to use DA. Therefore, the two hypotheses H4a and H4b were expressed as follows:

H4a: Facilitating conditions has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

H4b: Facilitating conditions has a positive impact on the auditors' behavior of using DA in Vietnam.

Figure1. The Proposed model



Source: Venkatesh et al. (2012) and author's supplement

Hedonic motivation (HM) reflects users' perceptions of usefulness and ease of use through technology adoption (Venkatesh et al., 2012). The research results of Dagilene and Klovienė (2019) also show that hedonic motivation plays an innovative role in the adoption of big data analytics. Auditors play a proactive role and drive the behavioral intention to adopt big data in the audit process. Auditing and financial management activities that are enhanced with technology application will create more trust in usefulness and ease of use. This will contribute to promoting intention and increasing demand for technology application in auditing and financial management, thereby leading to higher quality audit activities (Alles and Gray 2020). Handoko and Lantu (2021) argued that auditors implementing audits with big data and other data sources is one of the technological requirements that need to be met to facilitate auditors' audit activities. In studying auditors' technology adoption, the results of this study found that hedonic motivation has a positive impact on auditors' behavioral intention to adopt technology. According to Rikhardsson et al. (2022), auditors perceive and believe that the use of technology in the audit process will contribute to improving audit efficiency, as well as increasing behavioral intention to adopt more technology in

auditing and financial management activities. Therefore, Hypothesis H5 is proposed as follows.

H5: Hedonic motivation has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

Price value (PV) is an important factor in the UTAUT2 model, reflecting the technology adopter's perception of comparing the benefits of technology with the costs incurred in the process of technology adoption (Venkatesh et al., 2012). Aitkazinov (2023) demonstrated that applying technology to auditing and financial management activities will save time and lower costs, as well as create a more transparent and efficient auditing process. This has contributed to a positive impact on auditors' behavioral intention to adopt technology in auditing and financial management activities. Greenman (2023) also determined that the application of technology in auditing and financial management has helped reduce costs and brought benefits when using technology. The tasks performed by auditors are automated, thereby contributing to a positive impact on the behavioral intention of auditors to apply technology in auditing and financial management activities. Tritama et al. (2025) stated that technology processes big data at a fast speed. The application of technology has contributed to saving costs and time for auditors, as well as bringing benefits from applying technology in auditing and financial management activities and promoting the behavioral intention of auditors to apply technology in the auditing and financial management process. Synthesizing the results of previous studies, hypothesis H6 is proposed as follows:

H6: Price value has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

Habits (HA) are an important factor in the UTAUT2 model, which are the behaviors of technology users that are repeated through learning to use technology (Venkatesh et al., 2012). Handoko and Lantu (2021) used the UTAUT 2 model to study technology in auditing and financial management activities. The research results showed that habits significantly influenced behavioral intentions to adopt technology. At the same time, auditors' technology adoption behavior was positively influenced by factors such as auditors' habits. Habits or routine actions that involve elements of awareness, understanding internal

states are important for adaptability. Applying technology in auditing and financial management activities helps to balance habits and awareness, understanding activities that can motivate auditors towards behavioral intentions and behavioral behavior of technology adoption through automatic habits. (Samiolo et al. 2024). Tritama et al. (2025) used the UTAUT2 model to study the application of technology to improve audit quality. The results of this study showed that habits significantly influenced the behavioral intention to adopt technology in the audit process of auditors. Therefore, the two hypotheses H7a and H7b have been described as follows:

H7a: Habits have a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

H7b: Habits have a positive impact on the auditors' behavioral of using DA in Vietnam.

Information Technology Skills (IT) are one of the factors that form information technology competence, which is the ability to perform work effectively through the application of knowledge and experience. Information technology skills contribute to the effective performance of tasks, achieving goals and bringing benefits to organizations and individuals (Alsabahi et al., 2021). Li et al. (2018) demonstrated that the higher the auditor's information technology skills and competencies, the more significant the auditor's behavioral intention and behavior of using information technology. Ferri et al. (2020) measured auditors' intentions to adopt technology and demonstrated that auditors' information technology skills are more focused on using technology. Alsabahi et al. (2021) studied information technology skills and competencies of auditors and determined that the higher the skills, the more the auditor increases the behavioral intention and DA adoption behavior in auditing and financial management activities. The results of Nasrudin and Firmansyah (2024) demonstrated that professional competence and skills have a significant impact on the application of big data analytics. This result will contribute to promoting behavioral intentions and increasing the application of big data analytics by auditors in auditing and financial management activities. The results of Mat Saat et al. (2025) also reveal that information technology has a positive impact on the

auditors' behavioral intention to adopt DA. Based on the previous research results, two theories H8a and H8b are presented as follows:

H8a: Information technology skills have a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

H8b: Information technology skills have a positive impact on the auditors' behavioral of using DA in Vietnam.

User Autonomy (UA) is the freedom to choose what they want in their user experience. Users feel comfortable performing behaviors, having the ability to control their experiences through technology without being influenced by other parties (Kohler, 2022). The main findings of Dagiliene and Kloviene (2019) relate to the adoption of big data analytics in auditing and financial management. This study highlights the tendency of auditors to be autonomous and focus on big data analytics as one of the solutions to promote the increased adoption of this data analytics, as well as to meet management requirements. According to Handoko et al. (2020), the intention and behavior to adopt computer technology are highly dependent on automation and trust, as these are important factors in the adoption of blockchain technology. Auditors who are confident in adopting technology, understand how it works, and are autonomous in adopting technology will help auditors focus more on the audit content in a comprehensive way. Ha Van Duong (2022) argues that technology users' autonomy has a positive impact on their behavioral intention to adopt financial databases. At the same time, this is also an important factor that promotes users' financial database adoption behavior. Commerford et al., (2022) study on the impact of technology on auditors' audit activities shows that auditors' proactive use of technology such as artificial intelligence tends to use technologies to increase the quality of audit activities. The previous research results are the basis for proposing two theories H9a and H9b as follows:

H9a: User Autonomy has a positive impact on the auditors' behavioral intention to adopt DA in Vietnam.

H9b: User Autonomy has a positive impact on the auditors' behavioral of using DA in Vietnam.

Behavioral intention (BI) is considered as the desire of a

user to perform a behavior through their attitude towards adopting technology in the next times (Venkatesh et al., 2012). According to Shahbaz et al. (2019), behavioral intention is an important factor in the UTAUT2 model for technology adoption, behavioral intention to adopt technology contributes to the impact on actual adoption. From this result, it also shows that behavioral intention significantly affects the application of technology in auditing and financial management practice. The findings of Damer et al. (2021) found that behavioral intentions have a positive impact on auditors' behavioral adoption of technology platforms in auditing and financial management activities. The research results of Jiwandono and Sofyani, (2024) found that auditors' behavioral intention to use big data analytics techniques has a positive influence on their behavior in using this analytics technique in actual auditing and financial management activities. In their study on the application of big data analytics in auditing and financial management activities, Al Rob et al. (2024) specifically demonstrated that behavioral intention positively influences the application of big data analytics in auditing and financial management activities in practice. Thus, through previous studies, hypothesis H10 is expressed as follows:

H10: Behavioral Intention has a positive impact on the auditors' behavioral of using DA in Vietnam.

Research Methodology

Research design

This study applies preliminary research in the initial stage of forming the research topic, collecting previous studies, background knowledge to form the theoretical basis of the study, designing survey questions. The study continues to adjust the questions, observation variables in the data collection model from auditors and experts working in the auditing and financial management field invited to participate in the survey, interviews to study auditors' behavioral intentions and behavior in applying DA in Vietnam.

Quantitative research in this study is applied to interpret the relationships between variables through data collected from survey questionnaires to focus on data analysis using

SPSS 25.0 and AMOS 24.0 software. This study applied Structural Equation Modeling (SEM) to analyze data and study auditors' behavioral intentions and behavior in applying DA by conducting Cronbach's Alpha analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and SEM analysis according to the research model.

Sample and data

This study was conducted in Vietnam with the participation of 719 auditors and experts working in the auditing and financial management field. The survey and non-probability sampling from respondents through a survey questionnaire to collect data. The measurement on the scale was based on a questionnaire design with a five-point Likert with 1 being nothing and 5 being full. With the data range ($10 \times 49 = 490$) being 5-10 times the number of items in the scale (Hair et al., 2010), the sample size of 628 samples is sufficient for this study.

In quantitative analysis and data processing, this study relied on threshold values for fit indices. According to Hair et al. (2019), threshold values for fit indices such as values of 0.08 or less for RMSEA (Root Mean Square Error of Approximation); values of 0.01 or more for the P value of Close fit (PCLOSE); values of 5 or less CMIN/df (Chi-square divided by degrees of freedom) and values less than 2 are considered good; values of 0.9 are good and 0.95 or more are very good for indices such as CFI (Comparative Fit Index), GFI (Goodness-of-Fit), TLI (Tucker-Lewis Index).

Research Results

Cronbach's alpha reliability analysis

The results of Table 1 reflect that the corrected item-total correlation is greater than 0.3, which is consistent with the recommendation of Hulin et al. (2001). In addition, the Cronbach's alpha coefficient values are all greater than 0.60, indicating the reliability of the scale; the items have good stability and consistency as suggested by Hulin et al. (2001) and (Cresswell, 2010).

Table 1. Independent, moderating and dependent variables in the research

No.	Code	Observed variables	Corrected Item-Total Correlation
	PE	Cronbach's alpha = 0.855	
1	PE1	Using DA makes it easy for auditors and experts to analyze financial statements anywhere.	0.724
2	PE2	DA helps auditors and experts understand and make it easier for them to audit.	0.675
3	PE3	DA meets experts and auditors' expectations in analyzing financial statements.	0.591
4	PE4	DA allows auditors and experts to audit faster.	0.544
5	PE5	DA is suitable for auditors and experts' auditing and financial management activities.	0.610
6	PE6	DA makes auditors and experts more comfortable with auditing and financial management.	0.744
	EE	Cronbach's alpha = 0.822	
7	EE1	Using DA helps auditors and experts increase many services in auditing and financial management.	0.546
8	EE2	Using DA helps auditors and experts audit and manage more financial statements.	0.535
9	EE3	Using DA helps auditors and experts audit and manage more professionally.	0.668
10	EE4	Using DA helps auditors and experts understand audit information clearly.	0.598
11	EE5	Using DA helps auditors and experts have enough information to audit.	0.739
	SI	Cronbach's alpha = 0.835	
12	SI1	Auditors and experts' use of DA in auditing and financial management is influenced by many influencers.	0.669
13	SI2	Many influencers recommend auditors and experts to use DA in auditing and financial management.	0.572
14	SI3	People familiar with auditors and experts recommend them to use DA in auditing and financial management.	0.592
15	SI4	Auditors and experts' use of DA in auditing and financial management is influenced by the loyal staff.	0.570
16	SI5	Auditors and experts receive support for using DA in auditing and financial management from the familiar	0.593
17	SI6	Many managers in the region support the use of DA in auditing and financial management.	0.535
	FC	Cronbach's alpha = 0.832	
18	FC1	Auditors and experts are allowed to control the use of DA for auditing and financial management.	0.654
19	FC2	Auditors and experts have sufficient knowledge of using DA for auditing and financial management.	0.594
20	FC3	Auditors and experts are assured of auditing and financial management conditions when using DA	0.607
23	FC4	Auditors and experts have all the necessary resources to use DA in auditing and financial management.	0.559
21	FC5	Auditors and experts use DA to safe when they auditing and financial management	0.571
22	FC6	Auditors and experts have smart devices and support the use of DA for auditing and financial management.	0.655
	HM	Cronbach's alpha = 0.769	
23	HM1	Auditors and experts feel comfortable auditing and financial management through DA.	0.558
24	HM2	Auditors and experts feel lucky in auditing and financial management through DA.	0.630
25	HM3	Auditors and experts feel excited about auditing and financial management through DA.	0.663

No.	Code	Observed variables	Corrected Item-Total Correlation
	PE	Cronbach's alpha = 0.855	
26	HM4	Auditors feel satisfied in auditing through DA.	0.492
27	HM5	Auditors and experts feel excited about auditing and financial management through DA.	0.488
	PV	Cronbach's alpha = 0.780	
28	PV1	Using DA helps auditors and experts save time on auditing and financial management.	0.567
29	PV2	Using DA helps auditors and experts save a lot of costs for auditing and financial management.	0.625
30	PV3	Using DA helps auditors and experts pay for appropriate internet service fees.	0.654
31	PV4	Using DA helps auditors and experts avoid paying for system testing fees when auditing and financial management.	0.432
32	PV5	Using DA helps auditors and experts not to pay any additional costs when auditing and financial management.	0.520
	HA	Cronbach's alpha = 0.805	
33	HA1	Auditors can conduct audits through DA.	0.657
34	HA2	Auditors and experts have the ability to adapt to auditing financial statements through DA.	0.481
35	HA3	Auditors and experts have a habit of auditing through DA.	0.647
36	HA4	When auditing, auditors also receive instructions on how to use DA.	0.550
37	HA5	When there is no simulation, auditors can still use DA for auditing and financial management.	0.613
	IT	Cronbach's alpha = 0.645	
38	IT1	Auditors and experts have a solid foundation of information technology when auditing and financial management through DA.	0.409
39	IT2	Auditors and experts are proficient in some software when auditing and financial management through DA.	0.583
40	IT3	Auditors and experts are able to use some programming languages when auditing through DA.	0.550
41	IT4	Auditors and experts are able to collect, analyze and process data when auditing and financial management through DA.	0.443
42	IT5	Auditors and experts have knowledge of setting up, managing and protecting computer networks when auditing and financial management through DA.	0.433
43	IT6	Auditors and experts have analytical thinking and system evaluation when auditing and financial management through DA.	0.449
	UA	Cronbach's alpha = 0.681	
44	UA1	Auditors and experts are autonomous in choosing audit support tools when auditing and financial management through DA.	0.439
45	UA2	Auditors and experts are proactive in applying digitalization and data analysis when auditing and financial management.	0.444
46	UA3	Auditors and experts are autonomous in designing and adjusting electronic audit processes.	0.591
47	UA4	Auditors are proactive in choosing data analysis software for auditing and financial management.	0.461
48	UA5	Auditors and experts are always innovative and adaptable to digital transformation in auditing.	0.487
49	UA6	Auditors and experts proactively apply information technology in the planning and implementation stages of auditing and financial management.	0.472
	BI	Cronbach's alpha = 0.767	
50	BI1	Auditors and experts will continue to audit and manage through DA.	0.603

No.	Code	Observed variables	Corrected Item-Total Correlation
	PE	Cronbach's alpha = 0.855	
51	BI2	When auditing and financial management, auditors and experts apply DA.	0.595
52	BI3	Auditors will introduce other auditors and experts to audit through DA.	0.605
	UB	Cronbach's alpha = 0.720	
53	UB1	When auditors and experts encounter difficulties in applying for DA, some service providers will help them.	0.511
54	UB2	Auditors and experts may not need the help of service providers when auditing through DA.	0.558
55	UB3	Although auditors and experts have never applied for DA, auditors can use it to perform auditing and financial management.	0.553

Source: Venkatesh et al. (2012) and the authors' suggestions

Exploratory factor analysis

The results of EFA for independent variables reflect that KMO (Kaiser-Meyer-Olkin) reached a value of 0.782, greater than 0.5, Sig = 0.000 less than 0.05, so EFA results are consistent with the current data. With varimax rotation

(absolute value smaller than: 0.3), the results of 49 observed variables with 11 groups and the lowest Eigenvalues are 1.132, greater than 1, as can be shown in Table 2.

Table 2. Exploratory factor analysis for independent variables

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	Cumulative %
1	5.071	10.143	10.143	5.071	10.143	10.143	3.544	7.088
2	3.632	7.264	17.407	3.632	7.264	17.407	3.358	13.804
3	3.319	6.637	24.044	3.319	6.637	24.044	3.224	20.252
4	2.841	5.681	29.725	2.841	5.681	29.725	3.016	26.285
5	2.668	5.336	35.061	2.668	5.336	35.061	2.901	32.086
6	2.559	5.119	40.180	2.559	5.119	40.180	2.740	37.565
7	2.272	4.543	44.723	2.272	4.543	44.723	2.668	42.901
8	2.160	4.320	49.043	2.160	4.320	49.043	2.287	47.475
9	2.071	4.143	53.186	2.071	4.143	53.186	2.190	51.855
10	1.290	2.579	55.765	1.290	2.579	55.765	1.571	54.997
11	1.132	2.265	58.030	1.132	2.265	58.030	1.517	58.030
12	.964	1.928	59.958					
Extraction Method: Principal Component Analysis.								

Source: The authors' calculation from SPSS 25.0

The results obtained showed that the factor loading coefficients were all greater than 0.5 after rotating the independent variables. There were 2 new factors arising from the variables UA5 and UA6 in the UA factor and arising from the variables IT5 and IT6 in the IT factor (see Table 3). In which, the variables UA5 and UA6 in the UA factor have similar characteristics with the innovation and adaptation of auditors. From this result, this newly arising factor was named Innovation and Adaptation (IA). The IA

factor was hypothesized to have a positive impact on the auditors' behavioral intention and behavioral of using DA. At the same time, the variables IT5 and IT6 in the IT factor have similar characteristics to the analytical thinking of auditors. From this result, this newly arising factor was named Analytical Thinking (AT). The AT factor is also hypothesized to have a positive impact on the auditors' behavioral intention and behavioral of using DA.

Table 3. Rotated component matrix for independent variables.

Variables	Component										
	1	2	3	4	5	6	7	8	9	10	11
PE6	.822										
PE1	.811										
PE2	.740										
PE3	.734										
PE5	.719										
PE4	.631										
FC6		.770									
FC1		.767									
FC3		.734									
FC2		.708									
FC5		.681									
FC4		.658									
SI1			.799								
SI3			.729								
SI5			.721								
SI4			.710								
SI2			.709								
SI6			.681								
EE5				.855							
EE3				.803							
EE4				.742							
EE1				.711							
EE2				.682							
HA3					.800						
HA1					.800						
HA5					.754						
HA4					.708						
HA2					.638						
PV3						.800					
PV2						.786					
PV1						.731					
PV5						.707					
PV4						.601					
HM3							.819				
HM2							.794				

Variables	Component										11
	1	2	3	4	5	6	7	8	9	10	
HM1							.732				
HM5							.650				
HM4							.572				
UA2								.797			
UA4								.745			
UA3								.731			
UA1								.633			
IT2									.744		
IT3									.741		
IT4									.727		
IT1									.641		
UA5										.794	
UA6										.791	
IT5											.833
IT6											.806
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.											

Source: The authors' calculation from SPSS 25.0

The results of EFA dependent variables reflect that KMO (Kaiser-Meyer-Olkin) reached a value of 0.793, greater than 0.5, Sig = 0.000 less than 0.05, so EFA results are consistent with the current data. With varimax rotation

(absolute value smaller than: 0.3), the results of 6 observed variables with 2 groups and the lowest Eigenvalues are 1.506, greater than 1, as can be shown in Table 4.

Table 4. Exploratory factor analysis for dependent variables

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	Cumulative %
1	2.473	41.208	41.208	2.473	41.208	41.208	2.053	34.214
2	1.506	25.098	66.306	1.506	25.098	66.306	1.926	66.306
3	.635	10.585	76.891					
Extraction Method: Principal Component Analysis.								

Source: The authors' calculation from SPSS 25.0

The results obtained showed that the factor loading coefficients were all greater than 0.5 after rotating the dependent variables. There were 2 factors as can be shown in Table 5.

Table 5. Rotated component matrix for dependent variables

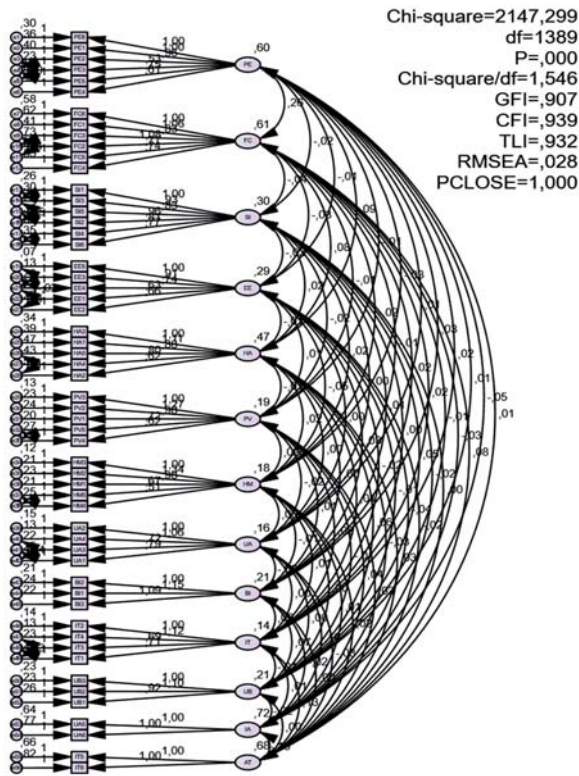
Variable	Component	
	1	2
BI3	.824	
BI1	.821	
BI2	.816	
UB3		.814
UB2		.797
UB1		.773
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		

Source: The authors' calculation from SPSS 25.0

Confirmatory factor analysis

The CFA analysis results showed that the KMO coefficient (Kaiser-Meyer-Olkin) reached a value of 0.770, greater than 0.5, Sig = 0.000 < 0.05, so the CFA analysis results were consistent with the current data. To find the CFA results, this study performed varimax rotation (absolute value less than 0.3) and the number of observations was 719 combined to correct the covariance. At the same time, through the links such as e3 and e4, e4 and e5, e9 and e10, e9 and e11, e13 and e14, e14 and e16, e15 and e16, e17 and e18, e19 and e23, e20 and e21, e21 and e23, e26 and e28, e32 and e33, e37 and e38, e41 and e41, e41 and e42, e47 and e49, e48 and e49 determined the model that fits the market data. Because, the standardized and unstandardized coefficients are both greater than 0.5, Chi-square = 2147.299, with 1389 degrees of freedom (df); Chi-square/df = 1.546 < 3 with p-value = 0.000; CFI = 0.939; TLI = 0.932; GFI = 0.907; RMSEA = 0.028 < 0.06; PCLOSE = 1.000 > 0.05 and the total variance is greater than 0.5, as reflected in Figure 2.

Figure 2. Confirmatory factor analysis

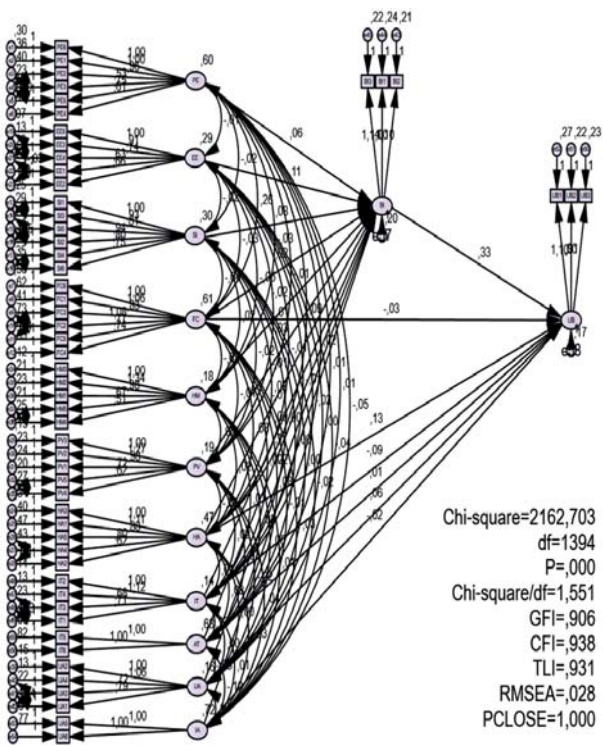


Source: The authors' calculation from AMOS 24.0

Structural equation modeling

The SEM analysis results showed that Chi-square = 2162,703; df= 1394; p= 0.000; Chi-square/df= 1,551; CFI = 0.938; TLI = 0.931; GFI = 0.906; RMSEA = 0.028; PCLOSE =1,000. Therefore, the SEM analysis results were consistent with the current data as can be seen in Figure 3.

Figure 3. Structural equation modeling



Source: The authors' calculation from AMOS 24.0

With 95% confidence, the results of SEM determined that PE has a positive impact on BI, with $p\text{-value} = 0.027 < 0.05$; EE has a positive impact on BI, $p\text{-value} = 0.007 < 0.05$; SI has a positive impact on BI, $p\text{-value} = 0.019 < 0.05$. However, UA has a negative impact on BI, $p\text{-value} = 0.018 < 0.05$. Besides, HA has a positive impact on UB, with $p\text{-value} = 0.000 < 0.05$; BI has a positive impact on UB, $p\text{-value} = 0.000 < 0.05$. The remaining impacts are not significant, because $p\text{-value} > 0.05$ as described in Table 6.

Table 6. Regression Weights and Standardized Regression Weights

			Unstandardized Coefficients				Standardized Coefficients
			Estimate	S.E.	C.R.	P	Estimate
BI	<---	PE	,057	,031	1,829	,027	,096
BI	<---	EE	,108	,040	2,704	,007	,128
BI	<---	SI	,075	,040	1,887	,019	,090
BI	<---	FC	,017	,031	,563	,573	,030
BI	<---	HM	-,021	,053	-,395	,693	-,019
BI	<---	PV	,027	,052	,516	,606	,026
BI	<---	HA	-,014	,032	-,443	,658	-,021
BI	<---	IT	-,009	,070	-,125	,901	-,007
BI	<---	AT	-,002	,035	-,061	,951	-,004
BI	<---	UA	-,171	,072	-2,357	,018	-,148
BI	<---	IA	,016	,037	,439	,661	,030
UB	<---	FC	-,035	,027	-1,280	,201	-,060
UB	<---	HA	,127	,032	3,932	***	,192
UB	<---	IT	-,095	,069	-1,374	,169	-,079
UB	<---	AT	,013	,035	,375	,708	,023
UB	<---	UA	,059	,069	,852	,394	,051
UB	<---	IA	-,024	,034	-,705	,481	-,045
UB	<---	BI	,330	,053	6,274	***	,333

Source: Authors' calculation

With statistical significance at 95% confidence level, this study performed the Bootstrap method with the number of replicate samples N=1000 and the results achieved reliability with C.R < 1.96 as determined in Table 7.

Table 7. Bootstrap method on SEM

Parameter			SE	SE-SE	Mean	Bias	SE-Bias	C.R = Bias / SE-Bias
BI	<---	PE	,031	,001	,058	,001	,001	1.0
BI	<---	EE	,039	,001	,106	-,001	,001	-1.0
BI	<---	SI	,044	,001	,075	,000	,001	0
BI	<---	FC	,031	,001	,017	,000	,001	0
BI	<---	HM	,055	,001	-,021	,000	,002	0
BI	<---	PV	,056	,001	,024	-,003	,002	-1.5

Source: The authors' calculation from AMOS 24.0

Parameter			SE	SE-SE	Mean	Bias	SE-Bias	C.R = Bias / SE-Bias
BI	<---	HA	,034	,001	-,014	,000	,001	0
BI	<---	IT	,076	,002	-,004	,003	,002	1.5
BI	<---	AT	,039	,001	-,003	-,001	,001	-1.0
BI	<---	UA	,073	,002	-,173	-,002	,002	-1.0
BI	<---	IA	,037	,001	,016	-,001	,001	-1.0
UB	<---	FC	,030	,001	-,035	,000	,001	0
UB	<---	HA	,035	,001	,128	,001	,001	1.0
UB	<---	IT	,077	,002	-,095	,000	,002	0
UB	<---	AT	,038	,001	,011	-,002	,001	0.5
UB	<---	UA	,075	,002	,057	-,001	,002	-0.5
UB	<---	IA	,038	,001	-,025	-,001	,001	-1.0
UB	<---	BI	,057	,001	,334	,003	,002	1.5

Source: The authors' calculation from AMOS 24.0

Discussions Results

Factors Auditors' Behavioral Intention

Performance expectancy positively affects auditors' behavioral intention of using DA in Vietnam at a significance level of 0.027. This result agrees with the expectation hypothesis and the results of studies by Iguma and Riccio (2020), Pratama and Komariyah (2023), Almagrashi et al. (2023), Mat Saat et al. (2025). This result indicates that when auditors believe that DA significantly improves the performance of audit activities, it will motivate auditors to apply DA more.

The hypothesis that effort expectancy has a positive impact on the auditors' behavioral intention to apply DA in Vietnam is supported. This result is consistent with previous studies on the auditors' behavioral intention to apply DA in the audit process of auditors by Shamsudin et al. (2015), Almagrashi et al. (2023), Pratama and Komariyah (2023), Mulyawan et al. (2024). This result clearly shows that effort expectancy is one of the factors that positively affects the behavioral intention to apply DA in auditing and financial management. At the same time, this also shows that technology and DA have been applied

in many auditing and financial management activities in Vietnam, so auditors feel that it is convenient and easy to apply DA throughout the auditing and financial management process.

This study found evidence supporting that social influence is a factor that has a positive impact on auditors' behavioral intention to adopt DA in Vietnam. This result is similar to the results of previous studies that examined auditors' behavioral intentions in adopting computer technology and applying DA through empirical testing by Iguma and Riccio (2020), Almagrashi et al. (2023), Sujarminto and Putri (2023), Pratama and Komariyah (2023), Mulyawan et al. (2024), Mat Saat et al. (2025). On the other hand, this result found that social influence is an important factor influencing auditors' behavioral intentions in adopting DA. Auditors' behavioral intentions to adopt DA are also influenced by the support and guidance from superiors and colleagues who adopt DA.

The results of hypothesis testing show that user autonomy has a negative impact on auditors' behavioral intention to apply DA in Vietnam, and this result is contrary to the hypothesis and results of previous studies by Dagiliene and

Kloviene (2019), Handoko et al. (2020), Ha Van Duong (2022), Commerford et al. (2022). This result does not support the findings explaining that auditors' user autonomy has a positive impact on auditors' behavioral intention to apply DA in Vietnam. Since auditors' autonomy is a factor that demonstrates auditors' complete autonomy, they are confident in their expertise when applying DA in auditing and financial management activities.

Factors Affecting Auditors' Use Behavioral

The results of hypothesis testing found a relationship between habits and the auditors' behavioral of using DA in Vietnam. This result is consistent with the hypothesis and in line with the research results of Handoko and Lantu (2021), (Samiolo et al. 2024), Tritama et al. (2025). This result shows that the daily application of DA by auditors in auditing and financial management activities is related to factors of awareness and understanding of DA, contributing to promoting adaptability and balancing habits and awareness. At the same time, understanding how to apply DA can motivate auditors towards behavioral intentions and DA application behavior through automatic habits, because thanks to the application of DA, it has contributed to increasing audit quality, as well as improving the auditor's audit process effectively.

This study found evidence supporting that behavioral intention is a factor that has a positive impact on the auditors' behavioral of using DA in Vietnam. This result is consistent with the hypothesis and in line with the research results of Shahbaz et al. (2019), Damer et al. (2021), Jiwandono and Sofyani, (2024), Al Rob et al. (2024). This result shows that when auditors' behavioral intentions are promoted, the adoption of DA will increase. This shows a positive trend towards DA adoption. At the same time, this result reflects that DA adoption brings many benefits to auditors, applying DA to analyze, judge, process and perform procedures to conclude on audit aspects. Therefore, auditors applying DA not only contribute to increasing efficiency, but also improve audit quality.

Conclusions and Recommendations

This study applies the UTAUT2 model and adds new factors such as Information Technology Skills, User Autonomy, making theoretical contributions through model establishment, analyzing factors on auditors' behavioral intentions and behaviors in applying DA to auditing and financial management in Vietnam. In practice, the findings of this study are the basis for proposing and contributing some important implications for managers and stakeholders to encourage and promote auditors' behavioral intentions and behaviors in applying DA in auditing and financial management activities in Vietnam as follows.

The performance expectancy factor plays an important role in determining auditor' behavioral intentions to apply for DA. Therefore, auditors need to continue to develop DA applications more and more advanced, because applying DA and exploiting the potential value of DA will contribute to increasing the productivity and performance of auditing and financial management activities. On the other hand, audit organizations and managers need to have policies to promote the development of DA applications in auditing and financial management activities, increase technical support, and guide advanced DA applications for auditors to apply to increase productivity and performance of auditing and financial management activities.

The effort expectancy factor impacts the auditors' behavioral intention to apply DA. Therefore, DA application providers need to develop this technology that is easy to understand and easy to apply for auditors to apply proficiently in auditing and financial management activities. Audit organizations need to coordinate with DA application providers to create DA applications that are both advanced and convenient in the process of applying for DA in auditing and financial management. In addition, DA application providers, managers and relevant parties need to develop technical infrastructure, transfer knowledge of DA applications smoothly, support and guide the application of new DA applications, support through the formation of DA application groups to exchange experiences between auditors to develop DA applications in auditing and financial management activities more widely.

Social influence is a factor that has a positive impact on auditors' behavioral intention to adopt DA in Vietnam. The social influence factor is very important in the application of DA by auditors and financial management, so DA application providers, managers and stakeholders need to pay more attention to this factor. Therefore, they should pay attention to the support and guidance of superiors and colleagues to apply DA in auditing and financial management activities. Promoting this positive influence through strategic linkages between auditing organizations, DA application providers, managers and stakeholders to deploy programs and projects to develop DA application technology in auditing and financial management activities, develop programs, training, exchange of best practices from superiors and colleagues in applying DA, thereby contributing to improving behavioral intention to apply DA in auditing and financial management activities.

Since auditors are completely autonomous, they are confident in their expertise when applying DA in auditing and financial management activities. This is an important factor contributing to improving the auditing and financial management quality. Therefore, autonomy needs to be linked with accountability, auditing organizations need to establish auditing and financial management guidelines through applying DA, guidelines on how to improve the efficiency and quality of auditing, and ensure compliance with standards through applying DA. Thereby, auditing and financial management activities ensure both autonomy and ensure the accuracy of DA results and transparency of audit results.

When DA application becomes regular, auditors' habits will become automatic habits and will be the driving force for auditors' behavior to continue applying DA in auditing and financial management activities. Therefore, auditing organizations and managers need to have policies to encourage the increasing application of DA in Vietnam, promoting DA application behavior. From there, auditors' automatic habits will create higher adaptability to the increasingly advanced application of DA, positively contribute to auditing and financial management activities and effectively impact the increase of DA use behavior in auditing and financial management activities.

Auditors' behavioral intentions are an important factor that positively affects auditors' DA usage behavior in Vietnam. To promote auditors' application of DA, DA platform providers need to improve the usefulness of DA, focus on advanced technology, and develop DA features that meet the requirements of auditing and financial management activities. On the other hand, auditing organizations need to increase investment in adequate technical infrastructure to support the smooth and seamless application of DA, process audit data quickly, and bring more convenience and efficiency to auditors applying DA in auditing and financial management activities. Thereby, this increasingly contributes to promoting the application of DA by auditors in Vietnam.

References

- Aitkazinov, A. (2023). The Role of Artificial Intelligence in Auditing: Opportunities and Challenges. *International Journal of Research in Engineering, Science, and Management*, 6(6), 117–119.
- Alles, M. G., & Gray, G. L. (2020). Will the Medium Become the Message? A Framework for Understanding the Coming Automation of the Audit Process. *Journal of Information Systems*, 34(2), 109–130.
- Almagrashi, A., Mujalli, A., Khan, T., & Attia, O. (2023). Factors determining internal auditors' behavioral intention to use computer-assisted auditing techniques: an extension of the UTAUT model and an empirical study. *Future Business Journal*, 9(1), 74.
- Al Rob, M. A., Nor, M. N. M., & Salleh, Z. (2024). The role of training in Big Data Analytics adoption: an empirical study of auditors using the technology acceptance model. *Electronic Journal of Business Research Methods*, 22(2), 30–45.
- Alsabahi, M. A., Bahador, K. M. K., & Saat, R. M. (2021). Skills Development Factors of Information Technology Competency Among External Auditors. *International Journal of Information Systems in the Service Sector (IJISSS)*, 13(2), 13–28.
- Chiba, A., Eguchi, K., & Kurasawa, H. (2019). Data analysis targeting healthcare-support applications using Internet-of-Things sensors. In *Chemical, Gas, and*

- Biosensors for Internet of Things and Related Applications (pp. 345-362). Elsevier.
- Commerford, B. P., Dennis, S., Joe, J., & Ulla, J. (2022). Man versus machine: Complex estimates and auditor reliance on artificial intelligence. *Journal of Accounting Research*, 60(1), 171–201.
 - Creswell, J.W. (2010). *Educational research - planning, conducting, and evaluating quantitative and qualitative research*, (4th Ed.). Pearson Merrill Prentice Hall, New Jersey
 - Damer, N., Al-Znaimat, A. H., Asad, M., & Almansou, Z. A. (2021). Analysis of motivational factors that influence usage of computer assisted audit techniques (CAATS) by external auditors in Jordan. *Academy of Strategic Management Journal*, 20(2), 1-13.
 - Dagiliene, L., & Kloviene, L. (2019). Motivation to use big data and big data analytics in external auditing. *Managerial Auditing Journal*, 34 (7), 750-782.
 - Hà Văn Dương (2022), *Giáo trình quản lý và ứng dụng cơ sở dữ liệu tài chính*. Nhà xuất bản Kinh tế Thành phố Hồ Chí Minh, Thành phố Hồ Chí Minh, Việt Nam.
 - Ferri, L., Spanò, R., Ginesti, G., & Theodosopoulos, G. (2020). Ascertaining auditors' intentions to use blockchain technology: Evidence from the big 4 accountancy firms in Italy. *Meditari Accountancy Research*, 29(5), 1063–1087.
 - Greenman, C. (2023). The impact of artificial intelligence on the accounting profession. *Journal of Research in Business, Economics and Management*, 8(3), 241–246
 - Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2010). *Multivariate data analysis* (7th ed.). New Jersey: PrenticeHall.
 - Hair, F. J., Black, W. C., Babin, B. J., Anderson, R. E. (2019). *Multivariate Data Analysis*, 8th Edition. Publisher: Annabel Ainscow.
 - Handoko, B. L., & Lantu, J. E. (2021). UTAUT2 model for predicting auditor's blockchain technology adoption. In *Proceedings of the 2021 12th International Conference on E-business, Management and Economics* (pp. 82-89).
 - Handoko, B.L., & Liusman, S. (2021). Analysis of External Auditor Intentions in Adopting Artificial Intelligence as Fraud Detection with the Unified Theory of Acceptance and Use of Technology (UTAUT) Approach. *Proceedings of the 2021 12th International Conference on E-business, Management and Economics*.
 - Handoko, B. L., Tjandra, R. L., & Mozes, L. A. A. (2020). Model for predicting auditor intention to adopt blockchain. In *Proceedings of the 2020 2nd International Conference on E-Business and E-commerce Engineering* (pp. 44-50).
 - Hezam, Y. A., Anthonysamy, L., & Suppiah, S. D. K. (2023). Big data analytics and auditing: A review and synthesis of literature. *Emerging Science Journal*, 7(2), 629-642.
 - Hulin, C., Netemeyer, R. and Cudeck, R. (2001). Can a reliability coefficient be too high? *Journal of Consumer Psychology*, 10(1): 55-58.
 - Iguma, M. K., & Riccio, E. L. (2020). Factors influencing Brazilian internal auditors' behavioural intention to adopt Big Data Analytics. *International Journal of Auditing Technology*, 4(3), 217. <https://doi.org/10.1504/ijaudit.2020.10039040>
 - Jason D. R., & Renwick, S (2024). Data and Information, an Overview. *Encyclopedia of Libraries, Librarianship, and Information Science*, 1 (2025), 283-297. Available at: <https://doi.org/10.1016/B978-0-323-95689-5.00229-7>
 - Jiwandono, A. I., & Sofyani, H. (2024). Key Determinants of Government Auditor's Behaviour to adopt Big Data Analytics in Audit Practice. *Jurnal Akuntansi Bisnis*, 17(2), 182-197.
 - Kohler, T. (2022). Autonomy, Relatedness, and Competence in UX Design. Available at: <https://www.nngroup.com/articles/autonomy-relatedness-competence/>
 - Li S, Da Xu L, Zhao S. (2018). 5G internet of things: A survey. *Journal of Industrial Information Integration*, 10, June 2018, 1–9.

- Mat Saat, R., Hamdi, H. Z., & Danila, R. (2025). Adopting Data Analytics In Auditing: A Study Of Internal Auditors At Malaysia's Financial Institution. *Advanced International Journal of Banking, Accounting, and Finance*, 7 (21), 35-53. DOI: 10.35631/AIJBAF.721003.
- Mohamed, I. S., Muhayyidin, N. H., and Rozzani, N. (2019). Auditing and data analytics via Computer Assisted Audit Techniques (CAATS). *Proceedings of the 3rd International Conference on Big Data and Internet of Things - BDIOT 2019*. Melbourne, Australia, from August 22-24, 2019, published by ACM.
- Mulyawan, A. N., Deniswara, K., & Setiadi, R. (2024). Analysis on Behavioral Intention of Financial Auditors in Adopting Big Data Analytics. *Business Economic, Communication, and Social Sciences Journal (BECOSS)*, 6(2), 91-105.
- Nasrudin, T., & Firmansyah, A. (2024). Does Big Data Analytics Implementation Have a Mediating Role in The Examination of Public Sector Audit Quality? *Owner: Riset & Jurnal Akuntansi*, 8(4), 4278-4294.
- Pratama, F. W, and Komariyah, E. F. (2023). Examining the Auditors' Acceptance of Big Data Analytics Technology Platform: Evidence from Government Auditors in Indonesia. *The Indonesian Journal of Accounting Research*, 26(2), 273 – 302.
- Rikhardsson, P., Kristinn, T., Bergthorsson, G., & Batt, C. (2022). Artificial intelligence and auditing in small- and medium-sized firms: Expectations and applications. *Ai Magazine*, 43(3), 323-336.
- Samiolo, R., Spence, C., & Toh, D. (2024). Auditor judgment in the fourth industrial revolution. *Contemporary Accounting Research*, 41(1), 498–528.
- Shamsuddin, A., Rajasharen, L., Maran, D., Ameer, M. F. M., & Muthu, P. (2015). Factors influencing usage level of computer-assisted audit techniques (CAATs) by internal auditors in Malaysia. In *Proceeding-Kuala Lumpur International Business, Economics and Law Conference*, 6(1), 123-131.
- Sujarminto, A. and Putri, A. (2023). Applying UTAUT to understanding factors influence the use of elearning BPK corporate university in jfp Ap training. *Journal of E-Business and Management Science*, 1(2), 105-115. <https://doi.org/10.61098/jems.v1i2.71>
- Suppiah, K., & Arumugam, D. (2023). Impact of data analytics on reporting quality of forensic audit: A study focus in Malaysian auditors. *E3S Web of Conferences*, 389(2). doi: 10.1051/e3sconf/202338909033
- Tritama, S. V., Mahaprajna, N. A., & LEO, B. (2025). The Role of AI Adoption in Achieving Sustainable Audit Quality. *Journal of Theoretical and Applied Information Technology*, 103(2).
- Venkatesh, V. et al. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36, 157-178. <https://doi.org/10.2307/41410412>