DIGITAL TRANSFORMATION IN AUDITING : LEARNING MOTIVATION, SOFT SKILLS AND STUDENT PERCEPTIONS IN INDUSTRY 5.0

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ABSTRACT

This study aims to analyze the influence of learning motivation, auditor soft skills, and student perceptions on auditor Information Technology (IT) mastery in facing the challenges of the Industrial Revolution 5.0. This revolution is characterized by the integration of advanced technology in various sectors, including accounting and auditing, thus requiring the readiness of human resources, especially accounting students, in mastering technical and non-technical skills. This study uses a quantitative approach with a survey design, where data is collected through a Likert scale-based questionnaire. Respondents consist of 55 accounting students from several universities in West Kalimantan Province, selected through purposive sampling, with criteria of active students in semesters 3, 5, and 7. The validity and reliability of the instrument were tested before use in data collection. Data analysis was conducted using multiple linear regression to determine the contribution of each independent variable to the mastery of IT skills as the dependent variable. The results of the study indicate that students' perceptions of the importance of information technology are the most influential factor in improving the mastery of IT skills. Meanwhile, learning motivation and soft skills showed lower partial contributions, although they remain important in the context of students' professional development. These findings emphasize the need for comprehensive integration between motivation, interpersonal skills, and technological understanding in the accounting curriculum to prepare graduates who are adaptive and competent in a digitized audit environment.

Keywords: Industrial Revolution 5.0; Information Technology; Learning Motivation; Soft Skills; IT Auditor Competency

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh motivasi belajar, soft skill auditor, dan persepsi mahasiswa terhadap penguasaan Teknologi Informasi (TI) auditor dalam menghadapi tantangan Revolusi Industri 5.0. Revolusi ini ditandai dengan integrasi teknologi canggih dalam berbagai sektor, termasuk akuntansi dan audit, sehingga menuntut kesiapan sumber daya manusia, khususnya mahasiswa akuntansi, dalam menguasai keterampilan teknis dan nonteknis. Penelitian ini menggunakan pendekatan kuantitatif dengan desain survei, di mana data dikumpulkan melalui kuesioner berbasis skala Likert. Responden terdiri dari 55 mahasiswa program studi akuntansi dari beberapa perguruan tinggi di Provinsi Kalimantan Barat yang dipilih melalui teknik purposive sampling, dengan kriteria mahasiswa aktif pada semester 3, 5, dan 7. Validitas dan reliabilitas instrumen diuji sebelum digunakan dalam pengumpulan data. Analisis data dilakukan menggunakan regresi linier berganda untuk mengetahui kontribusi masing-masing variabel independen terhadap penguasaan TI auditor sebagai variabel dependen. Hasil penelitian menunjukkan bahwa persepsi mahasiswa terhadap pentingnya teknologi informasi merupakan faktor yang paling berpengaruh dalam meningkatkan penguasaan kompetensi TI auditor.

Sementara itu, motivasi belajar dan soft skill menunjukkan kontribusi yang lebih rendah secara parsial, meskipun tetap penting dalam konteks pengembangan profesional mahasiswa. Temuan ini menegaskan perlunya integrasi komprehensif antara motivasi, kemampuan interpersonal, dan pemahaman teknologi dalam kurikulum akuntansi guna mempersiapkan lulusan yang adaptif dan kompeten dalam lingkungan audit yang terdigitalisasi.

Kata Kunci : Revolusi Industri 5.0; Teknologi Informasi; Motivasi Belajar; Soft Skill; Kompetensi Auditor TI

INTRODUCTION

Industrial The foundation of the Industrial Revolution 5.0 lies in the complementary combination of technological innovation and human capital, with an emphasis on the socio-human aspect to promote the well-being of society. In accordance with the philosophy of Society 5.0, where the virtual and real worlds are harmonized to improve the quality of life, this revolution has been effective in various areas like industry, social services, education, accountancy, and auditing. The advancement of information technology at a rapid pace has significantly transformed the business arena, demanding that auditors possess not only basic accounting skills but also high-level technological expertise. Due to the increasing pace of digitization and globalization, there has been an increased demand in the job market for employees who are able to be proactive, creative, and responsive to technological developments. It is for this reason that the ability of auditors to utilize digital technologies such as Big Data analysis and other digital tools is significant in a bid to enhance the productivity and success of the audit process (Gloriabarus, 2023).

In the era of Industrial Revolution 5.0 and Society 5.0, in which human collaboration with technology is in the forefront to advance society, the readiness of auditors to enhance their competences is a fundamental parameter in transcending professional challenges. Competence in digital technology, such as artificial intelligence and data analytics, is most critical to enhancing the efficiency and accuracy of the audit process. Auditors who have a strong motivation to learn are more flexible in adapting to changes in technology, enabling them to execute their jobs more effectively in an increasingly complex and digitalizing professional world (Kurniawati & Primasatya, 2024)

Aside from this, universities can also encourage higher digital literacy and equip individuals, future auditors included, to equip themselves with technical expertise

aligned with their professional practices. Proper motivation to learn and a quality curriculum-based education allow students to acquire the foundational skill sets required during the era of Industrial Revolution 5.0. Together with high motivation and sufficient academic background, prospective auditors will be able to fulfill the growing demands for competence in the profession (Gloria & Salma, 2023; Universitas Ahmad Dahlan, 2022).

Apart from digital technology expertise, auditors require sufficient soft skills. A few of the important competencies necessary to enhance the efficiency and validity of audits are critical thinking, advanced problem-solving, good interpersonal communication, and emotional intelligence. These soft skills enable auditors to keep pace with technological advancement, function efficiently as members of multidisciplinary teams, and thrive in the competitive landscape of the digitized profession. Thus, the soft skills development is a critical area that must be developed in accounting education so that accounting graduates not only acquire technical expertise but are also equipped to deal with complex problems in the professional arena (Binus University School of Accounting, 2020).

Auditors of the future, accounting students in large part, must have a firm understanding of information technology that has become largely accepted as an integral component of the audit profession. With the continuous development in technology, it has become more apparent to accounting students that acquiring applicable skills is central to their preparedness in the working environment. The authors contend that accounting software skills, fundamental understanding of electronic data processing (EDP) systems, and awareness of auditing tools and applications are essential components of contemporary professional practice. As such, it matters that higher education accounting curricula demonstrate a better level of integrated learning founded upon information technology so that accounting graduates will be able to cope with the demands of technology-induced professional challenges (M. Fauzan, 2009).

This research seeks to explore the correlation between auditors' soft skills, learning motivation, and students' perceptions of the significance of information technology use in the auditing profession. Further, the research seeks to explore the influence of these three factors on information technology competency among auditors

in the Industrial Revolution 5.0 era. The literature identifies that numerous studies approach auditor ability from the technical skills side as well as the interpersonal skills side. Yet, previous research tends to examine each of these areas separately and not bring together learning motivation, soft skills, and student attitudes within one analytical framework.

Past studies (Elvira & Nirwana, 2022; Yudhistari & Purnomo, 2023) have established a connection between learning motivation and greater levels of competence in learning methods. Nevertheless, the influence of learning motivation on auditors' information technology skills has not been well explored in the accounting education field. The identified gap in the current literature justifies the necessity to conduct further research on the interrelations among the three variables and the influence of their joint contribution to auditors' preparedness for the changes brought about by digital auditing.

Besides, the present study aims at accounting students in West Kalimantan, specifically in Pontianak, due to the region's fast economic growth and its demand for accounting professionals with the capacity to cope with technological advancement. Nevertheless, one of the greatest challenges faced in this region is the lack of opportunity for advanced accounting technology education, especially compared to big cities such as Jakarta or Surabaya, where the accounting program embraces a greater degree of technology. Therefore, this research assists in identifying the particular problems encountered by West Kalimantan accounting students and suggests curriculum improvement recommendations that more accurately reflect the requirements of the local industry.

Regarding novelty, this study addresses a gap in existing literature by combining learning motivation, soft skills, and students' attitudes within a single analytical framework. This framework aims to gain a comprehensive insight into the determinants of auditors' information technology competency in the age of digitalization. In addition, this research provides insightful recommendations for developing the accounting curriculum to be more aligned with the challenges presented by industry 5.0, as a reference for scholars, practitioners, and policymakers in their efforts to improve the quality of accounting education.

Providing for the limitations of this research in terms of geographical scope, increasing the sample size beyond 100+ participants or the inclusion of universities in

various regions would render the findings more applicable. Furthermore, this research can be extended through investigating its implications for auditing education and professional auditor practice, particularly how universities can better incorporate technology within their programs. Future research should involve an examination of the moderating role played by other variables, such as internship experience and institutional support, in addition to looking into the possibility of a qualitative approach in order to have a better grasp of students' perceptions of the use of technology in auditing.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Auditing

As stated by the American Accounting Association's Committee on Basic Auditing Concepts (Auditing: Theory and Practice, 9th Edition, 2001: 1-2), auditing constitutes a structured process of gathering data by impartial entities to objectively obtain and assess evidence concerning economic activities with the purpose of determining the compliance of statements with predetermined standards (Meutia Layli, 2019). As stated by Mulyadi (2002), auditing is the systematic and objective process of gathering and assessing evidence regarding claims of economic activities to determine the degree of alignment between current reports and established criteria, which will subsequently be communicated to the relevant users (cited in Kamal, 2021). Audits are typically carried out by auditors who are skilled, unbiased, and fair. Generally, the aim of the audit is to confirm that the data assessed by the audit has operated in accordance with relevant standards, regulations, and practices (Kamal, 2021).

Financial Statement Audit Objectives

The aim of a financial statement audit is to evaluate the accuracy or validity of the financial statements presented by the company. The practicality and rationality of this relate to commonly accepted accounting standards, and this evaluation will be evident in the audit opinion (Rijal Fahmi Mohamadi, 2024). There are four categories of opinions for financial statement audits, specifically:

a) Unqualified Opinion, signifying that the financial statements are prepared in compliance with relevant accounting standards.

- b) Reasonable With Exceptions (Qualified Opinion) indicates that the financial statements are dependable, though there are certain issues or items excluded that do not hinder decision-making accuracy.
- c) Unfair (Adversed) refers to the presentation of financial statements that do not comply with accounting standards or contain significant mistakes in the financial statements.
- d) No Revenue (Disclaimer), indicating that the financial statements contain significant errors and management restricts the audit's scope to prevent the auditor from obtaining adequate evidence.

Difference Between Accounting and Auditing

Accounting and auditing form the core of business studies with definitive roles. Accounting involves recognition, measurement, recording, and classification of transactions in order to allow financial statements based on general principles. The fundamental role of it is presenting decision-making credible information, from the corporate to public sector staffs. Despite having ultimate responsibility on company management regarding financial statements, auditing attests to and validates them so as to secure conformity.

In the meantime, the audit process, or in this case, auditing financial statements involves actions taken to collect and evaluate evidence associated with the financial statements. This task enables the auditor to assess the degree of appropriateness or fairness of a financial statement, determining if it has been presented accurately in line with Generally Accepted Accounting Principles (PABU). Given the numerous key terms and concepts associated with fundamental accounting and general knowledge in auditing, the book Accounting and Auditing Terms is designed to assist Grameds in grasping it more easily (Kamal, 2021).

Important Elements in Auditing

A number of important elements, including scepticism, independence, experience, accountability, professionalism, and knowledge of information technology, affect the quality of an audit. Experience and professionalism enhance audit accuracy, whereas scepticism and independence enhance fraud detection. Technology knowledge, like e-audit, increases efficiency and accuracy, and accountability guarantees auditor

duty. These elements contribute significantly to increased audit efficacy (M. Fajarudin Akbar & Nur Fitriyah, 2024; Suganda et al., n.d.; Vami et al., n.d.).

a) Skepticism

Fullerton and Durtschi (in Anggriawan, 2014) state that auditors who have high skepticism will increase their ability to detect fraud. The more skeptical an auditor is, the more careful he will be in making decisions by looking for additional evidence or information to support his conclusions (in Suganda et al., n.d.).

b) Independence

According to Pratomo's (2017) research findings, fraud detection will rise in tandem with more independence. On the other hand, fraud detection will become less valuable if independence declines. According to Alim's research (in Pratomo, 2017), independence significantly affects audit quality, with the capacity to identify fraud in the audit serving as one marker of high audit quality (in Suganda et al., n.d.).

c) Experience

The results of Anggriawan's research (2014) and Pratomo (2017) show a positive effect of auditor experience on fraud detection. This means that the more experience the auditor has, the auditor's ability to detect fraud will increase (in Suganda et al., n.d.).

d) Accountability

Based on research by Sangadah (2022), Lorensky, et al (2021), and Sunandar (2019) obtain factual proof that accountability significantly and favourably affects audit quality (in M. Fajarudin Akbar & Nur Fitriyah, 2024).

e) Professionalism

Based on research by Sangadah (2022), Lorensky, et al (2021), Fadillah, ddk (2020), Pratiwi (2020), Kertarajasa, et al (2019), and Sunandar (2019) discovered proof that professionalism significantly and favourably affects audit quality (in M. Fajarudin Akbar & Nur Fitriyah, 2024).

f) Understanding Of Information Technology

Understanding of technology such as e-audit has a positive and significant effect on audit quality, increasing efficiency, accuracy in detecting fraud, and accountability of financial statements (M. Fajarudin Akbar & Nur Fitriyah, 2024).

Auditing Standards

Standar Auditing Standards are ten standards established and endorsed by the Indonesian Institute of Certified Public Accountants (IAPI), which consist of general standards, field work standards, and reporting standards and their interpretations. Auditing standards are guidelines for auditing historical financial statements. Auditing standards consist of ten standards and are detailed in the form of Audit Engagement Standards (SPA). Thus the SPA is a further elaboration of each standard listed in the auditing standards (wikipedia, 2022). The auditing standards established by the Indonesian Institute of Certified Public Accountants Indonesia (IAPI), specifically the general standards, field work standards, and reporting standards, must be followed by auditors in order to support their professionalism as public accountants and carry out their audit duties (Vami et al., n.d.).

General Auditing Standards

- a) An auditor or audit executive is someone or more with sufficient technical training expertise and experience as an auditor.
- b) As an auditor, mental defense from all matters relating to the engagement and independence must be maintained.
- c) Auditors are required to utilize their professional expertise in the process of conducting audits to reporting activities carefully and thoroughly.

Fieldwork Standards

- a) The tasks need to be organized effectively and, when assistants are involved, closely monitored.
- b) An adequate comprehension of internal control needs to be achieved to organize the audit and decide the type, timing, and extent of tests to be conducted.
- c) Adequate reliable audit evidence must be gathered via inspection, observation, inquiry, and confirmation to provide a sound foundation for expressing an opinion on the audited financial statements.

Reporting Standards

a) The auditor's report must indicate if the financial statements were created following the accounting principles generally accepted in Indonesia.

- b) The auditor's report must specify, if applicable, any discrepancies in the use of accounting principles when preparing the current period financial statements in comparison to the application of those principles in previous periods.
- c) Informative disclosures within the financial statements are deemed sufficient, unless the auditor's report indicates otherwise.
- d) The auditor's report must include either an opinion on the overall financial statements or a declaration that such an opinion cannot be provided. If a general opinion cannot be provided, the reasons must be explained. When the auditor's name is linked to the financial statements, the auditor's report must clearly specify the type of audit work carried out, if applicable, as well as the level of responsibility taken on by the auditor.

Auditor Qualifications

a) Educational Requirements for Audit Professionals

A degree in accounting or finance is recommended for candidates since these fields offer a thorough understanding of the subject.

b) Extra Professional Credentials

The auditor's competency and effectiveness in performing audit activities are improved by accreditations like CPA (Certified Public Accountant) and CIA (Certified Internal Auditor).

c) Professional Background in Accounting and Auditing

Proficiency in auditing and accounting procedures is crucial for comprehending industry standards and fostering professional intuition.

d) Expert Technical Understanding

In addition to having a solid grasp of pertinent policies and regulations, an auditor needs to be familiar with generally accepted accounting standards, tax laws, and related auditing concepts.

e) Professional Accountants' Analytical Skills

Accurate data and information synthesis and interpretation, risk assessment, and decision-making are all skills that an auditor has to possess.

Code of Ethics

The International Ethics Standards Board for Accountants of the International Federation of Accountants (IESBA-IFAC) published the Handbook of the Code of

Ethics for Professional Accountants (202) Edition, which is adopted by the IAI code of ethics. Accountants acknowledge and comprehend that their beliefs are founded on their innate abilities and values, which are applied to their professional tasks, such as adhering to ethical standards.

Accounting and auditing form the core of business studies with definitive roles. Accounting involves recognition, measurement, recording, and classification of transactions in order to allow financial statements based on general principles. The fundamental role of it is presenting decision-making credible information, from the corporate to public sector staffs. Despite having ultimate responsibility on company management regarding financial statements, auditing attests to and validates them so as to secure conformity (Wednesd Avioni Azzalea, 2022).

The code of ethics can be understood as ideas in the framework of rules that can be used by an auditor in carrying out his duties. The important points in this code of ethics are:

a) IntIntegrity

Auditors must be honest and have high moral convictions.

b) Objectivity

The auditor must stand alone and not be influenced by other elements that may affect the assessment.

c) Professional Competence

The auditor must have sufficient knowledge and skills to carry out these responsibilities.

d) Secret

Information obtained in connection with the audit must be kept confidential by the Auditor unless there is a determination that requires its disclosure.

e) Professional Behavior

An auditor must act in such a way that the image of the profession is not tarnished and demonstrates professionalism in his field.

Auditor Responsibilities

The Auditing Practice Committee, the forerunner of the Auditing Practices Board, in 1980, provided a summary of the auditor's responsibilities (wikipedia, 2022):

- a) Planning, Regulating, and Documenting. Auditors must organize, oversee, and document their activities.
- b) Financial Reporting System. Auditors need to understand the method of recording and processing transactions and evaluate its sufficiency for preparing financial statements.
- c) Audit Proof. Auditors will gather pertinent and trustworthy audit evidence to offer reasonable conclusions.
- d) Internal Regulation. If the auditor intends to rely on internal controls, they must identify and assess those controls as well as conduct compliance tests.
- e) Evaluating Pertinent Financial Documents. The auditor conducts an evaluation of the pertinent financial statements as needed, along with conclusions reached from additional audit evidence collected, to offer a sound foundation for the opinion on the financial statements.

Learning Motivation

"Djaali (2012) Motivation is a physiological and psychological state that drives individuals to take action toward a goal". "Hamalik (2012) It consists of both internal and external factors that stimulate behavior toward achieving objectives". Kustyamegasari & Setyawan, 2020; Juliya & Herlambang, 2021; Lusidawaty et al., (2020) "Motivation involves generating, sustaining, and managing interest, making it essential for accomplishing tasks, such as earning a degree". (Elvira & Nirwana, 2022).

Generally, motivation is employed to enhance zeal, happiness, and study motivation. A highly motivated person is usually very enthusiastic about learning. This implies that learning-motivated children are more able to study for longer periods and are more conscientious than less motivated children. According to this definition, motivation to learn is the state that enables an individual to carry out an activity or learning exercise of his will or own interest to accomplish tasks on time in an attempt to meet his or her desired ends (Elvira & Nirwana, 2022).

Djamarah (2015: 157) "The function, usefulness, and advantages of learning motivation make it a crucial component of the teaching and learning process. In addition to influencing and changing student behaviour, learning motivation is cited as a source of behaviour encouragement. Among the purposes of learning motivation" (in Elvira & Nirwana, 2022), are:

- a) Motivation as a Pusher: Motivation is what propels behaviour or activity; without it, nothing will happen, like learning.
- b) The influence of motivation: Motivation guides behaviours to accomplish the intended outcome.
- c) Motivation as a Driver: Motivation acts as a driver, which means that it influences how people behave. A job's speed or slowness will depend on the level of motivation.

Learning motivation is central to information technology skills in auditing because it encourages people to acquire and use valuable tools and software. Highly motivated auditors take extra steps in acquiring new information and training that encourages career growth. This passion fosters learning love, leading to better use of technology on audits, quality reports, and effective analysis. In the long term, more motivation inspires better learning outcomes and enriches the performance of audits.

 H_1 : There is a significant positive relationship between learning motivation and auditors' mastery of information technology in the 5.0 era.

Soft Skills Auditor

Professional achievement in a dynamic work environment requires technical expertise (hard skills) as well as interpersonal and intrapersonal abilities (soft skills). Soft skills like teamwork, communication, emotional intelligence, and problem-solving enhance adaptability and critical thinking to promote effectiveness in a changing work environment. Finch et al. (2013), "Mentioned four types of soft skills: communication skills, active listening skills, professional skills and teamwork skills" (in Duyen Nguyen et al., 2020). CONARC 1972, cited in Parlamis and Monnot (2019), "Whitmore used the term "soft skills" to refer to crucial job-related skills that involve little or no interaction with machines" (in Duyen Nguyen et al., 2020). Dell'Aquila et al (2017) "Soft skills involve personal, interpersonal, and intrapersonal abilities that are essential in the workplace". Martins et al. (2020) "Examples of soft skills include emotional intelligence, communication, creativity, problem-solving, team building, and stress management" (in Duyen Nguyen et al., 2020). In the working world, soft skills like communication, problem-solving, and emotional intelligence are equally as crucial as hard skills. In addition to technical proficiency, interpersonal and intrapersonal skills

that allow people to collaborate, adapt, and think critically in difficult settings are also essential for career success (Duyen Nguyen et al., 2020).

Soft skills are also essential in the auditing field, especially during the Industrial Revolution 5.0 period when technology is strongly integrated into the work. Effective collaboration, communication, problem-solving, and adaptability are crucial to success in a rapidly changing work environment. Besides examining financial data, auditors must engage with clients, exercise risk-based decisions, and adhere to ethical and legal standards. During the era of the internet, such abilities increase the quality of auditing since they allow critical data analysis, effective communication, technology adjustment, ethical accountability, and effective time management.

H₂: There is a significant positive relationship between auditor soft skills and auditors' mastery of information technology in the 5.0 era.

Student Perception

Perception, in the words of Furqano Annasa Essera, Sukartini, and Dedy Djefris (2022), "is a process of finding, gathering, organizing, and interpreting information from the environment via the five senses. Perception is the basis of human knowledge and interaction. Perception varies among individuals due to differences in experience, knowledge, and social context, influencing mental processes, decision-making, and emotional responses to the environment" (in Bawamenewi et al., 2024).

Perception is a multidimensional process through which people pick, collect, arrange, and make sense of information from the world around them through their senses. As a precursor to comprehension and interaction with reality, perception is influenced by experience, education, and environmental conditions. In this way, people may develop varying interpretations for the same event, influencing what they think, decide, and feel in reaction to external inputs.

H₃: There is a significant positive relationship between students' perceptions and auditors' mastery of information technology in the 5.0.

RESEARCH METHOD

Method is a method of work that can be used to obtain something. While the research method can be interpreted as a work procedure in the research process, both in searching for data or disclosing existing phenomena (Zulkarnaen, W., et al., 2020:229).

Types of research

This study uses a quantitative approach with a survey design. In relation to this, the approach was chosen to measure the influence of learning motivation, auditor soft skills, and student perceptions of IT audit mastery in the Industrial Revolution 5.0 era.

Population and Sample

The participants of this research were students undertaking accounting programs in various universities in West Kalimantan Province. The purposive sampling technique was employed during the selection of the sample, targeting the inclusion of students in their 3rd, 5th, and 7th semesters with an objective of obtaining 55 respondents. West Kalimantan was afforded priority in this research because of constraints in resources and access-related issues, considering the topography-specific composition of land and water bodies in the area. The sample of 55 respondents was determined by time and resource availability and an estimation that was considered representative enough of the population. The limitations of this research are access difficulties to universities in West Kalimantan and time and resource constraints. It is recommended for future research to expand the geographical area and sample size to achieve greater generalization and representation of the results.

Research Instruments

Data information will be collected using a questionnaire consisting of several parts, such as:

- a) Learning Motivation (X₁) Following the works of Kurniawati & Primasatya (2024), Gloria & Salma (2023), and Ahmad Dahlan University (2022), auditors must create learning motivation towards adjusting to Industrial Revolution 5.0 that enables technological responsiveness and audit competence with the offering of digital competency.
- b)Auditor soft skills (X₂) Auditor soft skills are the essential qualities listed by Binus University School of Accounting (2020), including problem-solving, people skills, and emotional intelligence. These skills assist auditors in improving efficiency and accuracy in the audit process and adapt to Industry 5.0's changing needs.
- c)Student Perception (X₃) Based on M. Fauzan (2009), the research examines students' perception towards the necessity of being proficient with information technology in accounting, including accounting software knowledge, EDP systems, and technology gadgets in the era of industrial revolution 5.0.

d)IT Auditor Mastery (Y) IT Auditor Mastery (Y) Measured through the extent to

which learning motivation, soft skills, and students' perceptions influence the

adaptation to information technology changes in auditing in the Industrial Revolution

5.0 era.

Data Collection Procedure

Questionnaires were collected online using Google Forms. Students will be sent

the questionnaire via social media and email. A pilot test of the questionnaire on 30

respondents was conducted as a test of instrument validity and reliability before data

were collected.

Data analysis

Data collected were submitted to descriptive and inferential statistics.

Descriptive analysis depicted the respondents' profile, while inferential analysis used

multiple linear regression tests for the hypothesis:

a) The influence of learning motivation on auditor IT mastery.

b) There is a significant influence of auditor soft skills on auditor IT mastery.

c) There is a significant influence on student perceptions about the importance of

information technology on IT auditor mastery.

d)The influence of the interaction between learning motivation, auditor soft skills, and

student perceptions of auditor IT mastery.

Validity and Reliability

Instrument validity in Sugiyono (2017) is that the instrument can be used to

measure what should be measured. Hence, validity is an activity or process carried out

to test whether data is valid or not. Validity of the questionnaire will be tested by factor

analysis, while reliability will be tested by Cronbach's Alpha coefficient. Alpha values

above 0.50 are valid and reliable.

Research Ethics

This research will maintain ethics by asking for consent from the respondents

before filling in the questionnaire. The respondents will be told the reason for the

research and promised confidentiality of the information given.

RESEARCH RESULTS

Multiple Linear Regression Analysis

Validity Test

The results of the validity test show that all statement items have a calculated r value > r table or sig < 0.05, so it can be concluded that all statement items are valid.

Reliability Test

The results of the reliability test show that all variables have a Cronbach's alpha value > 0.60, so it can be concluded that all variables are reliable.

Classical Assumption Test

Normality Test

The results of the Kolmogorov-Smirnov normality test show that the significant value is 0.200d > 0.05, so it is normally distributed.

Multicollinearity Test

The results of the multicollinearity test show that all variables have a tolerance value > 0.10 or a VIF value < 10, so it can be concluded that there are no symptoms of multicollinearity or pass the multicollinearity test.

Heteroscedasticity Test

The results of the heteroscedasticity test show that all variables have a sig value > 0.05, so it can be concluded that there are no symptoms of heteroscedasticity or they passthe heteroscedasticity test.

Multiple Regression Test Model

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$

Information:

Y = Auditor Information Technology Mastery

X1 = Learning Motivation

X2 = Auditor Soft Skills

X3 = Student Perception

 α = Constants

 β = Regression coefficient

Y = 2.197 + 0.001X1 + 0.060X2 + 0.769X3

The explanation is as follows:

a. The constant coefficient value is 2.197 with a positive value. This can be interpreted that without the influence of variables X₁, X₂, and X₃ (when all are equal to zero), the dependent variable Y is predicted to be 2.197 units. This means the base level of Y starts at 2.197 before considering the influence of the independent variables.

b. The beta coefficient value of the Learning Motivation variable (X₁) is 0.001, which means if the values of other variables (Soft Skills and Student Perceptions) are held

constant and Learning Motivation increases by 1 unit, then the dependent variable Y will increase by 0.1% (or 0.001 units). Conversely, if Learning Motivation decreases by 1 unit, with other variables constant, then Y will decrease by 0.1%.

- c. The beta coefficient value of the Soft Skills variable (X₂) is 0.060, which means if the values of other variables (Learning Motivation and Student Perceptions) are held constant and Soft Skills increase by 1 unit, then the dependent variable Y will increase by 6.0% (or 0.060 units). Conversely, if Soft Skills decrease by 1 unit, with other variables constant, then Y will decrease by 6.0%.
- d. The beta coefficient value of the Student Perceptions variable (X₃) is 0.769, which means if the values of other variables (Learning Motivation and Soft Skills) are held constant and Student Perceptions increase by 1 unit, then the dependent variable Y will increase by 76.9% (or 0.769 units). Conversely, if Student Perceptions decrease by 1 unit, with other variables constant, then Y will decrease by 76.9%.

Results of the Determination Coefficient (R2) Test

The Coefficient of Determination (R²) is 0.532, which means that 53.2% of the variance in the dependent variable Y can be explained by the independent variables (Learning Motivation, Soft Skills, and Student Perceptions). The remaining 46.8% of the variance is explained by other factors outside the model or by random error.

T Test

The partial influence of independent variables on dependent variables is as follows:

- 1. The computed t value of the Learning Motivation variable (X_1) is 0.013 < t table value of 2.008, and the significance value is 0.990 > 0.05. Therefore, the null hypothesis (H_0) cannot be rejected and the alternative hypothesis (H_a) is rejected, which implies that the Learning Motivation variable does not have a significant effect on the dependent variable.
- 2. The computed t value of the Soft Skills variable (X_2) is 0.846 < t table value of 2.008, and the significance value is 0.401 > 0.05. Thus, the null hypothesis (H_0) cannot be rejected and the alternative hypothesis (H_a) is rejected, indicating that the Soft Skills variable does not significantly affect the dependent variable.
- 3. The computed t value of the Student Perception variable (X_3) is 7.088 > t table value of 2.008, and the significance value is < 0.001 < 0.05. Therefore, the alternative

hypothesis (H_a) is accepted and the null hypothesis (H₀) is rejected, meaning that the Student Perception variable has a significant positive effect on the dependent variable.

F Test

The ANOVA test results show that the calculated F value is 19.361, which is greater than the F table value of 2.770 at a significance level of 0.05 (df1 = 3; df2 = 51). In addition, the significance value is less than 0.001, which is below the 0.05 threshold. Therefore, the null hypothesis (H₀) is rejected and the alternative hypothesis (H_a) is accepted. This means that the independent variables Learning Motivation, Soft Skills, and Student Perceptions simultaneously have a statistically significant effect on the dependent variable in the regression model.

DISCUSSION

The findings from this research indicate that the multiple linear regression model satisfies all standard assumptions, which include normality, lack of multicollinearity, and homoscedasticity. Such results validate the suitability of the dataset for regression analysis, ensuring that the estimated model yields unbiased and trustworthy outcomes. Additionally, the tests for validity and reliability confirm that the tools used to assess Learning Motivation, Soft Skills, and Student Perceptions are both valid and dependable.

The partial regression analysis shows that the variable of Student Perception (X_3) has a noteworthy positive impact on Auditor Information Technology Mastery, with a computed t-value of 7.088 and a significance level lower than 0.001. This indicates that students' views regarding their educational settings, instructional resources, and overall academic experiences significantly affect their capability in mastering information technology pertinent to auditing. In contrast, Learning Motivation (X_1) and Soft Skills (X_2) do not show any statistically meaningful influence on the dependent variable, as evidenced by their t-values falling below the critical value and p-values greater than 0.05. This suggests that within the confines of this investigation, these variables alone may not serve as strong indicators of IT mastery.

Nevertheless, the overall model demonstrates statistical significance, as shown by the F-test results (F = 19.361, p < 0.001), confirming that Learning Motivation, Soft Skills, and Student Perceptions collaboratively impact Auditor IT Mastery. The coefficient of determination (R^2) sitting at 0.532 further implies that 53.2% of the variance in IT mastery can be attributed to the combined influence of these factors,

while the remaining 46.8% is due to other elements not accounted for in the model, such as quality of curriculum, teaching strategies, technological infrastructure, or differences among individual learners.

CONCLUSION

The study finds that of the independent variables analyzed, only Student Perceptions significantly and positively influence Auditor Information Technology Mastery. This highlights the essential impact that students' views of their educational journey have on improving their IT skills in the auditing sector. Conversely, Learning Motivation and Soft Skills do not show notable individual impacts on the dependent variable. Even though two variables show no noteworthy partial effects, the overall regression model is still relevant, accounting for 53.2% of the variance in the dependent variable. This indicates that although the separate effects of Learning Motivation and Soft Skills are not considerable, their joint impact, along with Student Perceptions, plays a crucial role in developing students' IT proficiency. These results underscore the importance for educational institutions to emphasize improving student perceptions by enhancing the quality of teaching, the relevance of learning resources, and fostering a supportive learning atmosphere. It is suggested that future studies include more variables like practical IT training, digital literacy initiatives, and institutional backing to better clarify the factors affecting IT proficiency in auditing education

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Besides, we recognize the role played by technological tools and programs applied in analyzing data and presenting this study. The use of SPSS to analyze statistics and other computer software has greatly enhanced our work in that it allowed us to come up with sensible conclusions with high accuracy and quickness. The effects of digital transformation in research methodology have contributed greatly to elevating the validity of this study.

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REFERENCES

Bawamenewi, M. M., Siahaan, A. M., & Saribu, A. D. (2024). Persepsi Mahasiswa Akuntansi terhadap Pengetahuan Teknologi Informasi Akuntansi (Studi Kasus pada

- Mahasiswa Program Studi Akuntansi Universitas HKBP Nommensen). *Jurnal Mahasiswa Humanis*, 4(1).
- Binus University School of Accounting. (2020, July 15). Skill dan Knowledge Yang Dibutuhkan Auditor Dalam Menghadapi Revolusi Indutri 4.0. Accounting.Binus.Ac.Id.
- Dea, O.:, Saputri, W., & Kuntadi, C. (2024). PT. Media Akademik Publisher PENGARUH KOMPETENSI, INTEGRITAS DAN MOTIVASI AUDITOR TERHADAP KUALITAS AUDIT. *JMA*), 2(4), 3031–5220. https://doi.org/10.62281
- Diana Putri Anggraini. (2021, November 26). *Pengembangan Soft Skill Akuntan dalam Menghadapi Era Society 5.0*. Www.Kumparan.Com.
- Duyen Nguyen, T. H., Le, V. L., Van Hau, N., Do, D. T., & Thu Thao, N. T. (2020). Evaluation of auditors' professional skills in local auditing firms in Hanoi. *Journal of Asian Finance, Economics and Business*, 7(9), 583–591. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.583
- Elvira, N. Z., & Nirwana, H. (2022). Studi Literatur: Motivasi Belajar Siswa dalam Pembelajaran. *Jurnal Literasi Pendidikan*, *1*(2). https://doi.org/10.56480/eductum.v1i2.767
- Gloria, & Salma. (2023, December 6). Professor Tri Priyambodo: Universities Have Huge Responsibility to Accelerate Digital Technology Literacy. Universitas Gajah Mada.
- Gloriabarus. (2023, November 24). Revolusi Industri Hasilkan Masyarakat 5.0, Perguruan Tinggi Punya Tanggung Jawab Besar untuk Akselerasi Literasi Teknologi Digital.
- Ignatius Edward Rianto. (2023, December 15). Penerapan Kecerdasan Buatan (AI) dan Analisis Data dalam Proses Audit: Transformasi Menuju Keefektifan dan Efisiensi. School Of Accounting BINUS.
- Kamal. (2021). Pengertian Audit, Fungsi, Tahapan, dan Jenisnya. Gramedia Blog.
- Kurniawati, S., & Primasatya, R. D. (2024). Model Pengembangan Kemampuan Auditor Dalam Tantangan Era Sosiety 5.0 Di Indonesia. *Owner*, 8(1), 212–221. https://doi.org/10.33395/owner.v8i1.1891
- M. Fajarudin Akbar, & Nur Fitriyah. (2024). ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI KUALITAS AUDIT PADA BADAN PEMERIKSA KEUANGAN (BPK) PROVINSI NTB. *Journal Risma*, 4(Audit).
- M.Fauzan. (2009). PERSEPSI DOSEN AKUNTANSI DAN MAHASISWA AKUNTANSI TERHADAP TEKNOLOGI INFORMASI YANG HARUS DIKUASAI OLEH AKUNTAN PUBLIK. Universitas Muhammadiyah Surakarta.
- Meutia Layli. (2019, August 7). Fungsi Audit Pada Perusahaan. Feb. Almaata. Ac. Id.
- Rijal Fahmi Mohamadi. (2024, December 6). Audit Laporan Keuangan: Tahapan & Dokumen Persyaratan. Mekari Jurnal.
- Suganda, T. R., Ambarwati, S., & Astuti, T. (n.d.). *PENGARUH SKEPTISISME PROFESIONAL, INDEPENDENSI, DAN PENGALAMAN AUDITOR TERHADAP KEMAMPUAN AUDITOR MENDETEKSI FRAUD.*
- Universitas Ahmad Dahlan. (2022, November 18). Era Industri 5.0 dan Kompetensi yang Dibutuhkan. Lldikti5.Kemdikbud.Go.Id.
- Vami, O.:, Sekolah, R., Ilmu, T., & Yai, E. (n.d.). *PENGARUH KOMPETENSI, INDEPENDENSI DAN PROFESIONALISME AUDITOR TERHADAP KUALITAS AUDIT.* http://www.antara.co.id

- Wednesd Avioni Azzalea. (2022). ANALISIS PENERAPAN KODE ETIK AUDITOR DALAM MENJAGA KERAHASIAAN DATA KLIEN DI KANTOR AKUNTAN PUBLIK SARASTANTO DAN REKAN. Universitas Islam Sultan Agung Semarang. Wikipedia. (2022, July 9). Standar Auditing. Wikipedia.
- Yoga, B., & Dinarjito, A. (2021). THE IMPACT OF KEY AUDIT MATTERS DISCLOSURE ON COMMUNICATIVE VALUE OF THE AUDITOR'S REPORT: A SYSTEMATIC LITERATURE REVIEW. *Jurnal Akuntansi Dan Keuangan Indonesia*, *18*(1), 15–32. https://doi.org/10.21002/jaki.2021.02
- Yudhistari, E., & Purnomo, H. (2023). Menumbuhkan Motivasi Belajar Siswa Pasca Pembelajaran Daring Akibat Pandemi COVID-19. In *Trends in Applied Sciences, Social Sciences, and Education* | (Vol. 1, Issue 1).
- Zulkarnaen, W., Fitriani, I., & Yuningsih, N. (2020). Pengembangan Supply Chain Management Dalam Pengelolaan Distribusi Logistik Pemilu Yang Lebih Tepat Jenis, Tepat Jumlah Dan Tepat Waktu Berbasis Human Resources Competency Development Di KPU Jawa Barat. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 4(2), 222-243. https://doi.org/10.31955/mea.vol4.iss2.pp222-243.

FIGURE AND TABLE

Figure 1. Conceptual Framework

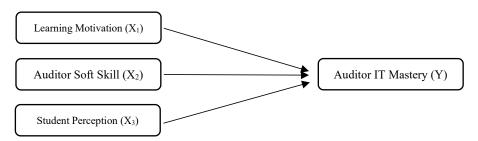


Table 1. Validity Test Results

Variable	Indicator	r Count	r Table	Significance	α	Description
Learning	X1.1	0,899	0,2656	0,001	0,05	Valid
Motivation	X1.2	0,571	0,2656	0,001	0,05	Valid
(X_1)	X1.3	0,889	0,2656	0,001	0,05	Valid
Auditor Soft	X2.1	0,803	0,2656	0,001	0,05	Valid
skills (X ₂)	X2.2	0,816	0,2656	0,001	0,05	Valid
	X2.3	0,592	0,2656	0,001	0,05	Valid
Student	X3.1	0,677	0,2656	0,001	0,05	Valid
Perception	X3.2	0,781	0,2656	0,001	0,05	Valid
(X_3)	X3.3	0,629	0,2656	0,001	0,05	Valid
Auditor IT	Y1	0,646	0,2656	0,001	0,05	Valid
Mastery (Y)	Y2	0,643	0,2656	0,001	0,05	Valid
	Y3	0,624	0,2656	0,001	0,05	Valid

Source: SPSS data processed, 2025

Table 2. Reliability Test Results

Variable	Cronbach's alpha	Standard	Description
Learning Motivation (X1)	0,651	0,60	Reliable
Auditor Soft skills (X2)	0,718	0,60	Reliable
Student Perception (X3)	0,833	0,60	Reliable

Auditor IT Mastery (Y) 0,821 0,60 Reliable

Source: SPSS data processed, 2025

Table 3. Normality Test Results One-Sample Kolmogorov-Smirnov Test

				Unstandardize d Residual
N	Mean			55
Normal Parameters ^{a,b}	Std. Devi	ation		.0000000
	Absolute			1.01561941
Most Extreme Differences	Positive			.078
	Negative			.078
Test Statistic	C			072
Asymp. Sig. (2-tailed) ^c				.078
Monte Carlo Sig. (2-tailed) ^d	Sig.			.200d
,	99%	Confidence		.543
	Interval			
			Lower Bound	.530
			Upper Bound	.555

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.
- e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: SPSS data processed, 2025

Table 4. Multicollinearity Test Results
Coefficient^a

Coefficient					
Model		Collinearity Statistics			
		Tolerance	VIF		
1	X1	.847	1.181		
1	X2	.877	1.141		
	X3	.906	1.105		

a. Dependent Variable: Y

Source: SPSS data processed, 2025

Table 5. Heteroscedasticity Test Results Coefficients^a

Unstandardized Standardized Model Coefficients Coefficients t Sig. Beta Std. Error 1.160 1.052 .275 .847 (Constant) .059 .041 -.212 .877 X1 .156 1 .755 X2 .012 .040 -.045 .905 X3 .034 .061 .080 .679

a. Dependent Variable: ABS_RES

Source: SPSS data processed, 2025

Table 6. Multiple Linear Regression Equation Coefficients^a

Model		Unstandardized Coefficients	
Model		В	
1 (Constant)		2.197	

X1	.001
X2	060
X3	.769

a. Dependent Variable: Y

Source: SPSS data processed, 2025

Table 7. Test Results of the Coefficient of Determination (R2)

Model Summary

Model	R	R Square	Adjusted R	Std. Error of the	
			Square	Estimate	
1	.730a	.532	.505	1.027	

a. Predictors: (Constant), X3, X1, X2

Source: SPSS data processed, 2025

Table 8. t Test Results Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	2.197	1.880		1.169	.248
,	X1	.001	.074	.001	.013	.990
1	X2	060	.071	.087	.846	.401
	X3	.769	.109	.713	7.088	<.001

a. Dependent Variable: Y

Source: SPSS data processed, 2025

Table 9. F Test Results

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	61.224	3	20.408	19.361	<.001 ^b
1	Residual	53.758	51	1.054		
	Total	114.982	54			

a. Dependent Variable: Y

b. Predictors: (Constant), X₃, X₁, X₂

Source: SPSS data processed, 2025