

# CHAPTER I

## INTRODUCTION

### 1.1 Background

Recently, prominent accounting firms, commonly referred to as the Big Four, have unveiled proprietary financial robots aimed at automating tasks like data recognition, invoice processing, and the creation of financial reports. These robots hold the promise of streamlining routine accounting duties, enabling business executives lacking extensive accounting expertise to base decisions on fundamental accounting insights (Bullock, 2017). This has led to a growing chorus of voices demanding that the accounting industry investigate potential AI integrations. The adoption of AI technology is gaining momentum across various accounting domains, encompassing activities such as analyzing financial distress, detecting fraudulent activities, forecasting stock market trends, and conducting audits (Gepp et al., 2018). Accounting firms, as highlighted by KPMG (2021), are embracing this trend as they realize the potential benefits it offers. increasingly seek professionals with technical skills and expertise in data analysis, making these capabilities crucial components of accounting education courses (Andiola et al., 2020).

Barclays (2018) predicts that the accounting profession will face challenges due to advancing technologies, particularly AI and machine learning. Over the next two to three decades, there is a possibility that traditional accounting roles may be automated by machines and robots. Nevertheless, humans possess inherent qualities such as intuition, critical thinking, and logic, giving them an edge over machines.

Human capabilities, including the five senses—sight, hearing, touch, taste, and smell—allow for spontaneous and nuanced decision-making.

A survey conducted at KPMG Internal Audit IT conferences in 2016 and 2017 revealed that nearly half of the participants acknowledged the use of artificial intelligence within their organizations. However, a significant proportion expressed uncertainty about technology-enabled governance, and many admitted a lack of understanding regarding the impact of technology on their audit approach (KPMG, 2018b).

In Indonesia, despite more than 30,000 graduates annually in accounting, concerns about job losses in the accounting and finance sector persist due to advancements in big data, machine learning (ML), and AI (Eka Putra, 2019). This situation poses both challenges and opportunities for accounting education. With the increasing prevalence of AI in accounting, the pressure on students to secure employment post-graduation, and the need for faculty to balance teaching and research, there is a critical need to assess the focus of university education—whether it should lean towards a liberal education or professional training.

To comprehend AI better, a multidimensional framework has been developed, dividing AI into different sorts of tasks and intelligence levels. The framework also considers whether the AI is virtual or robotic (Davenport et al., 2020). Despite the advancements, reaching the level where AI can learn beyond its original programming—context awareness—is projected to be achievable by 2050 with only a 50% likelihood.

Based on their findings, men auditors have a more positive impression of AI than their female colleagues (Ologe, 2020). Auditors' views on accounting AI were

unaffected by characteristics including age, education, experience, specialty, qualifications, and professional connections. The research highlighted the need of updating accounting curricula and promoting ongoing professional development in order to keep up with changing trends.

Recent works by Putri Dwima Ernisa and Padli Pirdaus (2022) emphasize the transformative impact of emerging technologies—Big Data, ML, and AI—in accountancy. These technologies have led to significant changes in accountancy procedures, reducing errors, increasing efficiency, and reshaping career structures in the accounting profession.

Triatmaja (2019) stresses the substantial implications of artificial intelligence on the accounting profession, advocating for increased competence in digital technology. The demand for skills in digital technology is highlighted, particularly in the fields of accounting, auditing, and financial management.

Perceptions of accountants' roles in the Fourth Industrial Revolution vary significantly, according to Merlina and Nuraini (2020). However, no significant differences were observed between accounting lecturers and students, older and younger subjects, or between genders.

Amdanata et al. (2023) find that technological readiness does not influence AI knowledge in area of accounting. This suggests that the adoption and understanding of AI in accounting are not necessarily linked to the general technological readiness of individuals.

Wijaya (2021) underscores the need for the accounting profession to adapt to the digital age. With a shift from traditional journalism-focused roles to increased

competition from technology and programmers, there is an urgent call for teaching information systems in accounting programs.

Luo, Meng, and Cai (2018) position artificial intelligence as a driving force in global economic development, with China actively regulating the AI industry to align with its new economic development normal. The accounting industry, in this era of reform and innovation, must strengthen its position in AI application to harness new information technologies.

Rahmawati (2022) highlights the strategic nature of the accounting profession, requiring a forward-looking vision and adaptability to technological shifts. The shift in accountants' responsibilities demands increased skills, aligning with global business growth and competition.

Lefaan and Juniarti (2019) conclude that despite awareness among students about the Fourth Industrial Revolution, particularly in technology, there is a lack of perceived threat. The next generation of problem solvers is well aware that they will need to master cutting-edge technologies like AI, of Things if they are to face the challenges of the future.

The importance of studying accounting students' views on the potential effects of AI on the accounting profession in the future cannot be overstated. This research tries to provide a high-level picture of accounting students' confidence in working with AI, specifically for West Sumatra.

## **1.2 Problem Formulation**

The issues with this research, given the presented context, are:

1. “Does the curriculum provided by universities in West Sumatra have a positive relationship with the competency of Accounting Students?”
2. “Does Accounting Student competence have a relationship with readiness to work with AI?”

### 1.3 Purpose Research

The following objectives will be addressed by this research, taking into account the presented context and issue statement:

1. “Knowing Understanding the perspectives of accounting students concerning the integration of AI in the future accounting profession.”
2. “Knowing the Assessing the comprehension of accounting students regarding AI and its prospective applications in the accounting field.”
3. “With the information Looking at what current and future accounting students think about the potential benefits and drawbacks of using AI in the field.”
4. “With the information Finding out how well accounting students are equipped to deal with the changes that will be brought about by AI's adoption in the field in the future.”

### 1.4 Research Benefit

Those that stand to gain from this study include:

1. For Researchers

Has the potential to provide fresh data about how accounting students see the potential use of AI in the field, which may serve as a springboard for other studies.

## 2. For Students

So that they are better equipped to deal with future difficulties, students may benefit from this study's findings by learning more about AI and its potential effects on the accounting profession.

### 1.5 Writing Systematic

The systematic of writing in this study consist of five chapters with detail as Follows:

**Chapter I** : In this part, you will find the study's rationale, research questions, research objectives, study importance, and the methodical process used to write it.

**Chapter II** : What follows is an examination of the theoretical framework that provides the basis for the study. In addition, it discusses prior research that is relevant to the present study, providing background on theoretical frameworks, conceptual frameworks, and the generation of hypotheses.

**Chapter III** : Covering topics such as study design, data collecting methods, operational definitions, measurement variables, data analysis methodologies, and demographic and sample selection, this chapter provides an overview of the research methodology.

**Chapter IV** : This part delves into the study findings and answers the questions that came from the original issue statement.

**Chapter V** : Concluding the investigation and offering suggestions for relevant future studies, the last chapter summarizes the findings.

