CHAPTER I
INTRODUCTION

This chapter provides a brief description of the entire contents of the research. In detail, this chapter presents a background of the research, the research problems, the research questions, the purpose of the study, and the contribution of the study.

A. Background of the Research

The recent advances of Artificial Intelligence (AI) have contributed to the education field. AI has transformed traditional teaching methods by introducing personalized and adaptive learning environments (Kolluru et al., 2018; Sajja et al., 2024). In particular, AI technologies present multiple opportunities for enhancing English Language Teaching (ELT) and learning. This global interest in AI integration is also reflected regionally. For instance, Asia is currently at the forefront of AI in enhancing ELT and learning research, with over two-thirds (72%) of the studies coming from Asia (Trajectory Partnership, 2018). Specifically, AI in English education is anticipated to grow by 43% from 2018 to 2023 (Becker et al., 2018), whereas the Horizon Report 2019 (Alexander et al., 2019) predicts AI applications of teaching and learning will develop even more sophisticatedly. More studies are now being conducted on AI in ELT than there were five or ten years ago, mirroring the recent rise in the number of AI tools available and public interest in AI.

To build on this global interest, numerous studies have discussed the integration of AI in enhancing ELT and learning. Dizon and Tang (2020), in their research, found an AI-powered personal voice assistant for practicing speaking called Alexa. The study showed that Alexa can help learners in improving students' speaking performance. Amin's (2023) study reported that AI ChatGPT can empower lecturers to cater to individual student needs and to provide greater classroom support by enabling personalized learning experiences. Similarly, Annamalai et al. (2023) found that chatbots can support learner autonomy and competence. The

result shows the use of an AI coach, which is tailored based on the learner's needs Prove that learners' speaking ability is increased and more accurate in grammar and structure. For instance, a study conducted by Chon et al. (2021) revealed that Translation Generator aided learners to write essays and improve their writing skills. Thus, Nazari et al. (2021) also examined the use of Grammarly as a feedback tool for English language learners. They reported good outcomes, with an improvement in behavioral, emotional, and cognitive engagement, as well as self-efficacy in writing. Meanwhile, Kazu and Kuvvetli (2023) highlight his research that automatic speech recognition tools help students to improve pronunciation. Additionally, Annamalai et al. (2023) identified that AI Chatbot is able to improve learners' listening skills.

These findings consistently demonstrate AI's promise in broadening and improving language teaching and learning. Despite this growing of literature, the majority of existing studies still concentrate on standard or traditional institutional contexts, while there are still very few studies that look at how AI is used for English teaching and learning at technology-focused universities like UNIKOM.

As a leading institution in the field of digital technology and innovation, UNIKOM stands out for its unique approach to digital literacy and technology adoption in academic practice. Within the English Department at UNIKOM, high digital literacy and advanced technology make it easier for lecturers and students to use AI tools in language learning. This environment is different from traditional universities, where access to technology and digital skills may be more limited. These specific conditions influence both the opportunities and challenges around AI implementation in the classroom.

This contextual gap highlights the need for research to investigate the benefits, practical realities, user readiness, and dynamics of AI-supported English Language Teaching and Learning. By focusing the research setting at UNIKOM, further study will generate more granular insights relevant for the development and refinement of AI-enhanced language teaching and learning. Particularly in settings emphasizing technological fluency and adaptive teaching methods.

To address the current gap in research on AI integration in ELT, a pilot study was conducted involving four English lecturers from the English Department at UNIKOM. In alignment with UNIKOM's reputation as a digitally advanced institution, all participating lecturers demonstrated a high degree of digital literacy and familiarity with AI-assisted tools commonly used in ELT, such as ChatGPT, Grammarly, Quill Bot, Perplexity, Deep Seek, Poli.ai, Consensus and etc. The demographic variables observed in the study included gender and teaching experience, with participants representing both male and female with more than 10 years teaching experiences.

The findings showed that, the high level of digital literacy minimized the influence of both gender and teaching experience on the initial use of AI tools. All lecturers, regardless of these demographic factors, were equally opened and confident in utilizing AI for teaching purposes. While their frequency and methods of AI integration varied based on personal teaching styles or subject demands. Both male and female lecturers indicated similar levels of engagement. Lecturers demonstrated comparable adaptability and familiarity in applying AI in the classroom. The challenges lecturers identified were less about access or ability and more about the need for ongoing pedagogical support, maintaining student motivation, and optimizing assessment practices in light of widespread technological adoption.

Thus, the results suggest that practical integration of AI is far more influenced by individual pedagogical approaches and institutional culture than by gender or years of teaching experience. The good digital foundation among lecturers effectively equalizes potential biases associated with demographic backgrounds, positioning pedagogy and openness to innovation as the most essential factors in successful AI integration within English Language Teaching.

While lecturers play an essential role in integrating AI into the classroom environment, it is equally important to reveal students' perspectives regarding the benefits of AI in English language learning. Students' attitudes, engagement, and experiences influence the success of the learning-based technology. Moreover, this study also reveals students' perspective regarding the benefits of AI integration in

English language learning. The acceptance, usage patterns, and attitudes toward AI may still be influenced by individual experiences, academic backgrounds, and personal preferences. Therefore, understanding both lecturer and student perspectives provides a more holistic view of AI integration in ELT and learning settings.

Thus, as AI continues to transform education globally, its role in ELT and learning becomes important. This study aims to contribute new insight to fulfill this contextual gap by exploring AI integration into ELT and learning at UNIKOM Bandung. Through a qualitative approach using case study design the researcher will explore AI integration into ELT and reveal AI benefits in English language learning from students' perception and deep insight regarding AI challenges from lecturers' perception.

B. Research Problems

The integration of AI in ELT and learning has captured increasing attention worldwide due to its potential to enhance learning outcomes, personalize learning, and support language skill development. While numerous studies have highlighted the pedagogical benefits of AI in improving speaking, writing, listening, reading, and pronunciation (Dizon & Tang, 2020; Nazari et al., 2021; Kazu & Kuvvetli, 2023), most of these investigations have focused on general educational settings, particularly in technologically advanced and well-resourced institutions. There is still a noticeable lack of research exploring how AI is integrated and perceived within digital university context.

The preliminary findings from a pilot study at UNIKOM revealed varying levels of insight and usage of AI tools such as ChatGPT, Grammarly, and Quill bot, Perplexity, Deep Seek and etc. among lecturers. Despite familiarity with these tools, lecturers expressed a need for pedagogical training and raised concerns about ethical issues and over-reliance on technology. This study addresses the gap in understanding how AI is integrated into ELT at UNIKOM, focusing on both lecturers' challenges and students' perceptions of AI's benefits in a technology-driven learning environment.

C. Research Questions

Based on the background, the researcher formulates the problem questions as follows:

1 How is AI being integrated into ELT and learning in English Department at UNIKOM Bandung?

2 What are the benefits of integrating AI in English language learning from the students' perspective perspectives in English Department at UNIKOM Bandung?

3 What are the challenges of integrating AI in ELT from lecturers' perspectives in English Department at UNIKOM Bandung?

D. Purposes of the Study

Based on the research question mentioned, the study is aimed:

1 To identify the integration of Artificial Intelligence (AI) in English Language Teaching and Learning at perspectives in English Department at UNIKOM Bandung.

2 To reveal the benefits of integrating AI in English language learning from the students' perspective in English Department at UNIKOM Bandung.

3 To find out the challenges of integrating AI in ELT from lecturers' perspectives in English Department at UNIKOM Bandung.

E. Contributions of the Study

This study provides both theoretical and practical contributions. By examining how AI is integrated into English Language Teaching and Learning through the lens of the Technology Acceptance Model (TAM), it offers insights into key factors influencing user acceptance in educational settings.

1 Theoretical Contribution

The result of this study is expected to give some theoretical contributions. Ultimately, it can contribute to the understanding of the Technology Acceptance Model (TAM) in the context of educational technology by applying AI. Therefore, it will examine some factors like perceived usefulness, ease of use, and privacy,

which are critical for understanding student attitudes towards AI in language learning and teaching.

2   Practical Contribution

       This research is expected to give some practical contribution for educators, students, and other readers. It is expected to provide valuable insight and guidance for learners and educators on how to integrate AI in English Language Teaching (ELT) and learning effectively. By recognizing students' perceptions of AI's role, educators can adopt strategies that align with students' needs and strengthen engagement and learning outcomes. This includes choosing AI tools that foster self-paced learning, provide adaptive feedback, and are sensitive to students' privacy concerns.

3   Methodological Contribution

       This study contributes methodologically by applying a qualitative approach using interviews, questionnaires, and observations to explore AI integration in English Language Teaching (ELT) and learning within technology-based institution in Indonesia. It addresses a gap in existing research by focusing on a technology-based educational setting, incorporating contextual factors such as gender and teaching experience. The study also offers insights that can inform future research instruments and methodologies for similar underrepresented educational environments.