Student Preferences on Using Artificial Intelligence (AI) Platform in Language Learning

Roswani Siregar^{1*}), Heni Subagiharti²), Diah Syafitri Handayani³), Sutarno⁴), Ahmad Laut Hasibuan⁵), Efendi Barus⁶)

¹⁾ University of Al-Azhar, Medan, Indonesia
 ²⁾ English Language Education, FKIP, University of Asahan, Indonesia
 ³⁾ Japanese Studies Program. Faculty of Vocational, University of Sumatera Utara, Indonesia
 ⁴⁾ Cendana Polytechnic, Medan, Indonesia
 ⁵⁾ Department English Education, Post Graduate, University of Muslim Nusantara Al Washliyah, Indonesia
 ⁶⁾ English Literature, Faculty of Literature Universitas Islam Sumatera Utara. Medan, Indonesia
 ^{*)} Corresponding Author: roses_air@yahoo.com

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Abstract

Artificial Intelligence (AI) is a system that is developed and continues to innovate in various fields with the aim of making human work easier. Currently Artificial Intelligence technology is also used in the field of education, including teaching foreign languages. This article aims to find out student references regarding the use of Artificial Intelligence. The use of artificial intelligence (AI) in English Language Teaching (ELT) can be seen as both a benefit and a potential threat, depending on how it is used and implemented. AI technology has the potential to make language learning more efficient and effective, by providing personalized feedback and practice exercises tailored to the different student's needs and learning styles. Thus, the method used to determine this phenomenon is qualitative descriptive with questionnaire data collection techniques. The result of the study showed that Artificial Intelligence (AI) has the potential to play an important role in helping students with various tasks in learning English, such as finding out the meaning and definition of words, translating sentences, and improving grammar with reliable and timely results. AI also has an impact on student abilities. Students are increasingly dependent on AI assistance in learning, thereby reducing its role in critical thinking and using memory.

Keywords: artificial intelligence, language, learning, application, students, perception.

I. INTRODUCTION

Currently, the emergence of Chatbot artificial intelligence (AI) technology has significantly changed various aspects of human life, including learning and teaching in higher education [1]. especially in English language teaching and learning. Artificial intelligence (AI) technology is now widely used in English language teaching and learning to help students and lecturers in higher education, especially in the post-COVID-19 pandemic era where online learning via digital learning platforms has become commonplace. carried out by teachers and students all over the world.

The discovery of new artificial intelligence (AI) chatbot technologies, such as ChatGPT, in early 2023 has triggered significant changes in English language teaching and learning [2]. English teachers have the opportunity to integrate artificial intelligence into learning, as AI offers many advantages, for example: AI-powered applications can help students learn languages and practice speaking every day [3] motivate students to learn the language [4]. Based on preliminary studies, English lecturers in Indonesia have integrated artificial intelligence into English language learning which has become very commonplace after the emergence of ChatGPT in early 2023. Most English lecturers use various AIs for various purposes. For example, asking and solving difficult questions with ChatGPT, checking grammar errors with Grammarly, paraphrasing with Quilbot, reviewing literature with Mendeley, and checking plagiarism with Turnitin [5].

In various literature, it is stated that Artificial Intelligence (AI) can have a positive impact, such as helping humans complete tasks and work, and being able to answer various current problems. On the other hand, Artificial Intelligence (AI) is also a threat and has a negative impact on human resources, because many human jobs are slowly starting to be replaced by Artificial Intelligence (AI). In the future, the development of Artificial Intelligence (AI) will become increasingly super sophisticated, therefore society must continue to upgrade itself to keep up with developments in science, especially in the field of technology. In the future, Artificial Intelligence (AI) with all its breakthroughs will become even more super sophisticated. In



essence, AI can replace human work, but Artificial Intelligence (AI) will never replace the emotional side of humans. Therefore, Indonesian people must continue to develop and maintain their emotional intelligence so that in the future its existence will still be needed.

The Use of AI in Education

The term "Artificial Intelligence" (AI) first appeared in 1956 at a conference at Dartmouth College, which discussed the possibility of creating and programming machines that could understand and perform tasks previously thought to be solely human intelligence [6]). Since then, the concept of AI has gone through various stages of evolution and undergone several important transformations, reflecting the increasing complexity and power of intelligent systems. The field of modern artificial intelligence has developed and developed dynamically. Recently, the use of AI tools to support and optimize educational processes has become very popular [7].

The ultimate goal of AI is to provide every student with a high-quality, personalized, and accessible education that opens up lifelong opportunities. AI can also be a key component in implementing innovative approaches to knowledge assessment systems, such as adaptive and continuous assessments that use them. However, researchers note that the use of AI technology in education and assessment brings several challenges and problems[8]. These include contradictory approaches to the pedagogical process, the lack of sufficiently convincing evidence regarding its effectiveness, the changing role of teachers in the learning process, and other ethical issues that require careful consideration and resolution.

Early AI systems, such as Samuel and Newell's (1959) pioneering work on computer-based learning, laid the foundation for the use of smart technology in educational settings. These systems use rule-based algorithms to deliver learning content and engage learners in interactive activities. Language learning by utilizing information technology will also increase learners' English language skills [9].

As time goes by, AI applications in education expand, covering areas beyond smart tutor systems. The emergence of natural language processing (NLP) and machine learning techniques is further expanding the possibilities of AI in education. Advances in NLP algorithms and machine learning open new opportunities for intelligent feedback generation and language understanding, revolutionizing the language-learning environment[10].

The history of AI in education shows ongoing efforts to harness smart technology for educational purposes. AI has a rich history in education, marked by milestones in smart tutoring systems, adaptive learning, and personalized instruction[11]. This historical overview highlights the continuous evolution of AI in education and paves the way for exploring its particular applications in English language teaching.

Over the past decade, intelligent systems and artificial intelligence (AI) have played an important role in transforming educational practices and the process of assessing student achievement. By combining advanced machine learning, natural language processing, and data analysis technologies, intelligent systems have become an integral part of the educational process. They not only provide the ability to automatically assess student learning achievements but also open new prospects for personalized learning and individual development of higher education students[12].

In the digital era, the field of education has witnessed a significant transformation through the integration of Artificial Intelligence (AI). With its potential to revolutionize various sectors, AI has emerged as a promising tool in enhancing the teaching and learning experience. English language teaching, in particular, faces many challenges in meeting the needs of diverse learners. Therefore, exploring the effectiveness of AI in English language teaching becomes very important to reveal new opportunities in language education.

AI Applications in English Language Teaching

In recent years, AI has gained great attention in English language teaching, offering an innovative approach to improving the learning experience. AI applications have diversified in various aspects of language teaching, providing new opportunities for personalized and adaptive learning. AI technology is currently used in English language teaching to support language learning, facilitate communication, and provide feedback to learners [13].

Language Learning Support. AI technology is used to provide language learning support to students. AI-powered platforms and tools offer interactive practice, real-time feedback, and adaptive content delivery based on learner needs and proficiency levels. AI-based platforms use machine learning algorithms to curate content and exercises specific to each learner, improving the efficiency and effectiveness of their language learning [14].

Communication Facilitation. AI applications facilitate communication between learners and native English speakers or language partners. Virtual tutors and chatbots equipped with AI capabilities engage in conversational exercises with learners, providing an immersive language learning experience. Interacting with virtual tutors and AI-based chatbots improves learners' speaking skills and increases their confidence in using English in real-life situations[15].

Providing Feedback. AI technology makes it possible to provide timely and targeted feedback to learners. Through speech recognition and natural language processing, AI systems analyze students' speech or writing output and provide feedback on pronunciation, grammar and vocabulary usage. AI-based speech recognition systems offer real-time feedback and error correction, assisting learners in improving their pronunciation and developing accurate speaking skills [16].

Personalized Instructions. AI-based adaptive learning systems offer personalized instruction by structuring learning content and activities according to learners' individual needs and development. These systems use machine learning algorithms



to analyze learner performance data and adjust learning paths as needed. AI-based adaptive learning systems provide personalized learning paths and customize instructional materials according to learners' proficiency levels, optimizing their learning experience[14].

AI algorithms can analyze student progress and adjust the curriculum, ensuring that students focus on the areas that need the most improvement. AI can provide access to a wide range of language learning resources, including multimedia content, online courses, and interactive exercises, that cater to a wide range of learning preferences. AI-powered language learning platforms often incorporate gamification elements, such as points, badges, and leaderboards, to keep learners motivated and engaged.

These current applications of AI in English language teaching demonstrate the potential of AI technology in enhancing the language learning experience by providing personalized instruction, facilitating communication, and providing targeted feedback. By leveraging AI tools, language educators can create engaging and adaptive learning environments according to learners' individual needs.

Research Aim and Research Questions

In the context of this research, it is necessary to investigate the extent of students' views or preferences regarding the use of AI, especially in language learning. In this study, the author presents students' views on the emergence of AI in helping them in learning foreign languages. Amid technological developments that make things easier for humans, what is the picture of the use of AI by students in language learning?

This research focuses on identifying student preferences in using AI in language learning. This research aims to determine the extent of student preferences in using AI, especially in language learning. Apart from that, to find out students' opinions about the advantages and limitations of using AI and its impact on the users themselves. By summarizing this information, it is hoped that this article can help develop the education sector and contribute to improving the quality of education, making it more individualized, accessible and effective through intelligent systems.

II. METHODS

Materials and Methods

In analyzing student preferences for the use of Artificial Intelligence (AI), the author used descriptive research with a qualitative approach. The qualitative descriptive research method is a way of describing and interpreting the meaning of the data that has been collected as much as possible in the situation being studied at that time. The qualitative descriptive method is the activity of analyzing, describing, and summarizing various data from several conditions and situations from interviews or observations in the field [17].

This research describes a real situation in the field regarding student preferences for the use of AI in language learning. Through research instruments, researchers gathered information about students' experiences with regard to AI. Currently Artificial Intelligence (AI) has developed in various fields, especially making it easier for students to do their assignments. Some Artificial Intelligence (AI) that can help students in language learning are Google Translate, Duolingo, Mondly, Babbel, and Grammarly.

Sample and Participants

The sample in this research were students at AL-Azhar University, Medan, which consisted of three study programs, namely Management, Accounting and Law study programs. The research subjects were chosen because students are elements of society who are aware of technological and information developments. Meanwhile, the object of this research is Artificial Intelligence (AI). There were 79 samples and respondents in this study.

Instruments and Procedures

In this study there are two types of data, namely primary data and secondary data. Primary data was obtained directly using a questionnaire that the author distributed to class A communication science majors. Meanwhile, secondary data was obtained by the author from the results of literature studies, articles and journals. Secondary data is supporting data for this research. Researchers collected data using a questionnaire by asking several questions and respondents were able to explain their respective versions by typing the answers directly. Questionnaires were distributed to each respondent via Google Form in the class groups of each study program.

Data Analysis

This research is divided into several stages. The first stage includes collecting materials and conducting content analysis of scientific and professional publications. These publications formed the theoretical basis of this research, so special attention was paid to the selection of sources. The objectivity and completeness of future results depends on the breadth of the material sample. We used analysis and synthesis methods to critically review and process the collected material, which served as a basis for drawing conclusions as well as summarizing the results (see Table 1). Data analysis was carried out using descriptive methods. This stage is carried out starting from data tabulation to determining frequencies and depicting responses to each question in graphs.



III. RESULTS AND DISCUSSION

The use of artificial intelligence technology Artificial Intelligence (AI) has spread widely in various aspects of life, especially in the world of education. The existence of Artificial Intelligence (AI) in the world has led to various perspectives regarding the use of Artificial Intelligence (AI) in the field of education. On the one hand, combining Artificial Intelligence (AI) with natural human intelligence creates maximum potential in each individual, achieves greater achievements, and expands access to information for students in independent learning. Artificial Intelligence (AI) has the aim of helping human work with a frame of thinking and reasoning like humans based on human commands themselves, and one of the biggest advantages of using Artificial Intelligence (AI) is its ability to make decisions in an efficient manner that tends to be fast and accurate based on data. which has existed.

Based on the tabulation results of respondents' answers to seven questions regarding the use of AI by students, the following presents student preferences for the use of AI in learning English.

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Table 1. Students'	Preference on	Artiticial	Intelligent in	language	earning
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Inquiries	Responses	
Have you ever used any AI-powered technologies or applications? (e.g.,	Yes : 55 No: 14	
virtual assistants, language learning apps, recommendation systems)		
How often do you use AI	Often : 34	
	Quite often: 15	
	Rarely: 7	
	Never : 13	
Does AI help you in English learning	Yes: 48 No: 21	
Mention the uses of AI that you have used in language learning	Translating terms and sentences : 40	
	Look for equivalent words: 45	
	Improve grammar: 31	
	Pronunciation or speaking practice: 41	
	Others, please specify:	
What applications do you use in language learning?	Duolingo : 29	
	Mondly: 38	
	Babbel: 16	
	Grammarly: 23	
If you are not using AI, what reasons apply to your circumstances	1. Haven't heard of AI devices	
	2. Never used AI	
	3. Don't know how to use it	
	4. Other reasons:	
How useful is AI in foreign language learning	Very useful : 52	
	Quite useful : 4	
	Less useful : 0	
	Not useful : 0	

The use of artificial intelligence technology is increasingly known among students. This can be seen from the students' responses to the questions asked in the questionnaire. After conducting a questionnaire survey, we found that as many as 55 or 79.7% of the 69 students knew what Artificial Intelligence (AI) was and used it, while the rest had never.

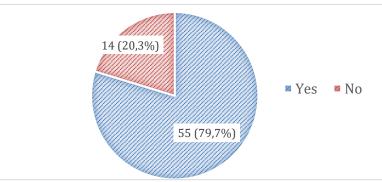


Figure 1. The usage of any AI-powered technologies or applications by the students

Based on the frequency of using artificial intelligence platforms, the questionnaire reveals that 34 (49.3%) respondents often use AI, 15 (21.7%) respondents quite often; 7 (10.1%) respondents use it sometimes, and 13 respondents (18.8%) never used AI.



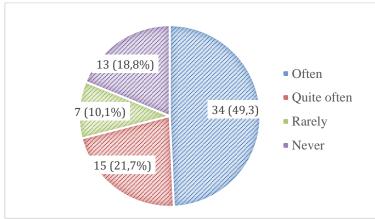


Figure 2. Frequency of AI use among the students

Regarding the function of AI in English language learning, 48 out of 69 respondents said it was very helpful, while the rest said it was not.

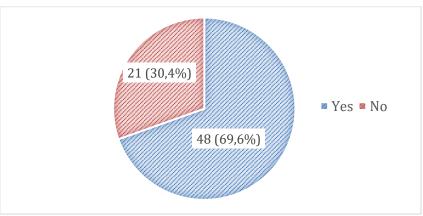


Figure 3. The usability of AI among students

Regarding AI applications that are often used in relation to language learning, there are four AI-based applications that have been used. Duolingo was used by 29 respondents, Mondly was used by 38 respondents, Babbel was used by 16 respondents, and Grammarly was used by 18 respondents.

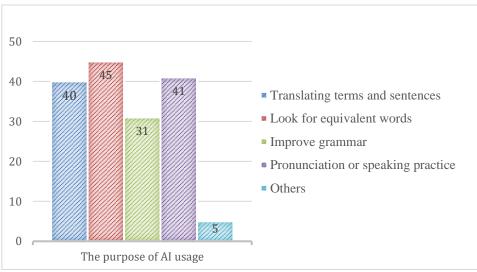


Figure 4. The purpose of AI in language learning



Students' opinions regarding the use of AI for language learning reveal that 40 respondents used AI to translate terms and sentences, 45 respondents looked for equivalent meanings or synonyms and definitions, 31 respondents used it to improve grammar, and 41 respondents used it to pronounce or speaking practice.

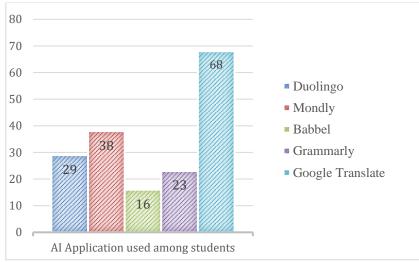


Figure 5. AI application for language learning

With the widespread use of AI in everyday life, some students are reluctant to use AI. Some reasons they are not interested in using AI are: never heard of AI, never used it, and don't know how to use AI.

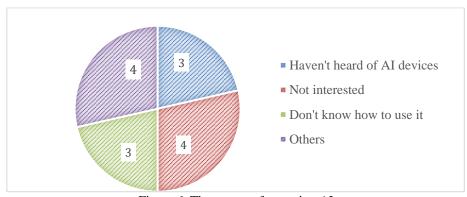


Figure 6. The reason of not using AI

Regarding the benefits of AI, students' preferences for its use were 52 out of 69 respondents regarded AI was very useful, and 4 respondents regarded it as quite useful.

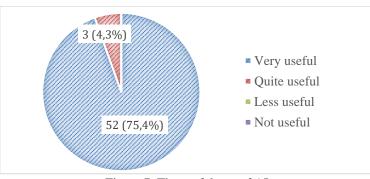


Figure 7. The usefulness of AI



However, on the other hand, there is a potential bias in the use of Artificial Intelligence (AI) in the education sector, this can be seen through students who currently tend to choose to shorten research time through Artificial Intelligence (AI) which can help complete assignments intensively which causes a lack of critical thinking. and rationality from students. Artificial Intelligence (AI) is also a threat to human resources because the role of humans is being replaced by robots. Even though Artificial Intelligence (AI) technology currently has various great advantages, it still does not guarantee that it does not have risks. The biggest risk that can occur is data security, if it is not used wisely and is used for something unethical, this can threaten the survival of many people.

In the future, the development of artificial intelligence (AI) technology will continue to advance and experience significant developments. However, AI technology cannot replace the role of humans as it should be because AIcannot replace the emotional aspects of humans.

The results already included regarding respondents' preferences for the use of Artificial Intelligence (AI) show that AI has the potential to play an important role in supporting students with learning disabilities and helping them achieve their maximum potential. For the emotional field of students, the use of Artificial Intelligence technology can help build self-confidence in learning outcomes, because human artificial intelligence technology can help learning in a pleasant and comfortable environment, thereby increasing self-confidence and reducing anxiety in learning.

Discussion

The use of human-artificial intelligence technology in language learning is viewed to ease students' tasks and assist in the efficient process of completing assignments, such as writers easily accessing and finding relevant data information based on existing sources. For students, one of the important results of applying artificial intelligence (AI) is increased motivation and engagement. AI increases their interest in learning and facilitates an interactive learning environment. Many studies also show that academic performance improves significantly when using human artificial intelligence technology. Artificial Intelligence (AI) significantly improves students' learning outcomes and well-being, maximizing their learning and achievement. One reason for this high level of motivation and achievement may be the promotion and enhancement of personal learning experiences.

In terms of usability, the AI applications or platforms mentioned above are liked by students because they offer various benefits in language learning. This is in line with [18], AI is in demand because it can increase student engagement, collaboration, and accessibility. Based on the survey, in open questions, students stated that the AI platform helped students in terms of time efficiency in their work.

The platform in Artificial Intelligence (AI) that is most often used in language learning is Google Translate. This application is easy and practical to use because it does not require registration. Google Translate provides instant translation, allowing users to quickly understand foreign language texts by simply typing or speaking the text they want to translate. The second application that is often used is Mondly. The app is designed to be engaging and interactive, utilizing features such as voice recognition, chatbots, and gamification elements to keep users motivated and engaged in their learning process. The third most frequently used application is Duolingo. This AI app provides structured lessons that cover a variety of language skills, including vocabulary, grammar, reading, writing, listening, and speaking. Lessons are organized into bite-sized modules, allowing students to learn at their own pace and fit language learning into their busy schedules. Meanwhile, another AI application that is often used is Grammarly. With this application, students can immediately find out how to correct incorrect writing and grammatical errors just by using this site. Grammarly itself is an automatic proofreading system that can identify errors related to 250 grammar rules and provide solutions for improving the writing that has been written. Grammarly performs very well in terms of accuracy and can provide users with feedback on identified posts. The number of errors is presented automatically after uploading the assignment file, and this makes it easier for students to revise incorrect writing.

The use of Artificial Intelligence (AI) technology also allows students to learn 21st century skills, including critical and creative thinking, makes it easier to assess complex skills, and encourages deeper thinking through Artificial Intelligence (AI). Artificial intelligence (AI) facilitates ongoing dialogue and helps students improve communication skills in language learning contexts, as it encourages collaborative learning and improves peer-to-peer communication skills.

Not all students are fluent enough in using foreign languages both when speaking and writing, especially English which uses grammar in everyday student life on campus. Based on survey results, most respondents use AI to find out the synonyms or meaning of a word or phrase. In second place, most respondents use Ai for spelling and speaking practice. Meanwhile, in third place, the majority of students use AI to translate sentences. However, there is an impact of bias that is often felt by most students after admitting that they often use AI, namely dependence on AI technology which is considered very instant in obtaining data whose source is sometimes still not accurate, where this dependence causes a weakening of the potential or ability to process and interpret words because of the instant influence. A.I.

This human-artificial intelligence technology also does not fully have benefits for students. If we as students are aware of technological advances, we will be careful about all forms and efforts to access personal data and personal privacy through the Artificial Intelligence (AI) platform, because of the use of the platform. -This Artificial Intelligence (AI) platform is very vulnerable to personal data and personal privacy being compromised. However, a study conducted by Crompton and colleagues found that educational interventions based on Artificial Intelligence (AI) were effective in reducing anxiety in pupils and students. Artificial intelligence (AI) technology itself can help provide many benefits for students in productivity, learning, organizational management and remote work, helping complete repetitive tasks and helping reduce costs and increase student consistency in



learning. Therefore, Artificial Intelligence (AI) has the potential to have a positive impact on student anxiety, helping them develop the skills and confidence needed to succeed in university life.

The use of Artificial Intelligence for language learning offers many benefits, such as personalized learning, availability, immediate feedback, interactive learning, adaptive curriculum, serource accessibility, and motivation and engagement. Personalized learning. AI can adapt to an individual's learning style and pace, offering a customized learning experience. This can provide targeted practice and feedback based on the learner's strengths and weaknesses. The AI-powered language learning platform can be accessed anytime, anywhere, so learners can practice at their convenience. In line with [19], immediate feedback can provide instant feedback on pronunciation, grammar, and vocabulary usage, helping students correct mistakes in real-time. For Interactive learning, AI can simulate real-life conversations via chatbots or virtual tutors, providing interactive practice opportunities that improve language acquisition. Other aspect of AI advantage are the adaptive curriculum: It is because AI algorithms can analyze student progress and adjust the curriculum, ensuring that students focus on the areas that need the most improvement. Moreover, AI can provide access to a wide range of learning preferences, Motivation and Engagement: AI-powered language learning platforms often incorporate gamification Overall, leveraging AI for language learning can increase efficiency, effectiveness, and engagement, ultimately speeding up the language acquisition process and empowering learners to achieve their language goals.

IV. CONCLUSIONS

Artificial Intelligence (AI) helps humans work with a frame of thinking and reasoning like humans based on human commands themselves, and one of the biggest advantages of using Artificial Intelligence (AI) is its ability to make decisions in an efficient manner that tends to be fast and accurate based on data. However, there is a potential bias in the use of Artificial Intelligence (AI) in the education sector, this can be seen through students who currently tend to choose to shorten research time through Artificial Intelligence (AI) which can help complete assignments intensively which causes a lack of critical thinking, and rationality from students. The development of Artificial Intelligence (AI) has made many people interested in and taking advantage of this artificial intelligence. After conducting a questionnaire survey, we found that as many as 85.2% of students in class A knew what Artificial Intelligence (AI). The use of human artificial intelligence technology in the learning and assignment process can be said to be quite helpful in easing students' tasks and assisting in the efficient process of completing assignments, such as writers easily accessing and finding relevant data information based on existing sources.

Artificial intelligence technology provides many benefits for students in productivity, learning, organizational management and remote work, helping complete repetitive tasks and helping reduce costs and increase student consistency in learning. Students carrying out lecture activities will not escape the use of artificial intelligence, many of them use artificial intelligence tools to meet their needs. The use of this intelligence tool makes work easier and saves time completing tasks. This human artificial intelligence technology also does not fully have benefits for students. If we as students are aware of technological advances, we will be careful about all forms and efforts to access personal data and personal privacy through the Artificial Intelligence (AI) platform, because of the use of the platform. -This Artificial Intelligence (AI) platform is very vulnerable to personal data and personal privacy being compromised.

In various sectors of life, Artificial Intelligence (AI) can have a positive impact, such as helping humans complete tasks and work, and being able to answer various current problems. On the other hand, Artificial Intelligence (AI) is also a threat and has a negative impact on human resources, because many human jobs are slowly starting to be replaced by Artificial Intelligence (AI). In the future, the development of Artificial Intelligence (AI) will become increasingly super sophisticated, therefore society must continue to upgrade itself to keep up with developments in science, especially in the field of technology. In the future, Artificial Intelligence (AI) will all its breakthroughs will become even more super sophisticated. In essence, AI can replace human work, but Artificial Intelligence (AI) will never replace the emotional side of humans. Therefore, Indonesian people must continue to develop and maintain their emotional intelligence so that in the future its existence will still be needed.

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