

THE ROLE OF TECHNOLOGY IN ARABIC-INDONESIA TRANSLATION: TRANSFORMATION OF EDUCATION IN THE DIGITAL ERA

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Abstract (In English). *This study examines the role of technology in Arabic-Indonesian translation, focusing on the opportunities and challenges it poses. The development of technology, especially artificial intelligence and machine translation, has significantly impacted the translation process and the world of education. On the one hand, technology offers opportunities to improve the efficiency, speed, and accessibility of translation. However, on the other hand, technology also presents challenges, such as accuracy, linguistic nuances, and the role of human translators. This study uses a qualitative descriptive method with literature review data collection techniques and content analysis to analyze how technology can be used to overcome these challenges and maximize existing opportunities so that it can produce quality and meaningful Arabic-Indonesian translations. The study results show that technology's role in Arabic-Indonesian translation provides opportunities and challenges. From the results of the study, it was found that the opportunities from AI-based translation, Google Translate, GPT chat, Online Dictionary, and so on can help someone who wants to learn a language with a very flexible, practical, and effective translation machine providing services for users, namely making it easier for someone to find the meaning of a vocabulary, sentence or Arabic text. Then, the existence of the translation machine also provides effectiveness and efficiency of time in translating a text or book, so that translating a text or book is completed faster in a short time. In addition to having opportunities or advantages in using technology translation machines. The role of technology translation also provides challenges or weaknesses in using translation machines. The weakness is the inaccuracy of the meaning produced by the translation machine. The meaning produced by the translation machine is sometimes confusing, inappropriate, and inaccurate. From the*



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study results, researchers also showed that the comparison between the use of the Google Translate translation machine and the GPT chat translation machine, which is more effective and has 70% accuracy, is GPT chat.

Keywords: Technology, Arabic-Indonesian Translation, Transformation, Education in The Digital Era

A. INTRODUCTIONS

Language is important for society and the nation to interact, socialize, and communicate in everyday life. The need for language will cover education, economy, social culture, and even international relations¹. Every country has its language, and each language has unique characteristics and traits. Language is very much considered in the world of education. By studying and mastering language, we will be able to communicate and interact with foreigners in remote parts of the world. In addition, learning a language can lead someone to the international arena².

The development of technology today brings new changes to all sectors of life. One sector that has experienced the impact of this technological development is the education sector. Along with the times, challenges and obstacles continue to experience development and change, especially in education. This is because from time-to-time human demands and needs continue to change³.

In the world of education, language is the most important part of learning. Therefore, we need to learn the language. Currently, many media support learning languages. Both manually and technologically. The development of technology has now become the center of society to be used in learning languages. Starting from the existence of AI technology, Chat GPT, or other supporting technology media⁴.

To learn a language, we must understand its meaning and significance. This is so that we can understand what other people say or convey. We also understand what we should say to that person. We can communicate and interact well with other people.

So, this statement, states that it is important to learn the translation of a language to understand each other in communicating. From what is explained above, researchers can conclude that to learn and master a language, it is necessary to understand the meaning and significance of the foreign language sentences. So, it is important for someone who wants to master a language to be good at translating languages. In this case, researchers suggest utilizing the role of existing technology such as AI, Chat GPT, Google Translate, and Machine Translate.

¹ Mardianingsih and Nunuk Indarti, "Peran Bahasa Dalam Mendorong Kolaborasi Efektif Di Bidang Ekonomi Untuk Pembangunan Berkelanjutan," *Jurnal Review Pendidikan Dan Pengajaran* 6, no. 2 (2023): 31–35.

² Fidia Wati et al., "PERAN BAHASA INDONESIA DALAM MENDORONG KOLABORASI THE ROLE OF INDONESIAN LANGUAGE IN ENCOURAGING ECONOMIC," 2024, 3143–51.

³ Mu'allimah Rodhiyana, "TRANSFORMATION OF ISLAMIC RELIGIOUS EDUCATION IN THE ERA OF SOCIETY 5.0," *Al-Risalah: Jurnal Pemikiran Islam* 14, no. 2 (2023): 555–68, <https://doi.org/10.34005/alrisalah.v14i1.2752>.

⁴ Suariqi Diantama, "Pemanfaatan Artificial Inteligent (AI) Dalam Dunia Pendidikan," *DEWANTECH Jurnal Teknologi Pendidikan* 1, no. 1 (2023): 8–14, <https://doi.org/10.61434/dewantech.v1i1.8>.

The development of technology in the digital era has brought about major changes in various fields, including language translation. One of the developments that has received attention is the use of technology in translating texts from Arabic to Indonesian. Technologies such as artificial intelligence (AI)-based translation software, digital translation applications, and text recognition systems (OCR). The existence of these technological media makes the translation process easier and faster, making it easier for individuals, linguists, translation experts and even institutions to access and understand open Arabic literature ⁵.

Arabic plays an important role in various aspects of life, especially in the context of religion, culture, and education. In Indonesia, the country with the largest Muslim population in the world, there is a growing need to translate Arabic texts into Indonesian for academic, scientific, and religious purposes. Technology acts as a solution here, speeding up the translation process while increasing access to information in Arabic. However, the use of technology in translation is not without its challenges ⁶.

Arabic is rich and complex in context, nuance, and grammatical structure, which often poses obstacles for automated translation tools. Challenges include the lack of high-quality training data for the Arabic-Indonesian language pair and technical difficulties in understanding it. The meaning of idioms is more contextual and culturally embedded in the text. In addition, technical translation results often require manual editing to ensure accuracy and appropriateness of meaning.

From the results of previous studies, it was found that the use of translation technology such as AI, Google Translate, GPT chat, online dictionaries, and so on provides many benefits and challenges. The more sophisticated the translation technology, the more benefits it provides for its users. However, after researchers studied it, it turned out that the existence of translation technology not only provides opportunities but also challenges in its use. Researchers found that the opportunities from the existence of translation technology not only provide effectiveness in finding the meaning and meaning of foreign language words or sentences but can also increase global accessibility. Therefore, the results of this study are to find out more about the opportunities and challenges that will be provided by the existence of technology translation in addition to giving time effectiveness, whether the role of translators can also increase global accessibility, and whether the results of AI translation provide good and accurate translation quality?

Thus, to answer the problem formulation above, this study aims to analyze the role of technology in Arabic-Indonesian translation and explore the opportunities that can be utilized from the existence of Online Dictionaries, AI, Chat GPT, and Machine Translation in translation. And identify the challenges that arise from the existence of translation technology such as Online Dictionaries, AI, Chat GPT, Google Translate, Machine Translation, and so on. This study is important in providing deeper insight into how technology can be

⁵ Eka Lutfiyatun, Depi Kurniati, and Nurul Fajriah, "Pemanfaatan Artificial Intelligence (AI) Dalam Tarjamah Dan Muhadatsah Di Perguruan Tinggi," *Balai Diklat Keagamaan Aceh* 2, no. 2 (2023): 93–105.

⁶ Muhib Abdul Wahab, "Peran Bahasa Arab Dalam Pengembangan Ilmu Dan Peradaban Islam," *ARABIYAT: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 1, no. 1 (2014), <https://doi.org/10.15408/a.v1i1.1127>.

optimized to support interlanguage translation, especially in the context of Arabic and Indonesian.

B. METHOD

This study uses a qualitative descriptive method. According to Sugiyono, qualitative research methods are approaches used to study phenomena in natural object conditions. This method is based on the philosophy of postpositivism, where researchers act as key instruments in data collection and analysis. Qualitative research emphasizes meaning rather than generalization and is conducted in a natural environment without manipulating variables⁷. This method was chosen because this study aims to describe and analyze in depth the role of technology in Arabic-Indonesian translation.

The data collection technique used is a literature review. A literature review is a systematic process that involves reviewing and critically evaluating existing literature sources. The goal is to understand the current state of research in a particular field, identify gaps in existing research, and develop a theoretical basis for the study to be conducted⁸. Data were collected through literature studies relevant to the research topic and sourced from books, journals, articles, and research reports. The literature used includes studies on translation, translation technology, Arabic, and Indonesian, and issues related to the opportunities and challenges of translation in the digital era.

Content analysis techniques, or content analysis, are methods used to analyze and understand the content of various forms of communication, both written and oral. According to Bungin (2011), content analysis is a research technique that emphasizes the consistency and meaning of communication content and the reading of symbols contained in symbolic interactions. This method allows researchers to classify and filter texts or words into certain categories that represent the content being studied⁹.

The collected data and documentation will then be analyzed in content and used to identify, classify, and analyze key themes related to the opportunities and challenges of Arabic-Indonesian translation with the help of technology. The focus of the analysis will be on how technology affects the process, results, and quality of translation.

C. RESULTS AND DISCUSSION

1. Use of Artificial Intelligence in Translation

In the increasingly developing digital era, the use of smartphones and online machine translation applications has become an integral part of modern society's life to interact across language and cultural boundaries. This phenomenon has

⁷ Ahmad Taufik and Muh. Amril Pratama Putra, "Persepsi Masyarakat Terhadap Rencana Kebijakan Penggunaan Jalan Tol Berbasis Konsep Multiline Free Flow," *Journal of Government Science (GovSci) : Jurnal Ilmu Pemerintahan* 3, no. 1 (2022): 47–62, <https://doi.org/10.54144/govsci.v3i1.29>.

⁸ Steven G. Helmericks, Randal L. Nelsen, and N. Prabha Unnithan, "The Researcher, the Topic, and the Literature: A Procedure for Systematizing Literature Searches," *The Journal of Applied Behavioral Science* 27, no. 3 (1991): 285–94, <https://doi.org/10.1177/0021886391273004>.

⁹ Rika Maria, "Analisis High Order Thinking Skilss (HOTS) Taksonomi Bloom Dalam Buku Teks Sejarah Indonesia," *Universitas Pendidikan Indonesia*, 2018, 64–73.

significantly reduced the communication gap between cultures and different linguistic systems. Yang, in his research, revealed that along with technological advances, a new concept known as artificial intelligence translation (AI translation) has emerged. This concept brings innovative scenarios in machine translation applications that aim to achieve a higher level of equality with human translators. However, some critics such as Li Bei, Zhi Yang Wang, et al.¹⁰ still highlight the existence of an unsolved performance gap between machine translation and human translation, especially in terms of understanding context and deeper language nuances.

According to Majumder, most current machine translation studies are still limited to approaches that focus on the translation and evaluation of sentences in isolation without considering the broader context in which the sentences appear. This limitation is both a challenge and an opportunity for further development. However, several potential benefits can be obtained through the refinement of the translation process, including increased efficiency in data collection and processing, the development of more sophisticated and effective algorithmic models, and faster and more accurate human evaluation systems. Optimizing these aspects will not only improve the quality of translation but also the efficiency of the translation process as a whole, paving the way for better integration between machine translation technology and human translator expertise¹¹.

Thus, researchers can conclude that the use of artificial intelligence in translation provides a lot of assistance to its users. The existence of translation through AI offers significant benefits in terms of efficiency and accuracy. The existence of AI translation technology also aims to achieve a high level of equality compared to human translation. So, the use of AI translation also improves the quality of translation.

2. The Role of Technology in Arabic-Indonesian Translation

There are several important roles of technology, especially AI in Arabic-Indonesian translation, that will be discussed in the specifications after researchers analyzed the role, it was found that there are Seven Roles of technology, especially in artificial intelligence, including the following:

a. Increased Speed and Efficiency

AI enables a much faster translation process compared to manual methods. For example, a technical document that would normally take a week to translate can be completed in 2 to 3 days with the help of AI or even in a matter of hours without sacrificing quality. This increases operational efficiency in the translation industry and allows for faster access to information related to the translated text or context¹².

¹⁰ Bei Li et al., "Does Multi-Encoder Help? A Case Study on Context-Aware Neural Machine Translation," *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2020, 3512–18, <https://doi.org/10.18653/v1/2020.acl-main.322>.

¹¹ Suvodeep Majumder et al., "A Baseline Revisited: Pushing the Limits of Multi-Segment Models for Context-Aware Translation," no. 2017 (2022).

¹² Martiana Nurullawasepa et al., "AI (Artificial Intelligence) Dalam Penerjemahan Teks Bahasa Arab," *Jurnal SENRIABDI: Seminar Nasional Hasil Riset Dan Pengabdian* 3, no. 1 (2023): 141–57.

In this case, researchers can conclude that with the help of AI in translating a sentence or text, the task of translating a text becomes fast without having to take days to complete. This is one opportunity for translation technology to have a significant impact, namely providing time efficiency and accuracy.

b. Cost Savings

Using AI in translation can significantly reduce costs. The average price of machine translation is much lower than that of human translation. For example, machine translation costs around \$0.10 per word, while the cost for human translation can be as much as \$0.22 per word. Thus, AI helps companies save money while still getting quality translations¹³.

c. Consistency in Translation

AI can maintain consistency in translations, which is crucial for businesses that require consistent messaging across their localized materials. AI-powered machine translation not only translates words but also keeps the brand's style and tone, ensuring that communications remain consistent across platforms¹⁴.

d. Big Data Analytics for Contextual Understanding

AI can analyze millions of translation samples to identify patterns and nuances that were previously difficult for traditional systems to capture. With a better understanding of context, AI systems can produce more accurate and natural translations, effectively conveying the original meaning of the text.¹⁵

e. Ease of Access and Use

AI technologies like Google Translate and DeepL make translation more accessible to everyone. Users can translate text or documents quickly without requiring in-depth language skills, making this tool extremely useful for both individuals and businesses¹⁶.

f. Support in Content Localization

AI plays a vital role in the localization process of marketing content and other official documents. Using glossary features and advanced

¹³ Safna Faradillah et al., "Analisis Perkembangan Artificial Intelligence Dalam Bidang Bisnis : Systematic Literature Review," *Djtechno: Jurnal Teknologi Informasi* 4, no. 2 (2023): 298–309, <https://doi.org/10.46576/djtechno.v4i2.3404>.

¹⁴ Adidi Yogya et al., "Peran Artificial Intelligence Sebagai Pengungkit Produktivitas Usaha Mikro," *Jurnal Abdimas Patikala* 3, no. 2 (2023): 891–96.

¹⁵ Aceng Badruzzaman Aceng, Sukron Mamun, and Ahmad Fauzi, "Pengenalan Dan Penerapan Artificial Intelligence Dalam Meningkatkan Kompetensi Guru Di Pondok Pesantren Quran Al-Lathifah Cikarang Barat," *Jurnal Pelita Pengabdian* 2, no. 1 (2024): 53–59, <https://doi.org/10.37366/jpp.v2i1.3198>.

¹⁶ Elsaty Lam Marya Bunga and Caroline V Katemba, "Comparing Translation Quality: Google Translate Vs DeepL for Foreign Language To English," *EDUSAINTEK: Jurnal Pendidikan, Sains Dan Teknologi* 11, no. 3 (2024): 1147–71, <https://doi.org/10.47668/edusaintek.v11i3.1264>.

algorithms, AI helps ensure that technical terms or product names are translated consistently, improving collaboration between teams and saving editing time.¹⁷

g. Improving Translation Quality through Machine Learning

AI-based machine translation uses machine learning algorithms to continuously learn from new data and improve its translation accuracy over time. This allows the system to adapt to dynamic language changes and cultural contexts¹⁸.

With these various roles, AI increases efficiency in Arabic-Indonesian translation and opens new opportunities for businesses to communicate effectively in the upcoming global market. The following sub-chapters will explain AI in more detail.

3. The Transformation of Digital-Era Education in Arabic-Indonesian Translation: Comprehensive Discussion

The digital era has ushered in transformative changes across various sectors, including education. In the field of Arabic-Indonesian translation, technological advancements have redefined traditional teaching and learning processes. This transformation has introduced various opportunities and challenges, reshaping how translation education is delivered and practiced.

a. Digital Learning Resources and Platforms

The proliferation of online learning platforms and digital resources has revolutionized Arabic-Indonesian translation education. Learning Management Systems (LMS) such as Moodle, Google Classroom, and Canvas provide structured environments for coursework, discussions, and assessments. Additionally, digital libraries and e-resources offer vast repositories of Arabic texts for translation exercises¹⁹.

- **Impact:** Students have access to a broader range of authentic Arabic texts, including literature, news articles, and academic papers.
- **Example:** Educators can assign real-world translation projects using digital Arabic news sources, fostering critical translation skills.

b. AI and Machine Translation Integration

Artificial Intelligence (AI) has transformed translation practices through tools like Google Translate, DeepL, and Microsoft Translator. While these

¹⁷ Syarifah Maihani et al., "Peran Kecerdasan Buatan Artificial Intelligence (Ai) Dalam Inovasi Pemasaran," *Warta Dharmawangsa* 17, no. 4 (2023): 1651–61, <https://doi.org/10.46576/wdw.v17i4.3817>.

¹⁸ Afrizal Zein et al., "Peran Text Processing Dalam Aplikasi Penerjemah Multi Bahasa Menggunakan Ajax API Google The Role of Text Processing in Multi-Language Translator Applications Using Google's Ajax API" 19, no. 1 (2018): 1410–7104.

¹⁹ Ibnu Fitrianto, "Innovation and Technology in Arabic Language Learning in Indonesia: Trends and Implications" 2, no. 3 (2024): 134–50.

tools are not perfect, they serve as valuable aids for students in understanding complex sentence structures and vocabulary ²⁰.

- **Educational Use:** AI tools are integrated into translation courses for comparative analysis and post-editing exercises.
- **Critical Thinking Development:** Students learn to evaluate and improve machine-generated translations.

c. **Virtual Classrooms and Remote Learning**

The rise of virtual classrooms has expanded the reach of Arabic-Indonesian translation education. Video conferencing tools such as Zoom, Microsoft Teams, and Google Meet have enabled real-time instruction and collaborative activities ²¹.

- **Flexible Learning:** Virtual classrooms break down geographical barriers, allowing students from remote areas to access quality education.
- **Collaboration:** Virtual breakout rooms facilitate group discussions and peer reviews.

d. **Mobile Applications and Gamification**

Mobile learning applications have become popular for language learning and translation practice. Apps such as Duolingo, Memrise, and Quizlet offer gamified experiences that enhance vocabulary acquisition and grammar comprehension ²².

- **Impact:** Gamification increases student engagement and motivation through rewards and progress tracking.
- **Translation Exercises:** Customized app features can incorporate Arabic-Indonesian translation tasks.

e. **Collaborative Online Projects**

Digital platforms facilitate collaborative translation projects, allowing students to work in teams and share real-time feedback. Cloud-based tools such as Google Docs and Microsoft OneDrive have become essential for collaborative assignments ²³.

- **Skills Development:** Collaboration fosters teamwork, communication, and critical thinking skills.
- **Peer Reviews:** Students gain valuable insights by reviewing and critiquing each other's translations.

²⁰ Abdulfattah Omar and Yasser Gomaa, "The Machine Translation of Literature: Implications for Translation Pedagogy," *International Journal of Emerging Technologies in Learning (IJET)* 15, no. 11 (2020): 228–35.

²¹ SEAMEO Regional Open Learning Center, "Technology in Education: A Case Study on Indonesia," 2023.

²² Rezkya Afril, Ilya Husna, and Hasan Jasem, "Learning Arabic in the Digital Era: Challenges and Effective Strategies," *ARABIYATI: Journal of Arabic Language Education* 1, no. 1 (2024).

²³ Mansour Amini, Latha Ravindran, and Kam-Fong Lee, "A Review of the Challenges and Merits of Collaborative Learning in Online Translation Classes," *Journal of Research, Policy & Practice of Teachers and Teacher Education* 12, no. 1 (2022): 69–79.

f. Challenges and Limitations

Despite the numerous benefits, digital transformation in Arabic-Indonesian translation education faces several challenges ²⁴:

- **Digital Infrastructure Gaps:** Limited internet access and inadequate digital infrastructure in rural areas hinder learning opportunities.
- **Teacher Preparedness:** Not all educators are adept at using digital tools effectively, necessitating comprehensive training programs.
- **Machine Translation Dependence:** Over-reliance on AI tools can undermine critical translation skills.
- **Academic Integrity:** The availability of digital translation tools raises concerns about plagiarism and academic dishonesty.

g. Recommendations for Effective Digital Integration

To maximize the benefits of digital transformation in Arabic-Indonesian translation education, the following strategies are recommended by ²⁵:

- **Blended Learning Models:** Combine traditional instruction with online components for a flexible and engaging learning experience.
- **Teacher Training Programs:** Provide educators with training on digital tools and innovative teaching methods.
- **Collaborative Learning Activities:** Foster teamwork and communication through digital projects and peer reviews.
- **Assessment Innovation:** Develop assessment methods that focus on creativity, problem-solving, and analytical skills.

4. Arabic – Indonesian Translation Opportunities in Technology

The rapid development of technology, especially in Arabic-Indonesian translation, provides many benefits, opportunities, and challenges. With technology, the Arabic-Indonesian translation process becomes more manageable, faster, more practical, and adaptive to the needs of today's modern society. Furthermore, it also supports cross-cultural communication as a whole (global). The role of technology provides many opportunities in the field of translation, both in terms of time effectiveness, efficiency, and ease of translation. Here are some technologies that are present and provide opportunities for ease in Arabic-Indonesian translation, including:

a. Machine Translation

In the era of technological development today, machine translation in Arabic-Indonesian translation provides many benefits and opportunities for the community, linguists, and translators. Examples of translation machines are Google Translate and Chat GPT. These two translation machines are artificial products that use AI intelligence. The existence of a translation machine makes it easier for someone or a translator to translate a text into Arabic. Even translation machines such as Google Translate and Chat GPT

²⁴ Yuyun Rohmatul Uyuni and Novi Amalia, "Social Media Language Trends: A Study of Changes in the Meaning of Contemporary Arabic Words in the Digital Era," *International Journal of Arabic Language Teaching* 6, no. 02 (2024): 182–96.

²⁵ UNESCO, "Unleashing Innovation: Embracing Digital Transformation in Education in Indonesia," UNESCO, 2024.

can not only words but also sentences, phrases, paragraphs, manuscripts, or books.

Google Translate is the most highlighted translation machine because the translation service from Google Translate is straightforward and effective. Google Translate is a practical, free, and efficient online translation service. The existence of Google Translate is a multilingual online translation service that also supports Indonesian translation. You can translate Arabic-Indonesian, English Indonesian, Japanese Indonesian, and so on into it. Various languages can be translated into Indonesian via Google Translate. However, the doubt in using Google Translate is that the translation via Google Translate still has shortcomings both in accuracy and in Google Translate translation. There is still a lot of confusion, doubt, and disharmony between words and meanings. The use of Google Translate also has disharmony with its meaning. This is what happens if we do translations carelessly. It is possible that the meaning or translation of a word or sentence is wrong. If the meaning and translation are bad, the meaning is also incorrect.

When discussing Arabic with Indonesian or other language translators through AI (Artificial Intelligence) or GPT chat, translating with AI capabilities, namely GPT chat, also has advantages. It is known from several references that discuss translation through AI or GPT Chat that the advantage is that the translation of the results of GPT chat is entirely accurate and reasonable. The following are research findings from Ummi Hasanah, who, in her writing entitled "Accuracy Value of Literary Text Translation Results Using GPT Chat," stated that GPT chat translation has an accuracy level of 70%. These results were obtained through her analysis of the novel "Al-Jamaalu Jurhun" or "Love is a Wound" by Eka Kurniawan, which was translated into Arabic²⁶.

So, the author concludes that using AI, Chat GPT, Machine Translation, Google Translate, and so on certainly has advantages in using Arabic in Indonesian. However, the one that has more AI and accuracy in language translation is GPT chat. It is known that the translation results using GPT chat have an accuracy of 70% compared to machine translation or Google Translate. So, the accuracy results are higher for GPT chat than for Google Translate. If on Google Translate, there is still a lot of confusion and inaccuracy in meaning and meaning. So, in this case, the researcher suggests that when translating a word or sentence for language translators or AI users, it is better to use GPT chat than Google Translate²⁷.

In addition, there are opportunities for language translation experts; the existence of AI or GPT chat or Google Translate can help them translate and make it easier for them to translate a sentence, text, or a book, then provide efficiency and effectiveness of time in translating, so that to translate an Arabic book into Indonesian, for example, it can be translated faster.

²⁶ Maman Farisa, Hamzah Abdurrahman, "ANALISIS PENERJEMAHAN BAHASA ARAB KE BAHASA INDONESIA MELALUI ARTIFICIAL INTELLIGENCE CHAT GPT" 7, no. 2 (2023): 170–72, <https://doi.org/10.36059/978-966-397-345-6-65>.

²⁷ Aliifah Nabila Putri, "Perbandingan Antara Google Translate Dan Artificial Intelligence Dalam Menerjemahkan Dari Bahasa Arab Ke Bahasa Indonesia," *Jurnal Pendidikan Tambusai* 8, no. 2 (2024): 19690–96.

5. *Online Dictionary as a Text Translation Media*

The development of the current era makes technology increasingly sophisticated, especially in the world of translation. In translation, a translator's dictionary is needed to provide convenience in translating a word, sentence, paragraph, text, or even a book. Currently, dictionaries are not only found in printed form but have also been developed as online dictionaries. The presence of online dictionaries is the result of increasingly sophisticated developments.

Online dictionaries are one of the translation media that can make it easier for a translator to translate an Arabic text into Indonesian. Online dictionaries play a vital role for linguists and foreign language students; this is to support their learning. As Silalahi has expressed, dictionaries play an important role in language life. It is essential because it is a medium for translating foreign languages. Dictionaries are the heart of language studies, especially Arabic. We can understand words, sentences, and texts from a foreign language with a dictionary. It is proven that both digital dictionaries, offline and online, play an essential role in translation. The one that is currently in great demand and used is the online dictionary. Online dictionaries are in great demand and used because they are more practical and effective than printed dictionaries. Some of the online dictionaries that are currently widely used by people include the Qamus dictionary, kamusarab.com, javakedaton dictionary, listen Arabis dictionary, al-manny dictionary, and many other online dictionaries²⁸.

The most popular online dictionary is the Al-Manny dictionary of the various online dictionaries. The AlManny dictionary is the most widely used by linguists or students majoring in foreign languages. This is because the Al-Manny dictionary has a high value of truth or accuracy. As researchers found in previous studies, there are more online dictionaries than printed dictionaries, and in online dictionaries, many people use the AlManny online dictionary. However, although they use more online dictionaries, they also need printed dictionaries to ensure accuracy.²⁹

The author concludes that there are many benefits of using an online dictionary, including being more practical and effective in searching for Arabic vocabulary; searching for vocabulary minimizes time because it can be typed directly via smartphone. An online dictionary can then be used as a learning medium for translating and finding the meaning of new vocabulary.

Besides the fact that an online dictionary has several advantages, it also has several disadvantages. The weakness of the online dictionary is the inaccuracy of the translation system. As expressed by Faqih, many online dictionaries translate word by word; this is statistical Machine Translation, where this translation machine learns from previously translated texts. The meaning produced from the online dictionary translation is sometimes confusing and inaccurate, especially if translated in one sentence or paragraph; it could be that the meaning will not match the text. So, in this study, the researcher suggests

²⁸ Yuniarti Amalia Wahdah, Muhajir Muhajir, and Abdurrahman Wahid Abdullah, "Kamus Online Sebagai Media Penerjemahan Teks Bagi Calon Guru Bahasa Arab," *Edukasiana: Jurnal Inovasi Pendidikan* 2, no. 3 (2023): 138–50, <https://doi.org/10.56916/ejip.v2i3.368>.

²⁹ Wahdah, Muhajir, and Abdullah.

that online dictionary users must recheck using a printed dictionary to make the definition and meaning accurate and precise.

6. Arabic–Indonesian Translation Challenges in Technology

Arabic to Indonesian translation has become a critical need, especially in religious, academic, and cultural contexts. However, translation technology faces several challenges in facilitating this process. One of the main challenges is the complexity of Arabic grammar, which is very different from Indonesian. Arabic has a richer grammatical structure, such as the use of i'rab (word endings) and changes in word form based on case, gender, and number. This isn't easy to process by automatic translation technology, which tends to be more effective in languages with simple grammar. In addition, semantic differences are a significant obstacle. Arabic has many synonyms for one word or concept, and each word can have different meanings depending on the context of the sentence. For example, the word "علم" can mean knowledge, knowing, or flag, depending on its use³⁰. Automatic translation technologies, even those using artificial intelligence, often struggle to capture these contextual nuances, resulting in inaccurate or inconsistent translations.

Another challenge is the dialectal variation in Arabic. While standard Arabic (fusha) is used in formal literature and media, colloquial Arabic has many different dialects, such as Egyptian, Levantine, and Maghrebi. These variations can affect translation accuracy, mainly if the text contains non-standardized dialectal elements. Translation technologies are often not trained to recognize and address these differences.

D. CONCLUSION

Technology has played an essential role in Arabic to Indonesian translation, providing significant opportunities. With AI-based translation software and applications, the translation process has become faster and more efficient. This technology supports broader access to Arabic texts for educational, religious, and professional purposes. In addition, technology helps overcome geographical barriers, allowing individuals from various backgrounds to communicate and understand Arabic culture more deeply.

The existence of AI-based technology translation media can make it easier for users to translate Arabic texts. An AI translation machine can be used as a learning medium in translating a language or language text; this also supports a person's motivation to learn a language. Using a translation machine can minimize time, this is because the use of a translation machine or online dictionary can be accessed directly via smartphone. This is what makes the translation more effective and efficient.

However, although technology brings great benefits, challenges remain in translating Arabic to Indonesian. One of the main obstacles is the complexity of the Arabic language structure, which is often difficult for machines to translate accurately. The nuances of meaning in Arabic, such as synonyms, idioms, and cultural context, are usually missed by automatic translation technology. As a

³⁰ Sahkholid Nasution, *Kamus Penulisan Karya Tulis Ilmiah (Makalah, Skripsi, Tesis Dan Disertasi) Indonesia – Arab, Arab – Indonesia*, ed. Zulheddi, Revisi (Medan: Perdana Publishing, 2022).

result, the resulting translation can lose its true meaning or even result in a wrong interpretation. Overall, the role of technology in translating Arabic into Indonesian is a great opportunity that can be utilized to improve cross-cultural communication and understanding and can also be used as motivation for someone to learn a language. Therefore, users of AI translation machines must be more innovative in utilizing the role of existing technology and not be left behind by the development of sophisticated technology.

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