

# The Analysis of Machine Translation Performance on Translating Informative Text from English into Indonesian

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**Abstract:** This study aims to investigate the performance of 6 machine translations. The text translated was an informative text from English into Indonesian. The document was taken from 48 students' papers in the semester final test. The research design is a descriptive qualitative and content analysis approach. The data obtained from the students' translation results in the final test, observation, and interview. In analyzing the result of translating, there were three categories: grammatical structure, cultural words, and mechanic writing (composition writing). The result shows the performance of 6 machine translations: Google translate (GT), DeepL, Yandex, U dictionary, Microsoft translator, and itranslate on grammatical structure analysis were understandable related to meaning because the language is a news report in formal language and reporting facts. However, some roles of language were the changes such as tenses, word formation, active/passive, singular plural, article, and auxiliary verbs. There was no example in cultural words and mechanic writing because the form of language is a news report. The result of the observation indicated that the students already apply technology in translation by utilizing MT in translating text. Furthermore, the result of the interview implied that the usage of MT can assist in translating text from English into Indonesian, especially for informative text.

**Keywords:** machine translation, performance, informative text

## INTRODUCTION

Artificial Intelligence (AI) is a human-like machine that has the ability to perform human works for instance reasoning, learning, planning, and creativity. It enables the support system to identify the needs of the environment. The usage of AI for today's activities and work is essential. For example smartphones or PC digital personal assistants, web search, machine translations, cybersecurity, fighting disinformation, and upgrading products and sales lines. The operations of air conditioner controllers, autonomous cars, online shopping and advertising, smart farming such as irrigation, feeding animals, weed-removing robots, and robots used in factories are effective with this AI. In machine translation, AI supports a tool for translating to and from foreign languages around the world. For example, from English into Bahasa Indonesia, Malay, Hindi, and Russia. Artificial Intelligent (AI) language-based translation platform from Google can help students to do their work assignments and homework better because this machine is able to translate difficult words in Arabic into English and vice versa (Kolhar & Alameen, 2021)

Machine Translation (MT) is commonly used by foreign language learners because this machine is useful to get the meaning of words in a foreign language easily. This machine

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is used to get instant results from translating process. For example, google translate (GT), DeepL, Yandex, U Dictionary, Microsoft Translator, and itranslate. GT provides the user with some features like type, say, or hand-write translation, translating with a camera, translating without an internet connection, translating a conversation in a foreign language, and more (<https://translate.google.com/about/>). GT provides an alternative tool to get the meaning of words, phrases, sentences, paragraphs, and text in a foreign language easily and effectively (Marito, Ashari, 2017, (Herlina, Dewanti, Lustiyantie, 2019). MT is a branch of computational linguistics that uses technology to mechanically translate text from one language to another (Garg & Agarwal, 2018).

The most usage of MT is for translating words in a foreign language. Systran as the oldest machine translation can translate to and from 55 languages. GT is the most popular machine translation able to translate 133 languages. While DeepL.com as the new one supports 31 languages. Google Translate that has been launched in 2006 supports 133 languages. Yandex Translate supports 98 languages. Microsoft Translate supports 129 languages. U dictionary supports 58 languages. The itranslate and supports 100 languages. Most of these MT have some features like written word translation, website translation, document translation, speech translation, mobile app translation, image translation, handwritten translation, bilingual conversation translation, and transcription.

Because of its practicality, machine translation is popular among the students. For example, the doctoral students of Universitas Negeri Jakarta apply this tool for doing reference book translation and classroom tasks (Emzir, Lustiyanti, Akbar, 2017). Furthermore, the students in Sekolah Tinggi Bahasa Asing Pontianak engage in this machine to understand the instruction from their lecturer (Angelina, Handayani, 2020). The undergraduate students from Universitas Pendidikan Indonesia (UPI) applied the post-editing process by machine translation (PEMT) which gives them opportunities to develop text literacy so that they can read academic works with a high level of awareness and sensitivity. Additionally, during PEMT exercises, the students were able to practice the use of translation strategies and procedures designed to increase their understanding of language structure and function (Harto, Hamied, Musthafa, & Setyarini, 2022).

Translation is an activity. The translation is a product. The translation is a field of study. In the activity, there is a process of producing text from one language or source text (ST) into another language or a target text (TT). The text that has been translated means the product. As a field of subject translation can be the process of teaching, and learning in the classroom which is talking about the strategy of translating. It can be concluded that translation refers to the general subject field, the product, or the process (Munday, 2008). Translation is equivalence when it deals with linguistic paradigm regardless of replacement or transformation is used, whether the focus is on the author or reader or text, whether the emphasis is on the reception of target text or source text, and whether functional equivalence or dynamic equivalence is suggested (Long, 2013).

When the action of translating happens, there are some strategies that can be applied. Robinson (2003) proposes three steps of translating that are taken from Pierce's three terms called: instinct, experience, and habit. Instinct means unclear preparation of the translator that starts with eyeless, intuitive, spontaneous sense in a language, source text, or target text, meaning of words and phrases, and grammatical structure of a sentence. Next, experience means the carrying out of translating words and phrases, looking back at both languages, finding equivalence of words, and structures of sentences. Last, habit means when the translator accustoms to the process continuously it will answer the problem as unconscious behavior patterns, especially for translating the process quickly and efficiently. The next translation process is called the interpretive model with two steps that are understanding and

expression. There are three kinds of understanding such as linguistics component, implicit or implied in a discourse, and cognitive knowledge about the language. Expression involves re-verbalization, verification, and equivalent forms (Lederer, 2003).

Translating English into Indonesian or vice needs specific treatment because of its characteristics. Apriyanti, et al. (2016) proposed the process of analyzing three categories of texts includes: expressive, informative, and vocative texts from English into Indonesian. The components of analysis are grammatical structure, cultural words, and writing mechanics. Ummami (2019) analyzes the result of translating text from English into Indonesian. The method used is equivalences from Jacobson, Nida, and Baker includes: lexical, textual, and grammatical.

Nowadays, the application of Artificial Intelligence (AI) in the process of translating is massive. All people from students to professionals get the benefit of machine translation (MT) to help them translate short and long text, spoken or written, even photos to the other language. The history of machine translation started 50 years ago when people want to read a foreign article or translate a letter from abroad. At that time, people spent a long time through dictionaries or going to professional translators. Then, computer-based translators help people to have a meaning behind the text. Its availability, openness, and convenience provided in the MT make the work of professionals easier, fast, and readable (Hutchinson, 2014). The use of Google Translate (GT) is free, easy, and handy when it packages with Google (Setiawan, 2020).

From the oldest one called SYSTRAN which launched in 1997 to Google Translate in 2006 and now Chat GPT in 2022 are the various MT that can be found today. The other examples are DeepL, Yandex, U-dictionary, Microsoft Translator, and itranslate. An example of online machine translation and its languages is provided in Table 1:

*Table 1. The example of online machine translation*

Translator	URL	Languages
Google Translate	<a href="https://translate.google.com/">https://translate.google.com/</a>	103
Yandex	<a href="https://translate.yandex.com/">https://translate.yandex.com/</a>	81
Bing Translator	<a href="https://www.bing.com/translator">https://www.bing.com/translator</a>	61
Systran	<a href="https://translate.systran.net/translation-Tools/text">https://translate.systran.net/translation-Tools/text</a>	41
Babylon	<a href="https://translation.babylon-software.com/">https://translation.babylon-software.com/</a>	23
PROMT	<a href="https://www.online-translator.com/">https://www.online-translator.com/</a>	20
WorldLingo	<a href="http://www.worldlingo.com/">http://www.worldlingo.com/</a>	14
Reverso	<a href="http://www.reverso.net/text_translation.aspx">http://www.reverso.net/text_translation.aspx</a>	14

(Vanjani, Aiken, 2020)

Based on the explanation, this study's objective was to investigate the performance of machine translations: GT, DeepL, Yandex, U dictionary, Microsoft translate, and itranslate on translating informative texts in various topics, observe the students' method of using the internet, especially MT application, and ask some questions about the usage of MT for finishing the tasks.

## METHOD

This study applied descriptive qualitative research design with a content analysis approach. The data are taken from the result of the final test on the Translation subject. There were 48 papers. The source texts were in English and the target text was in Indonesian. The students had to translate one informative text from a newspaper provided on the item test. There were 11 texts from numerous topics: Ukraine's war, wildlife safety, beauty trend, agriculture, Artificial Intelligence (AI), government policy in India, an English magazine, and big data. The student already presented the online machine translation in the classroom compared with a friend in the same class. The data are taken from the document of the final test on translating informative text with machine translation, observation when the students do the final test, and interview after doing the final test. The data were analyzed by using descriptive qualitative. The method of analysis on the document of the student's final test was: first was investigating machine translation used by the students, second was making a table, inserting the result of translation from machine translation, lastly was comparing the result in three categories: grammatical structure, cultural words, and mechanical writing (the composition of the paragraph). The data of observation and interview were analyzed by using a descriptive qualitative approach.

## RESULTS

There are three findings presented in the study: the result of analyzing the TT into three categories: grammatical structure, cultural words, and mechanical writing (composition of the paragraph), the result of observation, and the result of the interview.

The first finding was the result of analyzing in three steps: investigating machine translation used by students. The result was there were 6 machine translations applied. They were Google Translate, DeepL, Yandex, U Dictionary, Microsoft Translate, iTranslate. The second step was making a table, then inserting the result of the translation from MT. The example results of inserting ST and TT into a table are provided on the table.

Table 2. The example results of inserting ST dan TT into a table

English Text	<p><b>Big cat safety law ends ‘Tiger King’-style attractions</b></p> <p>The <b>Tiger King’s legacy</b> now <b>includes enhanced</b> big cat protections signed into <b>law</b> this week by President Joe Biden.</p> <p>Some animal <b>owners will need</b> federal <b>licenses</b>. Some <b>Interior Department officials</b> will get busy writing new regulations. Some roadside zoos will lose a <b>popular but unsuitable</b> attraction. “We’ll immediately see the end of <b>all cub petting operations</b>,” Marty Irby, executive director of Animal Wellness Action, <b>told</b> E&amp;E News.</p>
Google Translate	<p><i><b>Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Raja Harimau’</b></i></p> <p><i>Warisan <b>Raja Harimau</b> sekarang <b>mencakup peningkatan</b> perlindungan kucing besar yang ditandatangani menjadi <b>undang-undang</b> minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa <b>pemilik hewan memerlukan lisensi federal</b>. Beberapa <b>pejabat Departemen Dalam Negeri</b> akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan daya tarik yang <b>populer tetapi tidak sesuai</b>.</i></p> <p><i>“Kami akan segera melihat akhir dari semua operasi pemeliharaan</i></p>

	<p><i>anak,” kata Marty Irby, direktur eksekutif Animal Wellness Action, kepada E&amp;E News.</i></p>
Deep. L	<p><b>Undang-undang keselamatan kucing besar mengakhiri atraksi ala ‘Raja Harimau’</b></p> <p><i>Warisan Raja Harimau sekarang mencakup peningkatan perlindungan kucing besar yang ditandatangani menjadi undang-undang minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa pemilik hewan akan membutuhkan lisensi federal. Beberapa pejabat Departemen Dalam Negeri akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan atraksi yang populer tetapi tidak cocok.</i></p> <p><i>“Kita akan segera melihat akhir dari semua operasi hewan peliharaan anak,” kata Marty Irby, direktur eksekutif Animal Wellness Action, kepada E&amp;E News.</i></p>
Yandex	<p><b>Hukum keselamatan kucing besar berakhir ‘Tiger King’-gaya atraksi</b></p> <p><i>Warisan raja harimau sekarang termasuk perlindungan kucing besar yang ditingkatkan yang ditandatangani menjadi undang-undang minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa pemilik hewan akan membutuhkan lisensi federal. Beberapa pejabat Departemen Dalam Negeri akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan daya tarik yang populer tetapi tidak cocok.</i></p> <p><i>“Kami akan segera melihat akhir dari semua operasi Cub petting,” Marty Irby, direktur eksekutif Animal Wellness Action, mengatakan kepada E &amp; E News.</i></p>
U-dictionary	<p><b>Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Raja Harimau’</b></p> <p><i>Warisan Tiger King sekarang mencakup peningkatan perlindungan kucing besar dalam hukum pada minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa pemilik hewan memerlukan lisensi federal. Beberapa pejabat Departemen Interior akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan daya tarik yang populer namun tidak sesuai.</i></p> <p><i>“Kami akan segera melihat akhir dari semua operasi petaskus,” Marty Irby, Direktur Eksekutif Aksi Kesehatan Hewan, mengatakan kepada E &amp; E News.</i></p>
Microsoft Translate	<p><b>Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Tiger King’</b></p> <p><i>Warisan Raja Harimau sekarang mencakup peningkatan perlindungan kucing besar yang ditandatangani menjadi undang-undang minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa pemilik hewan memerlukan lisensi federal. Beberapa pejabat Departemen Dalam Negeri akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan daya tarik yang populer tetapi tidak cocok.</i></p> <p><i>“Kami akan segera melihat akhir dari semua operasi pemeliharaan anak,” kata Marty Irby, direktur eksekutif Animal Wellness Action, kepada E&amp;E News.</i></p>
i-translate	<p><b>Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Tiger King’</b></p> <p><i>Warisan Tiger King sekarang mencakup peningkatan perlindungan kucing besar dalam hukum pada minggu ini oleh Presiden Joe Biden.</i></p> <p><i>Beberapa pemilik hewan memerlukan lisensi federal. Beberapa pejabat Departemen Interior akan sibuk menulis peraturan baru. Beberapa kebun binatang pinggir jalan akan kehilangan daya tarik yang populer namun tidak sesuai.</i></p> <p><i>“Kami akan segera melihat akhir dari semua operasi petaskus,” Marty Irby, Direktur Eksekutif Aksi Kesehatan Hewan, mengatakan kepada E &amp; E News.</i></p>

Based on the second step, the analysis was categorized into grammatical structure, cultural words, and mechanical writing (composition of paragraph). The grammatical structure category consisted of tenses, word formation, active/passive, singular/plural, gender, and auxiliary verbs. The complete explanation is provided below.

In the tenses category, there were no changes from ST to TT because all the information is in a form of a published article in a newspaper that tells about language features such as past and present tense, reporting verbs, action verbs, and adverbs. In Indonesian there was no change of tenses but apply adverb of time for telling the time. For example, the word “ends” in the title “Big cat safety ends ....” translated into “*mengakhiri*” in GT, DeepL, U dictionary, Microsoft translate, and itranslate but in Yandex translator the meaning was “*berakhir*”. Another example was the word “includes” in the sentence “The Tiger King legacy now includes...”, translated into “*mencakup*” in GT, DeepL, U dictionary, Microsoft translator, and itranslate but in Yandex translator the meaning was “*termasuk*”.

Then, in the word formation category, there was a change of position on the noun because of the role in English that place the head noun in the sentence or noun phrase after modifiers but the Indonesian role is placing the head noun before modifiers. For example, the phrase “big cat” is translated into *kucing besar* in GT, DeepL, U dictionary, Microsoft translator, itranslate, and Yandex translator. The phrase “tiger king” is translated into “*raja harimau*” in GT, DeepL, Yandex translator, and Microsoft translator but in U dictionary and itranslate the meaning is untranslatable (tiger king).

Next, in the active/passive category, there was a change of active form in English translated into passive form and vice versa. For example, the word “enhanced” translated into “*ditingkatkan*” in Yandex translator. Another example is the word “told” translated into “*mengatakan*” in Yandex translator, U dictionary, and itranslate. But in GT, DeepL, and Microsoft translate this word translated into “*kepada*”.

In the singular/plural category, there were some examples of changing the meaning from plural to singular. The words “attractions, licenses, and owners” were translated into “*atraksi, lisensi, and pemilik*” in all machine translations: GT, DeepL, Yandex translator, U dictionary, Microsoft translator, and itranslate. The articles “the” and “a” aren’t translated into Indonesian by all machine translation. In the gender category, there is no example found. Lastly, in the auxiliary verb category, there was one example found: the word “will” translated into “*akan*” in all machine translations. The summary of the grammatical structure analysis is provided in Table 3.

Table 3. The summary of grammatical structure analysis

Source Text	Tenses	Word Formation	Active/ Passive	Singular Plural	Article	Gender	Auxiliary Verb
big cat Tiger king		<i>kucing besar</i> <i>raja harimau</i>					
ends, includes	<i>mengakhiri</i> , <i>berakhir</i>						
attractions licenses, owners				<i>atraksi</i> , <i>lisensi</i> , <i>pemilik</i>			
the, a					untrans- lated		untrans- lated
enhanced			<i>peningkatan- ditingkatkan</i>				

Source Text	Tenses	Word Formation	Active/ Passive	Singular Plural	Article	Gender	Auxiliary Verb
told			<i>mengatakan,</i> <i>kepada</i>				
will							<i>akan</i>

In the cultural words category, there were no examples reported since the news report in the form of formal language, talking about facts that were happening in the world or local area even names, dates, and places as well as point of view. Meanwhile, in the mechanic of the writing of a news article there was a structure known as an inverted pyramid format such as lead means the newsworthy information goes at the beginning of the story, most important facts like what, who, how, about the news, and background means the least newsworthy information goes at the end. Accordingly, all the TTs were in the form of the order of writing news articles. Nevertheless, some meanings of the words, phrases, and sentences may vary. For example, the meaning of “law” is translated into “undang-undang” in GT, DeepL, U dictionary, Microsoft translator, and itranslate but it is translated into “hukum” in Yandex translator. The phrase “tiger king” is translated into “raja harimau” in GT, DeepL, and Yandex translator, but it is translated into “tiger king” in U dictionary, Microsoft translator, and itranslate. The sentence “Big cat safety law ends ‘Tiger King’-style attractions” translated into “Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Raja Harimau’” in GT and U dictionary, “Undang-undang keselamatan kucing besar mengakhiri atraksi ala ‘Raja Harimau’” in DeepL, “Hukum keselamatan kucing besar berakhir ‘Tiger King’ -gaya atraksi” by Yandex translator, and “Undang-undang keselamatan kucing besar mengakhiri atraksi bergaya ‘Tiger King’” by Microsoft translate and itranslate.

The second finding was the result of observation. From the observation, it can be found that the students did five steps in translating the text. First, read all chosen texts to decide which text should be translated. Second, choose machine translation. Third, insert the text into the machine translation. Fourth, copy and paste the TT into a word document. Last was analyzing TT into categories: grammatical equivalence, lexical equivalence, and techniques of translating. The chosen texts were 11 titles on various topics with 400 - 500 words. All the students chose seven texts to be done. The three texts entitle Big cat safety law ends ‘Tiger King’-style attractions translated by six machine translations: GT, DeepL, Yandex, U dictionary, Microsoft translate, and itranslate, India eyes database on drug formulations in the country translated by six machine translations: GT, DeepL, Systran, Yandex, U dictionary, Microsoft translator, and Successful AI-data strategies must be built on firm foundations translated by six machine translations: GT, DeepL, Systran, U dictionary, Microsoft translate, and itranslate. The last four titles for example, Bioenergy from forest residues has “significant positive impact”, according to a new study translated by two machine translations: GT and online translator, Artificial intelligence strategists are drowning in data translated by two machine translations: GT and U dictionary, In Washington, Zelensky seeks to rally support for grueling war with Russia translated by two machine translations: GT and DeepL translator, and 5 French-Girl Makeup Tricks to Steal from the Emily in Paris Set translated by two machine translations: GT and U dictionary.

Big cat safety law ends ‘Tiger King’-style attractions translated by six machine translations: GT, DeepL, Yandex, Udictionary, Microsoft translate, and itranslate, India eyes database on drug formulations in the country translated by six machine translations: GT, DeepL, Systran, Yandex, Udictionary, Microsoft translator, and Successful AI-data strategies must be built on firm foundations translated by six machine translations: GT, DeepL, Systran, Udictionary, Microsoft translate, and itranslate. The last four titles, for example, Bioenergy from forest

residues has “significant positive impact”, according to a new study translated by two machine translations: GT and online translator, Artificial intelligence strategists are drowning in data translated by two machine translations: GT and U Dictionary, In Washington, Zelensky seeks to rally support for grueling war with Russia translated by two machine translations: GT and DeepL translator, and five French-Girl Makeup Tricks to Steal from the Emily in Paris Set translated by two machine translations: GT and U Dictionary.

The third finding was the result of the interview after the students finished the final test. There were three questions: why did you choose the machine translation? How understandable was the result compared to GT? And how about the vocabulary associated with the language that you translate? From those questions below were some answers from the students. In the first question students’ answers were “I chose GT because it was easy to access, just type in Google browser then I can directly use the application”, “I chose Systran because it is a new machine translation for me”, “I chose U dictionary because I can get not only the meaning of the word but also the synonym of those words”. From the second question, some answers were: “The meaning was understandable due to the Indonesian role of language doesn’t have tenses in showing the time”, “It is understandable if it translated informative text, but in some cases like literature text, the meaning of cultural words in Javanese, Sundanese, or any other local language need to adjust”. In the third question, the students’ answers were “I can get different meanings when applying different machine translation like GT, Systran, Yandex, or itranslate”, and “Sometimes I rely on machine translation much when I get unfamiliar words in a text”. Lastly, in the auxiliary verb category, there is one example found: the word “will” translated into “akan” in all machine translations.

## DISCUSSION

Since the result of the analysis gives a description of the grammatical structure, cultural words, and mechanic writing, interview, and observation from the MT performance some discussion may have in the following paragraph.

In the analysis of three categories, it can be said that the application of translating from English into Indonesian applies the theory from Apriyanti, Wulandari, Safitri, and Dewi (2016). In analyzing grammatical structure, it follows the role of English grammar elements such as tenses, word formation, singular/plural, active passive, and auxiliary verbs. But one element like gender is not commonly included in English grammar. In this research, Apriyanti et al. (2016) chose some elements of English grammar. The five key elements are word order, punctuation, tense and aspect, determiners, and connectors. Word order means the relationship between words for example subjects should carry a noun or pronoun and the place always comes first then the verb, next objects, and last adverb. Punctuation is used to convey pauses, intonation, and word stress. The punctuation marks are periods, commas, question marks, exclamation points, semicolons, dashes, hyphens, brackets, braces, parentheses, apostrophes, ellipsis, colons, and quotation marks. Tense and aspects refer to present, past, or future by applying domains to verbs. While aspects refer to one single instant action, a regular or repeated action, or an ongoing or progressive action or state. Determiners needed to give meaning to nouns because nouns can rarely stand on their own without prior context. Determiners can be “which”, “how many”, “what”, “my” and many others. By using determiners correctly, it is important to form meaningful questions or statements. The connector’s function is to connect phrases, words, and clauses. They can express subordination such as if, who, that, when, because, although, coordination like but, yet, and, nor, or correlation such as either, or, both, and.

The consideration of choosing the theory was the elements of grammar are included in the analysis process with the added element that is gender. Moreover, in the analysis

result, there is no example of gender category in informative text. While in cultural words there were no examples as well. In mechanic writing, some examples are found because the meaning in Indonesian is varied. Some of those meanings are readable but some others are not since every MT has its own style of translating words. As Purwaningsih (2016) said that machine translation can produce more than one meaning for one word so a translator must be able to decide which meaning should be used in translating. The translation results are different both from the style of language and choice of words used by each machine translation (Fitria, 2021)

From the result of the interview, it can be declared that AI can do many things such as inputting a photo, credit application, audio clip, English sentence, English sentence, remote control of a car camera, electricity, etc. The applications are speech recognition, photo tagging, self-driving car, language translation, etc. (Ng, 2016). AI also improves the quality of MT in today's change to translation business, and translation teaching in university (He 2021). MT as an application of language translation has turned into an essential part of the development of translation services in the world (Kong, 2022). From the result of observation, it can be informed that the students can implement their knowledge on using AI, especially in MT application. Unfortunately, this ease tool should be supported by evaluating process or post-translation editing, and language competencies (He, 2021)

## CONCLUSION

To sum up, from the three findings it can be said that the analysis of performance on machine translations that are GT, DeepL, Yandex, Udictionary, Microsoft translate, and itranslate on translating informative text from English into Indonesian is understandable. However, in grammatical structure, there are some differences in tenses, word formation, active/passive, singular/plural, article, and auxiliary verbs. These happen because there is a different role of languages in English Indonesian like tenses as the time signal in English but not in Indonesian, word formation of head noun placing, and singular/plural meaning. The cultural words were not found because the article is a news report that is reporting facts and formal language. In mechanic writing, the meaning in Indonesian is understandable due to the informative text form. Nevertheless, some styles of writing in Indonesian can vary because every machine translation applies its own style. The result of observation and interview shows that the students apply some steps to make them ease in practicing machine translation usage.

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