The Impact of the AI Translation Tools on the Translation Job Industry in Sri Lanka: With Special Reference to Sworn Translators

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ABSTRACT

Artificial intelligence has changed the world, from translation services to many fields. The present study examines the influence AI tools have on sworn translators in Sri Lanka, a country with a very intricate language setup. In this qualitative research, 25 sworn translators share their experiences and views about AI translation systems. This study seeks to answer these research questions: 1). How familiar are Sri Lankan sworn translators with AI translation tools and their usage of AI translation tools in their work? 2). What changes have they observed in the demand for human translators since the advent of AI tools, and how do Sri Lankan translators view the accuracy, quality, and overall impact of AI translation tools compared to human translation? The study indicates that even though certified translators widely use Google Translate and GetGloby artificial intelligence technologies, they still cannot do as adequate a job in terms of precision and quality as human translators. Certified translators (sworn translators) who mostly work in legal document translations in Sri Lanka have not reported primary changes in demand or income in their translation field. However, according to sworn translators, translators in both technical and literary fields have indicated slight differences in their revenues. Despite the advances in artificial intelligence, human translators still have become a necessity in ensuring the accuracy and subtlety of cultures for the production of quality translations. The results suggest that although AI technologies increase speed, they are unlikely to completely replace human translators in Sri Lanka in the near future.

Keywords— Artificial Intelligence, Translation Industry, Sworn Translators, Sri Lanka, Job Security.

Abbreviations

AI – Artificial Inteligence

INTRODUCTION

Artificial Intelligence (AI), as one of the fastest-changing elements in the world, has significantly changed industries worldwide. In the field of translation, Artificial Intelligence tools have emerged as powerful tools that enhance productivity, speed and effectiveness (Wang,2023). The translation field, traditionally based on human expertise, is undergoing fast-paced changes with the integration of AI driven translation tools and software. With these changes, the question regarding the capacity of AI tools to fully replace human translators has become a subject of discussion.

In Sri Lanka, where a multilingual landscape prevails with Sinhala, Tamil and English as the official languages, translation plays an essential role in communication, education, and commerce. There is a tendency of an increasing number of individuals are using AI-powered translation services due to the accuracy, fast and cost effectiveness compared to traditional methods of translation. In this context, there has been an increasing concern that AI technologies will replace human translators, resulting in possible job losses in the future.

This study examines the impact of AI translation rules on the translation job market in Sri Lanka, focusing on sworn translators. By conducting interviews with 25 sworn translators from Sri Lanka, the study explores the impact of AI tools on the translation field, focusing on the challenges and opportunities for professional translators. Therefore, the present study seeks to answer the following research questions:

1. How familiar are Sri Lankan sworn translators with AI translation tools and their usage of AI translation tools in their work?

2. What changes have they observed in the need for human translators since the advent of AI tools, and how do Sri Lankan translators view the accuracy, quality, and overall impact of AI translation tools compared to human translation?

LITERATURE REVIEW

Machines are now capable of performing tasks that are comparable to the cognitive processes of human beings, which are capable of learning, making decisions, and utilizing their knowledge. This can be described as Artificial Intelligence (Qin et al., 2023). AI has expanded significantly in recent years and has revolutionised numerous fields, including translation. It has enhanced conventional translation methods by employing tools such as machine translation (MT), neural machine translation (NMT), and natural language processing (NLP) (Luz et al.,2020). These tools facilitate the rapid translation of text between languages and facilitate global communication. Artificial Intelligence can be classified into three categories according to its level of intelligence, as per Wirth (2018). Strong AI is capable of autonomous reasoning, while Hybrid AI integrates various cognitive abilities and Narrow AI is intended to execute particular tasks. However, translation is frequently conducted using Narrow AI tools, such as DeepL and Google Translate. Nevertheless, they continue to encounter challenges when interacting with texts that necessitate a more profound comprehension of culture and context (Zhao & Jiang, 2022). Although these tools are frequently accurate, they encounter difficulty in translating idioms, cultural connotations, and words that have varying contextual meanings (Wang, 2023).

Numerous discussions have been initiated regarding the function of AI in translation. Researchers indicate that AI is effective for both technical and fundamental translations. However, it is inadequate for specialised fields such as legal or literary translation. These translations necessitate a deep understanding of both the source and target languages, as well as cultural comprehension (Strobl et al., 2024). As Bradley (2022) stated, there are concerns that artificial intelligence may eventually replace human translators in the translation industry, particularly in routine tasks. Nevertheless, certain researchers believe that AI can augment the capabilities of human translators rather than supplant them. Bakhov et al. (2024) demonstrate that translators' abilities can be enhanced through the implementation of artificial intelligence in translator training. It enables them to concentrate on the more challenging aspects of translation while AI handles the simpler tasks. This collaboration between AI and human beings can help translators increase their productivity while still requiring their expert knowledge (Lee, 2023).

Nevertheless, there is a dearth of research on the impact of AI on the translation industry in Sri Lanka. The efficiency of small and medium enterprises in Sri Lanka has been enhanced by the implementation of AI, as demonstrated by a study conducted by Fonseka et al. (2022). This may also impact the translation industry, where AI tools may streamline workflows, improve turnaround times, and reduce costs for both translators and clients. Nevertheless, the usage of AI tools for translation in Sri Lanka is a relatively recent development, and there is a lack of information regarding the impact of these tools on professional translators, particularly in the context of legal translation. It is crucial to investigate the impact of AI tools on translation employment in Sri Lanka as a result of these developments. While AI has the potential to expedite and reduce the cost of translation, its impact on the necessity of human translators—particularly in technical and legal fields—is unclear. The objective of this study is to address this gap by examining how Sri Lankan sworn translators perceive and use AI tools, and what they expect of their profession.

METHODOLOGY

The given study employs a qualitative research method. It is chosen as it allows in-depth understanding of the perspectives, expressions and experience of the participants regarding the use of Ai driven tools in the translation industry. Accordingly, the study aims to capture the impact of the AI driven tools on translator's work, its demand and the reception of translation quality.

Participants

The participants in the study are 25 sworn translators in Sri Lanka. Sworn translators are people recognized by legal authorities and have legal validity in the Sri Lankan translation industry (moj.gov.lk). They do document translations (mostly legal documents) from Sinhala to English, English to Sinhala, Sinhala to Tamil, Tamil to Sinhala, English to Tamil and Tamil to English.

Data Collection

The data were collected through semi-structured interviews ensuring that the key research questions were addressed. All the interviews were conducted online due to the logical constraints. Online translation format may have excluded some translators who are not comfortable with using online platforms. Participants were selected based on their availability and willingness to discuss their experience with AI translation tools. All the participants were asked about their experience with various AI translation tools such as Google Translate, Bing Translator etc in order to ensure a comprehensive view of the AI tools in different context. The interviews were both audio recorded and written answers, and the audio was transcribed.

Data Analysis

The data was analyzed by following Braun and Clarke's (2006) six steps of thematic analysis. This process involves;

1. Familiarizing with the data

2. Generating initial codes

3. Searching for themes

4. Reviewing themes

5. Defining themes

6. writing the report.

In order to reduce the misinterpretations or loss of the emic perspective understanding of the data, the original language (Sinhala) was used to code and analyze the data. Only the insights which were directly relevant to the study were translated into English to include in this paper. Participants' experience with artificial intelligence was mainly around the following themes: Experience and translation types, Familiarity and usage of AI tools, Comparison of AI and human translation, Impact on demand and income, Client preferences and Job security and Future of translation jobs. These themes manifest how artificial intelligence has impacted to Sri Lankan translation Job industry.

Ethical Considerations

The study followed ethical guidelines to protect the rights and the confidentiality of the participants. To protect the anonymity of the participants, labels (e.g., Participant A, Participant B, …) were given in the study. Informed consent was obtained from all the participants informing them about the objectives of the study, nature of the interviews and the confidentiality of their responses.

RESULTS AND DISCUSSIONS

Experience and Translation Types

Years of experience as sworn translators of 25 participants are as follows.

Table I - Experience

Years of experience	Percentage
1-2 years	48%
3-4 years	20%
5-6 years	32%

Nearly half of the participants (48%) possess only 1–2 years of experience, indicating that many are very inexperienced in the field. This trend may be associated with the time from 2019 to 2023, characterized by the emergence of artificial intelligence, particularly during the COVID-19 pandemic. The escalation of global travel restrictions has heightened the demand for document translation, hence generating opportunities for emerging translators. Furthermore, AI techniques such as machine translation may have facilitated entry into the profession for novices by diminishing the requisite ability or experience at the outset. Conversely, hardly 20% of the participants possess 3–4 years of expertise, while 32% have 5–6 years. This indicates that the profession presently has a diminished number of seasoned translators and is drawing an increasing influx of novices. This may indicate an increasing demand for sworn translations in Sri Lanka, attracting new professionals while failing to retain a significant number of long-term practitioners.

Forty percent (40%) of participants only engage in legal translation, underscoring the significant need for the translation of official and legal documents. Nonetheless, 32% of participants manage both legal and technical translations, while 28% operate within legal, technical, and literary domains. This indicates that numerous certified translators are enhancing their competencies and offerings to satisfy market demands.

Table Ii- Translation Types

Translation types	Percentage
Legal Translational	40%
Legal, Technical Translation	32%
Legal, Technical and Literary Translation	28%

Familiarity and Use of AI Tools

The participants were requested to identify the AI translation tools with which they were acquainted. All participants identified solely five tools: Google Translate, GetGloby, Bing Translator, Quillbot, and DeepL. Several individuals recounted their experiences as follows:

"As far as I know, I use Google Translator in some cases' (A)

"Used GetGloby to do translations" (C)

"Sometimes I use Google Translator"(F)

"I am familiar with GetGloby and Google Translator"(G)

"I do not use AI translation tools as they are not much of help when it comes to legal translation" (D)

"I do not use any translation tools. I do the translation manually in legal translation" (E)

Numerous participants indicated that they occasionally utilize AI translation tools, particularly for general or unofficial assignments. Some expressed familiarity with applications such as Google Translate and GetGloby,

utilizing them as necessary. Their comments indicate that these technologies serve as assistance rather than for comprehensive translations, especially in informal circumstances. Nonetheless, not all participants depend on AI tools. Certain individuals, particularly those specializing in legal translation, favour manual work. These comments suggest that although numerous certified translators are receptive to employing AI techniques, their application is typically confined to non-legal assignments. For legal and official translations, the majority of translators continue to prefer manual translation to ensure accuracy, reliability, and adherence to official requirements.

Table Ii- Use Of Ai Tools

Names of the AI tools	Percentage
Google Translate	55%
Getgloby	25%
Bing Translator	5%
Quillbot	10%
DeepL	5%

The above results indicate that the majority of certified translators in Sri Lanka are acquainted with AI translation tools; however, their application differs based on the nature of the translation tasks. The predominant tools utilized are Google Translate and GetGloby. Data indicates that 55% of participants utilize Google Translate, establishing it as the most prevalent AI tool among certified translators. 25% utilize GetGloby, but a lesser proportion of people employ Quillbot (10%), Bing Translator (5%), and DeepL (5%).

Comparison of AI and Human Translation

The participants expressed their views on the precision and quality of AI translations in relation to human translations. All concurred that human translators surpass AI tools in accuracy and quality. Several examples were given to show how AI tools produce incorrect translations.

"It's not 100% accurate. English to Sinhala/ Tamil is 65% accurate. But Sinhala to Tamil or Tamil to Sinhala is only 35% accurate"(A)

"I do technical translations, Sinhala to English comparatively correct than English to Sinhala"(C)

"I wanted to get the English translation of the word "සේපාලිකා"(Sepalika) which is a flower, but this word has been translated as "chief executive" in Google Translate. See it was totally a wrong meaning" (H)

The image below shows the translation of the word mentioned above, which was provided to the researcher by the sworn translator (H)

PICTURE I
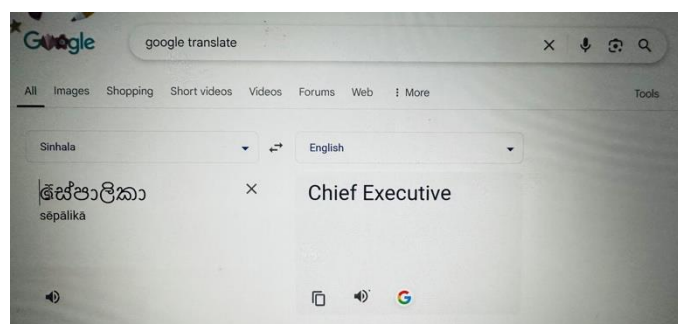
"In terms of accuracy and quality, human translators do a better job than AI tools. Most of the time direct or word-to-word translation is provided by the AI tools" (F)

These instances unequivocally demonstrate that AI translation technologies continue to commit significant errors, particularly when handling less prevalent vocabulary. Numerous participants indicated that AI technologies frequently fail to comprehend the meaning or context of a sentence, resulting in erroneous translations. These findings suggest that despite advancements in certain AI technologies, such as Google Translator and Bing Translator, they remain less reliable than human translators. In many instances, particularly in technical translations, AI can be beneficial, yet human translators remain essential for proofreading and rectifying the final result. Participants concurred that human translators exhibit greater accuracy and yield superior translations due to their ability to comprehend the complete content and context of the original text—an area where AI systems continue to falter.

Impact on Demand and Income of Human Translators

According to participants, AI translation tools have impacted on the demand and income of the translators to a certain extent.

"There's no changes for sworn translators, but it has slightly impacted for the demand for other translations like hotel document translation, content writing etc… because it can be done using AI tools and they do not need any seal for the output"(G)

"yes the demand depends on the purpose, for ex: when doing a technical or academic document translation there's a slight shortage of using a human translator because for small document translations people use AI translation tools. So that affect for the translators who engage in technical and literal translations, but it do not affect for sworn translators because clients need the seal for the translation"(H)

"Not significantly. Especially when it comes to sworn translation work, the official seal of the translator is the most important element of the translated document. Therefore, because of this government recognition I don't see much of a change in demand at least when it comes to sworn translator services"(B)

The feedback from participants G, H, and B indicates that the demand for human translators varies according to the sort of translation required. Their assessment indicates that the need for certified translators has remained relatively stable. Clients require official seals for documents, including legal or government-related files, which AI tools are incapable of supplying. B elucidates that the seal of the sworn translator is an essential component of the document, and hence, this official stipulation ensures a consistent need for sworn translation services. Nonetheless, regarding other forms of translation, such as hotel documentation, general content creation, or minor technical documents, there is a slight decrease in the requirement for human translators. Participants G and H noted that AI translation technologies are frequently employed for such documents, particularly when an official seal is unnecessary. Consequently, the pay and employment prospects for translators in these domains may be impacted.

"I am a part time sworn translator, but one of my friends is a full time sworn translator. When we give her a document to translate, it takes at least two days due to her busy schedule. So, I do not believe that the demand for sworn translators has negatively affected their income levels" (J)

"There's not much impact on the sworn translators, but other types of translators can be affected. For ex: When doing a technical translation, translator's charge per a word usually includes type setting, formation, translation and proofreading. However, some clients use google translate to translate the document themselves and ask a translator to do only the proofreading. That kind of cases can negatively affect the income of the translator"(K)

These statements demonstrate that sworn translators continue to have a consistent flow of translation work and that their income is not significantly affected due to the AI translation tools. While acknowledging that some translators encounter difficulties, they concurred that sworn translators are not significantly affected but observed that other translators encounter difficulties with the advancement of AI translation tools. For instance, certain

clients utilize Google Translate and solely compensate for proofreading, thereby diminishing the total revenue for professional translators.

"There is a considerable change in the economy. AI has helped much to develop our potentials and translation speed"…(L)

"There is a significant income increase due to time saving for the translation"(M)

Participants emphasized some beneficial impacts of AI on the translation sector. They stated that AI has induced a significant economic transformation by enhancing both translation efficiency and translator capabilities. This indicates that translators may now work faster and manage a greater volume of work. Participants noted that this efficiency has resulted in a substantial augmentation in income, as translators may finalize more tasks in a reduced time frame.

Client Preferences

Here are some statements about the client preferences according to the perceptions of the sworn translators:

"Especially like NGOS, they write the top of the source text that "please don't use AI translations"…(N)

"Some clients check whether the translator has used an AI tool to do the translation"(O)

The participants noted that clients exhibit considerable caution over official translations, regardless of whether they are performed by a human or facilitated by AI techniques. They indicated that numerous clients, particularly organizations such as NGOs, explicitly urge that translators refrain from utilizing AI techniques for the translation of significant documents. For instance, Participant 'N' indicated that certain NGOs explicitly annotate the source material with a comment stating, "Please refrain from utilizing AI translations." Participant 'O' noted that certain clients actively verify if a translator has utilized AI, indicating a preference for human translation to ensure accuracy and reliability in formal tasks.

"Depend on the purpose, for small documents they prefer AI tools"(E)

"I believe that for some clients, the most important factor is how quickly the translation is completed. In such cases, AI tools work better for delivering fast results"(G)

Moreover, certain participants said that client inclinations for technical and literary translations are frequently dependent on the objective and immediacy of the projects. For brief or less significant documents, numerous clients prefer AI technologies due to their expediency and cost-efficiency compared to using a human translator. This is particularly applicable when translation quality is not paramount, and the client merely requires a fundamental comprehension of the content. Several participants saw that time significantly influences the client's decision-making process. In the contemporary, rapid environment, numerous clients prioritize speed over accuracy, particularly for internal purposes or informal correspondence. Consequently, despite the superior accuracy and cultural sensitivity provided by human translators, they are occasionally disregarded in favour of AI systems that yield immediate results.

Job Security and Future of Translation Jobs

According to these 25 participants, they have similar ideas about replacing human translators in the translation industry.

"Still cannot" (P)

"Cannot because we translate two cultures"(Q)

"No, I don't believe that. Because AI translation tools are not yet so advanced to understand all the details and structures in lots of languages"(R)

"no, because I onced used Google Translate to translate the meaning of 'gray hair' into Sinhala. The Sinhala output was 'අලු හිසකෙස්' (the direct translation) which was totally wrong. Correct one should be 'පුදු හිසකෙස්' which means white hair, where hair turns white due to the natural aging process"(A)

Responses from participants A, P, Q and R indicate that numerous sworn translators in Sri Lanka do not perceive AI tools as capable of entirely substituting human translators. They assert that translation transcends mere word substitution between languages; it necessitates comprehension of two distinct cultures. Consequently, some translators contend that AI is deficient in addressing intricate cultural significance, emotions, and contextual nuances, which are vital for precise translation. Participant R further underscored that AI tools are not sufficiently advanced to grasp the structure and profound meanings of numerous languages comprehensively. Consequently, reliable job security persists for human translators in Sri Lanka, particularly in the domains of official, legal, and culturally sensitive translations. The majority of participants assert that although AI can assist with minor or fundamental duties, human translators will remain pivotal in the future of translation within the country.

"It wouldn't affect much in Sri Lankan context"(S)

"These technologies are still developing, so there's no significant impact in Sri Lanka, but in the future, they may have effect" (T)

"I don't think it will have an impact on our county"(B)

"I am not sure about other fields, but I believe sworn translation field will not be affected"(E)

The perspectives of participants S, T, B, and E indicate that AI translation technologies have not significantly affected translation employment in Sri Lanka—at least this time. The majority assert that the employment stability of human translators, remarkably certified translators, is intact. Participant S indicated that AI would have minimal impact on the Sri Lankan environment, primarily due to the necessity for human involvement in the desire for formal, certified translations, particularly for legal or government-related papers that require precision and official seals. Participant T indicated that AI translation technology is still evolving, and while there is currently no significant influence, potential changes may occur in the future. This indicates a broad recognition that although the present circumstances are stable, translators may need to evolve as technology advances. Participant B expressed optimism that translation work in Sri Lanka would not be significantly impacted, while Participant E emphasized that the sworn translation sector, in particular, is likely to remain unaffected due to its official and legal nature.

CONCLUSIONS

This study examined the impact of AI translation tools on the translation job market in Sri Lanka, with particular emphasis on sworn translators. The findings indicate that although translators frequently utilize AI technologies such as Google Translate and GetGloby, they remain inferior in accuracy, cultural comprehension, and quality compared to human translators. Sworn translators, primarily engaged with legal and official documents, have not encountered a significant reduction in demand or revenue due to the necessity of official seals and human verification in their work. Translators in technical and literary domains have encountered alterations, notably in proofreading-only projects and diminished full-translation opportunities, as clients increasingly utilize AI for more straightforward duties. While some translators capitalize on AI's efficiency and time-saving advantages, potentially augmenting their earnings, numerous clients—particularly NGOs and formal institutions—continue to favour human translation for crucial duties. The research indicated that translators do not perceive AI tools as capable of entirely supplanting human translators, particularly due to the necessity of comprehending two cultures, emotional nuance, and context for precise translation. In the Sri Lankan setting, human translators—especially sworn translators—maintain substantial job security, while there is a prevailing recognition that changes may arise with the advancement of AI technology in the future. Nonetheless, there is an acknowledgement that translators must remain informed since upcoming advancements in AI may alter some categories of translation employees, especially informal tasks.

ACKNOWLEDGMENT

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