

Çevirmenlerin Nöral Makine Çevirisi Hizmetlerini Kullanma Davranışları ve Tercihleri

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Öz

Çeviri sektörü, makine çevirisi hizmetlerinin ortaya çıkmasıyla birlikte derin bir dönüşüm geçirmiştir. Bu hizmetler, sundukları fırsatlar ve zorluklarla çevirmenlerin rollerini ve iş süreçlerini değiştirmiştir. Bu nedenle, bu çalışma, İngilizce-Türkçe dil çiftinde çalışan çevirmenlerin davranışlarını ve tercihlerini, nöral makine hizmetlerini profesyonel yaşamlarına ne ölçüde entegre ettikleri açısından araştırmayı amaçlamaktadır. Çalışma, en sık kullanılan platformlar, nöral makine çevirisi hizmetlerinin ücretli veya ücretsiz sürümleri için tercihler ve seçimlerinin ardındaki belirli nedenler de dahil olmak üzere, bu hizmetlerin seçim kriterlerine ilişkin temel soruları ele almaktadır. Veri toplamak için toplam 23 sorudan oluşan hem açık uçlu hem de evet/hayır sorularını içeren ayrıntılı bir çevrim içi anket kullanılmıştır. Katılımcılar, ortalama 8 yıllık deneyime sahip ana dili Türkçe olan 14 çevirmenden oluşmaktadır. Ayrıca, katılımcı grubu coğrafi konum, yaş ve uzmanlık açısından çeşitlilik göstermektedir. Katılımcıların yanıtlarındaki örüntüleri belirlemek için tematik analiz uygulanmıştır. Çalışmanın sonucunda katılımcıların nöral makine çevirisi hizmetlerini yardımcı bir araç olarak gördükleri, çevirmenlerin çoğunun ücretsiz versiyonları kullandığı ve bu hizmetlere erişimlerinin olmaması durumunda iş süreçlerinin olumsuz etkileneceğine inandıkları gözlemlenmiştir. Bu çalışma, nöral ağ kullanan makine çevirisi hizmetlerinin Türkiye'deki çevirmenlerin profesyonel yaşamlarına entegrasyonu ve kullanım kolaylığı, hız, doğruluk ve erişilebilirlik gibi tercihlerini etkileyen faktörler hakkında önemli bilgiler sunmakta ve böylece çevirmenler ile mevcut makine çevirisi hizmetleri arasında gelişen ilişkinin anlaşılmasına katkı sağlamaktadır.

Anahtar sözcükler: çevirmenler, DeepL, İngilizce-Türkçe dil çifti, makine çevirisi, sinir ağı

TRANSLATORS' USAGE BEHAVIORS AND PREFERENCES OF NEURAL MACHINE TRANSLATION SERVICES

Abstract

The translation industry has undergone a deep transformation with the emergence of machine translation services. These services have changed the roles and work process of translators with the opportunities and challenges they offer. Therefore, the present study seeks to investigate the behaviours and preferences of translators working in the English-Turkish language pair in terms of the extent to which they have integrated neural machine services into their professional lives. The study addresses key questions regarding the selection criteria of these services, including the most frequently used platforms, preferences for paid or free versions of the neural machine translation

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Gönderilme Tarihi: 15 Aralık 2024

Kabul Tarihi: 11 Mart 2025

services and the specific reasons behind their choices. The methodological approach involves a detailed online questionnaire with both yes/no and open-ended questions including a total of 23 items. The participants include 14 translators, whose native language were Turkish and had an average experience of 8 years. Furthermore, the participant group presents diversity in geographic location, age, and specialization. Thematic analysis has been applied to identify patterns in participants' responses. The findings showed that participants thought neural machine translation services were a useful tool, that the majority of translators utilised the free versions, and that they thought their work processes would suffer if they were unable to use these services. This study provides valuable insights into the integration of machine translation services which use neural network into the professional lives of translators in Türkiye and the factors influencing their choices such as ease of use, speed, accuracy and accessibility, thereby providing an understanding of the evolving relationship between translators and current machine translation technologies based on neural network.

Keywords: DeepL, English-Turkish language pair, machine translation, neural network, translators

INTRODUCTION

The translation industry has undergone a deep transformation with the emergence of machine translation services such as Google Translate with its neural engine throughout the world (Wu, et al., 2016). These services have changed the roles and work processes of translators with opportunities and challenges. Although the modern machine translation providers have had their problems, they are getting better and better each day (Nur Fitria, 2021).

This research attempts to provide an in-depth analysis of the behaviors and preferences of translators regarding these services. This study is grounded in the Technology Acceptance Model (TAM), which provides a framework to understand how individuals adopt and use new technologies (Davis, 1989, Yang & Wang, 2019, Salloum et al., 2024). According to TAM, two primary factors influence technology acceptance: Perceived Ease of Use (PEOU) and Perceived Usefulness (PU). PEOU reflects the extent to which individuals believe that using a particular technology will be effortless, while PU measures their perception of how effectively the technology enhances their work performance. In the context of this study, these dimensions align closely with the criteria that translators consider when selecting neural machine translation (NMT) services, such as ease of use, speed, and accuracy. By applying TAM, this research aims to analyse translators' preferences for free versus paid NMT services and explore how these factors impact their professional workflows and decision-making processes. This model also helps contextualize the findings within a broader theoretical framework, linking individual behaviors to technology acceptance dynamics.

Apart from the identification of the most used neural machine translation services, this work aims to explore the extent to which these services have been integrated into the daily professional life of translators. Furthermore, the research aims to discover the factors influencing translators' decisions between the paid and free versions of these services, and to understand the motivations behind the translators' choices. The research also attempts to identify the neural machine translation

service most used by these professionals and to understand the specific criteria they use for evaluating the efficiency of these services. The primary research question for this research is as follows: "What are the Turkish translators' usage behaviours and preferences of neural machine translation (NMT) services?". In order to answer this main question, the guiding questions in the present study include:

1. Which NMT services are most frequently used by Turkish translators?
2. Do Turkish translators prefer paid or free versions of these NMT services?
3. What are the main reasons behind their choice of NMT services?
4. To what extent are NMT services integrated in their professional life?

1. LITERATURE OVERVIEW

The machine translation market was valued at 982.2 million dollars in 2022 and is expected to reach a CAGR of 22.8% billion dollars between the years of 2023 and 2032 (Wadhvani, 2023). One of these services, Google Translate, had 1 billion users in 2021. These numbers include all members of the society and nationality, including professional translators. Koskinen and Ruokonen (2017) revealed that technology was essential in translators' work and that the main reason for using it was to increase productivity for 70% of the translators who participated in their study.

Machine translation has seen remarkable advancements in the last decade with the emergence of neural machine translation systems (Wu et al. 2016). Neural machine translation has established itself as the standard for large-scale machine translation in a very short time after it was first introduced in 2014 (Stahlberg, 2020). It has been a powerful approach to challenge the predominant techniques in machine translation for a long time such as Statistical Machine Translation and Phrase-Based Machine Translation systems (Mohamed et al., 2021) This development has given rise to an increased integration of machine translation into the workflows of translators worldwide, though some still resist its use (Sakamoto, 2019). For instance, the effectiveness of machine translation services using neural network such as Google Translate and DeepL for Turkish-English and English-Turkish language pairs is still hard to generalize on (Yaman, 2023). Furthermore, the widespread use of free NMT services poses significant data privacy risks. Free platforms often collect and store user input to enhance their systems. This issue underscores the importance of understanding the privacy policies of NMT platforms, as free versions generally lack the stringent data protection measures offered by premium services. Since as Kamocki and O'Regan (2016, p.4460) pointed out "their business model is largely based on providing translation in exchange for data, which can subsequently be used to improve the translation model, but also for commercial purposes", this two-way relationship may also have potential detrimental effects for data privacy of translators' work. Nevertheless, most translators see advancements in machine translation as a positive process as it can positively impact their income and productivity (Zaretskaya, 2015).

In the context of English-Turkish and Turkish-English, there are relatively few studies on the DeepL Translate system, which has made a bold foray into machine translation using neural systems in recent years and added Turkish to the system as of 2022 (Yaman, 2023). Nevertheless, there have been some studies comparing DeepL and Google Translate in different language pairs. To illustrate, Hidalgo-Ternero (2021) focused on the translation of idiomatic expressions in the Spanish-English

language pair. He found the neural machine translation to be generally successful and presented the success rates as 86% for Google Translate and 89% for DeepL. In another study, Esperança-Rodier and Frankowski (2021) addressed the translation of multiword expressions in the French-Polish language pair and found that DeepL outperformed Google Translate. More recently, Yaman (2023) compared the technical features and recent performances of DeepL and Google Translate, both of which are neural network systems based on artificial intelligence. Likewise, he also observed that DeepL outperformed Google Translate in the English-Turkish language pair.

In recent years, Generative Artificial Intelligence (GAI) models such as ChatGPT have also become increasingly popular (Jiang et al., 2023). GAI models, compared to Google Translate and similar neural network services, need prompts and thus additional guidance to run, and eventually complicating the process. ChatGPT, despite this extra step, is still used for translation purposes. Even though it is possible to improve the output of ChatGPT with specific prompts (Peng et al., 2023), findings from a recent study by Öner and Bengi (2024) demonstrated that despite many experiments with prompts, ChatGPT's output when translating in the English-Turkish language pair is only somewhat satisfactory, indicating that translations by GAI may share the same features as automatic neural translation platforms and may require a similar process such as post-editing requirement.

In this study, we specifically focus on professional translators' preferences and behaviors concerning the utilization of machine translation services which rely on neural networks. The scope of this study is limited to Turkish translators working in the English-Turkish language pair.

An important area of interest for this study is the behavioral choices made by translators regarding the neural machine translation services they use. This involves both free and paid options of these services. The dichotomy between free and paid services may be particularly important, as it may reflect not only the quality of translations but also economic and accessibility factors. Understanding why translators opt for a specific service is crucial for this study. These motivations could be rooted in factors such as translation quality, availability, and performance differences of language pairs.

2. METHODOLOGY

2.1. *Participants:*

The participants in the research were Turkish translators due to access of the researchers to the participants. Efforts were made to ensure diversity in terms of geographic location, age, and specialization to capture a spectrum of experiences and preferences of Turkish translation community. These minutes of research were collected in the following format through the semi structured interview: age, gender, workplace location, and specialization.

The study was conducted with 14 professional translators, with a significant female majority (71.4%). Participants' ages varied from 28 years to 42 years, with the largest group being in their early thirties.

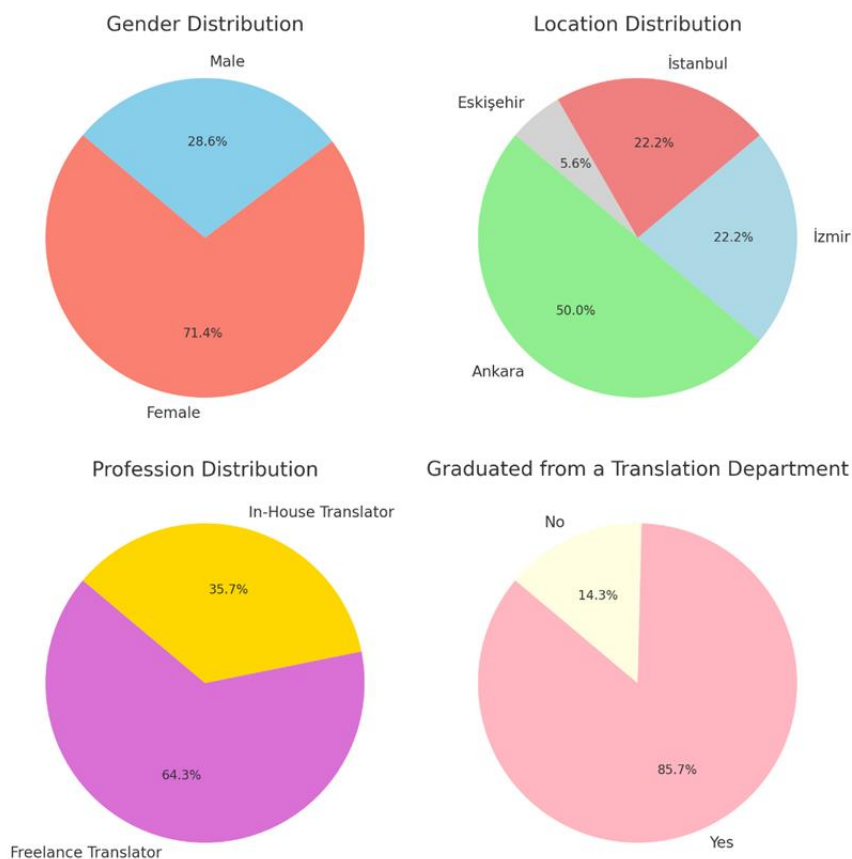


Figure 1. The demographics of the participants

The median professional experience of 8 years suggests a mature community that have witnessed significant industry changes, especially after the emergence of Neural Machine Translation (NMT). This experience range that spans from 1 year to 20 years, may indicate varying degrees of adaptability and perspectives towards technological integration in translation work. Most of the participants (64.3%) identified themselves as freelance translators. This highlights a significant trend towards freelance work in the translation industry, possibly driven by the flexibility and autonomy it offers, particularly post-covid. Considering their specializations, technical (8 participants expressed it as a main specialization area of theirs) and marketing translations (6 participants expressed it as a main specialization area of theirs) were most common, this may indicate these areas as popular demands in the English-Turkish language pair job market.

In terms of work location, a prominent concentration of participants was in Ankara (n: 7), İzmir (n: 3) and İstanbul (n: 3) also being key locations. There was also one participant from Eskişehir. This geographical distribution seems to be somewhat in line with regional economic or educational hubs since the participants were based in the largest cities in Türkiye.

The study also revealed that a significant majority (85.7%) of participants graduated from a translation-related department. This high level of formal education may suggest that a professional community is currently prevailing in translation practice, which is a positive trend. Translation work was the primary income source for most of the participants (12 participants out of 14), with some of them (5 participants) also engaging in other side jobs. The participants were also asked whether translation was the main source of their income and they had extra jobs or not. The majority (57.14%)

responded that translation was their main source of income and they did not have an extra job to make their living. Furthermore, there was also a group of participants (28.57%) who indicated that translation was their main source of income, but they also had extra jobs, as well. There were only two participants who indicated that translation was not their main job. Even though the translators reported that they engaged with a diverse type of translation tasks, they might be generally categorized into three, namely technical translation, marketing and/or media, and medical translation. These are followed by other academic translation, subtitling, legal and literary translation types. All of the participants indicated that they have used Neural Machine Translation services for their work and their experiences are shared in the Results part.

2.2. Procedure:

The procedure for conducting this research includes several key steps upon receiving the ethics committee approval of Social Sciences and Humanities Ethics Committee on December 18, 2023.

First Contact: The research began by establishing contact with potential participants, introducing them to the research's primary questions and the importance of their attendance. This first contact was made via emails, texts or phone calls. Reaching out to major translation companies and agencies, posting on online forums, groups and channels and networking websites were this research's main ways of finding potential participants.

Informed Consent: Before conducting the interviews, informed consent was obtained from each participant. They received a detailed explanation of the research, the purpose of the study, and the rights and responsibilities of them as participants in a suitable format.

Data Collection: Data was collected through pre-determined and open-ended questions to elicit further detailed responses. The study consisted of 23 questions (see Appendix).

Data Management: The results of the online questionnaire are stored securely to protect the participants' privacy in cloud platforms.

Data Analysis: Thematic analysis, involving the identification and exploration of themes and patterns in the participants' responses, was the main methods of data analysis. The analysis process was systematic and through. The process of finding, examining, and interpreting meaningful patterns—also known as "themes"—in qualitative data is known as thematic analysis (TA) (Clarke and Braun, 2017). TA offers clear, methodical steps for deriving codes and themes from qualitative data. The smallest analytical units that might potentially answer the research question are codes, which highlight intriguing aspects of the data. The building blocks of themes, or (bigger) patterns of meaning, codes are supported by a common core idea that serves as the organizing principle.

Thematic analysis in this study revealed several key codes and broader themes related to the behaviors and preferences of Turkish translators in using neural machine translation (NMT) services. The codes and themes are illustrated in Table 1 below.

Table 1. Codes, initial themes, and broader themes emerged in this study.

Broder Themes	NMT Service Preferences		NMT Service Criteria and Integration		
Initial Themes	Prevalence of NMT Usage and Preferred Services	Translators' Attitudes Towards NMT	Purpose of NMT Usage and Its Impact on Workflows	NMT Selection Criteria	NMT's Impact on Translation Quality
Codes	Number of translators using NMT Most frequently used platforms Ratio of free vs. paid version usage	Translators fully adopting NMT Translators being cautious about NMT Limited use of NMT for specific types of texts Translators completely rejecting NMT	Increasing speed Expanding work volume Improving translation quality Using NMT as a supplementary tool vs. full automation expectations	Accuracy Speed Ease of use Accessibility (free/paid options)	Accuracy in grammar and terminology Contextual appropriateness Post-editing requirements Influence on translators' workflows

These codes were derived from recurring patterns in participants' responses, where translators emphasized the importance of these criteria when selecting and evaluating NMT tools. From these codes and initial themes, two broader themes emerged: (i) NMT service preferences and (ii) NMT service criteria and integration.

3. RESULTS AND DISCUSSION

The present study aimed to provide an in-depth analysis of the behaviors and preferences of Turkish translators regarding their use of Neural Machine Translation services in the English-Turkish language pair. To this end, the main analysis of the data obtained through the semi-structured interviews with the translators from diverse backgrounds were categorized into two main themes, namely Neural network translation service preferences and Neural network service usage criteria and integration. The details are presented in the subsections below.

3.2. Neural network translation service preferences:

All of the 14 participants reported using NMT services, this shows the technology's clear widespread use in modern translation work. Google Translate (n: 13) and DeepL (n: 12) dominated as the most frequently used services, both of which are together indicated by the majority of the participants (n: 11). These two are followed by Smartcat (n: 2), Phrase (n: 1), Bing Bang Translator (n: 1), Bard (Gemini) (n: 1) and Reverso Translation (n: 1).

The participants were also asked to report which one of these tools they preferred and used most frequently. The clear preference (with 9 translators out of 14 using DeepL the most) indicates an edge in DeepL's accuracy and user experience, aligning with professional needs for reliable translation tools. It is remarkable to see that a relatively new translation service, DeepL has managed to show its edge as the most used translation service among this sample of Turkish translators who works in the English-Turkish language pair.

In this regard, the participants reported that DeepL provides more accurate results especially in terms of context and terminology. Interviewee 1 explained her preference of using DeepL with the following words:

I find it more accurate in terms of the context and terminology. I think it has a very sophisticated deep learning that is most probably supported with quite subtle and well-designed algorithms. So, it 'learns' better than ChatGPT which is another source that I find useful. Google Translate on the other hand is not reliable at all. One day it is perfect on a certain topic and the other day it gives you completely irrelevant results. (Interviewee 1)

Another participant highlighted that he frequently used the tools offered by the client, yet he preferred DeepL, especially for grammatical edits. He said:

Most of the clients I work with have their own engines to apply MT. However, when no MT is applied, I use DeepL to make it faster for me to work. I fully edit it but in terms of grammar, it gives me great flexibility. For clients where MT is fully prohibited, I avoid any kinds of engines though (Interviewee 5)

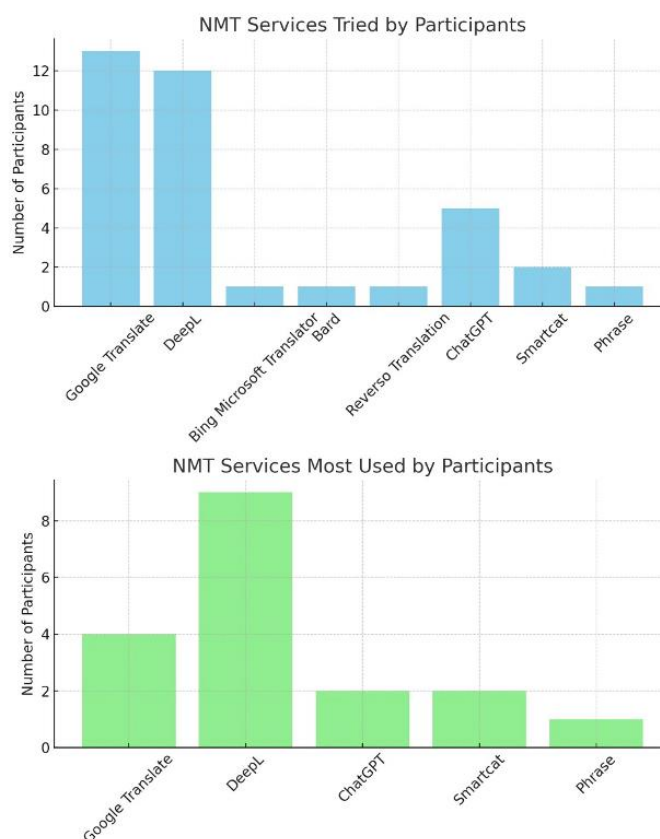


Figure 2. Service Use by Participants

DeepL is followed by Google Translate (n: 4), Ghat GPT (n: 2), Smartcat (n: 1), and Phrase (n: 1).

There was one participant who reported that he used both Google Translate and DeepL very frequently. He underlined that both services were useful in terms of accuracy and efficiency. He explained his reasons for using these services here:

The two neural machine translation (NMT) engines, namely Google Translate and DeepL, possess the most extensive datasets in their category. This comprehensive data foundation significantly enhances their accuracy, particularly for straightforward content like help pages. Their proficiency in delivering precise translations makes them invaluable tools in marketing projects, providing a reliable starting point for more complex language tasks. Additionally, these engines contribute to an increase in 'words per hour' metrics, optimizing efficiency in scenarios where personal input is less critical. When compared to other NMT engines listed, Google Translate and DeepL demonstrate superior reliability and performance, making them preferable choices in professional settings where accuracy and efficiency are paramount. (Interviewee 7)

The participants who preferred ChatGPT more frequently explained that ChatGPT provided them with alternative expressions and contextual inputs. The short explanation of Interviewee 8 is as follows:

For GPT-based services, getting alternative and more contextual inputs by changing the source or the instructions. (Interviewee 8)

Smartcat and Phrase are also important tools for translators today as they also provide translation memories. One of the participants who only preferred Phrase as the main translation service explained her preference as follows:

I first started using Phrase software/interface for my translation projects because it is the preferred tool of one of my primary clients. It provides an almost flawless solution in my field of work as it integrates previous translation memories (mostly based on my own projects) and therefore ensures consistency and saves great time. (Interviewee 14)

Considering the sample size, it is also remarkable that a variety of translation services (8 in total, Google Translate, DeepL, ChatGPT, Smartcat, Phrase, Bing Bang, Bard (Gemini), and Reverso Translation) have been tried by the translators, this shows that translators are open to try new options and that they are not operating on habit and showing pragmatic characteristics, since we see that a newer service, DeepL has dethroned Google Translate in just the second year of introducing Turkish into its translation languages.

On the other hand, among 14 participants, there was only one who reported that he always used an NMT when they were asked how frequently they used them. The majority indicated only often (n: 9), sometimes (n: 3), and there was also one person who reported that she rarely used it. This might suggest that the majority of the participants do not heavily rely on these tools in their work. Nevertheless, the consistent engagement with NMT services indicates their role in increasing translation speed and work volume, aligning with the ever-evolving needs of the translation industry. This also shows that in our current age, a translator who does not use a translation service whether utilizing NMT or not, is a rare sight to see.

The study's findings on translators' preferences for NMT services, particularly the dominance of DeepL over Google Translate, align with the literature's emphasis on accuracy and contextual reliability as critical factors (Hidalgo-Tertero, 2021; Yaman, 2023). The preference for DeepL, despite its recent introduction of Turkish support, reflects the practical needs highlighted in the literature, such as accuracy and efficiency, which are central to the Technology Acceptance Model (TAM). This demonstrates how perceived usefulness (PU) directly influences the adoption of newer technologies.

However, this study provides a unique contribution by showing that Turkish translators prioritize accuracy over the broader multilingual support that Google Translate offers. Additionally, the participants' inclination to experiment with multiple platforms, indicates a proactive and pragmatic attitude that has not been extensively explored in existing studies. This suggests that translators' behaviors are shaped not only by technological capabilities but also by dynamic shifts in their professional environments, reinforcing the idea that translators adapt flexibly to evolving technologies.

3.3. Neural network translation service usage criteria and integration:

In the present study, the ultimate criteria for choosing to use particular NMT services were aimed to be further understood. To this end, the participants were asked what criteria they considered when using an NMT service. The selection criteria for the group of participants mainly included ease of use, speed, accuracy and accessibility. Among these, they also listed the most predominantly important one for them. Accordingly, accuracy was the most expressed criterion for preference in NMT services, selected by 8 of 14 participants. This overwhelming draw for accuracy over other factors such as speed (n: 4), ease of use (n: 1) and accessibility (n: 1) underlines a professional concern for maintaining high-quality translation standards. We can infer that these participants are professional translators, and they are chosen as service provider by clients who value accuracy. Therefore, the translators in the present study might be also replicating these values in their work. Furthermore, the participants were of the opinion that accuracy was directly related to their speed and quality at work.

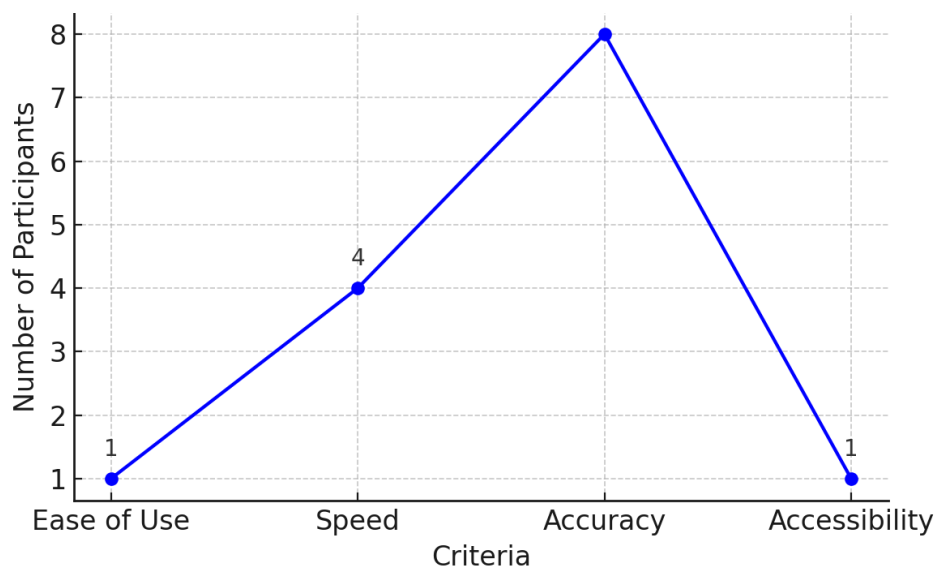


Figure 3. Dominating Criteria for Preferring NMT Services

To illustrate, Interviewee 3 indicated that accurate translation through NMT services enable her to spend less time on editing.

Accuracy is the criteria because when I get accurate translation, I do not spend much time on editing it. It saves a lot of time. (Interviewee 3)

Nonetheless, there were participants who gave higher importance to speed. For instance, one of the participants explained himself with the following words:

Speed is the most important criteria while I am deciding which machine translation service to use. Because I consider myself competent enough to detect it, if MT makes any mistakes. Therefore, I use MT as a tool to boost the speed of the work on which I am working. (Interviewee 2)

The effectiveness of NMT services was generally rated positively, though cautiously, with most scores around 3 (n: 7) and 4 (n: 4) out of 5. There were 2 participants who rated 5, and 1 participant rated 2 out of 5 for effectiveness of NMT services. This optimism and cautiousness suggest an acknowledgment of the benefits of NMT services while maintaining a critical eye on their limitations. Furthermore, combining with these findings, it might be suggested that translators still see these services as an “helping hand” rather than a definite solution. When they were asked what their primary contribution was to their work process, 9 participants out of 14 expressed that translation services’ primary contribution was “increasing speed” and 4 participants responded as “increasing work volume”, and 1 said “increasing quality” .

A significant number of participants (n: 13) indicated that their professional life would be negatively affected without access to these NMT services. This dependence on NMT technologies shows their crucial role in current translation practices and raises questions about the future of the profession in an increasingly digitalized world.

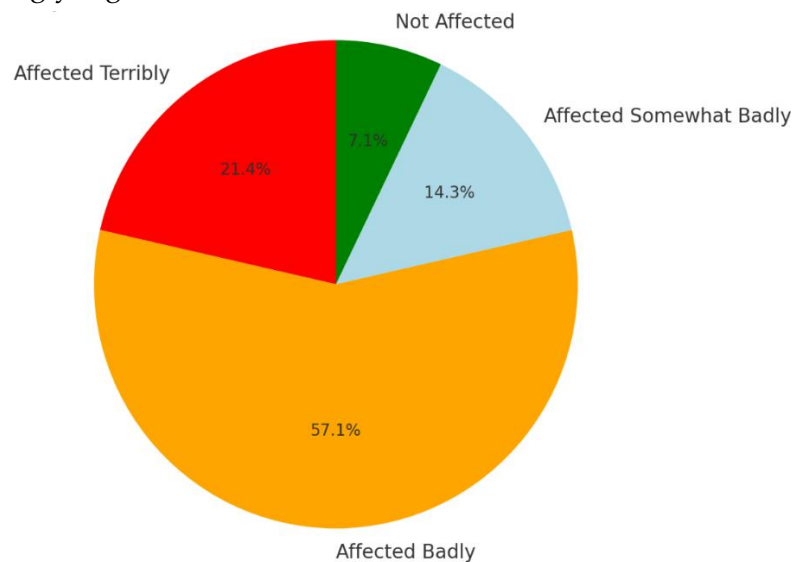


Figure 4. Impact on Professional Life without NMT Services

A minority of participants (n: 5, 35.7%) utilized premium/paid versions of NMT services, mainly driven by the need for higher accuracy and limitations in free versions. This niche but significant demand for advanced NMT features among professionals suggests a market gap that could be addressed by NMT service providers, provided they meet the specific needs of these

professional translators. Out of these 5 participants, 3 participants highlighted that they used paid versions because their employer provided them for free. For instance, Interviewee 1 said that her company offered the premium version of the services due to the workload.

I did not. My company provided it for me due to huge volume of work. (Interviewee 1)

However, there were those who did the payment for their tools themselves. For instance, there was one participant who preferred to use ChatGPT. She indicated that she used the paid version with the following words.

The paid version uses GPT-4 which is much more creative. GPT-4 also hallucinates less and it's less likely to fabricate facts. (Interviewee 8)

Nevertheless, the majority (n: 9) reported they only used the free versions. This may indicate that translators avoid using paid versions and get away with it since translation service market is not heavy on monetization currently, as most participants priorly indicated that they would be affected negatively at least to some extent, if they had lost access to these services.

The criteria highlighted by the participants for selecting NMT services—accuracy, speed, ease of use, and accessibility—closely mirror the key dimensions of TAM. Specifically, the focus on accuracy underscores the role of perceived usefulness (PU) in driving the adoption of NMT services, while ease of use (PEOU) is reflected in the participants' preference for user-friendly platforms such as DeepL. This finding aligns with Koskinen and Ruokonen's (2017) assertion that technology adoption among translators is heavily influenced by productivity-related factors.

However, the study also reveals a nuanced perspective that diverges from previous research. For instance, while the literature discusses the general trend of translators benefiting from paid services' enhanced features (Kamocki & O'Regan, 2016), the results indicate that the majority of participants rely on free versions due to economic constraints or a lack of compelling incentives to upgrade. This underscores a gap in existing NMT service offerings, where the value proposition of paid services does not yet justify their cost for many professionals.

CONCLUSION

The present study provides novel insights into the integration of neural machine translation services in the professional workflows of Turkish translators, a topic that has been underexplored in the literature. The findings highlight the rapid adoption of DeepL among professionals and the predominance of free service usage, offering new perspectives on the economic and practical factors influencing these preferences. While the results align with existing literature particularly regarding the efficiency and speed improvements offered by NMT, this study uniquely emphasizes the critical role of accuracy and data privacy concerns, contributing a localized understanding to the global discourse on machine translation.

The widespread use of NMT services among all our participants which are dominantly professional translators with varying experience, signals a shift in translation practices considering the last 10 years. We can clearly see that a translator and its translation tool, especially those with neural network capabilities, is now inseparable in this age considering they unanimously express

that their translation work process would be affected negatively. Though most of them still consider these services as a “helping end”, they are clearly a vital part of their daily workspace, increasing their work volume and speed. Accuracy is the chief concern for our participants since our sample size consist of highly professional individuals with formal education in translation area, it is not a high stretch to say they are usually employed for higher accuracy by establishments and individuals. A much different result may show for usage among non-translators and semi-professional translators.

The modern translator is highly pragmatic and open to innovation, we can see this as DeepL, a service provider which has introduced Turkish only 2 years ago, prevails as the most used NMT service provider, surpassing giants like Google’s Google Translate. As, with all translation services, the language pair greatly affects efficiency, currently Google offers a wider selection of languages (more than 100*) than DeepL but of course it is possible to see DeepL or another contender may challenge this in near future. The area is seemingly highly dynamic with new service providers introduced every year.

Also noteworthy, the monetarization of NMT translation services may have a deep effect since from this study we can see that most translators are avoiding the paid versions of these services, and they are willing to try new services. Knowing how vital these tools have become to translators, service providers may have a dilemma of their own with going for monetarization from free service, for others adjusting prices for their services and keeping their customers from going over other options. Most translators avoid paid versions of NMT services and are open to trying new platforms, which raises significant data privacy concerns. Free NMT services often collect and store user inputs to improve their systems, potentially compromising the confidentiality of sensitive documents, such as legal, medical, or corporate texts. Unlike premium versions that offer stricter data protection measures, free versions may not comply with data protection regulations. Additionally, as translators frequently experiment with different NMT platforms, they might unknowingly use services with unclear data policies, further increasing security risks. To mitigate these concerns, translators should carefully evaluate the privacy policies of NMT tools, prioritize platforms that guarantee data security, and consider paid versions for handling sensitive information. Companies and freelancers alike should establish clear guidelines to ensure client data protection in translation workflows.

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APPENDIX

Semi-interview questions

1. *Demographics:*

- What is your full name?
- What is your gender?
- What is your age?
- Are you a freelance translator or an in-house translator?
- Where are you located?
- Are you a graduate of a translation department?

2. *Experience:*

- Is translation your main source of income? Do you have extra jobs?
- How many years of experience do you have as a professional translator?
- What type of translation work do you engage with most? (e.g. technical documents, literary texts, medical field, etc.)

3. *Neural Machine Translation Usage:*

- Have you ever used a neural machine translation service that utilizes neural network technology? (DeepL, Google Translate, etc.)
- If yes, which services? Please list all that you know.
- What is your most used service?
- Can you explain your reason for using it the most?
- How often do you use these services while translating? Always, Often, Sometimes, Rarely, Never

4. *Criteria for Evaluating Neural Machine Translation Services:*

- What criteria do you consider when you prefer a neural machine translation service over others?
- What criteria do you consider predominantly when you prefer a neural machine translation service over others?
- Can you explain your reasoning for this answer?
- How effective are these services in the quality of your translation?
- What are their primary contributions to you in your work process?
- How would your professional life be affected if you had no access to these sources?

5. *Paid Service Usage:*

- Do you use a premium/paid version of a neural machine translation service currently?
- If yes, what influenced your decision to opt for the paid version?