The Use of Translation Technologies and Translators’ Technological Competence in Saudi Arabia: Taking Stock of the Past Seven Years

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Abstract. The Saudi Vision 2030 has dramatically revolutionized the translation market in Saudi Arabia and focused on two main principles, i.e., professionalization and employability. In globalized translation markets, using translation technologies is no longer a luxury but a necessity for professional translators to respond to the increasing demand for translation services. Therefore, one research area worth looking at and investigating is the professional aspect of the Saudi translation market in terms of the technological competence of translators. This paper is a first step towards working out the technological competence of professional translators in Saudi Arabia in future by taking stock of the last seven years. In this paper, professional translators were surveyed to learn about their views of translation technology training provided by Saudi academic programmes and to self-assess their competency levels in different areas related to translation technologies. The results indicate that although the majority of respondents confirmed their high level of technological competence, some professional translators still need additional tools training to ensure that they are prepared for the demands of the modern translation market. The study has implications for university training programmes to make adjustments in their curricula to include sufficient training on translation technologies. The study also suggests that there might be a need to reconsider the concept of technological competence in light of the recent developments of translation technologies and tools as well as the increasing role of machines in the translation process.

Keywords: Translation Technologies, Technological Competence, Translator Training, Competence assessment.

1 Introduction

Translation technologies have become increasingly popular among professional translators as part of the translation process in today’s globalized markets. Bowker and Pastor (2015) point out that translators could increase their productivity and income and preserve the efficiency and consistency of their translations thanks to the technologies used in their work. Moreover, it has been possible for translators to use technology to
work on collaborative translation projects and/or work remotely from across the world. In this sense, O’Hagan (2019) illustrates that computer-assisted translation (CAT) tools and machine translation (MT) have gradually transformed the human role in the translation process, moving to a machine-centered activity assisted by the interventions of humans in an interactive way, as Olohan (2011:343) puts it “a dance of agency”. As technological advances, (e.g., the launch of neural machine translation NMT, the emergence of new CAT tool functionalities and products) are on the rise, keeping up with the evolving landscape of translation technology requires a sufficient level of technological competence on the part of professional translators to remain relevant and competitive in the translation industry. Previous studies have mentioned that empirical research on translation competence (TC) is still scarce and fragmented in terms of investigating the extent to which translation technologies are adopted among professional translators and their technological competence level (e.g., Olohan, 2011) especially in growing translation markets, such as the case of Saudi Arabia. As part of a broader research project, the present work reports the results of an empirical survey distributed to professional translators working in the Saudi translation market to investigate their use of translation technologies and to assess the status of their technological competence.

1.1 Context and Rationale of the Study

The current study is driven by two main motives. First, translation technologies have been notably improved during the past seven years (April 2016 – April 2023), e.g., MT improvements and MT integration into the functionality of CAT tools. However, empirical research seems to be slower than the rapid technological improvements in the translation industry; thereby, this necessitates making periodic studies to reflect the reality of the translation market in terms of investigating the use of translation technologies and tools and monitoring the status of translators’ technological competence. Second, the Saudi translation market has received generous governmental support and witnessed some regulatory measures since the launch of the Saudi Vision 2030¹ in April 2016, which has the potential to entail some demographic, administrative, and/or professional changes in the market. To illustrate that, the Ministry of Culture (MoC) was established in 2018 to play a significant role in the development and growth of the local translation market in Saudi Arabia. Two years later, MoC founded the Literature, Publishing, and Translation Commission² to be a responsible authority to regulate and manage the translation sector in Saudi Arabia. This commission has announced several translation initiatives which are expected to result in a growing demand for high-quality translations. Moreover, the Ministry of Human Resources and Social Development has been working towards achieving a strategic goal of the vision: to decrease the unemployment rate among Saudi nationals to 7% by the end of the decade. In this direction, the Ministry has implemented an employment measure in the translation market since

¹ https://www.vision2030.gov.sa/
May 2022, that is, to restrict translator jobs to Saudi citizens as part of a process called ‘Saudization’. This process aims to minimize the unemployment rate among Saudis and ensure that translation job opportunities are primarily available to them.

Undoubtedly, such changes will, directly and indirectly, impact the Saudi translation market in the next few years. Locally, it is more likely that these enhancements increase the demand for translation services and the level of competitiveness among Saudi translators to keep up with the needs of the growing translation market. Moreover, the enhancements are expected to increase the pressure on the national workforce, i.e., professional translators, to show high-level performance and skills to satisfy their translation employers and customers. Globally, the country’s openness to foreign investments and its globalization and internationalization efforts could increase the demand for translation and localization services and help make the translation market in Saudi Arabia attractive for more translation works from abroad.

2 Literature Review

Over the years, translation, as a discipline, has gone through linguistic, cultural, professional, and technological turns. This, subsequently, has shifted the focus of several studies from the conceptualization of translation to investigating translators’ knowledge, skills, and expertise, or what is known as TC. Despite the controversial nature of TC, along with its various names, definitions, and descriptions given by translation scholars (Wills, 1996; Bell, 1991; Kiraly, 1995; Malmkjær, 2009; Yang & Li, 2021), there is a scholarly consensus that TC is not a singular entity but comprises a complex set of interrelated sub-components necessary for translators to produce successful translations. Especially as of the 1990s, some theoretical studies (e.g., Kiraly, 2006; 2015) and empirical research projects (e.g., PACTE 2000; 2003; 2017) have been carried out about the definition and modelling of TC to reflect the demands of the translation industry in terms of the skills and competencies required of translators. On the pedagogical side, expert groups (e.g., the European Master’s in Translation ‘EMT’) has been initiated to bring academia and industry closer by maintaining the alignment of the curriculum content of translator training programmes with the needs of the translation market (EMT, 2017). It is not the intention here to give a historical background about TC or to discuss the existing models. Yet, it is worth shedding some light on the TC model proposed by the EMT group due to its implementation and usefulness in the current study context. This model was applied in this study because of its technology-orientedness and comprehensive coverage of various aspects of translation technologies as noted by Svoboda & Sosoni 2023. Moreover, the model highlights two educational objectives, i.e., professionalization and employability, which are core principles in the Saudi Vision 2030 and the researchers’ broad project.

2.1 TC Model Framework Proposed by EMT

The EMT’s model of TC was first established in 2009 on the basis of relevant models to the European context by the Directorate-General for Translation (DGT), which
works in partnership with over 60 MA translator training programmes (EMT Expert Group, 2009). They provided the model as a quality reference for university training programmes to standardize the quality of teaching the competence domains, skills, and professional aspects to be required of professional translators in the translation market. This model was then redrafted in 2017 to live up to the reality of the contemporary translation market, producing five principal competence areas: Language and Culture, Translation, Technology, Personal and Interpersonal, and Service Provision. In their latest version produced in 2022, the EMT board decided to make a minor update to the model framework “to reflect the priorities of European translation programmes, as they prepare graduates for a dynamic and highly technologized workplace” (EMT Competence Framework, 2022:2). By reviewing the TC models succeeding the 2000s, it has been clear that technological competence is considered an indispensable competence area in all the proposed models. Regardless of the different names given to this competence (e.g., ‘technological’, ‘instrumental’ amongst others), these terms “would all refer to one’s knowledge of tools required for the profession” (Oraki & Tajvidi, 2020). Technological competence comprises a set of interdependent sub-competences, which determines what knowings that are supposed to be reflected in translators’ abilities. To acquire this competence area, several studies have stressed that university training programmes should integrate translation technology courses into their study content to produce market-ready translators who are skilled in using translation tools and technologies (e.g., Kenny, 2019).

Bearing in mind that translation jobs are only available for Saudi translators now, who are most likely to be graduates of local universities, several studies have criticized the way translation technologies were being taught in the language-related programmes at Saudi universities pertaining to the rigid curriculum content (Alenez, 2015), the conventional teaching practices (Omar et al., 2020), and the poor infrastructure of language labs (Abu-ghararah, 2015; Alrumaih, 2021). Such criticisms may raise alarming concerns about the status of the technological competence of professional translators in the Saudi translation market. The next section presents a brief review of related survey-based works considered prominent landmarks in the current study’s context.

2.2 Related-Market Surveys

One of the initial research attempts to provide an overview of the translators’ working practices in the Saudi translation market was conducted by Fatani (2009). The findings of this study are significant in providing valuable insights into the translation market’s trends (e.g., globalization), challenges (e.g., translators’ deficiencies), and opportunities (e.g., potential for expansion). This was supported by Abu-ghararah (2017), who warns about the existing gap between the outcomes of academic translation programmes at Saudi universities and the requirements of the translation market. The authors of the two studies anticipate potential growth in the local translation market due to the country’s openness and presence internationally. Although the two studies did not empirically investigate the translators’ technological competence, they reveal a lack of familiarity among professional translators with the use of translation technologies in their daily work; as Fatani (2009: online) described it, the Saudi translation market is
aware of “the deficiencies of Saudi translators who were graduates of local translation and language programs”. Moreover, both studies have mentioned that such competence and quality-related challenges would increase the difficulty for local and global translation companies to recruit a suitable workforce for translation projects.

Another important study was conducted by Alshaikhi el., (2018) to explore the competence level of professional translators in the Saudi translation market. Seventy-three participants filled out the questionnaire and assessed their level of proficiency in the full set of EMT competence domains, language, translation, technological, intercultural, thematic, information mining, and project management. In terms of the technological competence domain, seven criteria were included to explore how competent the respondents are in performing the IT-related skills. Based on average responses, 41% of the respondents described themselves as proficient in dealing with technology-related skills, whereas 34% were not confident when using technology in their work, rating themselves as sub-competent. The results also show that 21% of the respondents rated their competence as mediocre, indicating that they have modest abilities in performing the technological processes of translation. The study raises alarming concerns about those who confirmed their deficiencies in using translation technologies and calls for monitoring the competence level of professional translators over some period.

Two recent studies are worth mentioning here investigating the Saudi translation market in the post-Covid-19 era. The first study is conducted by Alkhatani (2021) that revealed significant shifts in the working norms of professional translators in the Saudi translation market, particularly towards more remote service provision and digital solutions. It was also found that newcomer translators have much interest in learning and staying up to date with the evolving translation technologies and tools. The author linked this thirst for knowledge to the lack of integration of translation technologies into the curricula of Saudi academic programmes. Similarly, Salamh (2022) focused on the divergence between what is being taught in translator training programmes and the job advertisements in Saudi Arabia pertaining to technology-related skills required of translators. The findings of study highlight that although translation employers prioritize the familiarity with translation digital tools when recruiting new candidates, most professional translators were not confident with their technological competence and felt unequipped with the important skills to use translation technologies efficiently. From these few indications, it has become necessary to conduct this survey-based study to fill a gap in the literature by responding to the following research questions:

1. How do professional translators perceive the teaching status of translation technologies i.e., CAT tools and MT, in BA academic programmes in Saudi Arabia?
2. What is the technological competence status of professional translators in the translation market in Saudi Arabia, and how has it been evolving in the past seven years?
3 Research Method

Using a self-reporting questionnaire, this study collected quantitative data from professional translators in the Saudi translation market. The questionnaire consists of three main sections. The first section collects information about the backgrounds of the participants. The second section seeks to identify the participants’ perceptions about the translation technology training, i.e., MT and CAT tools they received during their BA studies. The third section contains thirteen criteria related to translation technologies, which were adapted from the OPTIMALE survey (Toudic, 2012). Here, participants were asked to assess their level of competence using a Likert-type scale ranging from excellent, competent, average, sub-competent, and weak. The participants were also provided with a not applicable (N/A) option if they did not require the skill in their translation work. The survey was prepared using the Qualtrics software tool and circulated online from December 2021 to February 2022. In total, 404 responses were returned, 248 of which were completed and valid for analysis. Compared to similar studies conducted in Arab translation markets, the study’s sample size and response rate are encouraging. Notably, the reliability of the Likert-scale section was measured by calculating the Cronbach alpha value of 0.892, denoting a high degree of reliability. In terms of ethical considerations, this study has gained ethical approval and met all the requirements indicated by the ethics committee of Swansea University.

4 Results and Discussion

Based on the sheer use of descriptive statistical analysis, this section first illustrates some information about the participants’ demographics in a general manner, followed by their answers to the questions in sections two and three of the survey. The results show a participation predominance among females 78% compared to males 22%. The bulk of participants 86% are below 35 years old, denoting that they are from the rookie workforce of translators in the Saudi translation market. This result was also supported by the respondents’ length of experience since 72% have less than five years of experience as translators, which indicates that they are fresh translators. In addition, the results show that the responses came from various kinds of sectors, including private (38%), semi-governmental (11%) and governmental (24%) organizations, as well as LSPs (27%). Regarding their academic background, 70% of the respondents completed the BA studies whereas the remaining 30% hold postgraduate degrees either MA or PhD. Moreover, the participants were asked about their study backgrounds and the type of BA programme they graduated from. Although 50% of the respondents are graduates of translator training programmes, the results indicate that graduates of other BA study backgrounds also occupy the translation professions in the Saudi translation market, representing as follows: 40% came from English learning programmes, 7% from linguistics or literature programmes and a marginal percentage 3% studied in other academic programmes such as Arabic language or Islamic studies. This result flags the concern about the technological competence level of translators who graduated from non-translation programmes. According to Alsolami (2022), although half of the
English language programmes at Saudi universities state an objective to prepare professional translators for the market, only three (out of eight) integrate the teaching of translation technologies into their curriculum, indicating a potential lack of technological competence among would-be translators. Teaching content and practices of the English learning programmes might not be sufficient to meet the reality and requirements of the modern translation market. This finding should encourage significant reforms in the curriculums of these programmes to include translation technology training to ensure providing the translation market with translators with a sufficient level of technological competence.

The participants were also required to identify the kind of teaching used to teach MT and CAT tools in the academic programmes they graduated from. Figure 2 below displays the results of the teaching status of MT and CAT tools, as indicated by the respondents.

![Fig. 1. Teaching status of CAT tools and MT (respondents’ views).](image)

The above figure shows that about half of the respondents did not receive any training on MT, in addition to roughly one-fifth who learnt MT theoretically only without any practical training. This makes up almost two-thirds of the respondents who were not exposed to MT training during their BA studies. This finding is consistent with Abu-Oghararah’s (2015) study that investigated the availability of technology and language resources in translation programmes at Saudi universities. It was found that most students 80% confirmed the absence of MT teaching in these academic programmes; thus, they lack technological competence. Regarding their perceptions towards CAT tools training, most respondents described the situation as worse than training on MT. The results show that more than half of the respondents were not trained at all in using CAT tools during their BA studies, in addition to 15% who were only provided with theoretical knowledge about CAT tools. This increased the number of translators whose abilities are more likely to be deficient in using CAT tools when they start their translation careers. The results indicates that translation technology training has not adequately been provided for trainee translators in Saudi academic programmes since almost two-thirds of the respondents were not trained properly to use MT or CAT tools during their
BA studies. This finding supports the previous studies such as Abu-ghararah (2017) and Alrumaih (2021), who pointed out that the gap between translator training programmes and the translation industry in Saudi Arabia is still perceived, particularly concerning the insufficient integration of translation technologies into the curriculum content taught in the academic programmes. Specifically, Alrumaih (2021) reports that there is a diversity in the way of delivering translation technology courses, whether practically or theoretically, to students in the translation programmes at Riyadh-based universities. The author found that these academic programmes lack the provision of practical training on CAT tools for trainee translators. There may be a necessity for policymakers and curriculum designers to rethink about the teaching content and methods adopted to teach translation technology courses in Saudi academic programmes.

Moreover, the respondents were asked to rate their technological competence in thirteen statements categorized into four skill domains. These domains are as follows: skills in MT (3 criteria), skills in CAT tools (4 criteria), skills in localization (2 criteria) and Skills in other technology-related activities (4 criteria). It is worth mentioning that these domains are increasingly recognized in the modern translation industry as technology language trends, as revealed in the Nimdzi Language Technology Atlas published in 2022.

Technically speaking, the results of this section are reported and discussed based on the average percentages of the responses to provide estimates of the translators’ level of competence in each technological domain. Figure 3 below provides relevant details to the participants' three abilities to pre-edit texts for MT, post-edit MT, and configure MT systems.

![Fig. 2. Translators’ proficiency in MT-related skills.](image)

The results indicate that MT is widely accepted as part of the normal translation work in the modern translation market in Saudi Arabia since only an average of 13% of the respondents who said that MT is unnecessary for their work. This result aligns with what Alkhatani (2021) reported about the increasing adoption of MT among translators.
in the Saudi market. The overall assessment shows that an average of 61% of the respondents describe their competence status as proficient in MT-related skills. This should be seen as a positive development in the Saudi translation market since this technology (MT) is becoming increasingly prevalent in the translation market worldwide. However, the fact that an average of 12% of the respondents labelled themselves incompetent indicates that they are not confident about their skills in using MT. Moreover, the results show that an average of 14% of the respondents confirmed their moderate abilities in MT-related skills, which increases the number to be just over one-quarter of the respondents with a limited level of proficiency in dealing with MT-related skills. The latest version of the EMT model has enhanced the crucial incorporation of the skill of interacting with MT within the overall professional translation competence (EMT, 2017). According to the recent Nimdzi market survey (2023), the majority of the surveyed translation companies have witnessed a significantly greater use of MT during the second quarter of 2023 compared to the preceding quarter, up to 60.4% from 42.9%. Moreover, Salamah (2022) mentioned that many job announcements posted by translation employers in the Saudi translation market require proficient candidates in MT. Having the ‘Saudization’ process in mind, translators with a low level of competence or completely deficient to use MT might find difficulties to find a job in the competitive translation market. The results indicate that the MT domain might be an area of strength for most professional translators; yet there is still a need for improvements in terms of providing additional training for translation professionals to develop their competence in using MT more efficiently.

Like the use of MT, the overall assessment shows that CAT tools are widely used among most professional translators in the Saudi translation market since only an average of 10% stated that this technology is not required in their work. Perhaps, translators...
are less likely to use CAT tools if they work in translation fields where using CAT tools is not common (e.g., literary translation field). The results illustrate that an average of 60% of the respondents rated their abilities as competent in the four CAT tools-related skills. This could be a positive sign of the status of the translators’ level of proficiency in adopting CAT tools in their work. However, an average of 14% of the respondents described themselves as deficient in dealing with CAT tools, in addition to an average of 16% who have average abilities in this area. Such a deficiency in skills and knowledge of CAT tools could influence the translator’s productivity and work quality, which, as a result, have potential impacts on both the reputation of translators and the quality of the translation market. In their study, Alshaikhi el., (2018) reported similar findings about the translators’ lack of familiarity with the activities related to translation memory (TM) and termbase (TB) during their work. In the same regard, Alkhatani (2021) also stressed the essential demand to equip professional translators with the necessary skills to use the advanced features and customization of CAT tools. Therefore, more comprehensive training sessions are needed to ensure that translation professionals are fully equipped to meet the needs of the modern translation market.

The above figure displays the responses to the two items related to the localization domain, which registered similar ratings by the respondents. The results show that an average of 40% of the respondents rated themselves as competent in performing the localization processes (e.g., multimedia websites). However, a significant percentage of the respondents rated their competence level as only moderately competent 16% or completely deficient 26%, making up a total average percentage of 42% of the respondents without the necessary skills and knowledge to deal with the complexities of localization processes. Unlike traditional text-based translation, localization projects need a high level of proficiency from translators to successfully produce high-quality localized content. The results indicate a lack of competence among professional translators in
localization-related skills, which potentially impacts the quality and efficiency of their work. In other words, a large percentage of professional translators felt unprepared to provide localization services or involve in large-scale projects that need translators with a sufficient level of competence in the localization domain. Therefore, it could be stated that this skill domain is an area needing more improvements for the majority of the respondents. Previous research has not adequately explored the localization aspect of the Saudi translation market and the competence level of translators (localizers), which makes it difficult to monitor the translators’ level of competence in this specific domain. However, some resources in the literature pointed out that the requirements of translation employers have been long misaligned with the level of competence of job seekers (Fatani, 2009; Abu-gharah, 2017; Salamah, 2021).

Fig. 5. Translators’ proficiency in different technology-related skills.

Similar to the ratings given in the localization domain, the overall assessment shows that an average of 40% of the respondents rated their level of proficiency as competent in the four skills shown in Figure 5. However, a relatively high percentage of respondents rated themselves as either moderate 19% or sub-competent 24%, which is a total of 43% on average. This result indicates a lack of understanding and proficiency among the majority of participants to implement more specialized technologies, which has resulted in translators feeling unconfident in dealing with speech recognition systems, desktop publishing tools, programming macro-commands and mobile technologies. In a growing translation market, translators should not be lagged behind evolving technologies to avoid being at a disadvantage in competing for work. The results suggest that acquiring new skills related to various types of technologies and improving them are necessary to facilitate the translation process for translators and keep them up to date with the changing needs of the modern translation market in the 21st century.
5 Conclusion

Having surveyed an important stakeholder in the translation market, i.e., professional translators, the current paper is a call for academics to think of new ways of teaching translation technologies to match the requirements of the modern translation industry. Despite the technological ill-preparedness reported by the respondents during their BA academic studies, the self-assessment survey indicates a relatively high competence level among more than half of the respondents in interacting with MT and dealing with CAT tools in the Saudi translation market. However, the results also report that there are technological competence areas in which translators need further training and support to adapt to the changing technological landscape. The participants show some deficiencies in dealing with the processes of localization and using more advanced technologies such as programming macro commands. Moreover, the paper suggests that translation scholars and researchers may need to revisit the concept of technological competence and what that actually means in light of recent technological developments and how the various tasks of the translation process will be divided between humans and machines in a technologically driven industry. Translators’ approaches to technological competence should also be reviewed to encompass the ability to adapt to new technologies and interact with the machines effectively.

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