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The Role of Technological Skills for a Successful Career in the Translation Industry

Title in French

L'apport Des Compétences Technologiques Pour Une Carrière Réussie Dans L'industrie De La Traduction

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Abstract

This study proposes the specific technological skills that are instrumental for a thriving career in the translation industry. Proficiency in CAT tools, terminology management systems, and translation memory software is paramount, enabling translators to streamline their work, maintain consistency across projects, and manage complex terminology effectively. Therefore, this study sets out to meet three objectives, which are to: to determine the impact of translation technologies during the translation process, to determine the role of translation technologies in the professional insertion of translators and to assess the opinion of translators on the use of the translation technologies. Drawing on three models for assessing productivity, namely the model of Federico, Cattelan and Trombetti, the model of Guerberof and the model of Moorkens are presented before investigating the degree of uptake and perceptions of CAT tools by translators in Cameroon. Also, drawing from Kengne Fokoua's analysis of the Cameroonian translation market, the study equally sets out to identify the challenges faced by the Cameroonian translation market. The study uses a questionnaire for data collection, while the data collected are presented in tables and figures and statistically analysed using Pearson's Chi-squared test. After research, the findings of this study reveal computer skills of translators significantly affect the use of the CAT tools which in turn affect the translation process as well. To conclude, the study recommends that translators in Cameroon should be aware in order to keep abreast of technological advancements and market trends in the domain.

Résumé

Cet abrégé propose les compétences technologiques spécifiques qui sont essentielles pour une carrière florissante dans l'industrie de la traduction. La maîtrise des outils de TAO, des systèmes de gestion terminologique et des logiciels de mémoire de traduction est primordiale, car elle permet aux traducteurs de rationaliser leur travail, de maintenir la cohérence d'un projet à l'autre et de gérer efficacement une terminologie complexe. La présente étude se propose donc de répondre à trois objectifs, à savoir : évaluer l'opinion des traducteurs sur l'utilisation des technologies de traduction, déterminer le rôle des technologies de traduction dans l'insertion professionnelle des traducteurs, et enfin, démontrer l'impact des technologies de traduction au cours du processus de traduction. En s'appuyant sur trois modèles d'évaluation de la productivité, à savoir le modèle de Federico, Cattelan et Trombetti, le modèle de Guerberof et le modèle de Moorkens, les avantages des outils de TAO sont présentés avant d'étudier le degré d'adoption et les perceptions des outils de TAO par les traducteurs au Cameroun. S'inspirant de l'analyse de Kengne Fokoua sur le marché camerounais de la traduction, l'étude vise également à identifier les défis auxquels le marché camerounais de la traduction est confronté. L'étude utilise un questionnaire pour la collecte des données, tandis que les données recueillies sont présentées sous forme de tableaux et de figures et analysées statistiquement à l'aide du test du chi carré de Pearson. Après recherche, les résultats de cette étude révèlent que les compétences informatiques des traducteurs affectent de manière significative l'utilisation des outils de TAO qui, à leur tour, affectent également le processus de traduction. En conclusion, l'étude recommande que les traducteurs camerounais soient formés et sensibilisés afin de se tenir au courant des avancées technologiques et des tendances du marché dans ce domaine.

1. INTRODUCTION

In our world today, the objective of any man, wherever the domain/career he works in, is to succeed. In this quest for success, we then act according to what is known as the market requirements so as to stay visible, proficient and efficient in today's professional market as a whole. But the main concern here will be the translation market/industry. This said, the choice of this theme was not done haphazardly. In an era where science and technology have taken over in every sphere of life and career including translation, it is important, if not, essential that we evaluate what role these technologies have in the process of productivity, output and quality, as per the requirements needed in the actual translation market. One of these requirements would be the mastery of computer-assisted translation (CAT*) tools*, an indispensable element, skill and requirement every modern translator must possess. It is in this vein that Samuelsson-Brown, states: Technology is developing at a frightening pace and the demands made on the translator do not show any signs of abating. In fact, the translator is becoming more and more dependent on men formation technology and, if the translator does not adapt to change, he or she may become uncompetitive.

Some of the techniques used in modern translation technology can be traced back to the 9th century when an Arabic cryptographer named Al-Kindi developed the method of frequency analysis that is still used today. However, it wasn't until the mid-20th century, when computers became available and affordable, that translation technology truly began to take shape.

Here's an overview of the evolution of translation technology (Sin-Wai, 2016):

1950s: Georgetown University and IBM introduced the world's first machine translation (MT) system. The approach was rule-based and lexicographical, which means that it relied on pre-programmed rules and dictionaries. Although this early form of MT proved unreliable and slow, it was still revolutionary—a stepping stone on the path towards a more advanced technology.

1970s: The United States Department of Defense and Advanced Research Projects Agency (DARPA) started developing speech recognition technologies that paved the way for voice-to-text technologies.

1980s: The arrival of electronic dictionaries and terminological databases during this decade was another major turning point. These tools helped to make translation more accessible by providing translators with instant access to information (terminology with its translation) that could be used during the project.

Mid-1980s: The precursors of modern translation management systems (TMS) entered the scene from the hand of Coventry Lanchester Polytechnic University and its ALP System.

Late 1980s – early 1990s: IBM researchers introduced statistical machine translation (SMT). These systems were word-based and trained to translate one language into another by comparing large amounts of parallel texts in both languages (bilingual corpora). For example, they would analyze how often the German phrase "das auto" was translated as "the car" vs "the vehicle" vs "the automobile", and choose the most frequent translation for the text at hand.

Early 1990s: Most commercial computer-assisted (or aided) translation (CAT) tools appeared during this decade—a milestone that transformed translation technology forever. It enabled a whole new generation of translators to work more efficiently and effectively.

Late 1990s: A new version of IBM's statistical translation engine, this time phrase-based instead of word-based, was released. It became the commercial standard for years to come until Google entered the fray in 2006 with their neural machine translation (NMT) technology.

Early 2000s: The first cloud-based TMS solutions appeared in the market, enabling translation teams to work more flexibly and collaborate with other company members regardless of location.

2006: Google launched Google Translate—still statistical—which took the world by storm. The system first translated the input text into English before translating it into the target language. The system used predictive algorithms, which would guess which words should come next, based on the words and phrases it had "learned" before. These guesses often resulted in poor grammatical accuracy.

2016: Google Translate introduced neural machine translation (NMT), which outperformed phrase-based CAT tools and became the new commercial standard.

Translation technologies have been around for more than 50 years now, but as our world becomes increasingly interconnected, it's only grown more essential and having to master them is not exempted.

In the Cameroonian context, the translation market is very competitive. It will be of great importance for us to know what the actors of this market think of translation technologies, its role in professional insertion, and how they impact the translation process. In other words, productivity.

1.1 Statement of the Problem

Just as translation has evolved over the years, same has its market. Nowadays, translational skills alone do not suffice to make you a successful translator. The presence of science and technology is manifested by the proliferation of translation technology and its related software which today are of

a wide variety. One could then talk of an interdependence between translational and technological skills. Therefore, mastering these skills is for every translator a must-have weapon in his arsenal. Translators who do not possess this skill do not last long in the industry, for these translation technologies now shape/dictate the market and therefore all actors must align so as to sooth the market requirements which are: churn out more content quickly and rapidly, increase their accuracy, quality and overall effectiveness in order to remain eligible, visible and proficient in the long run. The problem statement of this study is therefore the fact that some translators who are willing to be part of today's beyond borders, wide and competitive market, neglect the role and impact of these various translation technologies during the translation process, and equally undermine these technologies as the access card to professional insertion.

1.2 Research Questions

1) What is the impact of translation technologies during the translation process?
2) What is the role of translation technologies in the professional insertion of translators?
3) What is the the perception of stakeholders in the translation industry about the use of translation technologies?

1.3 Objectives

1) To determine the impact of translation technologies during the translation process.
2) To determine the role of translation technologies in the professional insertion of translators.
3) To assess the opinion of translators on the use of the translation technologies.

2. LITERATURE REVIEW

The aim of this chapter is to discuss the relevant literature regarding the domains of translation technologies and translation market. The chapter successfully examines the literature at three levels: the conceptual review, which goes through all the relevant terms used in our work; the theoretical review, which provides the theories that underpin the study and lastly, the empirical review, which looks at past works relating to translation technologies and the translation market.

2.1 Translation

Different scholars in the field of translation defined it in so many ways depending on their view of the process. According to Catford (1965:20) translation is defined as the replacement of textual material in one language (SL) by equivalent textual material in another language (TL). He insists on two key terms: textual material and equivalent. Textual material means that in normal conditions it is not the entirety of the SL that is replaced by the TL equivalent, only on the level of lexis and grammar. As for equivalence, Catford shows it from the linguistic angle and finally maintains that translation equivalence is 'any TL form (text or portion of text) which is observed to be the equivalent of a given SL form (text or portion of text), and that portion of a TL text which is changed when and only when a given portion of the SL text is changed' (Catford, 1965:27-28).

Translation is equally the communication of the meaning of a source-language text by means of an equivalent target-language text. The English language draws a terminological distinction (which does not exist in every language) between translating (a written text) and interpreting (oral or signed communication between users of different languages); under this distinction, translation can begin only after the appearance of writing within a language community. Because of the laborious nature of the translation process, since the 1940s efforts have been made, with varying degrees of success, to automate translation or to mechanically aid the human translator. More recently, the rise of the Internet has fostered a world-wide market for translation services and has facilitated "language localisation".

2.1.2 Computer-Assisted Translation (CAT) tools

Exploring various definitions of CAT tools is far from being easy since different scholars gave them slightly different meanings. However, some definitions are reviewed to avoid any confusion each time the term is mentioned throughout this work.

To begin with, Computer-Assisted Translation (CAT) tools should not be confused with MT since the former does not seek to replace the translator by fully automating the translation process. CAT tools are also different from HAMT because in the latter, the human intervenes when the machine is stuck and the input needs to be simplified and output requires improvement (Kenny, 1999:68). Apparently, the role of CAT tools is to assist translators in their work without doing the job for them or eliminating the human intervention from the process (Bowker, 2002:247).

Drawing on various views held by different scholars, Computer-Assisted Translation (CAT) tools have been referred to as various kinds of computer software used by translation practitioners for professional translation. (Garcia, 2007; Garcia, 2012; Pym, 2011; Taravella & Villeneuve, 2013). Some scholars even include both hardware and software products used by translators (Kenny: 1999:67). Unfortunately, this definition may create confusion since many would be tempted to add laptops, scanners, Word processors, spell, grammar and style checkers, electronic dictionaries, which Bowker (2002) excluded from the list of CAT tools because they are just part of the general knowledge.

Other authors like Hutchins and Somers (1992) even refer to such types of translation technologies as Machine-Aided Human Translation

(MAHT) and maintain that it is the process through which the translator has the ability of selecting and using the tools 'as required or desired'.

2.1.3 Translation Memory (TM)

Pym, Perekrestenko and Starink (2006:8) define Translation Memories (TM) as 'programmes that create databases of source-text and target-text segments in such a way that the paired segments can be re-used'. Doherty (2016:950) who considers a translation memory (TM) as the 'core of CAT tools' also establishes that a TM is a programme used by a translator as databases to store a text alongside its original text for the purpose of reusing these pairs in full or in part when the translator receives an assignment with 'similar linguistic composition.'

assignment with 'similar linguistic composition.'

Linguists often work with similar texts/phrases/segments in localization. The translation memory continuously compares the text translators work on with the data in the base. In case of a match, the system suggests the appropriate translation. There are two types of matching :

1. **Fuzzy matches.** Fuzzy matches are suggestions from the translation memory system where texts match approximately (in Lingohub, between 55% and 99% matches). They suit a given text in terms of meaning and spelling. Translators benefit from using fuzzy matches as a starting point to reduce the effort needed for the final translation.
2. **Exact matches.** As the phrase indicates, exact matches suit the given text exactly (in Lingohub, 100% matches). Exact matches are provided if the source texts of a past and future translation match completely. Thus, you can apply such exact matches without further changes.

Translation Memories are keepers of text quality and foster high-quality translations. Translators will translate matching phrases identically to ensure textual and vocal uniformity. They maintain linguistic consistency across past and future translations even if various translators work on your localization projects.

2.1.4 Terminology Management System (TMS)

According to Langewis (2002 as quoted by Zafra, 2006), the terminology management system can be described a programme that catalogues words and phrases as well as other relevant information (e.g. grammatical, context, etc.) in a database in a way that will allow retrieval in linguistic applications.

Robust translation technologies are must-have tools for multinational businesses serving a multilingual consumer base. A terminology management system is just one of those: you can store, manage, and access the key source terms and translations that describe your products and services — whether they are the approved terminology or the rejected.

Here are just some of the top characteristics of terminology management systems that make them beloved by the world's best global companies.

1. Consistency

Let's place a critical switch on your product that controls one of its key functions. Imagine the confusion then that could result from every department of your company using different terminology to describe that same product part. The marketing team is calling it a thingamajig on the website sales page, the technical writers are calling it a doodad in the user manual, and the engineers placed doohickey on the label above the switch on the product itself. (By the way, those are all actual generic terms for the same thing: a whatchamacallit.)

The beauty of a terminology management system is that it helps your content creators — in whatever department they may be working in — understand that a common termbase is both right for product users and for the translation teams that would otherwise carry that confusion forward into the target language materials.

Confusion is one aspect, but extra costs another. Inconsistency in the terminology used decreases your potential re-use or leverage you could otherwise get from existing translations. Also, by and large, productivity of translations is up if translators can quickly and easily access approved terminology.

Many terminology management applications provide features to ensure that the consistency is maintained by making it possible to insert definitions, show proper usage, or otherwise share instructions that are specific to clients, products, and more.

2. Centralization

Of course, content creators, translators, and diverse internal departments have been used to operating in their silos — contributing to the inconsistency issue described above. Another benefit to terminology management is, therefore, that these diverse stakeholders can — with user rights/approvals — contribute to, connect with, and share the resources of a single, central terminology base.

When you are working with multiple translation teams, you recognize that centralization of terminology is your means of standardizing terminology usage (see 5 Things to Know About Creating a Multilingual Glossary [Cliff Notes]). Unsurprisingly, this contributes to cost and time efficiencies: no more time wasted in determining whether a term is approved for use or not and no costly error corrections to documents where outdated terminology had been used or where one translation team used a term different from another team's choice.

3. Automation

Afraid that building a terminology database will be a painstaking, hair-pulling chore? Well don't be! Thanks to automation features in terminology management systems, building a reliable termbase starts with your legacy materials. You do not start from scratch: you import your previously translated materials along with their source-language documents.

From your already developed resources you can — relatively painlessly — extract, search, index, group, and categorize terminology for use in new projects or, more generally, as an integrated part of translation management workflows that include glossaries, translation memories, and style guides.

In a similar vein, automation can help analyse the existing source language content and using frequency analysis identify repetitive source terms for potential inclusion in your termbase. When used with bilingual data, the same functionality may suggest potential candidate translations for any new terms.

4. Integration

The beauty of having your multilingual terminology in order comes from the ability of your terminology management system to maximize its value by integrating with other essential tools that are part of today's translation workflows.

For instance, automatic checkers will verify the consistency of the terminology used in your translations with your termbase, and produce a report that can be used to easily pinpoint potential errors upfront. Similarly, your terminology system should allow for a smooth integration with your translation management system or your authoring tools.

5. Roles and Workflows

Having a large team of translators or editors accessing your termbase is great, but without some sound functionality that allows you to assign appropriate roles to individual users, things can easily fall into disarray. It should account for various roles such as content creators, those who can query, suggest, validate or update specific terminology, those who can provide context or definitions, import or export glossaries, as well as the wide range of potential users on the client as well as the LSP side.

Having a sound system of user roles is then essential for creating standardized workflows that account for individual scenarios, such as:

- Terminology validation process for new terms identified by content creators or customers
- Terminology validation process for new terms identified by translators during the translation process
- Process for managing terminology changes, including managed changes to approved legacy terms

Last but not least, your terminology management system should support the two terminology-related ISO standards used — ISO 10241 (Terminological entries in standards) and ISO 704 (Terminology work - Principles and methods).

6. Metadata

Terms as such are effectively useless without context. So a good terminology management system should provide for an easy way of managing specific metadata that go with each term. These metadata — such as status, source, product, project, domain, date of entry, history and dates of changes as well as users — are critical for translators or terminology approvers. They enable them to understand the context and history of individual terms so they can make informed decisions about their use and to perform advanced termbase management operations.

7. Standards Support

Your terminology management system should not work in isolation. Terminology should easily flow in and out of your termbase as needed. For that, look to support for standards such as Term Base eXchange (TBX), the ISO-approved, open XML-based standard for exchanging structured terminological data. Further down the road, look for new exciting developments such as the potential interoperability with the XLIFF 2.0 Glossary Module (via TBX).

8. Future-Proofing

Let's say that your company has grown from 10 products localized into 2 languages to 25 products localized into 15. Now imagine the amount of content that you would have to create for them all.

Today's terminology management systems can grow with the content produced for your different needs. Moreover, the best systems help you track that content in whatever format it may be displayed in — whether for content headed to the print shop or content headed to your website.

2.1.5 Human-Aided Machine Translation (HAMT)

As maintained by Slocum (1988:5), human-aided machine translation is viewed as 'a system wherein the computer is responsible for producing the translation per se, but may interact with a human monitor at many stages along the way'.

The name itself suggests that a greater percentage of the work is done by the machine, but there is human involvement during the process, in an interactive mode, or at the stage of preparation of the text or the stage of the output. Besides, Doherty (2016) acknowledged that without human intervention, MT is deprived of quality:

Despite the widespread and diverse adoption of MT in research and practice, most machine translated content still requires some form of human intervention to edit the MT output to the desired level

of quality and/or to verify its quality before publication, dissemination, product release, legal compliance, and so on (Doherty, 2016:958).

The two last stages of human intervention are respectively referred to by

Hutchins & Somers (1992:150) as the 'pre-editing' and 'post-editing' stages:

a) Pre-editing

This stage mostly includes the checking of the source texts to eliminate anything that might cause a problem to the machine. Names (proper nouns) and embedded clauses are identified, homographs are marked, unknown words are substituted, and so on. The human being reformulates the text using a 'controlled language' as mentioned by Hutchins & Somers (1992:151).

Vauquois & Boilet (1985:30) also state that:

Pre-editing is the insertion of some conventional marks in the input text, which is not otherwise modified, by replacing words with "synonyms" or by rewriting parts to change the syntactical structure. When pre-editing is used, the inserted marks refer to some lexical ambiguity (for example, ambiguity between noun and verb), or indicate the scope of a coordination, the antecedent of a relative pronoun, etc.

b) Post-editing

At this stage, the output from the Machine Translation system is correct to reach an acceptable standard. Vauquois & Boitet (1985:30) equally maintain that 'post-editing is necessary in all cases where high quality of the output must be attained, as opposed to situations where information gathering is the main purpose.' Slight modification may be made in case the person who needs the text only wants it for an information purpose. On the contrary, thorough modifications are made if the text is meant for publication and distribution. Here, the human being plays the role of an editor. Every error has to be spotted and lexical and structural changes made by retyping without expecting any help from the system. (Hutchins & Somers, 1992:152)

In Human-Aided Machine Translation (HAMT), the source text has to be modified before, during or after its translation by the computer. The human being intervenes and changes the form of the input before the translation process starts to make it easier to process by the computer or they introduce some additional information into the source text to facilitate further analysis by the computer. Kozłowski (2002 as quoted by Puchała-Ladzińska, 2016:93) noticed that those systems are not very popular among the users, as the users need to manually answer the questions asked by the computer and thus do not have the full control over the output.

2.1.6 Machine-Aided Human Translation (MAHT)

Sager (1994 as quoted by Quah, 2006:13) describes Machine-Aided Human Translation (MAHT) as the use of computer software by translators 'to perform part of the process of translation'.

2.1.7 Machine Translation (MT)

According to Sager (1994 as quoted by Quah, 2006:8), Machine Translation (MT) originally referred only to automatic systems with no human involvement. By adding a slight precision, Hedblom (2010:1) defines it as a sub-genre in Artificial Intelligence that deals with automatic translations between different languages. In the same vein, the European Association for Machine Translation (EAMT) considers MT as 'the application of computers to the task of translating texts from one natural language to another.' As for the International Association of Machine Translation (IAMT), MT is defined as taking 'input in the form of full sentences at a time [sic] and generating corresponding full sentences (not necessarily of good quality)' (Hutchins, 2000).

2.1.8 Technological Skills that a Translator Must Acquire

Nowadays, the translation process does not only rely upon translators' linguistic competences. It also requires the mastery of information processing skills and a few special IT skills. In other words, and quoting Susanne J. Jetak and Gary Massey, "[t]his is apparent from the very first stages of the translation process, when communication between the translator and the client, and the processing of the source text, will in most cases be effected electronically." These skills could be categorised into;

a) Basic Software Skills

To begin with, translators need advanced knowledge of word processing software. A few years ago, it was enough to have some knowledge of Microsoft Word, Excel, and PowerPoint. However, nowadays, any translator must acquit themselves with software for desktop publishing, conversion of speech to text, quality assurance, among others. These skills are becoming increasingly necessary to achieve a successful career.

b) Knowledge of Cat Tools

Secondly, computer-assisted translation tools play an important part in the translation process. They help translators increase their daily output, as well as consistency and quality. Moreover, they assist translators in managing their time and resources more effectively. CAT tools are not the same as machine translation, though.

c) Typing Skills

In the third place, the ability to touch-type and type fast will save translators a lot of time and increase their productivity. Besides, having to look down at the keyboard means a higher chance of back and neck pain. However, those translators who are not great at keyboarding always have the option of using speech-to-text software.

d) Programming Skills

Certain knowledge of programming is essential for translators specialised in IT, gaming, and other areas involving coding. In the case of translators who provide website translation services, being able to work with WordPress can come in handy, as many clients want their translations done directly on their websites. Moreover, a significant percentage of websites all over the world use WordPress.

e) Knowledge of Project Management

In the words of PhD Celia Rico Perez, "[p]roject management is about coordination, teamwork, planning, and control techniques; (…) it has lately gained a name in the translation profession due, mainly, to market growth and virtual teams. When translation is subcontracted to teams communicating through the Internet, (…) project management offers essential tools for translation providers."

f) Research Skills

There is so much variation in the texts that translators work with that many of them end up having to pick up specialised vocabulary quickly. In this sense, figuring out how to find out what they do not know becomes essential. It is important to consider that developing good research skills takes practice because it involves learning how to find useful, relevant, and trustworthy information online.

2.1.9 The Cameroonian Translation Market

Kengne in his research paper *Mutations in The Translation Industry: Exploring Cameroonian Professional Agents' Strategical Quest for Sustainability* identifies from the profiles in the Cameroonian Translation subsystem, that it appears that the greatest majority of the respondents provide translation services on the global market and depend very less on the local demand. Precisely, 89.7% of Cameroon-based agents (Freelancers, Public service/freelance translators, Translation companies) are assumed to be in touch with the decentralised market and held to remain competitive to ensure themselves sustainability. These agents are also the primary representatives of the Cameroonian translation industry, with regard to the interconnection between the centres and the peripheries of the global industry. In this position, the 89.7% of agents from the Cameroonian market reported that the mutating features of the translation industry has been a major bone to pick with, considering that, as agents within the last-ranked peripheral market, their professional environment does not always favour professional emancipation.

Ideally, to keep up with the evolving trend of the industry, these agents are expected to have a great attention to changing practices in the global industry, so as to keep themselves in line with the best practices of the profession at any time. At this point it becomes interesting to learn that unlike what would be expected, the overall trend of these agents' concern for update on mutations is not very high. While 38.3% percent report to be highly concerned with updating themselves on evolving practices, 50% confess having just average interest on keeping themselves abreast on evolution trends in the global market. Most alarming, over 11% reportedly have low or no interest in getting informed on translation mutations.

In this same vein, it was further observed that, once mutations are identified and industry's best practices are known, these agents' primary concern is not oriented towards complying with such best practices, in order to counter the adverse effects of these mutations.

2.2 Theoretical Review

Theoretical considerations are as important in translation as they are in other fields of study. Translation theory is therefore, the body of knowledge that is used to determine the appropriate methods for the widest possible range of texts or text categories. It provides a framework of principles, restricted rules and hints for translating texts. It therefore serves as a background for problem solving.

2.2.1 The Sociolinguistic Theory

The sociolinguistic theory deals primarily with language as it is used by society in communicating.

Ngoran (2017) posits that unlike the linguistic and philological theories of translation, sociolinguistic theories of translation are target-text oriented and give priority to the receptors of the translation. They use the communication model and view translation as a communicative act in which a message encoded in the source language has to be decoded by the receptors of the translation. They posit that for decoding to take place, the message in the source text has to be interpreted, taking into consideration the extra- linguistic context of the text when it concerns certain expressions. For a text to be properly interpreted, information relating to its author, its historical background, the circumstances involved in its production and the history of its interpretation is required.

The modern version of the sociolinguistic theories of translation may be seen in Newmark's (1988) communicative approach to translation, where what matters is the effective conveyance of a message within a specific context. This is equally what the pragmatic approach to translation advocates

the view of translation as the transfer of a message from one language to another within a specific context. Here we see the relevance of Popovik's (1970) idea of 'shifts of expression' when a message moves from one language to another, hence the constrained latitude of the literary translator to stylistically create in the receptor text. This theory permits the contextualization of translation, translation technologies and the translation market to Cameroon.

2.2.2 The Communication Theory

The Communication Theory of Translation is a theory that aims at communicative translation, "which attempts to produce on its readers an effect as close as possible to that obtained on the readers of the original" (Newmark, 1988: 39), Newmark (idem) further explains that communicative translation, which is target culture, target text and target- reader-oriented, "addresses itself solely to the target reader, who does not anticipate difficulties and would expect a generous transfer of foreign elements into his own culture as well as his language where necessary". Ngoran (2017) states that the communication theory of translation posits that a translation should sound as natural as possible in the target language and should be such that the target reader will not doubt its originality. It should therefore read as an original composition in the target language and not at all as a translation.

This theory is important to our study because the whole aim of having to master translation technologies supersedes just to have a successful career but rather foster and simplify communication between different cultures.

2.2.3 The Skopos Theory

The skopos theory is a theory that stands out against the claim that there is no aim or objective as the translator embarks on the translation process. Ngoran (2017) states that Skopos is a Greek term which means "aim" or "purpose". Skopos theory as introduced in translation theory in the 1970s by Hans J. Vermeer as a technical term referring to the purpose of a translation and of the action of translation:

The nature of the target text is "primarily determined by its skopos or commission" (Vermeer 1989/2000: 230) and adequacy as the measure of translational action. In Reiss and Vermeer (1984: 139), adequacy describes the relations between the source text and the target text as a consequence of observing a skopos during the translation process. In other words, if the target text fulfils the skopos outlined by the commission, it is functionally and communicatively adequate (Munday, 2001: 80).

Ngoran (2017) cited in Vermeer and Reiss (1984:119) give the main tenets of the Skops theory entitled Grundlegung einer Allgemeine Translations Theories (Groundwork for a General Theory of Translation). These are:

1. A translation (or target text) is determined by its skopos.
2. A target text is an offer of information in a target culture and target language concerning an offer of information in a source culture and Source language.
3. A target text does not initiate an offer of information in a clearly reversible way.
4. A target text must be internally coherent.
5. A target text must be coherent with the source text.
6. The five rules above stand in hierarchical order, with the skopos rule predominating.

Although one of the criticisms levelled by Nord (1997: 109-122). This theory is essential in our study in that it enables us to identify the purpose of acquiring technological skills. The general aim of acquiring these skills is to better set translation purposes such as meeting up with market and client demands.

2.3 Empirical Review

This section reviews previous empirical works regarding the domains of technology and translation.

Ristikartano (2015) in The Role of Translation Technologies and Human Resources in International Business Communication. The objective of the thesis was firstly to define the role of technological and human resources in the command of languages in international business communication in a sample of British, Finnish and Russian SME companies. The second objective was to develop guidelines for the application of both technological and human resources in the said sector of communication in order to make their business more advanced on the global market. Quantitative research applied to get statistics for stated research questions. A survey study approach formed the research strategy. The survey created via an online questionnaire form measured similarities and differences regarding the use of technologies and human resources in international business communication in the sample mentioned above. The cohort of 30 companies was divided into three groups according to their geographical location. The survey deepened the understanding of the role of language related technological advances and human resources including language competencies in communication and made it possible to create a concept of Language Management Strategy. To clarify the idea of applying LMS to a company on the field, individual LMS guidelines are developed for KSK Ltd.

Doherty (2016), in The Impact of Translation Technologies on the Process and Product of Translation firstly proved how technological advances have led to unprecedented changes in translation as a means of interlingual communication. This article discusses the impact of two major technological developments of contemporary translation: computer-assisted translation tools and machine translation. These technologies have increased productivity and quality in translation, supported international

communication, and demonstrated the growing need for innovative technological solutions to the age-old problem of the language barrier. However, these tools also represent significant challenges and uncertainties for the translation profession and the industry. In highlighting the need for increased awareness and technological competencies, I propose that these challenges can be overcome and translation technologies will become even more integral in interlingual communication.

Based on Schumpeter's theory of innovation and from the perspective of creative destruction (2019), the study proposes the concepts of "positive transformation outcomes" and "negative transformation outcomes" of machine translation technology on traditional language service providers. On the one hand, many high-tech companies enter into the language service industry by taking the advantage of machine translation technology, bringing competitive pressure on traditional language service providers, which is considered as "negative transformation outcomes". On the other hand, traditional language service providers themselves can improve translation efficiency, reduce costs and expand business line by adopting the advanced machine translation technology, which is considered as "positive transformation outcomes". The study then collects data from the real language service providers and empirically evaluates the net impact of machine translation technology on the performance of language service providers. The case study based on the business revenue data and the development trend information of two famous language service providers demonstrates that the language service provider that adopts the advanced machine translation technology could significantly increase the business revenue and promote positive development, while the language service provider that avoid the new technology could result in the business revenue decline and development stagnation. The results indicate to some extend that currently the positive impact of the "positive transformation outcomes" from machine translation technology have already exceeded the negative impact of the "negative transformation outcomes" lead by machine translation technology. The role of machine translation technology should be paid more attention, especially within language service providers.

Terratranslations (2022) in *The Role of Technology in the Translation Industry* examine how technology has impacted the translation industry. Technology has its faults—there's no doubt about that—but in the translation industry it has been an enabler for progress. As long as all parties involved in the process understand that technology has its limitations, it can be used to do more, better, and work faster. In a world where access to information in a language everybody understands has become critical, having technology on our side is an enormous help.

3. METHODOLOGY

This chapter discusses the research design, area of study, population, sample of population, sampling technique, instrument for data collection, validation of questionnaire and administration of the instrument as well as the method used for data analysis.

3.1 Research Design

In general, a research design allows to have control over the study. Before deciding on which research design to adopt, the researcher assesses various factors including the purpose of the research, participants and time allocated to the study.

This study is a survey which aims at outlining the role of technological skills for a successful career in the translation industry. In order to do this, a quantitative research design was adopted via the distribution of questionnaires to all the respondents.

3.2 Data Collection Procedure/Tools

Within the framework of this research, a questionnaire entitled 'The Role of Technological Skills for a Successful Career in the Translation Industry' was designed on the online platform Google Form. In order to collect data, the said questionnaires were administered to 75 professional translators in Cameroon. These questionnaires were administered to the respondents via email and WhatsApp within a period of one month.

3.3 Data Presentation and Analysis

This section presents, analyses and interprets the results. The data analysis aims at answering the research questions that have been mentioned in chapter one of this research. Then, analysis was done using a descriptive and inferential statistics method called the Pearson Chi-squared test. The analysis focused mainly on establishing a correlation between the perceived effect of age of translators on the use of CAT tools, and the effect of computer skills on the use of CAT tools.

3.3.1 The role of CAT tools and their impact in the translation process

In order to determine the role of CAT tools and its impact, questionnaires were shared to translators so as to evaluate how relevant these tools are to them on the basis of suitability, speed and consistency. These are three very important elements in today's translation industry.

a) Suitability of CAT Tools

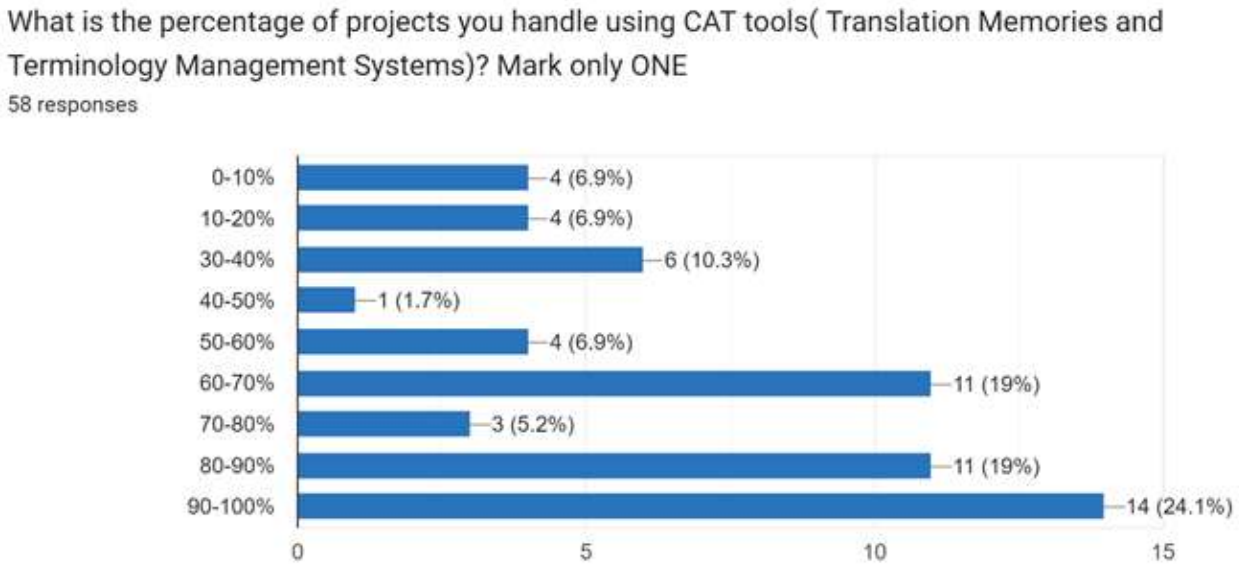

Figure 1: Suitability of CAT Tools

According to this figure, the majority of CAT tool users (24.1%) believe that the tools are 90-100% suitable for projects that are handled. 44.9% of the respondents indicated that CAT tools are compatible with translated documents at 50-90%. For 10.3% of the users, only 30-40% of the files can be translated using the software. The findings mean that most of the translation projects in Cameroon are supported by CAT tools. However, some translators make a voluntary decision of non-adoption in some cases due to a number of reasons including the incompatibility with the work undertaken. Besides, not all texts are worth being included in a TM (Bowker, 2005:19).

b) Speed

Generally, the speed is measured in terms of the number of words processed within an hour. This is used as an indicator of productivity in translation (Bowker, 2005; Federico, Cattelan, and Trombetti, 2012; Guerberof, 2009; Moorkens, 2012). Therefore, the researcher used the same indicator to determine how productive respondents can be when using CAT tools and when no CAT tool is used. The chart below compares the output between CAT tool users and non-users.

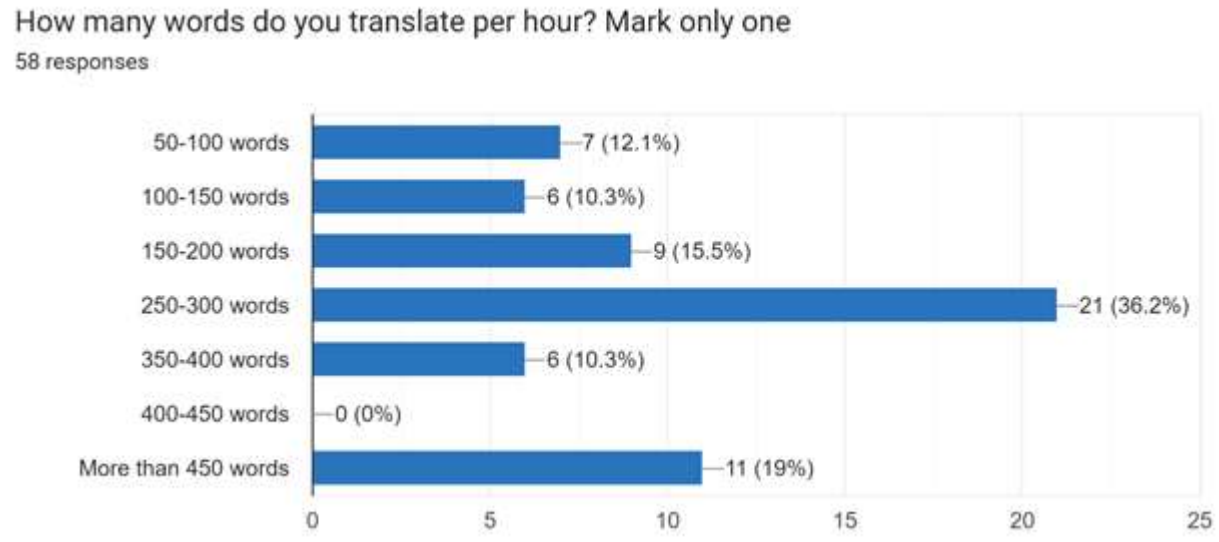

Figure 2: Processing Speed

This figure reveals that the numerical minority of CAT tool non-users (22) can produce 50-200 words per hour. 21 of them can go up to 250-300 words per hour. As for CAT tool users, the majority (11 respondents) recorded an hourly output of more than 450 words per hour. Six of the CAT tool users also indicated that they could handle 350-400 words per hour. Given that the majority of CAT tool users attest to be faster when they translate using CAT tools, it is clear that these tools have a positive impact on the productivity level of every translator.

c) Consistency

As another indicator of productivity in translation, consistency is evaluated to determine how it is likely to be affected by CAT tools. However, the point of view of non-users was not taken into consideration because of their uncertainty regarding the impact that these tools may have on translations.

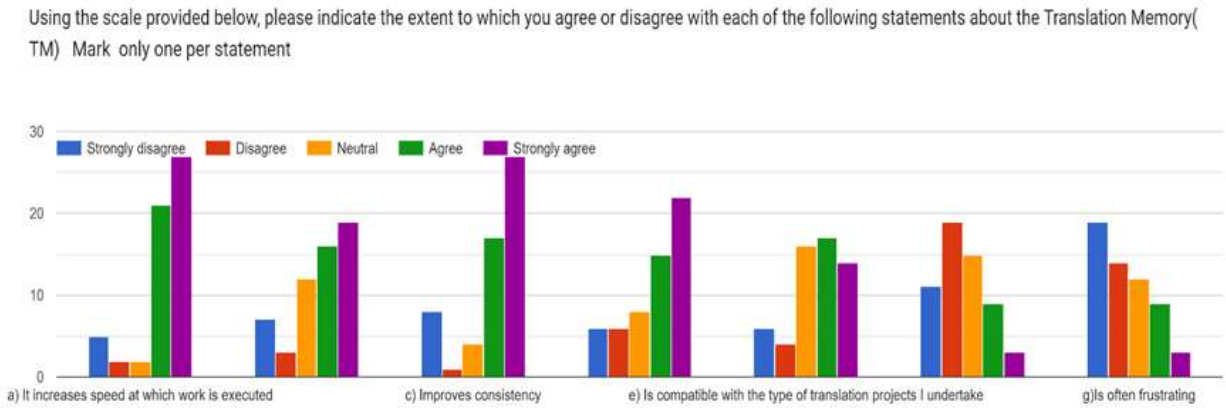

Figure 3: Consistency

The figure shows that the majority (66.7%) strongly agree that CAT tools have increased the level of consistency, 22.2% simply agree that the consistency of their translation has improved, 11.1% of respondents are not sure whether CAT tools have affected their workflow in any way. As for the remaining 5.22% of respondents, they disagree that CAT tools have increased their level of consistency. Hence, after reviewing the translators' opinions, it is a fact that CAT tools help them to stay consistent in their work.

It is also revealed that all the translators in Cameroon are university graduates. Some translators trained as such (8.6%) and fifty-six (96.6%) of whom have postgraduate degrees, while others received training in other fields and later joined the profession because they were fond of the art. All these translators fell into three categories: firm owners, in-house and freelance translators.

Another interesting finding of the research is that all translators have intermediate and advanced computer skills and can handle a wide array of file formats such as Microsoft Office Package, PDF, XML, HTML, Desktop publishing formats and so forth. This also prompted the research to establish a correlation between computer skills and the use of CAT tools.

Table 1: Impact of Computer Skills on the Use of CAT tools

Pearson's Chi-squared test	
Variable	p-value
Productivity and Computer Skills	p-value = 0.05
Correlation is significant when p-value is less than 0.05	

According to this table, evidence shows that computer skills positively affect the use of CAT tools of translators in Cameroon given the positive and strong result from the Pearson's chi-squared test (R = 0.807; P =0.05) for CAT tools, particularly the translation memory. The positive and strong correlation therefore indicates that computer skills of translators significantly affect the use of the CAT tools. Hence, it was inferred that only translators with good computer skills were likely to adopt CAT tools. This implies that translators with basic computer skills would face difficulties using the CAT tools.

The data indicates that some translators are actually familiar and have had experience with CAT tools, such as Wordfast, SDL Trados, MemoQ, Déjà Vu, Microsoft Leaf, Memsource, Across and

Wordbee. As for the remainder, one proportion has only heard of CAT tools whereas the other is completely strange to the existence of such technology. These last two cases constitute the majority. Despite this wide availability of CAT tools and their uptake, it is noted that only Translation Memoires (TMs) are mostly known to translators. Few Terminology Management System (TMS) were mentioned such as Uniterm, Termium. This implies that translators in Cameroon are not very familiar with TMS.

Also, the impact of CAT tools on the work of translators in terms of speed and consistency is assessed. Based on the adopted model, which considers the processing speed as an indicator of productivity, it is now clear that CAT tool users are likely to be more productive than non-users. The majority of translators who are using CAT tools also state that they play a key role in maintaining consistency throughout translated projects.

Using a multiple response set, strategies were investigated in quest to raise translators' awareness about CAT tools. Most of the solutions were suggested by translators who strongly believe these tools should be taught at school. Other solutions include attending seminars and training to help building translators' capacity.

3.3 The role of CAT tools in the professional insertion of translators

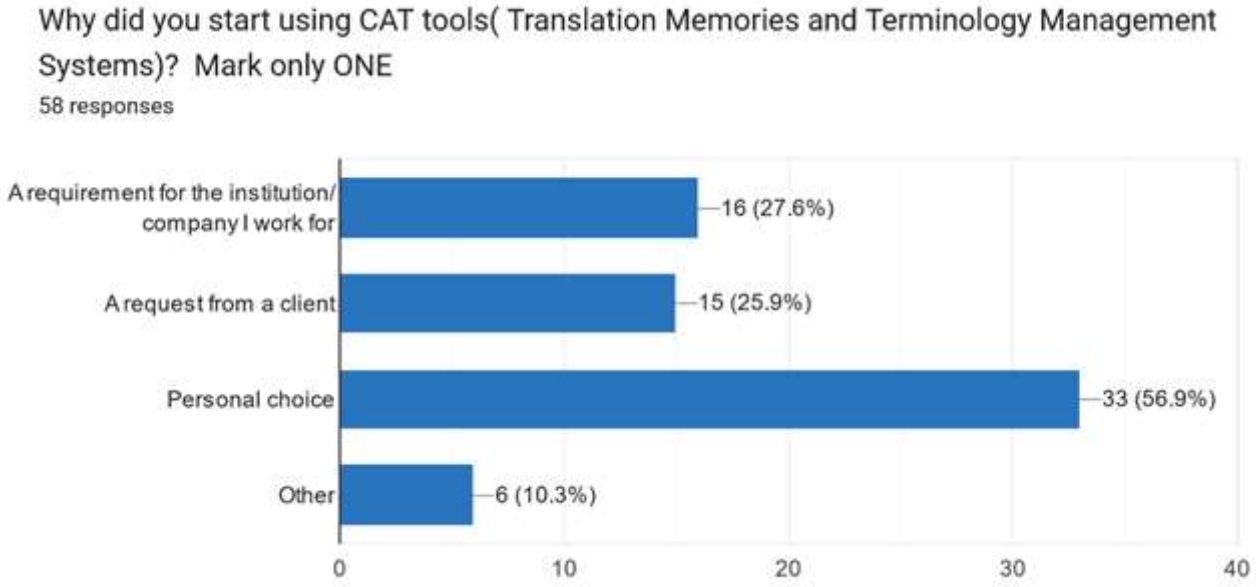

Figure 4: CAT tools in the professional insertion of translators

The figure shows that the majority (56.9%) strongly agree that they began using CAT tools for personal reasons, while 27.6% and 25.9% account for the for the fact that their adoption of these CAT tools was for professional reasons (a requirement for the institution they work for or a request from client). This in itself is proof that the adoption is vital for any translator who wishes to go professional.

Translators provide a quintessential example thanks to their profession. Although translation and interpreting (both written and oral) have been in high demand throughout history for their indispensable intercultural mediation functions (Delisle & Woodsworth, 1995), they are still permanently under-professionalized. This holds even for the more prosperous translation markets today (e.g., the Danish market; Dam & Zethsen, 2010, 2011, and more).

3.4 The perception of stakeholders in the translation industry about the use of CAT tools.

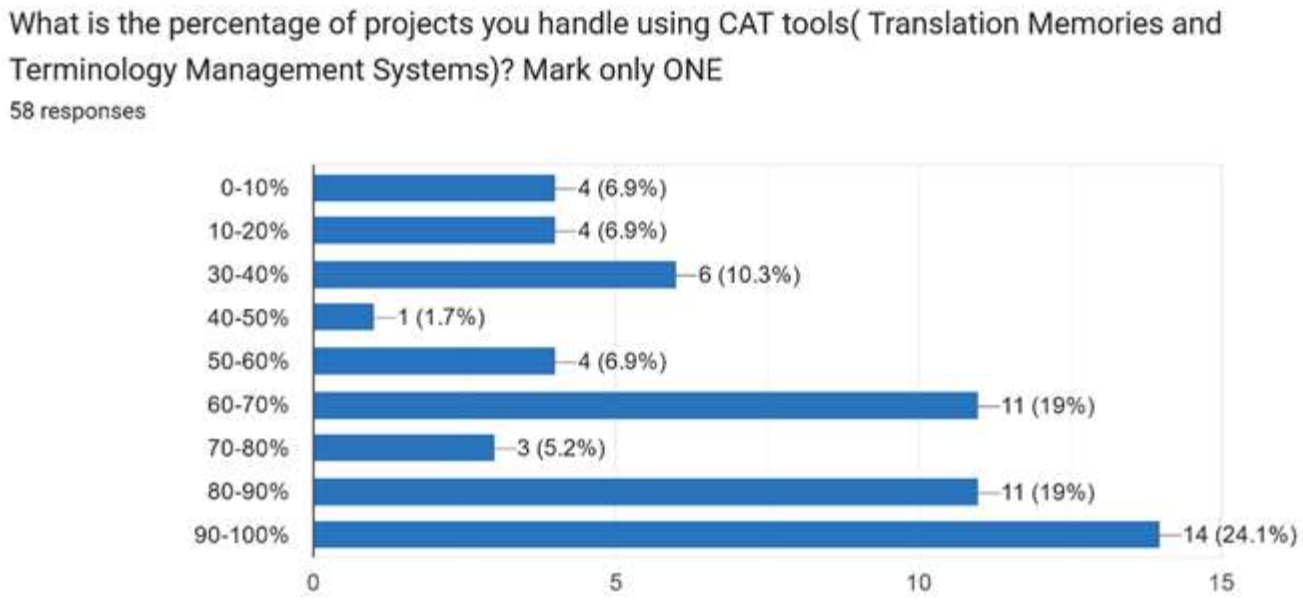

Figure 5: The opinion translators have of the use of CAT tools

According to the figure above the majority (69%) strongly agrees that CAT tools are responsible for handling 50-100% of their translation projects. While 24.1% account for the fact that these CAT tools handle a little or no percentage of their projects. This in itself proves that most translators perceive CAT tools and its use as indispensable.

4. CONCLUSION

In this study on the role of technological skills in a successful career in the translation industry, various advantages of these technologies have been discussed such as speed and efficiency while investigating how translators in Cameroon perceive CAT tools, and how these tools are important for their professional insertion. A series of terms, concepts, theories and other articles were reviewed (translation, computer-assisted translation tools, terminology management systems, sociolinguistic theory, skopos theory and communication theory etc).

Data was collected via questionnaires which were designed on google form. They were distributed to the respondents via email and WhatsApp. The collected data was analysed using the Pearson's Chi-squared test.

After presentation of the findings, it was realised that the first objective is attained because the crucial utility of CAT tools in the translation process was revealed. So is the second objective. It equally confirmed that CAT tools are essential for the professional insertion of translators. As for the third objective, the study was able to prove that most translators view CAT tools as indispensable . Therefore, each translator should be aware of these technologies.

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