

# Enhancing translator employability in the artificial intelligence era

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#### **Abstract**

This exploratory study investigates Enhancing Translator Employability in the Artificial Intelligence Era (AI). As AI, particularly through machine learning and neural networks, revolutionizes translation services, concerns have emerged regarding the future demand for human translators. The study sets out to assess perceptions of employability among trainee translators. Translators and employers in the Artificial Intelligence Era (AI) era, identify factors influencing these perceptions, and propose strategies for enhancing their employability. Employing a mixed-methods approach with 60 participants—comprising 40 ASTI trainees, 16 recent graduates, and 4 employers—the study examines perceptions of future career prospects, factors influencing these perceptions, and strategies for enhancing employability. The research draws on Skills-Mismatch Theory, Human Capital Theory, Career Adaptability Theory, and Job-Market Signaling Theory guiding our research and findings. Results highlight significant uncertainty among trainees, largely due to the rapid integration of AI tools in translation. However, the study also reveals opportunities for human translators to adopt AI as a complementary tool, emphasizing the importance of targeted training programs in technological proficiency and adaptive skills. The study provides actionable recommendations, including curriculum reforms to incorporate AI-focused training, industry-academia collaborations, and the promotion of lifelong learning to ensure translators remain competitive. These findings offer insights into the evolving translation market and guide educational institutions, policymakers, and industry stakeholders in preparing translators for an AI-enhanced professional landscape.

## **Keywords:**

Artificial Intelligence, Translation Industry, Employability, Translator Training, Technological Advancements.

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#### Introduction

In an era where technological advancement is relentless, the translation industry finds itself at a crossroads. The advent of artificial intelligence (AI) has brought about transformative changes in how translation services are rendered, challenging the traditional roles of human translators. As AI technologies, such as machine learning and neural networks, continue to evolve, they are reshaping the translation industry raising pivotal questions about the future of human translators in this new landscape. Amidst the rapid adoption of AI tools in translation processes, this research seeks to unravel the perceptions of trainee translators, recent graduates/professional translators as well as employers/clients regarding translator future career prospects and explore the strategies that could boost their employability in the AI-dominated translation industry. This study aims to shed light on the evolving dynamics of the translation market in the AI era and the ways in which trainee translators and translation professionals can navigate the challenges and opportunities presented by this technological upheaval.

## **Statement of the Problem**

The rapid integration of Artificial Intelligence (AI) technologies, into the translation industry has precipitated a significant shift in the operational and employment paradigms of this field. While these advancements promise to revolutionize translation services by enhancing efficiency and accuracy, they also pose profound questions about the future role and employability of human translators. This emerging scenario has sparked concerns among translation professionals and trainees alike, as the increasing capabilities of AI in performing complex translations threaten to diminish the demand for human translator expertise.

### **Research Questions**

This study has the following questions;

- 1. How do trainee translators at ASTI perceive their future career prospects?
- 2. What is responsible for the negative or positive perceptions of trainee translators?
- 3. What recommendations can be made to boost the employability of trainee translators?

### **Research Objectives**

- 1. To explore the perceptions of trainee translators at ASTI regarding the future career prospects.
- 2. To evaluate the reasons for the negative or positive perceptions of trainee translators?
- 3. To examine the recommendations to boost the employability of trainee translators?

#### Literature Review

### **Conceptual Review**

## **Employability prospects**

The concept of "employability prospects" has gained significant attention in academic literature, with scholars offering various definitions that reflect the multidimensional nature of the term. Hillage and Pollard (1998) define employability as the "capability to move selfsufficiently within the labor market to realize potential through sustainable employment." This definition emphasizes not only the acquisition of employment but also the ability to maintain and navigate one's career over time. The focus here is on adaptability, lifelong learning, and career development, which are crucial for sustaining employment in a dynamic labor market.

Yorke and Knight (2006) describe employability as "a set of achievements—skills, understandings, and personal attributes—that make graduates more likely to gain employment and be successful in their chosen occupations." Their definition highlights the importance of a broad skill set that includes both technical abilities and personal qualities, suggesting that employability extends beyond mere job acquisition to include long-term career success.

Harvey (2001) offers a more market-oriented perspective, defining employability as "the ability of a graduate to secure a job and maintain it, with the prospect of obtaining new employment if necessary." Harvey's definition underscores the importance of adaptability in the labor market, where continuous skill development is essential for maintaining employability over time.

Brown, Hesketh, and Williams (2003) take a sociological approach, arguing that employability is influenced by both individual skills and the broader social and economic structures. They emphasize the role of "positional conflict," where graduates compete for limited positions, and employability is shaped by factors such as social class, educational background, and labor market conditions. This perspective broadens the concept of employability by considering the structural inequalities that can affect an individual's employment prospects.

#### **Artificial Intelligence**

The concept of Artificial Intelligence (AI) has been defined and interpreted in various ways by scholars and experts. John McCarthy, one of the pioneers in the field, defines AI as "the science and engineering of making intelligent machines, especially intelligent computer programs" (McCarthy, 2007). This definition focuses on the technical aspect of AI, emphasizing the creation of machines that can perform tasks requiring human intelligence, such as problem-solving, decision-making, and learning.

Russell and Norvig (2021), in their widely acclaimed textbook Artificial Intelligence: A Modern Approach, define AI as "the study of agents that receive percepts from the environment and perform actions." This definition highlights the interactive nature of AI, where machines process input data from their surroundings and generate appropriate responses, much like how humans react to stimuli. They also classify AI systems based on their abilities to act rationally, think rationally, act humanly, or think humanly, providing a comprehensive view of the field.

When looking at Nils J. Nilsson's work in The Quest for Artificial Intelligence, AI is further elaborated as "a set of technologies that can mimic human behavior and cognitive processes." This broad view connects AI to machine learning, natural language processing, and robotics, where systems are designed to replicate human thought processes, including reasoning, learning, and adapting over time.

AI plays a significant role. As AI technologies, such as machine translation (MT), continue to evolve, they directly influence the translation industry by automating certain translation tasks that were once exclusive to human translators. This presents both challenges and opportunities for trainee translators. While AI might automate simpler, repetitive tasks, there is a growing need for human expertise in post-editing machine translations, quality control, and handling complex, nuanced translations that AI still struggles to manage.

The discourse on AI and its role in translation highlights several patterns. Scholars like Pym et al. (2013) argue that AI in translation is not replacing human translators but transforming their roles. Translators are increasingly expected to work alongside AI systems, leveraging them for efficiency while maintaining high standards of accuracy and cultural sensitivity. However, a gap exists in the literature regarding how well translation training programs, especially in Cameroon, are preparing students to thrive in this AI-enhanced landscape. Bowker and Ciro (2019) note that many training institutions lag behind in integrating AI and technology skills into their curricula, potentially widening the skills gap and affecting employability.

AI's role is pivotal. Trainee translators/ professional translators alike must adapt to a changing industry landscape where AI is both a tool and a competitor. It becomes clear that while AI brings about challenges, it also offers new avenues for employment, provided that training programs can adequately prepare students for this hybrid future of human-AI collaboration.

### Sociology of translation

The concept of the "Sociology of Translation" has emerged as an important framework within Translation Studies, focusing on the social contexts, practices, and power relations that shape translation activities. Defined broadly, the Sociology of Translation examines how social factors influence the production, dissemination, and reception of translations. It seeks to understand the role of translators as social agents and how their work is embedded within and shaped by the social structures, institutions, and networks in which they operate.

One foundational definition comes from Bourdieu (1990), who applied his broader sociological theories to the field of translation, emphasizing concepts like habitus, capital, and field. According to Bourdieu, translation is not merely a linguistic transfer but a socially situated practice where translators operate within a specific "field" — a network of relationships defined by power dynamics, cultural capital, and social norms. This perspective positions translators as active participants in the social construction of meaning, influenced by their position within the field and their accumulated social and cultural capital.

Further expanding on this idea, Wolf and Fukari (2007) describe the Sociology of Translation as a study of the various actors, institutions, and networks involved in translation processes, exploring how these social elements affect the choices made by translators. They emphasize the importance of examining the translator's role within the larger social and professional systems, considering how factors like market demand, professional norms, and institutional pressures shape translation practices.

When it comes to our study, the Sociology of Translation offers a critical lens through which to analyze how social factors influence the employability of these trainees. By understanding the social structures and networks that govern the translation industry in Cameroon, you can better assess how these elements affect the integration of trainees into the professional market. For instance, factors such as the demand for translation services, the presence of professional associations, and the recognition of translation as a profession within the broader society all play significant roles in shaping the employment opportunities available to trainee translators.

Different interpretations of the Sociology of Translation reveal varying emphases on particular aspects of the social context. For example, Latour's (2005) Actor-Network Theory (ANT) shifts the focus from individual translators to the network of human and non-human actors that influence translation outcomes. ANT argues that translation is the result of interactions between various agents, including technologies, institutions, and cultural norms. This perspective highlights the complexity of the translation process, suggesting that employability prospects may also depend on how well trainees can navigate these networks.

Contrastingly, Chesterman (2006) critiques the Sociology of Translation for sometimes overlooking the agency of individual translators, arguing that it should also account for the personal choices, creativity, and ethical considerations that translators bring to their work. This debate points to a broader question within the field: to what extent are translators constrained by social forces versus exercising their autonomy? In the context of Cameroonian trainee translators, this tension might manifest in how they balance adherence to industry norms with innovative practices that respond to local needs.

In conclusion, the Sociology of Translation provides a valuable framework for analyzing the employability prospects of trainee translators in Cameroon by highlighting the importance of social structures, networks, and power dynamics. However, there is a clear need for more research that applies these concepts to the Cameroonian context, addressing the specific social and professional challenges that trainee translators face. By engaging critically with the literature, your study can contribute to filling these gaps, offering insights into how social

factors influence the transition from training to professional practice in the Cameroonian translation industry.

#### Theoretical review

Career Adaptability Theory: The Career Adaptability theory focuses on an individual's ability to navigate career transitions, develop resilience, and adapt to changing work environments. It is particularly relevant for examining how trainee translators at ASTI as well as translators prepare for and adapt to the rapidly changing demands of the translation industry. Given the dynamic nature of the translation industry, which is influenced by technological advancements, market changes and shifting client needs, this theory will be instrumental in assessing how ASTI trainees are/can get quipped to handle these challenges and sustain their employability over time.

Career Adaptability Theory was developed by Mark Savickas and other career development theorists. Savickas's work emphasizes the importance of adaptability as a key component of career success in a constantly evolving labor market. The theory outlines specific dimensions of adaptability, including concern for the future, control over one's career path, curiosity about opportunities, and confidence in one's ability to achieve career goals. These dimensions provide a comprehensive framework for understanding how individuals manage their career development in response to external changes.

The key tenets of Career Adaptability Theory include the concepts of career concern, control, curiosity, and confidence. For this study, these dimensions will be explored in the context of how ASTI trainee translators perceive and prepare for their careers. The research will investigate how the training at ASTI fosters these adaptability skills and how these skills influence the trainees' ability to secure and maintain employment in the translation industry. The study will also explore the role of adaptability in coping with challenges such as technological disruption and evolving industry standards.

The principles of Career Adaptability Theory will be directly applied in the study to assess the adaptability of ASTI trainees. This will involve empirical research to measure the trainees' levels of career concern, control, curiosity, and confidence, and to analyze how these factors influence their employability. The theory will be used as a practical tool to evaluate the preparedness of trainees for the translation job market and to suggest ways in which ASTI's curriculum could be enhanced to improve career adaptability among its students.

Job-Market Signaling Theory by Michael Spence: Job-Market Signaling Theory is essential for understanding how ASTI trainee translators and professional translators can effectively communicate their skills and competencies to potential employers in the job market. The theory focuses on the signals that job seekers send to employers to indicate their suitability for a role. In the context of translation, where the market is often competitive and fragmented, this theory will help analyze how ASTI trainees can differentiate themselves and enhance their employability through effective signaling.

Job-Market Signaling Theory was developed by Michael Spence, an economist who was awarded the Nobel Prize in Economics for his contributions to the understanding of information asymmetry in the job market. Spence's theory suggests that job seekers send signals—such as educational qualifications, work experience, and other credentials—to employers to convey their productivity and reduce the uncertainty associated with hiring decisions. This theory has become a cornerstone in the study of labor economics and is particularly relevant for analyzing employment dynamics in industries with high information asymmetry, such as translation.

The main tenet of Job-Market Signaling Theory is that individuals use certain signals to communicate their ability and competence to employers. For this study, the theory will be applied to analyze the specific signals that ASTI trainees use/can use to enhance their employability. This might include the reputation of ASTI as an institution, the specific qualifications and certifications that trainees obtain, their proficiency in multiple languages, and the quality of their translation work as demonstrated through portfolios or internships. The study will explore how these signals are perceived by employers in Cameroon and their effectiveness in securing employment.

The study will actively apply the principles of Job-Market Signaling Theory to examine the employability prospects of ASTI graduates. By analyzing the effectiveness of various signals used by trainee translators, the study will provide insights into how these signals can be optimized to improve job market outcomes. The theory will not merely be treated as a historical concept; instead, it will serve as a practical framework for developing strategies that ASTI trainees can use to better position themselves in the competitive translation job market in Cameroon.

Skills Gap Theory by Alan Manning: This theory by Alan Manning posits that there is often a disparity between the skills that job seekers possess and the skills that employers require. This is particularly pertinent in the context of translation studies, where the rapid evolution of translation technologies and the specific demands of the local job market may not align with the training provided to students and the skills they possess. By applying this theory to the study, we can assess the extent to which the skills acquired by trainee translators at ASTI align with the current demands of the translation industry in Cameroon.

The core principle of the Skills-Mismatch Theory is the idea that when there is a misalignment between the skills workers possess and the skills demanded by employers, it leads to unemployment or underemployment. In the context of this study, the theory will be used to explore specific areas where ASTI trainee translators and practitioners might not be fully equipped with the skills needed in the modern translation market, particularly in areas such as technological proficiency, specialized translation domains, and soft skills like client management. By examining these mismatches, the study aims to identify such gaps and suggest potential areas for improvement.

This study will actively exploit the principles of the Skills-Mismatch Theory to analyze data on the skills of trainee translators and the expectations of employers in Cameroon. The theory serves as a foundational framework for understanding and addressing the employability challenges faced by ASTI trainee translators. The analysis will directly apply the theory to identify areas of misalignment and propose actionable recommendations for bridging the skills gap.

## **Empirical review**

The notion of graduate employability has garnered significant attention in recent years, with studies consistently highlighting a gap between the skills employers seek and those possessed by graduates. A bibliometric analysis by Wahab et al. (2024) revealed that the most prominent thematic concerns in the employability debate include the need for broader skills for career enhancement and the significance of generic skills such as communication, problem-solving, and adaptability(Graduate Employability: A Bibliometric Analysis). From this point of view, it would appear that enhancing employability requires a combination of technical expertise and soft skills. This assertion aligns with Hillage and Pollard's (1998) argument that employability encompasses both skills and personal attributes.

Yet, there are some disparities in how educational institutions prepare students for the job market. For instance, Shimekit and Oumer (2022) conclude that the employability enhancement practices at Addis Ababa University did not provide adequate support for engineering graduates (Practices and Prospects of Enhancing Employability of Addis Ababa University Engineering Graduates). In contrast, Islam et al. (2024) stress the importance of work-integrated learning and employer engagement to bridge the employability gap (Graduate Employability: A Bibliometric Analysis). What we infer from these findings is that while the importance of soft skills is widely accepted, more emphasis on practical, hands-on experience would better prepare students for the workforce.

Technological Competence and Employability is equally discussed in these works. In the rapidly evolving labor market, technological competence is increasingly essential for employability, particularly in fields such as translation and public service interpreting. Vitalaru and Peña-Díaz (2024) emphasize that technological training in translation programs is crucial for enhancing employability (Technology for Public Service Translators and Interpreters in Spain: Enhancing Employability Through Training). However, the authors note a loophole between the demand for technology-driven skills such as machine translation and the actual usage of these tools by graduates. This discrepancy suggests that while graduates may be aware of technological tools, they may not be adequately trained to use them effectively in their jobs.

This point of view raises questions about the effectiveness of current educational curricula in preparing students for the technological demands of modern workplaces. From our perspective, this reflects a broader issue in education—curricula must evolve in tandem with technological advancements to ensure that graduates are not left behind. This aligns with the recommendation from Wahab et al. (2024) that curriculum design must focus on building adequate human capital by integrating technology into the learning process(Graduate Employability: A Bibliometric Analysis).

Another salient issue raised is that of how graduates perceive their own employability versus the reality of the job market. Rothwell et al. (2008) developed a scale for assessing selfperceived employability, which reflects students' confidence in securing employment after graduation (Self-perceived employability: Construction and initial validation of a scale for university students). However, there is often a disparity between self-perceived employability and actual job market outcomes. For instance, the findings of Arcodia and Barker (2003) suggest that while students in event management programs may perceive themselves as employable, job advertisements often reveal a mismatch between

From this point of view, one could argue that higher education institutions should focus not only on boosting students' self-perceived employability but also on ensuring that their skills align with the market demands. Without this alignment, even the most confident graduates may struggle to secure relevant employment, as seen in event management and engineering sectors (Practices and Prospects of Enhancing Employability of Addis Ababa University Engineering Graduates).

Skills mismatch is another topic of concern to some of these authors Employers increasingly demand a broad range of competencies from graduates, including soft skills like adaptability, critical thinking, and communication, alongside technical proficiency. The bibliometric analysis by Wahab et al. (2024) shows that a significant gap exists between employer expectations and the skills that graduates possess upon entering the job market(Graduate Employability: A Bibliometric Analysis). This skills mismatch presents a significant challenge to employability, as graduates often find themselves underprepared for the complexities of modern workplaces.

### Methodology

This section outlines the research methodology of our study which is structured into several key sections. First, the research design is presented, followed by the description of the population and sample involved in the study which is followed by the data collection methods used as well as the operationalization of variables. The chapter then covers the data analysis plan, and finally, concludes with the ethical considerations guiding the research.

A mixed-methods research design was adopted, combining quantitative surveys for statistical trends, like employability prospects, with qualitative interviews for in-depth exploration of personal experiences. This approach enabled comprehensive analysis and validation through triangulation, offering actionable insights into employability and career development in an AI-driven market.

The study targeted three key groups in Cameroon's translation field: trainee translators, recent graduates, and employers. It focused primarily on students and graduates from ASTI, a leading translator training institution. The sample size comprised 60 participants: 40 students, 16 graduates, and 4 employers. Purposive sampling ensured relevant expertise for interviews, while random sampling was used for questionnaires, ensuring diverse perspectives.

Data was collected via questionnaires and interviews which were deployed online and faceto-face respectively. Instruments were pilot-tested for clarity, with reliability checked using Cronbach's alpha and validity confirmed through alignment with study objectives and supervisors' reviews. Triangulation of survey and interview data further strengthened the study. Ethical considerations were upheld, ensuring voluntary participation and informed consent.

Both quantitative and qualitative methods were used. Quantitative data, analyzed with SPSS 25.0, employed descriptive tools like frequency counts and Chi-Square tests to predict employability. Qualitative data underwent thematic analysis, identifying key themes supported by participant quotations. Findings were presented through tables and figures.

Ethical protocols ensured participant rights and data integrity. Informed consent, confidentiality, and secure data storage were maintained. Participation was voluntary, with no coercion, and participants could withdraw at any time.

### **Data Presentation and Analyses**

This chapter presents findings of our study from qualitative and quantitative data collected from 60 participants (51 for quantitative data and 9 for qualitative data) including trainee translators, a few trainees, professional translators and employers where administered questionnaires and a few interviewed.

#### **Presentation of Data**

### **Quantitative data**

In describing the 51 respondents by age group, majority of the trainee translators 64.7% (33) were within the age group of 20-25 years, 19.6% (10) 31-35 years, while 9.8% (5) were within the age group of 26-30 years, and 5.9% (3) below 20 years. Moreover, gender wise, majority of the trainee translators 64.7% (33) sampled were female when compared to 35.3% (18) who were male. Furthermore, based on the educational level of the 51 trainee translators sampled, majority 90.2% (46) were at the undergraduate level and few 9.8% (5) were at the postgraduate level. In addition, in describing the 51 sampled trainee translators by category, majority 72.5% (37) were ASTI trainee translators, 25.5% (13) were recent graduates and 2.0% (1) was an employer.

### **Descriptive Findings**

Regarding familiarity with AI-powered interpreting tools, 51.0% (26) of respondents are very familiar, 37.3% (19) are somewhat familiar, 9.8% (5) are not very familiar and 2.0% (1) are not familiar at all. Cumulatively, almost all the respondents 98.0% (50) are familiar with AIpowered interpreting tools although at different levels.

Based on formal training in AI-powered interpreting tools, 21.6% (11) of the trainee translators have received formal training in using AI tools in translation while majority 78.4% (40) have not.

Based on respondents' perception of employability in the current translation market, 3.9% (2) said is very high, 29.4% (15) rated it high, 49.0% (25) indicated moderate while 15.7% (8) rated it low and 2.0% (1) neutral. In conclusion, the current rate of employability is not that poor because only 15.7% (8) think it is low.

Based on change in perception of the translation profession with the rise of AI, 45.1% (23) of respondents said their perception has fairly changed, 31.4% (16) a great deal, 19.6% (10) a little, and 2.0% (1) not at all. Overall, 96.0% (49) of respondents' perception of the translation profession has changed with the rise of AI.

Figure 1: Level of Importance for Trainee Translators / Translators to Keep up with Emerging AI **Technologies** 

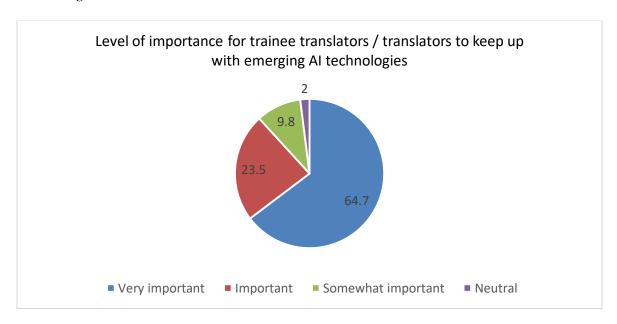
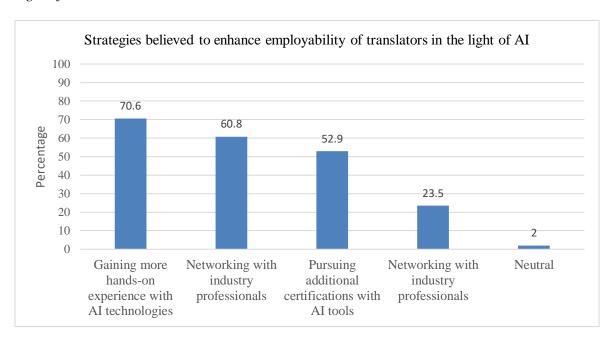


Table 1: Respondents Perception if Courses Offered to Trainees are Good Enough for Preparation in the Job Market and Additional Courses Needed to Enhance Employability

		Frequency	Percentage	
Do you think the courses	Yes	26	51.0	-
offered to trainees are good enough to prepare the ASTI trainees for the job market?	No	25	49.0	
Additional courses, topics	Initiation to AI tools plus practicals	18	31.6	

or skills think should be	Courses on CAT and ICT tools	13	22.8
given to trainees in to	Marketing/entrepreneurship	8	14.0
enhance their	More training on revision and	5	8.8
employability	editing/post-editing course		
	Communication development	4	7.0
	More practical courses	2	3.5
	Subtilling	1	1.8
	Dubbing	1	1.8
	More courses on Audio-visual	1	1.8
	translations		
	Legal and medical translation	1	1.8
	Tax pricing	1	1.8
	Administrative writing	1	1.8
	Psychology	1	1.8

Figure 2: Strategies Believed to Enhance Employability of Trainee Translators / Translators in the Light of AI.



Furthermore, based on the impact of AI on job availability for human translators, majority of respondents 80.4% (41) hold the believe that AI will reduce opportunities, while 9.8% (5) hold the believe to increase opportunities, and another 9.8% (5) believe that there will be no effect.

Question Two: What is responsible for the negative or positive perceptions of trainee translators?

Regarding the factors affecting employability perception as a human translator, 39.2% (20) mentioned AI increasing translation capabilities, 23.5% (12) indicated personal skills in using AI tools, 17.6% (9) of equal proportion indicated availability of specialized niches for human translators and demand for cultural and contextual translation and 2.0% (1) was neutral.

# Question Three: What recommendations can be made to boost the employability of trainee translators?

Based on recommendations to better prepare trainee translators in the era of AI to enhance employability, it was frequently recommended that AI should be integrated as a course in the curriculum as depicted in the statements "Teachers can include AI translations in some of their classes to familiarize students with the strengths and shortfalls of AI.", "Put AI courses in programme."

More so, some respondents recommended that trainees should be taught more on post-editing for skills improvement as narrated "They should extend the revision and post editing class to two or more semesters."

Other recommendations were that trainee translators should acquire skills in the use of CAT tools, be diverse and adaptable, improve on their language development to better detect AI errors, be taught on community translation, collaborate with AI-industry, more practical courses be provided, organise seminars on AI, trainees be keep informed of the current trend, and that they should be encouraged and be skillful in identifying AI errors.

### Reasons Human Translators Are Still Striving Despite AI

Based on the reasons why human translators continue to strive despite AI in the translation industry, many respondents said is because human translators perfectly understand cultural nuances that AI does not. Another frequently mentioned reason is because AI translations are still post-edited by human translators. More so, human translators were reported to be more accurate/ efficient, understand context, provide specialized services, and are dynamic that AI does not.

Based on the advice for trainee translators to enhance their employability, it was advised that they should keep abreast with new technologies (CAT tools, AI), improve on their language / communication skills, work hard and developed their skills, be diversify, demonstrate mastery of their translation profession, engage more in research, stay current / updated with new trend, engage in networking, collaborate with AI, be flexible, improve on their language proficiency, be proactive, engage in continuous learning, learn mother tongue, specialize, demonstrate competency in post-editing, rely less on AI, and engage on internship.

### **Findings Derived from Interview Guide**

In addition to the data derived from the questionnaire, few trainee translators, professionals, and employers were interview and their responses are presented below using a thematic approach.

**Table 2:**Essential Skills for Trainee Translators to Stay Employable in the AI-Driven Area

Themes	Ouotations
Flexibility and adaptability	"I think flexibility and adaptability are very important. Translators should not only be fluent in languages but also adept at using AI tools to enhance their work. Strong research skills and cultural awareness are essential too, and the ability to manage and edit AI-generated content will be vital for staying competitive in the industry. Specialization in niche fields will also provide an edge."
Strong technical, language, soft, and cognitive skills	"In addition to translational skills, translators now must acquire pin point skills that are directly or indirectly linked to translation. The advent of AI has equally brought several jobs particularly data annotation, coding and other purely linguistic tasks. It would be helpful for translators to acquire such skills to stay relevant."
Research skills	"Profound research, self-training, and adaptability are the key to face AI."

Finally, when trainee translators were asked of the plans to differentiate themselves in the AI driven translation era, many of them said they will engage more into research and self-training as narrated in the statements "...Self-training and further research will be indispensable....", "....It is important to learn and master the use of several AI tools as they are created. Moving with technology keeps you ahead as you are aware of trends and developments and how to use them effectively....."

In addition, some plan to study and know the weakness of AI and see how to take advantage as depicted in the statement "....Standing out in this AI era would require a plethora of strategies. First of all, it is important to understand the linguistic and contextual limits of AI translations and leverage them to make a difference in your translation...."

Finally, some trainee translators plan to network as narrated in the statement "...Networking is equally important as you get to learn how colleagues use tools and figure out you can adapt their good practices to your performance...."

Furthermore, regarding interview with professional translators / recent graduates, when they were first asked valuable employable skills needed to stay competitive in the AI driven era, some of the professional translators said ICT skills and linguistic competence are vital to stay employable as depicted the statements "...Knowledge in ICT in addition to linguistic, transfer and intercultural competence....", "....Expertise in machine translation post-editing and advanced CAT tools to enhance efficiency....

More so, some professional translators highlighted specialization as one other important aspect to help translators stay employable as depicted in the statement "...Developing

specialization and becoming expert in niche areas like legal or medical translation to maintain relevance...."

On the contrary, some professionals denied of noticing much change in client expectation as narrated in the statement "...On my part, no there hasn't been much of a change with my clients...."

Lastly, when the professional translators were asked of the kind of training or professional development recommend to other translators who want to remain competitive in the AI era, more of them said other professionals should know how to use ICT and AI translation tools for better integration into their practices as depicted in the statements "....Training in CAT tools, AVT and ICT in general...", "...I advise them to enroll in courses on AI integration in translation and machine translation post-editing...."

When the employers were asked of the skills or qualities they prioritize when hiring translators in a landscape increasingly shaped by AI, one of them mentioned strong postediting skills as seen in the statement "... Strong post machine editing abilities and the equally the capacity to adapt to new technologies quickly...."

Other skills mentioned are higher order thinking skills and understanding cultural nuances as depicted in the statement "... Problem-solving skills, creativity, and the ability to ensure cultural and contextual accuracy beyond AI capabilities...." And, ability to deliver quickly with accuracy was another quality mentioned by an employer as depicted in the statement "....Speed, speed, speed and accuracy...."

Third, when the employers were asked of what recommendations they would you give to translation training institutions on preparing future translators for an AI-augmented industry, one of them recommended good training on post-editing and ability to use CAT tools as narrated in the statement "....Incorporate machine translation post-editing and CAT tool training into the curriculum...." More so, another employer recommended that integration of AI courses in training institutions as depicted in the statement "... Offer courses on AI ethics and the translator's role in maintaining quality and accountability...." Another recommendation was promotion of professionalization as depicted in the statement "....Focus on building resilience by training students in specialization areas where AI struggles, such as creative or nuanced translations...."

Lastly, when the employers were asked if they are specific AI-related skills or areas of knowledge that would boost the employability of recent graduates, all of them mentioned competences in using AI -translation tools and evaluation of said tools as depicted in the statements "....Well, improving one's familiarity with these famous AI tools will be very profitable and even gaining knowledge in trending domains like: climate change, renewable energy, cryptocurrency, green finance, Artificial Intelligence, data protection, etc.....", "....Yes, there are a good number of them, such as skills in evaluating and improving AIgenerated translations for quality and context are also increasingly in demand. I advise them to excel in whatever domain they choose. Strive to be excellent...."

In conclusion, interview with employers, many of them indicated that machine translation has influenced their hiring decisions as they hire specialist who do not rely only on machine but, could integrate machine translation to facilitate workflow. More so, strong post-editing skills, ability to deliver quickly with accuracy, and higher order thinking skills like problem-solving skills, creativity and understanding cultural nuances were the skills or qualities they prioritize when hiring translators in a landscape increasingly shaped by AI. More so, it was recommended that translation training institutions need to prepare future translators for an AI-augmented industry by making sure they have good post-editing skills, can use CAT tools, AI courses be integrated in the curriculum, and professionalization be promoted by ensuring that trainees specialize in a particular area or field.

### **Testing of Hypotheses**

Hypothesis One: There is a considerable decrease in the demand for human translators, which significantly reduces the employability prospects of trainee translators.

Statistically, findings showed that 33.3% of respondents in present times rate employability as high while 49.0% rated it moderately and 15.7% low. More so, 19.6% of respondents rated the translation profession to have change a little. However, more of respondents 80.4% predicted reduction in employability opportunities in future which is significant (Chi-Square= 50.824, p-value < 0.001. Thus, the hypothesis stated above is accepted, since majority of the respondents attest to the fact that there is a decrease in translator demand.

Hypothesis Two: Translation students and professionals who possess advanced technological skills, particularly in AI and machine learning, will perceive their employability prospects more positively compared to those without such skills.

The findings showed that curriculum modification with AI integration and CAT tools and staying abreast with new technologies (CAT tools, AI) were the most mentioned recommendations and advice given to trainee translators to better prepare themselves or enhance their employability chances in future. This shows that trainees who fail to acquire the current technological skills will have limited employability chances in the future. Therefore, the hypothesis that states translation students and professionals who possess advanced technological skills, particularly in AI and machine learning, will perceive their employability prospects more positively compared to those without such skills was accepted.

## **Hypothesis Three:**

Implementing targeted training programs that emphasize both technological proficiency and practical experience as well as trainees being more proactive will significantly improve the employability of trainee translators.

As earlier depicted in the findings, it was frequently recommended that curriculum / training programmes be modified to integrate the use of technological tools such as AI and CAT tools. It was also recommended that trainee translators should collaborate with AI translation tools, attend seminars on AI, acquire skills in using CAT tools, more practical be provided, and they should be proactive such as thinking critically and solving problems to enhance their employability. Therefore, the hypothesis that states implementing targeted training programs that emphasize both technological proficiency and practical experience as well as trainees being more proactive will significantly improve the employability of trainee translators was accepted

### **Summary of Findings**

Summarily, our study on Enhancing Translator in the Artificial Intelligence Era, with data collected from 60 participants comprising trainee translators, recent graduates/professional translators, and employers reveal insights into the demographic characteristics of respondents, their familiarity with AI tools, perceptions of employability, and the implications of AI on translation practices.

With regards to the demographics of respondents, the study sampled 51 participants for quantitative data and 9 for qualitative data. Of the 51 surveyed, 64.7% were between the ages of 20-25 years, while only 5.9% were below 20 years. As for gender, most respondents were female (64.7%), and 35.3% were male. Regarding educational level, 90.2% were undergraduate students, and only 9.8% were pursuing postgraduate studies. 72.5% of respondents were ASTI trainee translators, 25.5% were recent graduates, and 2% represented employers in the industry. As observed, the study was predominantly focused on young, aspiring translators (trainee translators).

In terms of familiarity and training with AI tools, the findings underscore the participants' significant exposure to AI-powered interpreting tools as revealed by some quotes such as; "Cumulatively, almost all the respondents (98.0%) are familiar with AI-powered interpreting tools, although at different levels," with 51.0% being very familiar. However, the majority (78.4%) admitted to not receiving formal training in these tools, indicating a gap in educational preparation for emerging technologies. One respondent stated, "Trainees should be taught more on how to use AI tools that guide them but not replace them."

With regards to the perceptions of employability, Participants had different views regarding their employability prospects. While 49.0% rated their employability as moderate, only 3.9% viewed it as very high, and 15.7% believed it to be low. It should be noted that many respondents acknowledged the transformative impact of AI, with 96.0% indicating that AI had changed their perception of the translation profession. A participant explained that, "AI tools will significantly shape the future of translation, but human translators will play a crucial role in ensuring quality, accuracy, and cultural nuances in more complex translations."

Most respondents (80.4%) believed AI would reduce job opportunities for human translators, with one participant stating, "There are fears and concerns, especially with respect to the job market and the availability of jobs for translators. AI seems faster and time-gaining compared to human translators." However, 21.6% argued that AI could actually complement human efforts, thereby enhancing speed and efficiency.

Pertaining to the AI's influence on job availability, the respondents held divergent opinions. While many appreciated its efficiency, accuracy was observed to be a major concern as reflected in these respondents statements; "AI translations are usually not accurate according to the country's language." and "AI doesn't know context. Human translators are needed to detect cultural and linguistic nuances." Despite these concerns, respondents acknowledged the need to adapt to AI, with 64.7% asserting that keeping up with emerging AI technologies is "very important."

As far as recommendations for training and skill development is concerned, respondents provided valuable and insightful recommendations and suggestions to enhance translator employability in the AI era. Many suggested integrating AI and CAT tools into training programs, as one participant emphasized, "Having AI courses integrated into the curriculum will help trainees master essential tools and familiarize themselves with the strengths and shortfalls of AI." Practical training and post-editing skills were also seen as essential, with one respondent suggesting, "They should extend the revision and post-editing class to two or more semesters."

Specialization and adaptability were equally highlighted as critical strategies, with one participant advising, "Developing specialization and becoming experts in niche areas like legal or medical translation will help maintain relevance." Networking and staying updated on industry trends were also recommended, with another participant stating, "Networking is the hallmark of this profession. Translators should invest a lot in building relationships with colleagues and clients."

With regard to employers' perspectives, the employers interviewed in the study highlighted the growing importance and relevance of AI-related skills in the contemporary and future translation industry. One employer said, "We now prioritize hiring translators who can seamlessly integrate machine translation tools into their workflow and excel in post-editing." They however emphasized that human translators remain relevant and even indispensable for tasks requiring cultural sensitivity and contextual accuracy. One employer explained, "Problem-solving skills, creativity, and the ability to ensure cultural and contextual accuracy beyond AI capabilities are crucial."

Employers also recommended integrating AI courses into training programs, highlighting the need for translators to maintain accountability in an AI-driven industry. Additionally, they advocated for specialization and proficiency in tools like Trados and MemoQ, stating that, "Improving familiarity with these tools will be very profitable for translators in the future."

As or the strategies for competitiveness, respondents and employers held similar views. They suggested strategies for maintaining competitiveness in the AI era. These include continuous learning and seeking of knowledge, adapting AI tools to specific contexts, and leveraging the limitations of AI. One respondent stated, "It is important to understand the linguistic and contextual limits of AI translations and leverage them to make a difference." Strong collaboration with AI was also recommended, with one participant advising, "Work together with AI; it's not your enemy."

In a nut shell, the findings of this study reveal an interwoven relationship between AI and translator employability. While AI can potentially lessen demand for human translators, it equally opens a window of opportunity for efficiency and specialization. By embracing technological advancements, adequately adapting training programs, and fostering a culture of continuous learning, trainee translators can considerably optimize their career potential and flourish in the evolving AI-driven translation industry.

#### Conclusion

This section concludes this study on Enhancing Translator Employability in the Artificial Intelligence Era by integrating key elements of this research. The chapter begins with a summary of the findings, followed by interpretation of results. The implications of this study for theory, policy and practice are equally discussed. Practical recommendations for educators, policymakers, trainee translators and professionals are also provided to enhance employability in an AI-driven market. Finally, the chapter proposes suggestions for future research, encouraging further exploration of the evolving relationship between artificial intelligence and translator employability.

## Implications for theory, policy and practice

The significance of this work extends across theoretical, policy, and practical dimensions, making it a critical contribution to the discourse on Enhancing Translator Employability in the Artificial Intelligence (AI) Era.

### **Theory**

Theoretically speaking, this research greatly enriches the field of translation studies by integrating and complimenting existing works and theories in the translation and AI field. For example, the findings affirm that while AI tools are time and volume efficient, they cannot accurately convey cultural and contextual nuances understanding like human translators do. This underscores the relevance of theories like the Human Capital Theory, which posits that investments in specialized education and skills training are critical for employability. The study thus validates existing research emphasizing the need for adaptability, as highlighted in Career Adaptability Theory, by demonstrating how translators must harness their technological proficiency as well as their cultural competencies. The study also contributes to the sociology of translation by highlighting how social and cultural dynamics in Cameroon shape the professional trajectories of translators. These theoretical contributions pave the way for future research to explore localized impacts of global technological trends on translation practices.

#### **Policy**

In terms of policy, this work provides useful reflections for educational institutions, policymakers, and industry stakeholders. By identifying gaps in translator training programs, it underscores the need for curriculum reform to be include more of ICT and AI-related competencies and practical technological skills. The study's findings encourage the creation and promotion of policies that support continuous professional development, foster partnerships between academic institutions and the translation industry, and promote equitable access to technological resources. These policy recommendations are vital for creating an enabling environment where translators can thrive despite technological evolutions.

#### **Practice**

This study offers actionable strategies to boost the employability of translators. By emphasizing the importance of proficiency in AI tools, adaptability, and practical experience, the research equips translators with the tools to remain competitive in a rapidly evolving industry. It also serves as a guide for translation educators and industry practitioners to develop training courses that align with current market demands. The study also highlights the importance of developing and fine-tuning niche areas of specialization which could better equip trainees and strengthen their job market readiness. Moreover, it provides a framework for translators to navigate the challenges of AI-driven workflows, such as post-editing machine translations and specializing in areas where human expertise remains indispensable.

In summary, the study's significance lies in its ability to provide practical solutions for a sustainable and adaptive translation workforce.

## **Limitations of the study**

No one is perfect and every masterpiece, bears the subtle marks of its imperfection. Every study has its limitations, and this work is no exception. As we delve into the limitations of this study, may they act as windows to future exploration and growth, guiding the path toward better understanding.

One of the limitations of this work is the geographical scope of the study. The research primarily examines the employability prospects of trainee translators and recent graduates from ASTI in Cameroon which excludes other Translation schools. Despite the valuable insights it provides, it may limit the generalizability of the findings to other regions or institutions with different educational and demographic contexts. In addition, translation industry in Cameroon operates under unique market conditions, and the challenges faced by translators there may differ significantly from those in other countries.

Another limitation of the work sample size. The study includes data from a relatively small sample of 60 participants including trainee translators, recent graduates, and a limited number of employers out of the thousands of ASTI translators and other translation schools in Cameroon and beyond. This portion may not fully capture the diversity of perspectives within the translation industry. A larger, more representative sample could provide a broader understanding of the perceptions of translators and strategies to enhance their employability.

#### **Recommendations for future work**

Every study serves as a stepping stone toward deeper understanding and innovation. In this section, we provide recommendations for future work, highlighting unexplored avenues and areas requiring further research.

Our first recommendation is curriculum enhancement. Training institutions like ASTI, ISTIC, University of Yaounde I, etc. should integrate and reinforce AI-related courses, such as Natural Learning Processing (NLP), Machine Translation and Post-editing, AI and Ethics in Translation, AI-powered Audiovisual Translation, etc. into their curriculum. These courses should be thought in more than one semester for better assimilation. This will equip trainees with cutting-edge technological skills, enabling them to adapt to AI-driven translation practices thus equipping them for the job market.

Secondly, we recommend and encourage trainees to specialize in niche areas, such as legal translation, medical translation. Literary translation and other recent domains where human expertise remains critical. Specialization and mastery in such domains can help translators maintain relevance in the job market and capitalize on areas where AI has limitations especially contextually.

We equally strongly encourage translators to gain hands-on experience. They can do this by searching for practical training at firms, ministries, companies and also search for internship and volunteer opportunities even online in organizations and render their services in realworld translation projects.

In addition networking and continuous learning should be part and parcel of translators. Trainees and professional translators should actively and relentlessly participate in networking events, such as conferences and workshops, and pursue certifications in as many areas as possible and collaborating with colleagues. These activities help build professional connections and ensure they stay updated on industry trends.

We equally recommend strong collaboration with AI. AI should be considered as a blessing that has come to lighten the translators' job. So every training program should emphasize the benefits of mastering and collaborating with AI tools. Students should equally be taught to leverage AI for efficiency and speed while complimenting it with their cultural and contextual expertise

Furthermore, future research should explore the employability of translators in different regions to understand how socio-economic and cultural factors can equally impact or influence career prospects. Comparative studies between developing and developed countries for example could yield valuable insights.

Another interesting area of research could be tracking the career trajectories of trainee translators over time would provide a deeper understanding of how training and technological advancements can effectively boost employability in the long term.

Moreover, extensive research on employer expectations and how they adapt hiring practices and attitudes to AI advancements would be invaluable. This would help further align training programs with market needs.

These few recommendations are aimed at bridging existing gaps and empowering translation students and professionals to thrive in an AI-driven industry.

# **Bibliography**

Baker, M. (2018). In other words: A coursebook on translation (3rd ed.). Routledge. Bowker, L., & Ciro, J. (2019). Machine translation and global research: Towards improved machine translation literacy in the scholarly community. Emerald Publishing.

Chesterman, A. (2006). Questions in the sociology of translation. In J. Duarte, A. Assis Rosa, & T. Seruya (Eds.), Translation studies at the interface of disciplines (pp. 9–27). John Benjamins Publishing.

Doherty, S. (2016). The impact of translation technologies on the process and product of translation. International Journal of Communication, 10, 947–969.

EMT Board. (2017, December). The European Master's in Translation Competence Framework 2017. European Commission. Retrieved December 6, 2021, from https://ec.europa.eu/info/sites/default/files/emt competence fwk 2017 en web.pdf

Fomunyam, K. G. (2020). Digital transformation and its implications for higher education in Cameroon. Journal of Educational Technology Systems, 49(2), 213–234. https://doi.org/10.1177/0047239520946422

Gile, D. (2009). Basic concepts and models for interpreter and translator training (Rev. ed.). John Benjamins Publishing.

Guerberof, A., & Moorkens, J. (2019). Machine translation and post-editing training as part of a master's programme. Jostrans – Journal of Specialized Translation, 31, 217–238.

Harvey, L. (2001). Defining and measuring employability. Quality in Higher Education, 7(2), 97–109. https://doi.org/10.1080/13538320120059990

Hillage, J., & Pollard, E. (1998). Employability: Developing a framework for policy analysis. Institute for Employment Studies.

Huang, M. H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service* Research, 21(3), 155–172. https://doi.org/10.1177/1094670518775397

Hutchins, J. (2005). Current commercial machine translation systems and computer-based translation tools: System types and their uses. *International Journal of Translation*, 17(1–2), 5-38.

Jiménez-Crespo, M. A. (2017). Crowdsourcing and online collaborative translations: Expanding the limits of translation studies. John Benjamins Publishing.

John McCarthy. (2007). What is artificial intelligence? Retrieved from http://wwwformal.stanford.edu/jmc/

Kenny, D., & Way, A. (2018). Machine translation for everyone: Empowering users in the age of artificial intelligence. Springer.

Kiraly, D. C. (2000). A social constructivist approach to translator education: Empowerment from theory to practice. St. Jerome Publishing.

Kirov, V., & Malamin, B. (2022). Are translators afraid of artificial intelligence? Societies, 12(2), 70. https://doi.org/10.3390/soc12020070

Massey, G., & Ehrensberger-Dow, M. (2017). Cognitive translation studies: Developments and debates. Translation Spaces, 6(1), 1–16. https://doi.org/10.1075/ts.6.1.01mas

Moorkens, J. (2020). Ethical considerations in machine translation post-editing. Translation Spaces, 9(1), 90–113. https://doi.org/10.1075/ts.9.1.05moo

Nkengfack, H. N., &Tchaptchet, E. T. (2019). Technological advancements and their impact on the economy of Cameroon: A review. African Journal of Science, Technology, Innovation and Development, 11(5), 567–576. https://doi.org/10.1080/20421338.2019.1572793

O'Hagan, M. (2016). Massively open translation: Unpacking the relationship between technology and translation in the 21st century. *International Journal of Translation*, 12(2), 50-67.

Pym, A. (2012). On translator ethics: Principles for mediation between cultures. John Benjamins Publishing.

Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. The Career Development Quarterly, 45(3), 247–259. https://doi.org/10.1002/j.2161-0045.1997.tb00469.x

Sawyer, R. K. (2006). Explaining creativity: The science of human innovation. Oxford University Press.

Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355– 374. https://doi.org/10.2307/1882010

Sullivan, C. (2013). Creativity. In Y. Gambier & L. Van Doorslaer (Eds.), Handbook of translation studies (Vol. 4, pp. 42–46). John Benjamins Publishing Company.

Vieira, L. N., &Zetzsche, J. (2022). Translation technologies and their ethical implications: Challenges and opportunities. The Journal of Ethics and Technology, 28(3), 201–215.

Wolf, M., &Fukari, A. (Eds.). (2007). *Constructing a sociology of translation*. John Benjamins Publishing.

Yorke, M. (2006). Employability in higher education: What it is – what it is not. *Higher Education Academy*.