



Specialized Media Translation in the Age of Artificial Intelligence : a field study on a sample of Algerian media professionals

La traduction médiatique spécialisée à l'ère de l'intelligence artificielle : étude de terrain auprès d'un échantillon de professionnels des médias algériens

Sihem BEDBOUDI ¹

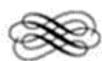
University Badji Mokhtar-Annaba | Algérie
bedboudisihem@gmail.com

Abstract : This study aimed to explore the current state of artificial intelligence use in specialized media translation within Algerian media institutions. Adopting a survey-based approach, a questionnaire was distributed to a sample of media professionals. The findings revealed that the application of AI in translation remains limited and lacks a structured framework, facing several challenges such as the absence of specialized training and insufficient access to appropriate technological tools. The study highlights the need to develop tailored training programs and dedicated technical platforms to enhance the quality and efficiency of translation practices.

Keywords: Specialized media translation, artificial intelligence, media professionals, intelligent translation, machine translation.

Résumé : Cette étude visait à explorer l'état actuel de l'utilisation de l'intelligence artificielle dans la traduction médiatique spécialisée au sein des institutions médiatiques algériennes. En adoptant une approche basée sur une enquête, un questionnaire a été distribué à un échantillon de professionnels des médias. Les résultats ont révélé que l'application de l'IA dans la traduction reste limitée et dépourvue d'un cadre structuré, confrontée à plusieurs défis tels que l'absence de formation spécialisée et l'accès insuffisant aux outils technologiques appropriés. L'étude souligne la nécessité de développer des programmes de formation ciblés et des plateformes techniques dédiées afin d'améliorer la qualité et l'efficacité des pratiques de traduction.

Mots-clés : Traduction spécialisée dans les médias, intelligence artificielle, professionnels des médias, traduction intelligente, traduction automatique.



In today's rapidly evolving digital era, artificial intelligence (AI) technologies are reshaping a wide range of professions—most notably those related to media and language. It is now possible to translate all forms of media content—written, visual,

¹ Corresponding author: BEDBOUDI SIHEM | bedboudisihem@gmail.com

or audio—using intelligent tools powered by machine learning and natural language processing. These innovations have not only made access to information easier but also reduced the time and effort required for translation, fundamentally changing how media content is produced and shared across different languages.

Despite these advancements, machine translation continues to face major challenges, especially when it comes to accuracy, contextual relevance, cultural sensitivity, and professional confidentiality. This is particularly true in the case of specialized media translation, which demands a nuanced understanding of the political, cultural, or economic background of the content, along with a critical ability to communicate the intended meaning effectively to the target audience. In this context, a legitimate question arises: How reliable are AI-powered tools compared to professional human translators, particularly in complex media environments like Algeria—where Arabic, French, English, and Amazigh frequently intersect?

At the same time, Algerian media professionals are grappling with both professional and technical challenges as they attempt to adapt to these rapid changes. Do they see intelligent translation tools as valuable assets that support their work, or as potential threats to their professional identity? Do Algerian journalists possess the digital and linguistic competencies needed to use these tools effectively? And how does the growing reliance on machine translation affect the overall quality and credibility of the media message?

These questions call for a field-based investigation into the views and experiences of Algerian media professionals, who are central to the creation and editing of content. Such an inquiry can help clarify their stance on this digital transformation in the field of media translation, assess their level of adaptation, and determine whether they perceive this shift as an opportunity to enhance media performance or as a risk to their core skills. Accordingly, this study aims to explore the current state of specialized media translation in Algeria in light of the growing use of AI tools—by examining existing practices, identifying ongoing challenges, and anticipating future prospects for the field within the Algerian media landscape. Accordingly, based on the presented problem, this study revolves around a set of main and sub-questions, namely:

Main Question

What is the reality of specialized media translation in Algeria in light of the use of artificial intelligence technologies, and how do Algerian media professionals interact with these digital transformations?

Sub-questions

- To what extent do Algerian media professionals rely on artificial intelligence tools in media translation?
- What are the most widely used types of intelligent translation tools in the Algerian media?

- What is the evaluation of media professionals regarding the efficiency and accuracy of machine translation compared to specialized human translation ?
- What are the professional and technical challenges facing Algerian media professionals in dealing with intelligent translation ?
- Do media professionals view artificial intelligence as an opportunity to improve the quality of media translation or a threat to the credibility of the media message ?
- What is the level of training and qualifications that Algerian media professionals have received in the field of media translation and the use of artificial intelligence tool ??
- To what extent does machine translation comply with the professional and ethical standards of media work in the Algerian context ?

1. The Concept of Media Translation and Its Distinction from Other Types of Translation

Media translation is a specialized branch of translation that focuses on adapting content intended for public communication through various media channels, including television, radio, print, and digital platforms. Unlike literary or technical translation, media translation often involves time-sensitive materials such as news reports, interviews, headlines, or subtitles, where speed, clarity, and audience impact are crucial. It is not merely a linguistic act but a communicative process that requires sensitivity to cultural, political, and social contexts. What distinguishes media translation is its reliance on simplification, localization, and sometimes even adaptation to fit the medium's constraints and the target audience's expectations. For instance, a headline must be concise yet impactful, often requiring creative decisions beyond literal translation. Moreover, media translators must frequently work under pressure, with tight deadlines and evolving content. Compared to legal or scientific translation, which demands terminological precision, media translation values readability, relevance, and immediacy. It also requires awareness of visual and audiovisual elements, especially in subtitling and voice-over work. Thus, media translation occupies a unique space at the intersection of language, journalism, and intercultural communication.

1.1. The Concept of Media Translation

"Media translation refers to the process of rendering messages, content, or information disseminated through various media channels—such as television, radio, newspapers, and the internet—from one language into another, taking into account not only linguistic but also cultural and contextual factors to ensure effective communication." (Bassnett, 2014 : 110)

"Media translation involves the process of converting media content, including news reports, interviews, and documentaries, from one language to another while ensuring cultural appropriateness and communicative effectiveness" (Pérez-González, 2020 : 15).

1.2. Specialized Media Translation

Specialized media translation goes beyond mere linguistic conversion; it requires a deep understanding of the subject matter being communicated. This is particularly crucial in

domains such as politics and economics, where accuracy and nuance are essential. As Pym emphasizes, “specialized translation demands not only linguistic competence but also a thorough understanding of the subject matter to maintain the integrity of the original message” (Pym, 2014, p. 103). In this context, media translators must be both language experts and subject specialists to ensure that the meaning, tone, and implications of the original content are preserved. The translator's role, therefore, becomes more complex and interdisciplinary, involving cognitive, cultural, and technical skills necessary for producing reliable and contextually appropriate translations within the fast-paced environment of media communication.

2. The Use of Artificial Intelligence Tools in the Field of Media Translation

In light of the accelerating digital revolution the world is witnessing today, artificial intelligence technologies have reshaped the landscape of many professions—chief among them media and language-related fields. It is now possible to translate all types of media content—whether written, visual, or audio—using intelligent software based on machine learning and natural language processing technologies. These advancements have facilitated access to information and significantly reduced the time and effort required for translation, leading to a major transformation in the way media content is produced and disseminated across multiple languages.

2.1. The Difference Between Manual Translation and AI-Assisted Translation

John Baker discusses the fundamental differences between human translation and AI-assisted machine translation, addressing the question : what distinguishes each in terms of accuracy, context, and processing capabilities ? This comes in the context of the challenges specifically faced by media translation. “Human translators possess an intuitive grasp of context, cultural nuances, and rhetorical intent—qualities that AI systems, even with advances in neural machine translation, still struggle to replicate fully” (Baker, 2020 :78). He further argues that while human translation may be slower and more expensive, it remains more reliable in cases that require deep contextual knowledge and an accurate understanding of cultural distinctions :

“While AI-assisted translation can speed up workflows significantly, the lack of contextual understanding and cultural literacy can result in errors that only a human, with professional experience, can anticipate and correct” (Baker, 2020 :83). Despite its advancements, intelligent translation still presents core challenges related to accuracy, context, cultural sensitivity, and professional nuance—particularly in the field of specialized media translation. This type of translation requires a deep understanding of the political, cultural, or economic context of the text, along with a critical sensitivity in conveying meaning in a way that aligns with the target audience. In this regard, a legitimate question arises about the efficiency of AI tools in media translation compared to professional human translation—especially in a media environment like Algeria, where multiple languages (Arabic, French, English, and Tamazight) intersect within complex and intertwined media contexts.

2.2. The Impact of Artificial Intelligence on the Profession of Media Translation

The media translation sector is undergoing profound transformations due to the rapid advancements in artificial intelligence technologies, which have directly impacted the nature of the profession and the roles of translators within media institutions. Smart translation tools have become an integral part of the daily work environment, contributing to the acceleration of translation processes and the real-time delivery of news to multilingual audiences. This shift has led to a form of "partial automation" of certain tasks, which proves especially useful in urgent news coverage.

However, the growing reliance on these tools has sparked considerable debate regarding their accuracy and reliability, particularly when translating precise terminology or content with cultural or political nuances. The integration of AI has also reshaped the skillset required of translators, who are now expected to understand AI technologies and perform post-editing of machine-generated texts, rather than engaging solely in manual translation. Despite concerns about AI threatening traditional jobs, many experts view it as an opportunity for professional development—provided it is used as a supportive tool rather than a substitute for human expertise. Therefore, the future of media translation in the age of artificial intelligence depends on achieving an effective balance between technology and human skill to ensure high-quality media output. "Translators are increasingly shifting toward roles that involve post-editing AI-generated output, serving as quality controllers and cultural consultants rather than sole translators" (Oni, 2025, p. 4).

3. Methodological Procedures of the Study

This descriptive study adopted a survey approach, given its suitability to the nature of the topic, which aims to describe and analyze the reality of specialized media translation in Algeria in light of developments in the field of artificial intelligence. This approach explores the opinions and actual practices of Algerian media professionals. An electronic questionnaire was used as the primary tool for data collection. A purposive sample of 50 Algerian media professionals working in national and international media organizations was selected, who have direct contact with multilingual media content or actively use intelligent translation tools in their daily work. The sample varied in terms of gender, years of experience, and type of media organization (written, visual, digital) to ensure comprehensive representation. They were contacted via various electronic media (email, WhatsApp, Messenger, etc.).

The study was limited to a timeframe extending from May to June 2025, and a spatial framework encompassing some Algerian states with active media organizations, such as Algiers, Annaba, and Constantine.

4. Presentation and analysis of field study results

Table 1 : Sociodemographic data of the study sample

Variable	Category	Frequency	Percentage
Gender	Male	30	60%
	Female	20	40%
Age Group	Under 30 years	12	24%
	30-40 years	20	40%
	41-50 years	10	20%
	Over 50 years	8	16%
Educational Level	Bachelor's degree (Licence)	15	30%
	Master's degree	24	48%
	Doctorate	6	12%
	Vocational or professional diploma	5	10%
Years of Experience	Less than 5 years	10	20%
	5-10 years	18	36%
	11-20 years	14	28%
	Over 20 years	8	16%
Professional Specialty	Print Journalism	14	28%
	Radio and Television	12	24%
	Online Journalism	16	32%
	Media Translation	8	16%

Source : Field survey data

From the data in the table above, which represents the characteristics of the field study sample of media professionals, we note that it is mostly composed of males at 60%, compared to 40% females, reflecting a prominent male representation in the Algerian media community. In terms of age group, the largest percentage was recorded among those between 30 and 40 years old (40%), followed by those under 30 years old (24%), indicating a clear youth presence in the Algerian media sector. Regarding educational level, the results show that master's degree holders predominate at 48%, followed by bachelor's degree holders at 30%, reflecting the interest of media professionals in obtaining a high and specialized academic level. Regarding years of experience, the majority are

concentrated between 5 and 10 years (36%), indicating average professional experience, followed by those between 11 and 20 years old (28%), indicating a relative balance between young and experienced talent. In terms of professional specialization, electronic journalism ranks first with 32%, followed by print journalism (28%), then radio and television (24%), and finally media translation with 16%, which may reflect the current interest in training in the field of digital media compared to traditional media specializations.

Table 2 : Level of Dependence on Artificial Intelligence Tools in Media Translation

Level of Dependence	Frequency	Percentage
Very High	12	24%
Moderate	21	42%
Low	14	28%
Not Used	3	6%
Total	50	100%

Source : Field survey data

Based on the results presented in Table 2, it is evident that the majority of Algerian media professionals in the study sample rely on artificial intelligence tools for media translation, albeit to varying degrees. Specifically, 24% reported a “very high” level of reliance, while 42% indicated a “moderate” level—bringing the total proportion of those actively depending on AI tools to 66%. This reflects a clear trend toward the adoption of AI as a supportive tool in the translation process, particularly in time-sensitive tasks such as translating breaking news or headlines. On the other hand, 28% of respondents reported a “low” level of usage, while only 6% stated that they do not use AI tools at all. These findings may be attributed to insufficient training in this area or a lack of trust in the accuracy of machine translation, especially when dealing with specialized terminology or culturally nuanced content. Collectively, these figures suggest that the Algerian media landscape is undergoing a transitional phase, wherein the use of AI in translation is increasingly apparent. Nevertheless, this adoption remains contingent upon several technical, human, and organizational factors. As such, there is a pressing need to strengthen ongoing professional training and to develop adequate digital infrastructure within national media institutions.

These observations are supported by a recent empirical study entitled “*Arab Journalists’ Adoption of Artificial Intelligence Applications in Media Institutions*”, which highlights the integration of AI technologies into media practices in Algeria and affirms their growing presence in journalistic workflows. (Al-Zahrani, 2022: 15)

Table 3 : Most Common Media Translation Tools Used by Algerian Media Professionals

Translation Tools Used	Frequency	Percentage
Google Translate	27	54%
DeepL	11	22%
ChatGPT or similar tools	7	14%
In-house specialized tools	5	10%
Total	50	100%

Source : Field survey data

The results of the table above show that Google Translate is the most widely used tool among Algerian media professionals in the field of media translation, at 54%. This reflects a clear preference for free and easy-to-use tools that enable quick and direct translation, especially in media environments that require immediate responses. DeepL, a tool renowned for its quality and accuracy in European languages, comes in second place with 22%. This tool is known for its translation quality and accuracy in European languages, indicating a segment of media professionals who place a relative premium on the quality of the translated text over mere speed. Interactive AI tools such as ChatGPT or similar tools accounted for only 14% of users, indicating that these tools, despite their advancements, are still not widely used in Algerian media circles, perhaps due to a lack of training or awareness of their advanced editorial capabilities. Specialized tools within media institutions accounted for the lowest percentage (10%), revealing a near-total absence of a digital institutional structure specializing in translation. This demonstrates that reliance, in most cases, remains individual and not framed within integrated editorial systems. These data clearly demonstrate that Algerian media professionals often work with personal, free tools, lacking institutional support and technical strategies geared toward professional digital transformation. This calls for enhanced training in smart translation tools and the development of Arabic digital solutions capable of responding to the specificities of local media and the Arabic language.

Table 4 : Journalists' Evaluation of the Accuracy of Machine Translation Compared to Human Translation

Evaluation	Frequency	Percentage
Accurate only for breaking news	20	40%
Inaccurate and requires revision	19	38%
Very accurate in all cases	3	6%
Unreliable	8	16%
Total	50	100%

Source : Field survey data

Table 4 summarizes the views of media professionals on the accuracy of machine translation in comparison to human translation. The results show a noticeable variation in levels of trust toward this technology. Around 40% of respondents believe that machine translation is accurate only in the context of fast-paced news, suggesting that its value lies mainly in speed rather than linguistic or stylistic precision. In contrast, 38% of participants described machine translation as “inaccurate and in need of revision,” indicating a widespread concern over its reliability and a preference for human oversight in ensuring translation quality. Only 6% rated it as “very accurate” in all cases—a relatively low percentage that reflects limited confidence in its ability to meet professional journalistic standards. Meanwhile, 16% considered machine translation to be entirely “unreliable,” possibly due to prior negative experiences or a fundamental distrust of automated tools in editorial contexts. These findings suggest that, despite noticeable progress in AI technologies, many media professionals remain cautious about fully embracing machine translation. The results also reinforce the ongoing need for human involvement to safeguard the accuracy, clarity, and credibility of translated media content.

Table 5 : Key Challenges Faced by Media Professionals When Using Smart Media Translation

Challenge	Frequency	Percentage
Loss of contextual meaning	32	26.44%
Inaccurate literal translation	28	23.14%
Difficulty with specialized terminology	25	20.66%
Lack of training in AI tools	21	17.35%
Absence of professional Arabic-language tools	15	12.39%
Total	121	100%

Source : Field survey data

Table 5 presents the main challenges faced by Algerian media professionals when using intelligent media translation tools. Leading these challenges is the issue of contextual meaning loss, reported by 26.44% of respondents. This finding reflects a fundamental shortcoming in AI translation: its limited ability to grasp the broader context of media texts, which is essential for conveying accurate and nuanced messages. The second most frequently cited problem is inaccurate literal translation (23.14%). This suggests that AI tools often default to word-for-word rendering, overlooking rhetorical and cultural subtleties that are vital in professional media writing. Similarly, 20.66% of participants pointed to difficulties with specialized terminology, indicating that current systems still struggle to adapt to the technical vocabulary used in fields such as law, politics, and

economics. In addition, 17.35% of journalists identified a lack of training in AI tools as a barrier to effective use. This highlights a gap not in the technology itself, but in users' preparedness and ability to apply it correctly within the media context. Finally, the absence of professional-grade Arabic translation tools (12.39%) was also noted, underscoring the need for more linguistically and culturally tailored AI solutions that address the specificities of Arabic media language. Taken together, these findings reveal that while intelligent translation technologies have become more accessible, their effective use remains constrained by technical limitations, user training gaps, and a lack of tools suited to Arabic. Addressing these challenges requires both the development of more context-sensitive systems and investment in training programs that enable journalists to engage with these tools critically and competently.

Table 6 : Journalists' Attitudes Toward Using Artificial Intelligence in Media Translation

Attitude	Frequency	Percentage
An opportunity to improve media performance	29	58%
A threat to professionalism and jobs	12	24%
No significant impact	7	14%
Neutral	2	4%
Total	50	100%

Source : Field survey data

Table (06) reflects the attitudes of media professionals toward the use of artificial intelligence in media translation. It generally demonstrates a positive view of this technology. The majority of respondents, 58%, believe that AI-based media translation represents "an opportunity to improve media performance." This position reflects a growing awareness among media professionals of the potential of AI to accelerate and facilitate translation processes, thereby improving production efficiency. This is especially true in light of the pressures of accelerating media work and the need for media institutions for tools that support the speed and accuracy of publication. Conversely, 24% of media professionals believe this technology represents a "threat to professionalism and jobs." This significant percentage reflects real concerns regarding the possibility of intelligent systems replacing translators and media professionals, or reducing reliance on human competencies. This could impact the quality of media messages and undermine the principles of verification and accuracy, which are pillars of professional journalistic work. The group that believes that AI has "no significant impact" on media translation represents 14%, which may indicate a belief that AI still lacks the deep linguistic and cultural skills that characterize human translation, especially in texts of an analytical or critical nature. On the other hand, only 4% expressed a neutral position, reflecting that the overwhelming majority has formed a clear perception—both positive and negative—about the impact of AI on media translation. It can be said, in general, that media professionals are divided

between those who welcome technology as a means of development and those who have reservations about its professional and career implications. This reflects the importance of adopting a balanced approach that combines technological proficiency with professionalism, and works to qualify media professionals to use AI tools in a way that preserves the quality of media work and enhances the role of humans in editorial and linguistic decision-making.

Table 7 : Media Professionals' Exposure to Training in Media Translation

Type of Training Received	Frequency	Percentage
I have not received any training	24	48%
I engaged in self-training via the Internet	17	34%
I received official training courses	7	14%
I received university-level training	2	4%
Total	50	100%

Source : Field survey data

Based on the data presented above regarding the training received by media professionals in the field of media translation, the findings reveal that a significant portion of respondents (48%) have not undergone any form of training in this area. This indicates that nearly half of the participants are engaging in media translation without a specialized educational or professional background, which may compromise the accuracy and quality of their translations—particularly given the linguistic precision and contextual awareness required in media work. Meanwhile, 34% of respondents reported engaging in self-directed learning via the internet. This suggests a level of awareness about the importance of acquiring relevant skills, even in the absence of institutional support. However, such informal learning, while commendable, often lacks the academic rigor and structured feedback necessary for developing comprehensive and contextually accurate translation abilities. Only 14% of participants indicated that they had received formal training courses in media translation, underscoring the limited role played by media institutions or professional training centers in this regard. Even more striking is the minimal percentage (4%) who reported receiving university-level training in this field. This highlights either a scarcity of academic programs dedicated to media translation or a mismatch between existing curricula and the practical needs of the media industry.

Taken together, these results point to a significant gap in both academic and professional training opportunities available to media professionals in Algeria. This gap likely contributes to ongoing issues in translation quality and may hinder the effective use of AI-powered translation tools, particularly when dealing with specialized or context-sensitive texts. The findings underscore the urgent need to enhance formal and university-level training programs, integrate media translation into journalism curricula, and establish

clear standards to ensure the development of qualified professionals capable of producing accurate and reliable media content.

Table 8 : Types of Media Content in Which Journalists Use Smart Translation

Type of Media Content	Frequency	Percentage
Breaking news	26	52%
Articles	11	22%
Reports	9	18%
Statements	4	8%
Total	50	100%

Source : Field survey data

The data presented in the table highlights the types of media content in which Algerian journalists tend to use smart translation tools. Notably, the highest use is associated with *breaking news*, representing 52% of responses. This outcome is understandable, considering the fast-paced nature of newsrooms where the priority is to deliver information quickly. In such contexts, speed often outweighs stylistic precision or deep contextual analysis, making smart translation a practical solution for meeting tight deadlines. In contrast, the use of smart translation for *articles* stands at 22%. Articles typically demand a more refined writing style, nuanced expression, and a stronger sensitivity to cultural context—elements that automated tools still struggle to handle with full accuracy. Similarly, *reports* account for 18% of use, reflecting a moderate reliance that may be influenced by the informative and often analytical nature of report writing, which requires clarity, consistency, and terminological precision. The lowest percentage of use, 8%, appears in the translation of *statements*. This may be attributed to the formal and often sensitive nature of such content, where even small translation errors—particularly involving figures or official terminology—can lead to serious misunderstandings. As a result, journalists may prefer human translation or at least human review in such cases.

Taken as a whole, the results suggest that smart translation tools are viewed as helpful in scenarios where speed is essential, but are used with greater caution—or even avoided entirely—when content requires a higher degree of linguistic and editorial accuracy. This reflects a growing awareness among media professionals of the current limitations of AI in translation, and underscores the continued importance of human oversight in maintaining the quality and credibility of media content.

Table 10 : Availability of In-House Smart Media Translation Tools in Media Institutions

Options	Frequency	Percentage
Yes	11	22%
No	36	72%

I don't know	3	6%
Total	50	100%

Source : Field survey data

Table 10 sheds light on the availability of smart media translation tools within media institutions, revealing a significant gap between technological advancements and their practical adoption in professional media environments. According to the results, 72% of journalists stated that their institutions do not provide dedicated smart translation tools. This high percentage indicates a lack of real commitment to developing or acquiring advanced technological solutions that align with the growing demands of modern media translation. This absence may be attributed to several factors, including limited financial resources, weak technical awareness among decision-makers, or the lack of a strategic vision to integrate artificial intelligence into media operations. On the other hand, only 22% of respondents reported that their institutions do provide such tools—a relatively low figure considering the remarkable progress in machine translation technologies in recent years. Meanwhile, 6% answered “I don't know,” a seemingly minor percentage that nevertheless points to a lack of internal communication or transparency within some media organizations regarding available technological tools, or perhaps a failure to involve journalists and editors in technical decision-making processes. Based on these findings, it can be concluded that most media institutions still rely heavily on general or free translation tools such as Google Translate, rather than developing their own customized solutions tailored to their editorial and linguistic needs. This shortfall increases the risk of translation errors and limits institutional control over the quality of translated content. It also highlights the urgent need for investment in specialized AI-based tools—or at the very least, the professional training of media personnel on how to effectively use existing tools—in order to enhance the accuracy and efficiency of translation, particularly in a media landscape increasingly driven by speed and multilingual communication.

Table 11 : Ways to Improve the Use of Artificial Intelligence in Media Translation from the Perspective of Media Professionals

Suggestions	Frequency	Percentage
Providing training in digital translation	31	42.46%
Developing AI tools specialized in media translation	28	38.35%
Improving the digital working environment within media institutions	14	19.17%
Total	73	100%

Source : Field survey data

The table above outlines the ways in which the use of artificial intelligence in media translation can be improved, according to the perspectives of media professionals. A clear focus emerges on training and professional development, as the suggestion to “provide training in digital translation” ranked first with 42.46%. This indicates a strong awareness among journalists that the effective use of AI tools can only be achieved through proper training. It also highlights an existing gap in specialized digital skills and underscores the need to equip media professionals to work effectively with smart translation technologies. In second place, with 38.35%, is the call to “develop AI tools specialized in media translation,” emphasizing the need for tools that respect the stylistic, contextual, and terminological nuances of journalistic work. This points to the importance of involving developers and technical experts in creating solutions tailored to the specific demands of editorial tasks across different languages and dialects. The third suggestion, “improving the digital working environment within media institutions,” received 19.17%. While relatively lower, this figure reflects an awareness of an important organizational dimension: the need to create an integrated technical environment that allows journalists to use smart translation tools efficiently. This includes providing built-in software within editorial systems and integrating AI tools into daily newsroom tasks. The percentage also reveals the need for internal support and technical investment to enable journalists to work within a more advanced and comfortable digital infrastructure.

In conclusion, improving the use of artificial intelligence in media translation requires a three-pronged approach: professional training, tool development, and infrastructure enhancement. These combined priorities reflect media professionals’ readiness to work with AI as a partner in the editorial process—provided that the tools align with the profession’s specific nature and uphold standards of quality.

5. General results of the study

By analyzing the data obtained from the field study, the following general conclusions can be drawn:

- Algerian media professionals use AI tools in media translation to varying degrees, without the supervision of the institution they work for.
- Media professionals often rely on general, free AI tools, with less reliance on more advanced tools. This is all due to the lack of professional tools implemented within their media organizations.
- Media professionals—the study sample—believe that intelligent media translation is only useful in urgent situations, as their confidence in its results is relative, given its lack of accuracy, especially if the media material to be translated is analytical. Therefore, intelligent translation requires human review.
- The most prominent difficulties media professionals face when relying on AI tools to translate their content include the loss of contextual meaning, literal translation, difficulty translating specialized terms, poor professional training, and the lack of effective Arabic language tools.
- The majority of media professionals consider artificial intelligence an opportunity to improve media performance, but they also express concerns about its impact on jobs and editorial professionalism.

- Weak training and qualifications in the field of intelligent media translation. Most media professionals in the study sample have not received academic or professional training in media translation or the use of artificial intelligence tools, and rely on self-study to develop their skills.
- Intelligent translation tools are most commonly used by media professionals for breaking news, while they are less frequently used for articles, reports, and data that require greater linguistic and contextual accuracy.
- The majority of media professionals are keen to review machine translation results six times before publishing them, reflecting an awareness of the limitations of artificial intelligence.
- The majority of Algerian media institutions do not have their own intelligent translation tools, which forces media professionals to use generic tools at their own risk.

Conclusion

In conclusion, this study finds that, despite the widespread presence and rapid evolution of artificial intelligence (AI) in today's world, its effective integration into the field of specialized media translation—particularly within Algerian media institutions—remains limited. Current usage is largely characterized by experimental and ad hoc practices, revealing a lack of a clear strategic framework for systematically embedding AI tools into media workflows. Several obstacles were identified, most notably insufficient professional training in AI applications, the absence of specialized tools tailored to the Arab media context, and a heavy reliance on general-purpose, free translation platforms that often lack the accuracy and contextual sensitivity required in media translation. In light of these findings, the study proposes a set of practical recommendations to strengthen the role of AI in media translation :

- Revise academic training programs for journalists and media professionals to include courses on AI and intelligent translation technologies.
- Develop national AI-based translation platforms tailored to the specific needs of media institutions.
- Implement continuous in-house training programs on AI tools for translation and editorial work.
- Foster partnerships between universities, research centers, and media organizations to develop culturally and linguistically relevant AI solutions.
- Establish clear editorial policies to govern the use of smart translation tools, ensuring quality, reliability, and a complementary role for human expertise.

Ultimately, achieving effective synergy between AI and specialized media translation requires a comprehensive strategic vision—one that integrates technological advancement, professional capacity-building, and institutional reform. Such an approach is essential for ensuring the quality and credibility of Arabic media content in an era of accelerated digital transformation.

Bibliographical references

AL-ZAHRANI A. 2022. "The adoption of artificial intelligence applications by Arab journalists in media institutions ". *Algerian Journal of Media and Public Opinion Research*, 5(1), 15-39.

BAKER J. 2020. *Machine Translation and Human Translation: A Comparison*. Palgrave Macmillan.

BASSNETT S. 2014. *Translation studies* (4th ed). Routledge.

ONI S.S. 2025. *The Impact of AI on the Translation Industry*. Obafemi Awolowo University. Retrieved.

PEREZ-GONZALEZ L. 2020. *Media translation: Concepts, practices, and research*. Routledge.

PYM A. 2014. *Exploring translation theories* (2nd ed.). Routledge.