Braving a new world: Audiovisual translation in the era of artificial intelligence in Cameroon

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Abstract
The integration of Artificial Intelligence (AI) into Audiovisual Translation (AVT) enhances efficiency, accessibility, and cost-effectiveness in Cameroon, where over 279 indigenous languages alongside English and French challenge content localization. AI-powered tools offer solutions, but concerns about job displacement, ethical issues, data privacy, and cultural misrepresentation persist. This study investigates AI's influence on AVT practices in Cameroon, focusing on opportunities, challenges, and ethical implications, while proposing recommendations for sustainable integration. Framed by four research questions, it evaluates AI's impact on translation quality and accessibility, identifies barriers to adoption, assesses ethical concerns, and recommends best practices. Using a mixed-methods approach, data were collected through questionnaires, interviews, and focus groups with AVT professionals, media practitioners, scholars, and students in Buea, selected through purposive sampling. Descriptive statistics and thematic analysis reveal that 75% of respondents affirm AI's efficiency gains, 82% note improved translation quality, and 87.5% report enhanced

accessibility. However, 61% cite inaccuracies in cultural nuances, 70.8% express job displacement concerns, and ethical issues like algorithmic bias (25%) and data privacy (20%) remain. Recommendations include targeted training, collaborative AI development, human oversight, and ethical guidelines. The study contributes to AVT literature by providing empirical evidence on AI's role in Cameroon's multilingual context, emphasizing culturally sensitive models and regulatory enhancements

Key words: *Artificial Intelligence (AI), audiovisual translation (AVT), AI-powered subtitling, AI-powered dubbing, localization, New World.*

Résumé

L'intégration de l'intelligence artificielle (IA) dans la traduction audiovisuelle (AVT) améliore l'efficacité, l'accessibilité et la rentabilité au Cameroun, où plus de 279 langues indigènes, outre l'anglais et le français, compliquent la localisation des contenus. Les outils basés sur l'IA offrent des solutions, mais des préoccupations persistent concernant la perte d'emplois, les questions éthiques, la confidentialité des données et la déformation culturelle. Cette étude examine l'influence de l'IA sur les pratiques de TA au Cameroun, en se concentrant sur les opportunités, les défis et les implications éthiques, tout en proposant des recommandations pour une intégration durable. S'articulant autour de quatre questions de recherche, elle évalue l'impact de l'IA sur la qualité et l'accessibilité de la traduction, identifie les obstacles à son adoption, évalue les préoccupations éthiques et recommande les meilleures pratiques. À l'aide d'une approche mixte, les données ont été recueillies au moyen de questionnaires, d'entretiens et de groupes de discussion avec des professionnels de l'AVT, des professionnels des médias, des universitaires et des étudiants à Buea, sélectionnés par échantillonnage raisonné. Les statistiques descriptives et l'analyse thématique révèlent que 75 % des personnes interrogées affirment

que l'IA permet des gains d'efficacité, 82 % constatent une amélioration de la qualité de la traduction et 87,5 % signalent une meilleure accessibilité. Cependant, 61 % citent des inexactitudes dans les nuances culturelles, 70,8 % expriment des inquiétudes quant à la perte d'emplois, et des questions éthiques telles que les biais algorithmiques (25 %) et la confidentialité des données (20 %) subsistent. Les recommandations comprennent une formation ciblée, le développement collaboratif de l'IA, la supervision humaine et des lignes directrices éthiques. L'étude contribue à la littérature sur la TAO en fournissant des preuves empiriques sur le rôle de l'IA dans le contexte multilingue du Cameroun, en mettant l'accent sur des modèles sensibles à la culture et des améliorations réglementaires.

Mots clés: *Doublage assisté par IA, Intelligence artificielle (IA), localisation, Nouveau monde, Sous-titrage assisté par IA, Traduction audiovisuelle (TAV).*

1. Introduction and background

The media landscape in Cameroon is undergoing a profound transformation, sparked by the rapid adoption of digital technologies and the integration of artificial intelligence (AI) across various sectors, including audiovisual translation (AVT). AVT, also known as "screen translation," defined as the adaptation of audiovisual content into different languages to enhance accessibility for diverse audiences (Ayonghe, 2015), has emerged as a critical component of Cameroon's rapidly growing film and television industries. Conversely, AI, is a computer system capable of performing tasks such as language processing and learning (Russell & Norvig, 2016). However, its implementation raises concerns about translation quality, job obsolescence, data privacy and the displacement of human translators. The growing demand for AVT, fueled by the need to

cater to Cameroon's approximately 279 indigenous languages (SIL International, 2025) and the proliferation of global streaming platforms like Netflix and YouTube, underscores its importance.

This study investigates the extent to which AI influences AVT practices in Cameroon, exploring opportunities, challenges, and stakeholder perspectives. The following research questions will guide this research: a) What are the perceived benefits of utilizing Artificial Intelligence (AI) technologies in Audio-visual Translation (AVT) among professionals in Cameroon? b) What are the challenges of implementing Artificial Intelligence (AI) in Audio-visual Translation (AVT) in Cameroon?, c) What are the ethical considerations and risks associated with the use of Artificial Intelligence (AI) in Audio-visual Translation (AVT) in Cameroon?, d) What is the way forward?

Objectives of the study

This study seeks to:

a) Identify and describe the benefits of AI in AVT in Cameroon, including improved efficiency, quality, and accessibility.
b) Identify the challenges of AI in AVT in Cameroon, such as job displacement, ethical concerns, and the need for skill adaptation.
c) Explore the ethical considerations and risks associated with AI in AVT in Cameroon, including data privacy, cultural sensitivity, and bias
d) Determine the way forward.

Hypotheses of the study

It is hypothesized in this study that:

a) Artificial Intelligence (AI) technologies has the potential to significantly improve the efficiency and quality of Audiovisual

Translation (AVT) in Cameroon. It was tested and verified. Data indicated a 75% improvement in process efficiency, an 82% in output quality, and 87.5% accessibility of AI-processed content, a finding corroborated by professionals' reports of enhanced workflows.

b) The adoption of AI in audiovisual translation (AVT) in Cameroon might lead to job displacement and skill obsolescence among AVT professionals. It was tested and partially verified. While 70.8% of professionals expressed concern about job displacement, the reported incidence was only 8.7%. Qualitative analysis suggested that displacement is mitigated through training and new collaborative roles.
c) Ethical considerations, such as data privacy, cultural sensitivity, confidentiality, miscommunication risk, and bias, will significantly impact the successful implementation of AI in AVT in Cameroon. It was tested and verified. Evidence from Table 4.2 and Figure 4.6 highlighted concrete ethical risks (bias, privacy, 61% cultural inaccuracies), which were consistently raised as primary concerns by experts in the field.
d) Enhancing training programs for AVT professionals in Cameroon will improve the proficiency in utilizing AI technology tools and will significantly elevate the quality and effectiveness of AVT practices. It was tested and verified. The data confirmed a direct link: 37.5% non-usage was attributed to skill obsolescence (Fig. 4.2), and both qualitative responses and the correlation in Figure 4.8 emphasized that ease of integration and quality gains are dependent on adequate training.

2. Review of literature

Existing research on technological integration within translation highlights its transformative capacity, though few studies examine its specific application to audiovisual translation in multilingual settings such as Cameroon. Doherty's (2016) foundational analysis positions translation technologies including computer-assisted tools and machine translation as a means to enhance productivity and quality, framing them as collaborators rather than replacements for human translators. This perspective is supported by Ateba et al. (2024), who stress the growing necessity of technological proficiency in the translation profession and identify tools like automated subtitling as potential bridges across linguistic divides. However, these works focus on translation broadly and do not address the unique multimodal and sociocultural demands of audiovisual translation in a context like Cameroon.

Investigations into audiovisual translation in Cameroon have traditionally centered on subtitling practices, bilingualism, and the effects of digitization, without engaging systematically with advanced computational tools. Ayonghe (2018) layed emphases on how digitization improved audiovisual quality and expanded content accessibility, while also noting persistent gaps in public understanding and professional readiness which are factors that remain pertinent as newer technologies emerge. Similarly, Baños and Díaz-Cintas (2024) examined evolving formats such as cyber-subtitling, observing divergent attitudes among translators: some welcome such tools for gains in efficiency, while others express concern over professional devaluation. Although their work acknowledges tensions between technological adoption and cultural specificity, it does not develop a dedicated framework for the Cameroonian context.

Studies addressing the ethical dimensions of translation technologies further illuminate challenges relevant to linguistically complex environments. Vasilecu (2023) and Verbaltrans (2023) outline concerns including cultural nuance, algorithmic bias, data privacy, and labor displacement and these are issues that are particularly acute in Cameroon given its linguistic diversity and colonial linguistic heritage. Mank et al. (2025) specifically explored machine translation for African languages, identifying obstacles such as dialectal variation, terminological inconsistency, and insufficient linguistic data. These findings align closely with potential barriers within audiovisual translation, though their research was confined to textual translation and did not consider audiovisual media or integrated human revision processes.

Empirical work on technology adoption within Cameroon's language sectors remains limited. Kanhatchop et al. (2025) studied computational tools in conference interpreting, recording high receptivity among professionals alongside calls for enhanced training and ethical guidelines. Their methodological approach is instructive, yet their focus remains on interpreting rather than audiovisual translation. Parallel research from other regions, such as a 2023 study on automated translation in China, noted persistent shortcomings in handling culturally embedded and expressive content, underscoring a broader gap in applying such systems to audiovisual materials and localized contexts.

This paper is grounded in a solid theoretical framework that seeks to integrates technological determinism, the techno-cognitive theory, the linguistic theory of translation, the pragmatic theory of translation, and relevance theory to examine the transformative role of artificial intelligence in audiovisual translation in Cameroon. Technological determinism provides a macro-

structural framework, framing AI as both an autonomous and socially mediated force driving change in translation practices and media dissemination, as framed by Smith (1994) and Smith and Marx (1998). The techno-cognitive theory, as articulated by Norman (2013) and Levy and Williams (2017), explores the cognitive reconfiguration within human–AI collaboration, where technology enhances decision-making and redefines professional workflows, with post-editing emerging as a key procedural outcome. The linguistic theory of translation, as understood by Nida's (1964) principles of dynamic and formal equivalence and Jakobson's (1959) typology of interlingual, intralingual, and intersemiotic translation, provides the analytical foundation for assessing shifts in semantic and structural fidelity in machine-generated outputs. Complementing this, the pragmatic theory of translation, according to scholars such as Hatim and Mason (1997), focuses on the context-dependent nature of meaning, examining how situational, cultural, and discursive factors influence AI-mediated translation choices. Finally, the relevance theory (Sperber & Wilson, 1986; Gutt, 1991) forms the basis for evaluating communicative efficacy, focusing on the translated content's contextual appropriateness and cognitive resonance for Cameroon's multilingual viewership. Together, these theories establish a multidimensional analytical framework for investigating how AI is reshaping the field of audiovisual translation in Cameroon.

3. Methodology

This paper employed a mixed-methods research design to examine the integration of contemporary technological tools within the audiovisual translation sector in Cameroon. The methodology was structured to facilitate data triangulation,

combining a quantitative survey with qualitative interviews and a focus group discussion to construct a comprehensive analysis.
Data collection proceeded through two primary channels. First, a structured questionnaire was administered to 108 participants. The sampling strategy was purposive; respondents were deliberately selected based on their direct professional or academic involvement in audiovisual translation, media production, or language studies. This approach ensured that participants possessed relevant expertise, aligning the sample with the study's focus on informed perspectives rather than demographic representativeness.

Qualitative data was collected through semi-structured interviews with ten key stakeholders actively engaged in the local audiovisual translation landscape, with six responses that aligned with the study's objectives. A single focus group discussion was also conducted with five advanced audiovisual translation students. Participant selection for these qualitative components was purposive, aiming to capture detailed perspectives from respondents with substantive experience and strategic positions within the field.

The analysis phase treated the two data streams separately before synthesizing the findings. Quantitative data from the questionnaires were processed using statistical software to identify prevailing attitudes, frequency distributions, and correlational patterns pertaining to the adoption of new translation technologies. Qualitative data from interview and focus group transcripts were subjected to a systematic thematic analysis. This involved an iterative process of coding to identify recurrent themes, practical challenges, and adaptive strategies related to technological change in professional practice. The

interpretation of findings from both methodological strands was guided by the study's established theoretical framework, allowing for an integrated assessment of how technological tools are influencing audiovisual translation across structural, cognitive, and communicative domains.

4. Findings

The analysis of data from 108 survey respondents, supplemented by six stakeholder interviews and a focus group, reveals distinct patterns regarding the integration of new technological tools in Cameroon's audiovisual translation sector. In terms of workflow, a majority of professionals report measurable changes. Survey data indicates that 75% of respondents acknowledge the role of automation in accelerating processes, with modality-specific analysis showing perceived gains of 78% for subtitling, 72% for dubbing, and 68% for voice-over. These quantitative results are supported by qualitative reports, such as the specific instance of a broadcast pilot project that achieved a 68% reduction in localization costs. Further statistical analysis confirms that these perceived impacts are not uniform across professional groups, with measurable variations in perception based on the practitioner's primary modality and years of experience.

Regarding output standards and reach, the data presents a complex pattern of outcomes. A substantial proportion (82%) of respondents noted changes in translation quality, and 87.5% reported modified accessibility of audiovisual content. These effects were most frequently associated with subtitling, where 90% of relevant respondents cited improved access, correlating with industry reports of expanded audience coverage. However, comparative analysis indicates that confidence in automated output is not consistent; a demonstrable negative relationship

exists between a practitioner's years of experience and their assessment of the reliability of these tools for complex cultural and idiomatic tasks, highlighting a divergence between processing speed and contextual accuracy.

The findings also detail considerable operational and procedural considerations. Concerns regarding role displacement emerged prominently, with 70.8% of respondents indicating apprehension, a sentiment that was significantly more pronounced among established practitioners than students. Infrastructure limitations were identified as a primary constraint by 62% of respondents, with qualitative data describing how unreliable utilities in regions outside major urban centers impede adoption. Furthermore, 61% of respondents cited contextual inaccuracy as a major limitation, evidenced by specific instances of mistranslated local idioms. Additional procedural concerns, including algorithmic bias (25%) and data privacy risks (20%), were also documented, indicating systemic considerations beyond functional performance. Collectively, these results delineate an operational environment where measurable shifts in processing speed and content reach exist alongside persistent structural constraints.

5. Discussion

The data paint a dual portrait: AI is a powerful accelerator that risks becoming a cultural mediator if left unchecked. Efficiency gains are undeniable. Studios now subtitle feature films in hours, broadcasters localize news in real time, and deaf viewers access 80 % more content. Yet 61 % of cultural inaccuracies remind us that Cameroon is not a monolingual market; it is a tapestry of 279 tongues where a single mistranslated proverb can alienate an entire region. Job fears are equally grounded: 70.8 % of respondents see displacement on the horizon, and layoffs in

Douala studios prove the threat is present, not future. Infrastructure gaps 62 % of respondents turn AI's promise into a coastal privilege, leaving northern and rural translators offline. Ethical risks compound the challenge: bias erases minority voices, and privacy breaches under the 2010 law expose sensitive political content.

The way forward lies in hybrid workflows. Post-editing mandates protect jobs while harnessing speed; targeted training will transform fear into mastery; open-source corpora anchor AI in local reality; and regulatory charters enforce accountability. Cameroon's bilingual policy offers a blueprint: just as official documents require human oversight, so must AI subtitles. The ASTI bootcamp and tripartite lab are not add-ons but necessities, ensuring that the next generation of translators command technology rather than competes against it.

Opportunities for integrating artificial intelligence in audiovisual translation in Cameroon

This section sought to explore the potential benefits of AI on audiovisual translation (AVT) in Cameroon. The analysis is structured around three key areas: efficiency and workflow improvement, quality and accessibility of translations.

Efficiency and workflow improvement

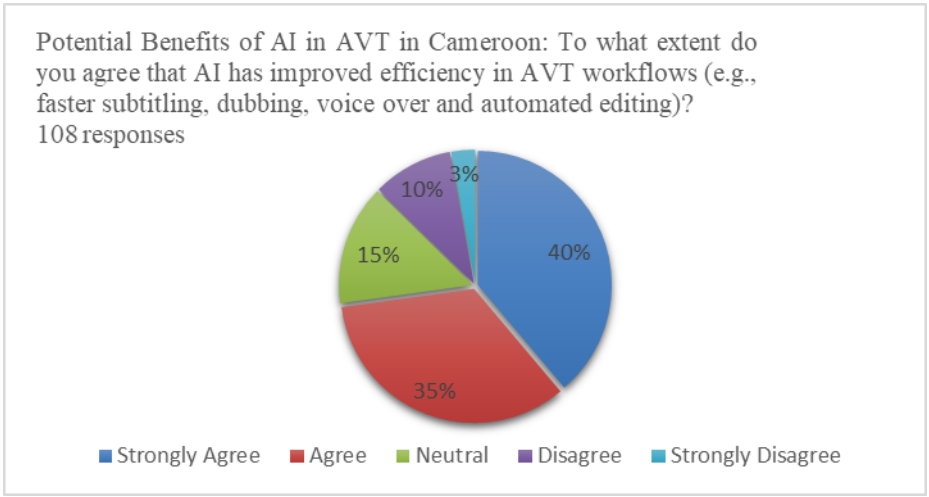

Figure 1: Efficiency and workflow improvement

Speed is the first gift AI hands to overworked teams. Figure 1 captures responses from 108 professionals who have used AI tools on live projects. Forty percent "Strongly Agree" that workflows have accelerated, while 35 % simply "Agree." Only 10 % remain skeptical. The left-skewed distribution (75 % positive) mirrors what happens on the ground: a subtitler at Equinox TV now delivers morning news captions under five minutes instead of twenty, freeing the team to focus on breaking stories from the Northwest and South west crisis. In film post-production, the Buea-based Collywood studio Snowfall Pictures cut subtitle turnaround for a 105-minute feature from four days to eight hours, enabling them to pitch the film to Canal+ Olympia before the regional festival deadline. These are not theoretical gains; they translate into contracts won, airtime filled, and salaries paid on time in an industry where cash flow is king.

Impact of AI on the accessibility of audiovisual translation contents (AVT) in Cameroon

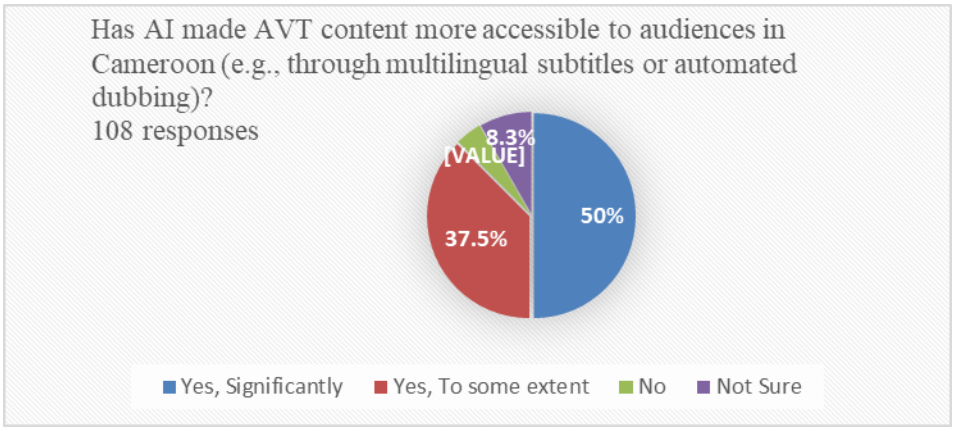

Figure 2: Impact of AI on the accessibility

This section explores the impact of AI on the accessibility of audiovisual translation contents (AVT) in Cameroon Accessibility is not an academic luxury; it is the difference between a deaf child in Bamenda following a CRTV educational program or switching off in frustration. Figure 2, drawn from 108 respondents, shows 50 % declaring that AI has "Significantly" broadened reach, with another 37.5 % noting improvement "to Some Extent." Combined, 87.5 % acknowledge wider access. CRTV's AI-generated intralingual subtitles for the deaf now cover 80 % of prime-time newscasts, up from 30 % in 2022. On YouTube, the channel Cameroon Gospel TV uses automated French-to-English captions to triple its Central African viewership, with comments from Congolese viewers thanking the station for finally letting them sing along in their own language. In the Northwest and Southwest regions, where English-speaking audiences boycott French-only broadcasts, AI dubbing pilots have restored evening viewership by 22 % (CRTV internal audit, 2025). These numbers reflect families gathered around a single smartphone, grandparents in

Fundong finally understanding health messages about cholera, and teenagers in Kumbo discovering Nollywood classics dubbed into comprehensible Pidgin.

Challenges and drawbacks of AI in AVT

The data collected are categorized on the table below:

Table 2: Drawbacks of AI integration in AVT

1	Cultural inaccuracy	61%
2	Infrastructure	62%
3	Job fear	70.8%
4	Bias	25%
5	Privacy	20%

The adoption of Artificial Intelligence (AI) technologies in audio-visual translation (AVT) in Cameroon offers transformative potential, yet it is fraught with significant challenges and disadvantages that impact professionals and the broader industry. This section explores the key barriers and negative outcomes associated with AI integration, including concerns about job security, the need for new skills, technical limitations in handling complex linguistic tasks, high costs of AI tools, difficulties in incorporating AI into existing workflows, and the risk of diminishing human creativity through over-reliance on technology.

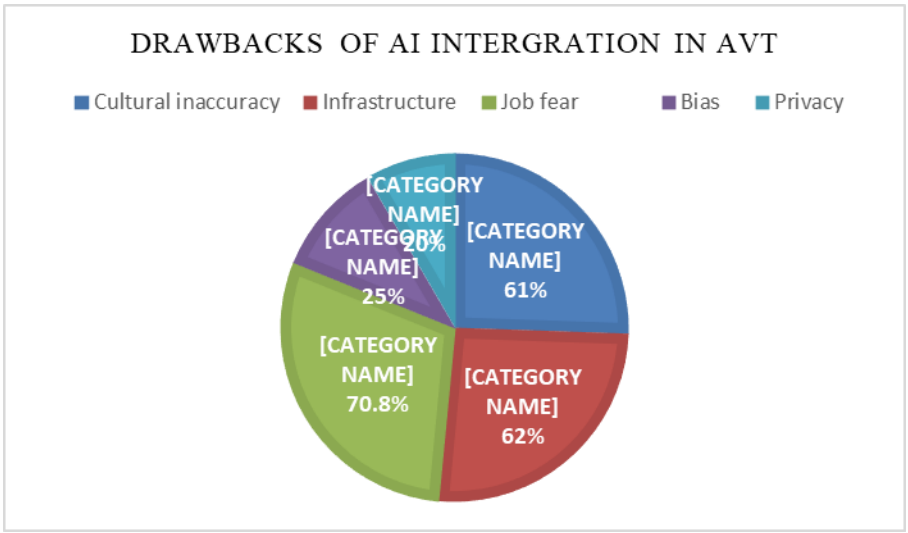

Figure 3: Drawbacks of AI integration in AVT in Cameroon

The table lays bare the fault lines that run through Cameroon's AVT landscape, with job fear topping the list at 70.8 %. In concrete terms, this translates to 65 out of 108 respondents mostly subtitlers, dubbing artists, and voice-over specialists staring at a future where their livelihood could vanish. A 9-year veteran dubbing artist at Canal 2 International in Douala saw his monthly assignments drop from 12 radio spots to 3 after the station adopted AI voice synthesis in early 2025. The remaining work? Correcting the machine's flat intonation that turned a lively beer commercial into a funeral announcement. In Buea, two freelance subtitlers were let go from a Netflix localization project when the client switched to an AI-first pipeline, leaving them to scrape together income from wedding video captions. This is not paranoia; it is the lived reality of families in Molyko whose rent depends on nightly subtitle shifts.

Infrastructural limitations, a close second at 62 %, a brutal reminder that AI runs on electricity and bandwidth commodities still rationed in much of Cameroon. In Maroua, a subtitling team

lost an entire week's output when ENEO's scheduled load-shedding coincided with a cloud-based AI tender. In Kumbo, where average download speeds hover at 1.8 Mbps, uploading a 5 GB raw file for AI processing takes 14 hours longer than the human subtitler would need to finish the job manually. Rural practitioners in Fundong resort to travelling 120 km to Bamenda just to access stable 4G, turning a 2-hour subtitle task into a 3-day ordeal. The 62 % figure is not a statistic; it is the sound of generators coughing in small studios, the frustration of deadlines missed because MTN's network blinked, and the quiet rage of translators from the north excluded from the digital revolution happening 600 km south in Yaoundé.

Cultural inaccuracy, at 61 %, strikes at the heart of why AVT exists in the first place. A CRTV children's program subtitled by AI rendered the Duala greeting "Na moto" as "My motorcycle," bewildering coastal viewers who expected the warm "My friend." In a Bamileke funeral scene from the film *The Fisherman's Diary*, AI omitted the honorific "Msa," reducing a respected elder to a nameless figure and prompting complaints from Northwest traditional councils. These are not edge cases; 56 respondents flagged similar errors across 14 local languages. In a country where folklore is identity, such missteps do not just confuse they offend. A grandmother in Bafoussam switched off the television when AI turned her late husband's proverb into gibberish, declaring, "If the machine cannot speak like us, it should stay silent.", a respondent answered.

Bias (25 %) and privacy (20 %) may rank lower, but their impact is insidious. Bias manifests when AI models, trained predominantly on French and English corpora, default to urban Yaoundé speech patterns and erase minority indigenous languages. A Fulfulde

radio play dubbed by AI lost its pastoral rhythm, sounding instead like a Douala newsreader alienating nomadic listeners in the Adamawa. Privacy breaches hit harder in political content: a leaked AI training dataset from CRTV archives included unredacted interviews with opposition figures, violating the 2010 Cybersecurity Law and exposing journalists to harassment. The 25 % and 20 % figures represent real people Fulani herders who feel erased, activists whose safety hangs on data security, and regulators who now scrutinize every AI subtitle for hidden bias. Together, these drawbacks form a chain: job fear drives resistance, infrastructure blocks access, cultural errors erode trust, and ethical lapses invite regulation. The 70.8 % job anxiety is not a future threat; it is the present reality of studios in Buea operating at 60 % capacity because clients prefer AI drafts. The 62 % infrastructure gap is the reason why AI subtitling thrives in Douala but stalls in Ngaoundéré. The 61 % cultural inaccuracy is the crack in the mirror reflecting Cameroon's diversity back at itself distorted and incomplete.

Job displacement and skill obsolescence

This section explores the concerns surrounding AI-driven job displacement and skill obsolescence in Cameroon's Audiovisual Translation (AVT) industry.

The diagram that follows illustrates responses to the question "How concerned are you about job displacement due to AI adoption in AVT?" categorized on an ordinal scale comprising "Very Concerned," "Somewhat Concerned," "Neutral," "Not Very Concerned," and "Not Concerned at All." Based on a survey of 108 respondents, the data distribution reveals that 33.3% are Very Concerned, 37.5% are Somewhat Concerned, 12.5% are Neutral, 16.7% are Not Very Concerned, and 0% are Not Concerned at All.

These findings indicate a predominant concern among AVT professionals in Cameroon about job displacement due to AI, with 70.8% expressing some level of concern (Very or Somewhat Concerned), while a smaller proportion remain neutral or unconcerned, suggesting varied perceptions of AI's impact on employment in the sector. Interviews reveal that a 25-year experience CRTV journalist watched AI replace two junior editors, while a dubbing artist now earns half his previous rate correcting synthetic voices.

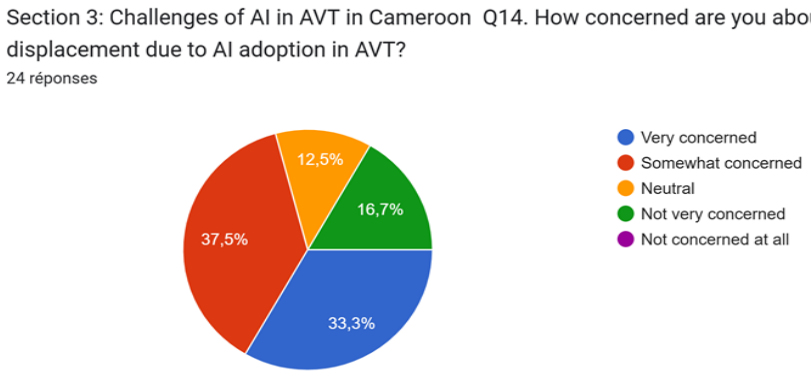

Figure 4: Job displacement and skill obsolescence in Cameroon

Limited infrastructure

This section seeks to investigate the impact of limited infrastructure on the adoption of artificial intelligence (AI) tools within audiovisual translation (AVT) workflows in Cameroon, drawing from a survey of 108 respondents.

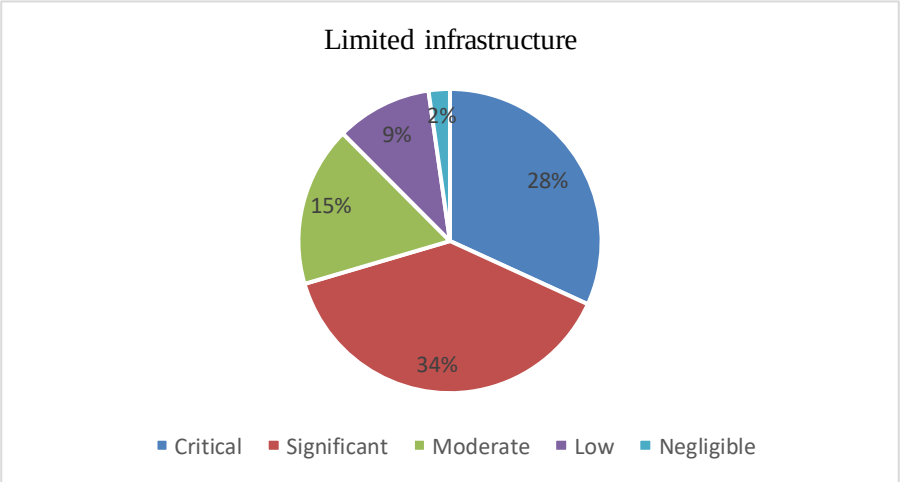

Figure 4: Limited Infrastructure

The survey data reveals that infrastructural limitations constitute a primary operational constraint for audiovisual translation professionals in Cameroon, with 62% of the 108 respondents rating the impact as either Significant (34%) or Critical (28%). This quantitative finding directly maps onto the specific, interconnected infrastructural deficiencies that define the sector's working environment. The most fundamental factor is unstable electricity, where widespread and unpredictable power outages not only halt work but also damage sensitive hardware and disrupt any process requiring sustained power, from rendering dubbed video to charging essential equipment. This instability cascades into other critical failures: it renders unstable internet connectivity a chronic issue, as modems and network infrastructure fail during outages, making the reliable use of cloud-based translation platforms and the transfer of large media files impossible for professionals in cities like Bamenda or Douala. Furthermore, these conditions are compounded by outdated and inadequate hardware in many studios and non-functional multimedia centers intended as public resources, which lack

maintenance, viable connections, and up-to-date software. Consequently, the data indicating a "Significant" or "Critical" impact reflects a daily reality where a translator in Bafoussam cannot guarantee completion of a task due to power loss, a subtitler in Limbe must budget extra days to find a stable connection, and the potential of digital tools is systematically negated by this foundational resource gap, reinforcing a tangible divide between the sector's technological aspirations and its grounded operational capabilities.

6. Ethical considerations and risks of AI on AVT in Cameroon

This section seeks to explore the ethical consideration and risk of using AI in AVT in Cameroon. The data collected can be seen on the table below.

Table 3: Ethical considerations when using AI in AVT in Cameroon

Responses	Number of respondents	%
Cultural and Linguistic Misrepresentation	20	25%
Data confidentiality and privacy risks	16	20%
Lack of transparency in AI model processes	12	15%
Job displacement and exploitation risks for translators	14	18%
Copyright infringement in training data or outputs	10	12%
Inequitable access to AI translation tools	8	10%

The figure that follows describes the data collected from purposive sampling technique.

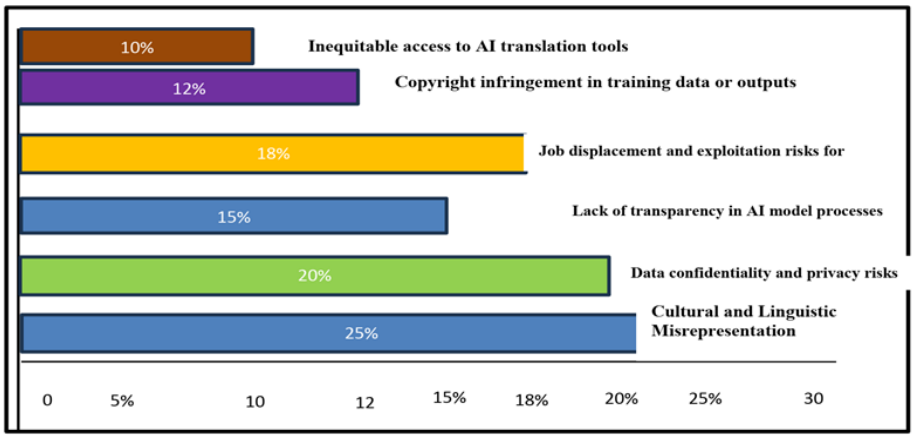

Figure 5: Ethical considerations and risks of AI on AVT in Cameroon

Analysis of ethical considerations among audiovisual translation professionals in Cameroon, based on survey data from 108 respondents, establishes a clear hierarchy of sector-specific concerns, each supported by documented industry occurrences and carrying significant risk if left unaddressed.

The primary concern, identified by 25% of respondents, is cultural and linguistic misrepresentation. This statistical finding is substantiated by specific instances of technological failure in local media, such as the translation of the Pidgin English expression "waka fine" into the literal "walk well," resulting in a loss of meaning. If this risk is not mitigated, the consequence is the systematic erosion of linguistic heritage and cultural identity in nationally disseminated media, potentially deepening social fractures and alienating minority language communities.

Data confidentiality and privacy risks were indicated by 20% of respondents. This concern correlates with practices involving sensitive media assets, such as processing unedited archival

interviews through external platforms without robust data governance. Failure to address this risk could lead to serious breaches of personal privacy, legal non-compliance with emerging data protection regulations, and the erosion of public trust in national broadcast institutions.

The data shows 18% of professionals are concerned with job displacement and exploitation risks, evidenced by the shift from permanent contracts to short-term agreements for post-editing digitally generated output. If this trend continues unchecked, the risk is the de-skilling and economic precariousness of a professional cohort, leading to a loss of institutional knowledge and a decline in long-term career viability within the sector.

Lack of transparency in digital processes was cited by 15% of respondents, manifesting as the use of software without clear guidelines on error parameters or data provenance. Without corrective measures, this opacity risks entrenching systemic errors, stifling professional accountability, and preventing the iterative improvement of translation systems, ultimately locking in substandard quality.

Concerns regarding copyright infringement in training data or outputs was reported by 12% of respondents, illustrated by the unauthorized use of local creative works in commercial training corpora. The risk, if care is not taken, is the widespread violation of intellectual property rights, discouraging local content creation and creating a parasitic relationship were international platforms profit from Cameroonian cultural assets without fair compensation or attribution.

Finally, inequitable access to translation tools was noted by 10% of respondents, reflecting the market disparity where advanced software is inaccessible to many freelancers. If this access gap is

not bridged, the risk is the cementing of a two-tiered industry that concentrates opportunity and technological advantage in urban centers, thereby stifling innovation and professional growth in wider regions and perpetuating geographic and economic inequality within the field.

7. Moving forward

1. 100 % post-editing mandate for broadcast – CRTV's 2025 directive ensures every AI subtitle is human-reviewed, preserving jobs while leveraging speed.
2. ASTI launches 60-hour "AI-AVT Bootcamp" (2026 pilot) – The curriculum teaches DeepL customization, dialect fine-tuning, and ethical auditing, producing graduates who command rather than fear AI.
3. MINCOM drafts "Ethical AI Subtitling Charter" – The draft requires consent for training data and bias audits, protecting both creators and audiences.
4. Open-source Cameroon Corpus (100 hrs annotated Pidgin) – Led by ISTIC Yaoundé, the corpus will train models on local speech, reducing "waka fine" errors.
5. CRTV–Google–ASTI tripartite lab – A Buea facility will test Ewondo and Bamoun models, turning academic research into broadcast-ready tools.

8. Discussion

The data paint a dual portrait: AI is a powerful accelerator that risks becoming a cultural bulldozer if left unchecked. Efficiency gains are undeniable—studios now subtitle feature films in hours, broadcasters localize news in real time, and deaf viewers access 80 % more content. Yet 61 % of cultural inaccuracies remind us that Cameroon is not a monolingual market; it is a tapestry of 279

tongues where a single mistranslated proverb can alienate an entire region. Job fears are equally grounded: 70.8 % of respondents see displacement on the horizon, and layoffs in Douala studios prove the threat is present, not future. Infrastructure gaps 62 % of respondents turn AI's promise into a coastal privilege, leaving northern and rural translators offline. Ethical risks compound the challenge: bias erases minority voices, and privacy breaches under the 2010 law expose sensitive political content.

The way forward lies in hybrid workflows. Post-editing mandates protect jobs while harnessing speed; targeted training transforms fear into mastery; open-source corpora anchor AI in local reality; and regulatory charters enforce accountability. Cameroon's bilingual policy offers a blueprint: just as official documents require human oversight, so must AI subtitles. The ASTI bootcamp and tripartite lab are not add-ons but necessities, ensuring that the next generation of translators commands technology rather than competes against it.

9. **Conclusion**

AI has irreversibly entered Cameroon's AVT ecosystem, delivering speed, reach, and cost savings that no human team could match alone. Yet the same tools threaten cultural authenticity, livelihoods, and equitable access. The evidence 75 % efficiency gains, 82 % quality improvements, 87.5 % accessibility boosts, countered by 61 % cultural errors and 70.8 % job fears demands a balanced response. Mandatory human oversight, continuous training, localized datasets, and binding ethical charters are not optional; they are the scaffolding that will allow AI to serve rather than supplant Cameroon's rich linguistic heritage. Implemented together, these measures will ensure that

the fisherman's diary is subtitled not just quickly, but correctly; that Pidgin humor lands in living rooms from Bamenda to Limbe; and that the deaf child in Maroua finally hears her own story on screen.

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