Risk Management when using AI in EHS Translations

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Risks of using Artificial Intelligence (AI) for Translations

1. Loss of reputation: Errors introduced through AI may result in a loss of your reputation for quality, accuracy, and integrity.
2. Copyright violation: A lack of transparency for source data of AI Large Language Models (LLMs) may result in copyright violations of protected source data.
3. Risk of lawsuit: AI translation may expose you to liability if someone suffers injury or loss as a result of a serious error or mistranslation.
4. Financial loss: Improper AI translations may expose you to financial loss if pricing, warranties, terms, or offers are incorrectly translated.
5. Risk of injury: Operator errors, medical dose errors, SDS errors, or similar critical information containing mistakes from AI translations may result in injury.
6. Data security: Most of the AI software available takes ownership of the material translated through the AI portal. Proprietary information could be lost.
7. Lack of regulatory knowledge: AI has no "understanding" of or training on global EHS regulations, making it impossible to produce compliant translations.
8. Lack of comprehension: AI can only work within the limits of the LLM used for training. Complex technical text increases the chance of errors.
9. Risk of bias and discrimination: AI systems might perpetuate biases, leading to potential discrimination claims.
10. Professional liability: Reliance on AI without proper oversight could be seen as professional negligence.
11. Cross-border legal issues: AI systems might not account for different legal systems and terminologies across jurisdictions.
12. Lack of certifiability: In legal contexts, AI translations might not be accepted as certified translations.
13. Informed consent: Failure to disclose AI use to clients could lead to legal issues around informed consent.
14. Auditability: Lack of clear audit trails in AI systems could be problematic in legal proceedings.
15. Lack of regulation: Currently, a lack of ethical codes, legal guidelines, or enforceable safety rules increases the risk of using AI software.

Risk Mitigation Strategies

1. The best risk mitigation strategy to eliminate risks from AI translation errors is to only use qualified, professional human translators.
2. Using a higher quality LLM of relevant material to train the AI engine will also reduce the risk of translation errors.
3. Carefully reviewing the AI-generated translation with a human editor should reduce the risk of translation errors.
4. Maintaining transparency and traceability of the source material in the LLM can reduce the risk of legal liability for copyright infringement.
5. Using AI to only translate non-critical material, or non-proprietary material will reduce risks of injury and intellectual property loss.
6. Always confirm references or cited sources supporting an AI translation to reduce the risk of professional negligence.
7. Be aware of when AI-generated text appears in legal documents, SDSs, or important documents, and disclose such use to all interested parties.
8. Compare legal requirements in all jurisdictions covered by the AI translation for compliance.
9. Continually check for updates on AI use regulations, guidelines, and best practices concerning linguisitic applications (translation, interpreting, sign language, etc.)

AI Regulations and Guidelines (Resolution 604 ABA 2023)

1. Increased scrutiny on AI use: Language translation companies using AI-powered tools may need to be more transparent about how they implement these technologies in their workflows.
2. Accountability measures: Businesses may need to establish clearer accountability structures for decisions made using AI in translation processes.
3. Traceability requirements: There might be a need to implement systems that can trace AI-assisted translations back to their source, showing how decisions were made.
4. Quality assurance: Companies may need to develop more robust quality assurance processes to ensure AI-translated content meets the same standards as human translations.
5. Privacy and data protection: As AI systems often require large datasets for training, there may be increased focus on how translation companies handle and protect client data.
6. Ethical considerations: The resolution may prompt discussions about the ethical use of AI in translation, particularly in sensitive fields like legal or medical translation.
7. Human oversight: There may be a greater emphasis on human oversight of AI-assisted translations, especially for critical documents.
8. Disclosure to clients: Translation companies might need to be more upfront with clients about when and how AI is used in their translation processes.
9. Regulatory compliance: As regulators begin to implement guidelines based on this resolution, translation companies may need to adjust their practices to remain compliant.
10. Competitive advantage: Companies that can demonstrate adherence to these guidelines may gain a competitive edge, especially when working with legal clients or in highly regulated industries.
11. Investment in technology: To meet these new standards, companies may need to invest in more sophisticated AI systems that offer better transparency and traceability.
12. Training and education: There may be a need for increased training for translators and project managers on the ethical use of AI and how to work alongside AI systems responsibly.

Discussion

There are many risks associated with using AI as part of an automated translation methodology. Guidelines and regulations are just now starting to appear, and lawsuits over the unauthorized use of copyrighted material to train AI engines are also becoming more frequent. A recent Class Action lawsuit against Google was dismissed on June 6, 2024, but the judge left open the possibility of revising the scope, clarifying the claims, and refiling for privacy violations.

Given the risks involved versus the potential time savings one must carefully weigh the risk/benefit ratio to decide on whether to use AI for linguistic applications or not. There are not a lot of publicly available sources of high-quality text in English and other languages. Nearly every document, article, or website on the internet contains a variety of linguistic errors from punctuation to grammar to being factually incorrect.

The chemical regulatory environment is highly complex and changes often. So even if someone were able to train an AI engine on existing chemical regulations today, that training would be obsolete in a matter of weeks. The use of AI-generated translation or Machine Translation (MT) may be acceptable for tourist travel or non-critical text, but when the consequences of a mistranslation are life-threatening, then the accuracy and quality of AI-generated or MT translations are not acceptable and carry too high a risk.

Even with risk mitigation, the residual risk where serious consequences exist from an error in translation indicates using AI or MT for an EHS related translation is most likely unacceptable given the current state of the technology.

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