

The Role of Machine Translation and Computer-Assisted Translation Tools in Global Business Success: A Comprehensive Analysis

H.M.L.V. Wanninayake*
University of Kelaniya, Sri Lanka
**lankeshiw001@gmail.com*

In today's hyperconnected global economy, businesses face the challenge of overcoming linguistic barriers to effectively communicate and engage with diverse audiences worldwide. Machine Translation (MT) and Computer-Assisted Translation (CAT) tools have emerged as indispensable technologies in facilitating cross-border communication and driving global business success. Globalization has heightened the demand for efficient translation solutions in international business. Yet, the effectiveness of Machine Translation (MT) and Computer-Assisted Translation (CAT) tools in enhancing global business success remains insufficient. This study aims to evaluate the role of machine translation (MT) and computer-assisted translation (CAT) tools in overcoming linguistic barriers, enhancing operational efficiency, and fostering cross-cultural communication within global business. It will analyse their impact in both multinational corporations (MNCs) and small-to-medium enterprises (SMEs) across various industries, and identify best practices and challenges related to their adoption and use. This study employs a mixed-methods approach, combining quantitative surveys and qualitative interviews with professionals from MNCs and SMEs engaged in international business activities. The quantitative phase involves the distribution of surveys to gather data on the utilization, perceived effectiveness, and challenges of MT and CAT tools. The qualitative phase comprises in-depth interviews to gain deeper insights into the experiences, strategies, and recommendations of practitioners using these technologies in global business contexts. Initial findings show widespread use of MT and CAT tools in various sectors, aiding in overcoming language barriers, enhancing translation quality, and speeding up localization. Challenges include linguistic accuracy, cultural nuances, and integrating tools into existing workflows. Success requires investing in training, using hybrid approaches of automation and human input, and selecting tools that align with linguistic needs and business goals. In summary, MT and CAT tools are essential for businesses to address global linguistic and cultural challenges. Effective use demands careful consideration of organizational needs, technology, and human input. Strategic adoption can enhance expansion, efficiency, and competitiveness. Recommendations include investing in employee training, adopting hybrid translation approaches for accuracy and cultural sensitivity, regularly evaluating tool performance, and fostering collaboration among language professionals, technology developers, and business stakeholders to tailor solutions to industry needs.

Keywords: Computer-Assisted Translation, Global Business Success, Machine Translation, Multinational Corporations, Small-to-medium Enterprises