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TRANSLATION EFFICIENCY IN THE ERA OF DIGITALIZATION: THE SYNERGY OF HUMAN AND TECHNOLOGICAL FACTORS

The rapid expansion of the global information space has fundamentally transformed the conditions under which translation is performed. According to forecasts by the International Data Corporation (IDC), the volume of the global DataSphere is expected to double between 2022 and 2026, while organizational data are growing significantly faster than consumer-generated content (International Data Corporation, 2022). As a result, the demand for multilingual communication and translation services continues to increase across business, science, education, and international cooperation. Under such conditions, translation has become a critical mechanism for ensuring access to information on a global scale. However, the growing volume of content creates a challenge that cannot be addressed by traditional human translation alone.

The translation industry has responded to this challenge through the adoption of digital technologies that enhance productivity, consistency, and quality. Among these technologies, Computer-Assisted Translation (CAT) tools occupy a central position. CAT environments integrate several technological components that support translators throughout the translation process, including Translation Memory (TM), terminology management systems, machine translation engines, and artificial intelligence solutions. Together, these components create a unified workspace that improves efficiency while preserving human control over translation quality (Bowker & Fisher, 2010).

One of the most important elements of CAT technology is Translation Memory. This linguistic database stores previously translated segments and enables their reuse in future projects. When a new segment is processed, the system automatically searches for exact or partial matches and suggests existing translations. Such functionality reduces repetitive work, accelerates project completion, and contributes to terminological consistency. The effectiveness of Translation Memory is particularly

evident in technical, legal, and business documentation, where recurring phrases and standardized terminology are common (Bowker, 2002).

Another significant development is the integration of machine translation into CAT environments. Modern neural machine translation systems such as Google Translate, DeepL Translator, and Microsoft Translator can generate preliminary translations that serve as a basis for further editing. Through API integration, translators can access machine-generated suggestions directly within CAT tools, eliminating the need to switch between multiple applications. This integration has established a new workflow model in which machine translation accelerates the translation process while human experts ensure accuracy, style, and contextual appropriateness (Koehn, 2020).

Despite substantial technological progress, machine translation still faces several limitations. Neural systems may generate inaccurate translations, factual errors, or outputs that appear plausible but fail to convey the intended meaning. They also experience difficulties in interpreting humour, irony, cultural references, and emotionally nuanced content. Furthermore, issues related to confidentiality and data security remain important considerations when using online translation services. Consequently, human expertise continues to play a decisive role in quality assurance and intercultural mediation.

In this context, post-editing has become a key professional competence. Modern translators increasingly function not only as language specialists but also as editors and quality managers who evaluate, revise, and optimize machine-generated output. The most effective translation workflow is therefore based on a hybrid model that combines the speed and scalability of technological solutions with the critical thinking, cultural awareness, and linguistic expertise of human translators (Vieira, 2019).

The digital transformation of the translation industry demonstrates that technological innovations do not eliminate the need for human translators. Instead, they redefine professional roles and create opportunities for more efficient collaboration between humans and intelligent systems. The future of translation lies not in competition

between people and technology but in their productive synergy, which enables both high-quality and high-speed multilingual communication.

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ABBREVIATIONS AS A PRODUCTIVE WORD-FORMATION

PROCESS IN ENGLISH BUSINESS DISCOURSE

The relevance of studying abbreviations and shortenings is determined by their active functioning in modern English business discourse, where they serve as means of linguistic economy, standardization, and concise transmission of professional information. In contemporary linguistic studies, abbreviation is regarded as a productive word-formation process connected with the reduction of components of words or word combinations while preserving their meaning (Бондаренко, 2015, 78).

In linguistic research, abbreviations and shortenings are defined as a heterogeneous linguistic phenomenon characterized by a developed typology. One of the most common classifications is the division into graphic and lexical shortenings (Гайденок, Сергеева, 2022, 80-81). Graphic shortenings function primarily in written communication and