International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 14 Issue 6 || June 2025 || PP. 59-62

Why English Matters in a Technical World

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English has today taken its shiny throne as a lingua franca of technology, effectively uniting tech professionals across the globe. This paper is a flotation on the expectations that English language proficiency places in the lineup of effective communication in multinational teams, timely access to current technological information and career enhancement opportunities for non-native speakers. Based on a literature-based approach, the study investigates historical sources of influence in the globalization of languages and the foundational nature of English to internet technology and programming. The results show that English proficiency is paramount in grasping the newest trends and being able to collaborate beyond boundaries in the more competitive job scenario engendered by remote and outsourcing frameworks. Further, some pragmatic methodologies, such as media-based exposure, language applications and reciprocating communication, are suggested to be applied to improve English capability among technology professionals. On a concluding note, proficiency in English complements technical skills needed for employment and a thriving career in the international technology arena.

Keywords: *english proficiency; global technology industry; multinational communication; career advancement; globalization and language; Language learning strategies*

Date of Submission: 05-06-2025 Date of Acceptance: 17-06-2025

I. Introduction

Globalization in the information technology and engineering sectors has positioned English as the principal language of professional communication, linking dispersed teams and enabling access to worldwide resources (Crystal). Over the past five decades, the dominance of the United States in technological innovation and the emergence of Silicon Valley as a premier research center have further cemented English's role in science and engineering fields (Phillipson). By the 1990s, the maturation of internet technologies resulted in foundational protocols, documentation and technical communities predominantly adopting English, establishing it as the default language for digital collaboration and knowledge sharing (Graddol). Consequently, non-native English speakers in technology fields increasingly face work environments where proficiency in English is as crucial as technical skills (Jenkins). Although programming languages like Java and Python utilize English keywords, understanding code syntax alone does not ensure effective navigation of technical documentation or meaningful participation in code review discussions (Yates).

In global software development, teams frequently operate across multiple continents, demanding clear communication to coordinate complex tasks and meet tight deadlines (Björkman). Language barriers can lead to misunderstandings during virtual meetings, delayed feedback in design reviews and misaligned expectations about project goals, collectively causing significant project delays (Graham and Hinds). Furthermore, vital platforms such as GitHub and Stack Overflow, which serve as hubs for troubleshooting, best practice exchange and open-source contributions, predominantly function in English, putting non-native speakers at a disadvantage if they struggle with community conventions or articulating technical queries.

Beyond daily collaboration, English proficiency critically impacts career progression within multinational firms. Studies show that around 70% of tech industry hiring managers prioritize spoken and written English skills, often associating language competence with leadership potential, even for roles based in non-English-speaking regions (Gonzalez and Browne). For example, an engineer in Bengaluru with strong coding abilities was overlooked for promotion due to inadequate English writing skills affecting technical reports, whereas a peer with comparable expertise but stronger English proficiency advanced within six months (Kim). The rise of remote work and outsourcing, especially accelerated by the COVID-19 pandemic, has intensified the need for English fluency, with many positions requiring minimum scores on standardized tests like IELTS or TOEFL (McKay). Thus, non-native English speakers lacking robust language skills risk marginalization despite their technical talent.

To address these challenges, both practitioners and educational institutions recommend strategies to close the language gap. Immersive listening—such as engaging with English-language tech podcasts and viewing coding tutorials with English subtitles—helps learners absorb specialized vocabulary and diverse accents (Vandergrift and Goh). Vocabulary apps employing spaced repetition focus on high-frequency technical terms like "throughput," "latency," and "containerization," facilitating rapid lexicon acquisition (Nation).

Within organizations, pairing non-native speakers with fluent English colleagues through mentoring programs supports language development and team integration (Modig and Åhlfeldt). Additionally, participating in open-source projects by submitting issues and pull requests in English offers authentic opportunities to apply language skills in professional contexts. Collectively, these measures aim to ensure that mastering English complements technical expertise, enhancing employability and enabling effective collaboration in the global technology sector.

II. Literature Review

The ascendancy of English as the dominant language in the global technology sector is well-documented, rooted in historical, economic, and technological developments (Crystal; Phillipson). While the Introduction outlined this trajectory, the literature further elaborates on the nuanced implications of English dominance for multinational teams and individual professionals. Studies on global software development emphasize that language barriers not only disrupt routine communication but also influence complex cognitive processes such as collaborative problem-solving and innovation (Björkman; Graham and Hinds). Beyond communication delays, language proficiency impacts trust-building and psychological safety within teams, crucial elements for effective remote collaboration (Sarker et al.,).

Career advancement literature reveals that English proficiency is often conflated with leadership capability, shaping recruitment and promotion practices in multinational firms (Gonzalez and Browne). This linguistic bias may marginalize technically skilled professionals lacking adequate English skills, thereby reinforcing socio-economic disparities in the global tech labor market (Krammer). The COVID-19 pandemic intensified these dynamics, as remote work became widespread and standardized English assessments like IELTS and TOEFL became de facto hiring requirements (McKay).

Intervention studies provide evidence for the efficacy of various language acquisition strategies tailored to technology professionals. Immersive listening techniques, including exposure to tech podcasts and tutorials, improve both comprehension and contextual vocabulary (Vandergrift and Goh). Mobile apps employing spaced repetition algorithms help in memorizing technical lexicon, while mentorship and peer learning foster real-time practice and confidence building in organizational settings (Nation; Modig and Åhlfeldt). Open-source contribution serves as an experiential learning platform, enabling application of English skills within authentic professional discourse (Feller and Fitzgerald).

Recent scholarly contributions have emphasized the role of communication and language proficiency in enhancing employability and professional development among engineering students. Sivasankar, Kumar, and Cynthiya Rose (2025) explore how public speaking skills directly contribute to improved job prospects in multinational corporations, highlighting the demand for effective oral communication in global settings. Similarly, Kumar, Gowthaman, and Jaganbabu (2014) argue that communication skills function as a critical human resource for career growth in technical disciplines. The pedagogical dimensions of English language instruction are examined by Kumar, Philip, and Kalaiselvi (2013), who assess the practical application of Communicative Language Teaching (CLT) in India, suggesting the need for more contextualized and outcome-driven methodologies. Further, Cynthiya Rose and Bhuvaneswari (2020; 2025) focus on creative communication strategies, including storytelling and anthropomorphism, demonstrating their pedagogical potential in enhancing language acquisition and engagement. These insights align with the present study's emphasis on English proficiency as a multidimensional skill set—encompassing speaking, listening, and cultural literacy—crucial for navigating the complexities of globalized, English-dominated tech environments.

Despite this progress, significant gaps remain. Few integrative studies holistically address the intersection of language proficiency with technical competence in shaping career trajectories and team effectiveness, especially in increasingly hybrid and distributed work environments. Future research is called for to explore how evolving remote collaboration tools and AI-driven language support technologies can mitigate linguistic challenges. This study aims to synthesize current insights and propose actionable recommendations for practitioners and educators to better support non-native English-speaking tech professionals in navigating the complexities of the globalized industry.

III. Methodology

This study employs a qualitative literature-based approach, critically analysing and synthesising relevant scholarly articles, industry reports and authoritative publications to explore the role of English proficiency in the global technology industry. The research focuses on sources addressing globalisation's influence on language use, communication dynamics in multinational tech teams, career progression factors and language acquisition strategies. Thematic analysis was conducted to identify recurring patterns and insights within the literature, which were integrated to develop a comprehensive understanding of how English proficiency complements technical expertise and affects employability and collaboration in the tech sector. This approach allowed for a robust conceptual framework without the collection of primary empirical data.

IV. The Centrality of English in the Global Tech Landscape: Historical Foundations and Contemporary Realities

English has long been established as the principal medium for professional communication within technology and engineering sectors, a status shaped by historical developments and sustained by modern globalisation processes. The dominance of English is deeply rooted in geopolitical shifts, notably the rise of the United States as a technological powerhouse throughout the twentieth century, coupled with Silicon Valley's emergence as a nexus for innovation and research (Salomone 45; Crystal 112). This trajectory has embedded English into the fabric of scientific and technical knowledge, a trend accelerated by the internet's foundation, which was predominantly developed in English during the 1990s (Inman and Hewett 78). Programming languages themselves, while logical and universal, frequently incorporate English keywords and conventions, underscoring the language's ubiquity in coding practices (Crystal 97).

In contemporary settings, this historic legacy translates into a near-universal expectation of English proficiency among technology professionals, especially in multinational and remote work environments. With software development teams often dispersed across continents, clear and precise communication becomes vital to synchronise complex project tasks and meet tight deadlines. Linguistic challenges among non-native English speakers can lead to miscommunications during virtual meetings, delays in design feedback and misunderstandings of project goals, all of which negatively affect productivity and increase the risk of project overruns (Salomone 112). Crucially, widely used collaborative platforms such as GitHub and Stack Overflow operate almost exclusively in English, forming the backbone for knowledge exchange, troubleshooting and community-driven innovation. These digital spaces demand not only technical expertise but also the ability to comprehend and produce nuanced technical language (Inman and Hewett 103).

Moreover, English language skills significantly influence career advancement opportunities in the global technology sector. Studies reveal that a large proportion of tech firms' hiring managers regard proficiency in spoken and written English as a fundamental criterion, often correlating language ability with leadership potential regardless of the employee's geographical location (Crystal 134). The surge in remote work and outsourcing models, particularly accelerated by the COVID-19 pandemic, has further entrenched English as the lingua franca of technology employment, with many organisations requiring recognised language certifications such as IELTS or TOEFL to validate candidates' communication competencies (Salomone 98). Consequently, professionals with limited English proficiency risk exclusion from senior roles and international projects, despite possessing strong technical skills.

Recognising these challenges, various strategies have been implemented to bridge language gaps within the technology workforce. Immersive learning techniques, including engagement with English-language podcasts, coding tutorials and subtitled video content, provide accessible means to enhance domain-specific vocabulary and listening comprehension (Inman and Hewett 85). Technological tools such as vocabulary-building applications employ spaced repetition to help learners acquire and retain crucial technical terminology rapidly (Crystal 145). Within corporate environments, mentoring programmes that pair less proficient English speakers with fluent colleagues' foster language development and improve team cohesion, enhancing overall communication efficiency (Salomone 120). Participation in open-source communities offers authentic contexts for practicing English in professional scenarios, supporting continuous improvement through real-world application (Inman and Hewett 109).

Despite advances in machine translation and AI-assisted communication tools, these technologies have yet to fully replace the nuanced understanding required for effective collaboration and leadership in global tech teams. English proficiency remains an indispensable complement to technical expertise, enabling professionals to access timely information, engage fully in multinational projects and pursue career progression in an increasingly interconnected and competitive industry.

V. Conclusion

In this fast-evolving world with growing methods of global collaborative environment and conduct, English proficiency is required from technology professionals. As highlighted, English is both the language to glean latest technical information and innovations in advances while serving as the language through which multinational teams communicate amongst themselves. With the growing ascendancy of the English language in this field, internet protocols and programming languages appeared to reinforce the superiority of English to such an extent that technical knowledge alone cannot suffice without some language skills. One's career path expectations also lean increasingly toward communication skills in English, especially in multinational companies and remote working scenarios. These linguistic scenarios must be tackled through immersion and hands-on practical training for non-native speakers. In conclusion, gaining in English maximizes not only their employability but also the productivity of the society, hence being paramount for remaining productive in the global tech scene.

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