

Role of English language in acquiring and enhancing IT skills of people

Submitted by

Fahim Faisal Ahammed Nabeel

ID: 192-10-2067

Batch: 47th

Bachelor of Arts in English

Supervised by

Dr. Binoy Barman

Professor

Department of English

Faculty of Humanities & Social Science

May 2023

Letter of Approval

This is to certify that Fahim Faisal Ahammed Nabeel, 192-10-2067, has completed his thesis under my supervision. His work is authentic and the result of his own efforts. I approve the thesis and recommend its submission to the department for necessary action.

B. Barner 21-05-2023

Professor Dr. Binoy Barman

Department of English

Daffodil International University

Declaration

I, Fahim Faisal Ahammed Nabeel, declare that the submitted research paper is my original work and has not been published elsewhere. I assume full responsibility for the accuracy, authenticity, and validity of the information and data presented in this paper. The research has been conducted with fairness, objectivity, and without any bias. I take full responsibility for its authenticity and agree that any form of plagiarism will result in disqualification.

21-5-2023

Fahim Faisal Ahammed Nabeel

Department of English

Daffodil International University

Acknowledgement

Allah mdulillah all praise to Allah swt. for whom I came across this journey. No hardship could be rewarded without the consent of Allah. Though it was a long journey and required much patience for me to complete this research paper, it was Allah who gave me that patience and strength to conclude this task successfully. I thank all my teachers for helping me in completing my thesis. I would like to mention the name of my supervisor sir Dr. Binoy Barman who was the stair of my journey of this research. For a person like him it takes a lot to provide such time and support to a junior researcher like me. Because he is one of the hardest working, intellectual and the humblest person as well at the same time I have ever encountered with. While all the busyness is devouring him, his that much support and time for me meant a lot to me. He really inspired me a lot and never show any grief or tiredness to his duties. Having him as my supervisor was a great advantage for me. I will always remember him inshallah for his kind gestures and positive attitudes. Besides, my parents also deserve my gratitude who were always a shield against any of the obstacles of my life. I truly believe that the support of the parents makes any hardship into simpler. Their support was always encouraging for me. Finally, I would like to say that with hardship always comes fruitful result and with gratitude one always remains connected to their ground.

Dedication

This paper is dedicated to my parents who have always been a path of guidance to me. They have dedicated all their lives for me till now. Even if I dedicate this small book of my hardship, yet it can never be compared to theirs. This dedication only reflects the love and gratitude of mine toward them. As I have worked much for this research and have also gained and learned many things, all this would never be possible with their consent and support. I always wish them good fortune and blessings of Allah swt.

Abstract

Today's world is considered as a technology-based world. Our day-to-day work has fully become technology dependent. From flying an Airplane; to the nip of a pen, everything is the work of technology. That is why, people who are experts in IT, are ruling the world for generations. The increasing influence of information technology (IT) in various domains has underscored the importance of acquiring and enhancing IT skills. In today's interconnected world, English has emerged as a dominant language in the field of IT, serving as a vital medium for communication, knowledge transfer, and skill development. This research aims to explore the role of the English language in facilitating the acquisition and enhancement of IT skills among individuals. This study contains both qualitative and quantitative methodologies, as a combine mixed method to gather comprehensive data. Quantitative data will be collected through surveys and assessments, focusing on the language proficiency of individuals and their IT skill levels. Qualitative data will be obtained through interviews and focus group discussions, allowing participants to share their experiences, challenges, and perceptions related to the role of English in IT skill development. The research will target a diverse population, including IT professionals, students, and individuals seeking to enter the IT industry. By examining the correlation between English language proficiency and IT skill development, this study aims to identify the specific linguistic aspects of English that are most relevant to IT and the potential barriers faced by non-native English speakers in acquiring and enhancing IT skills. Moreover, the study will explore the effectiveness of different language learning approaches and resources in facilitating IT skill development.

Table of Contents

Le	tter of Approval	~	~	~	~	~	~	~	~	~	i
De	claration ~	~	~	~	~	~	~	~	~	~	ii
Ac	knowledge ~	~	~	~	~	~	~	~	~	~	iii
De	dication ~	~	~	~	~	~	~	~	~	~	iv
Ab	stract ~	~	~	~	~	~	~	~	~	~	v
Ta	ble of Contents	~	~	~	~	~	~	~	~	~	vi
List of Figures and Tables		~	~	~	~	~	~	~	~	vii	
1.	Chapter 1: Introdu		~	~	~	~	~	~	~	~	1-3
	1.1. Purpose of th	•		~	~	~	~	~	~	~	2
2	1.2. Shortcomings		~	~	~	~	~	~	~	~	2-3
2.	Chapter 2: Literat			~	~	~	~	~	~	~	4-9
3.	Chapter 3: Signifi		~	~	~	~	~	~	~	~	8
4.	Chapter 4: Resear	ch Met	hods an	d Instru	ments	~	~	~	~	~	11-12
	4.1. Methods	~	~	~	~	~	~	~	~	~	11
	4.2. Feedback	~	~	~	~	~	~	~	~	~	11
	4.3. Instrument	~	~	~	~	~	~	~	~	~	12
5.	1	•		~	~	~	~	~	~	~	13-16
	5.1. Expertise of t				~	~	~	~	~	~	13
	5.2. Opinion on the	ne helpf	ulness o	of Engli	sh	~	~	~	~	~	14
	5.3. Opinion on E	inglish l	being ar	obstac	le	~	~	~	~	~	15
	5.4. Opinion on b	eing a c	ompetit	tor	~	~	~	~	~	~	16
6.	Chapter 6: Person	al opini	on	~	~	~	~	~	~	~	17-18
	6.1. To do list	~	~	~	~	~	~	~	~	~	18
7.	Chapter 7: Conclu	ısion	~	~	~	~	~	~	~	~	19
8.	Chapter 8: Appen	dix	~	~	~	~	~	~	~	~	20
9.	Chapter 9: Refere	nces	~	~	~	~	~	~	~	~	21

List of Figures and Tables

Figures	Page no
Figure 1: Expertise of the IT interviewees	13
Figure 2: Opinion on the helpfulness of English	14
Figure 3: Opinion on English being an obstacle	15
Figure 4: Opinion on being a competitor	16
Table	
Table 1: To do list to improve English	18

Introduction

In today's interconnected world, the English language has become the global medium of communication, transcending borders and connecting people from diverse backgrounds. Simultaneously, the rapid advancement of information technology (IT) has revolutionized various aspects of our lives, permeating almost every sector and industry. As the digital landscape continues to expand, the proficiency in both English and IT skills have emerged as a powerful catalyst for personal and professional growth, particularly in the field of technology.

This research delves into the pivotal role played by the English language in the acquisition and enhancement of IT skills, exploring the intricate relationship between language proficiency and technological competence. By examining the multifaceted dimensions of this association, we aim to shed light on how the mastery of English empowers individuals in their pursuit of IT expertise, ultimately bridging the gap between language and technology.

The study will investigate various aspects, starting with the fundamental premise that English serves as the lingua franca of the IT industry, being the predominant language for software development, coding, technical documentation, and collaboration within global teams. Additionally, we will explore how English proficiency facilitates efficient comprehension and utilization of abundant online resources, documentation, and tutorials, enabling individuals to navigate the vast realm of IT knowledge effectively.

Furthermore, this research will delve into the impact of language on cross-cultural communication in the IT domain. English fluency fosters effective collaboration, idea exchange, and knowledge sharing among professionals from different linguistic backgrounds. We will examine how language proficiency enhances networking opportunities, teamwork, and participation in international conferences, thereby expanding professional horizons and fostering innovation.

Moreover, this study will shed light on the role of English in acquiring IT skills by analyzing the influence of language on education and training programs. With a focus on non-English speaking regions, we will explore how language proficiency affects access to quality IT education, certification programs, and specialized training resources. Additionally, we will investigate the effectiveness of English as a medium of instruction in IT-related curricula and the potential barriers it presents.

In conclusion, this research aims to highlight the indispensable role of the English language in the acquisition and enhancement of IT skills. By understanding this symbiotic relationship, policymakers, educators, and individuals can devise strategies to bridge language gaps, promote linguistic inclusivity, and empower aspiring IT professionals worldwide. Ultimately, this exploration will contribute to fostering a more diverse, skilled, and interconnected global IT community, where language is not a barrier but a stepping stone to technological empowerment.

1.1: Purpose of the study

The research seeks to explore the importance of English proficiency in the context of information technology, examining how English language proficiency impacts an individual's ability to acquire, develop, and excel in IT-related competencies.

- The research aims to assess how English language proficiency affects individuals' ability to acquire and enhance IT skills. It explores the hypothesis that a strong command of English can facilitate the comprehension of technical IT concepts, reading technical documentation and understanding programming languages, thereby aiding the overall acquisition and development of IT skills.
- The study seeks to identify specific language barriers that individuals encounter when learning and developing IT skills. It aims to explore the challenges faced by non-native English speakers, such as difficulties in understanding technical terms, following instructional materials, or participating in discussions, and how these barriers impact their IT learning journey.
- The research aims to investigate the correlation between English language proficiency and employment opportunities in the IT sector. It examines whether English proficiency plays a significant role in career advancement, job prospects, and the ability to compete in the global IT job market.

By addressing these research objectives, the study seeks to contribute to the existing knowledge on the role of English language proficiency in acquiring and enhancing IT skills. The findings can potentially inform educational practices, policy decisions, and training programs aimed at improving IT education and bridging language-related gaps in the field of information technology.

1.2: Shortcomings

While this research holds potential for valuable insights, there are several potential shortcomings that should be considered:

- The study may focus on a specific region, population, or educational institution, which could limit the generalizability of the findings. The role of the English language in acquiring and enhancing IT skills can vary across different cultural, linguistic, and educational contexts. Thus, the results may not be applicable universally.
- While the research aims to examine the relationship between English language proficiency and IT skill acquisition, it may face challenges in establishing a causal relationship. Other sectors, such as basic IT knowledge, educational resources, teaching methodologies or socio-economic factors can also influence IT skill development, making it difficult to attribute changes solely to English language proficiency.
- The study may focus on a specific set of IT skills or technologies, potentially overlooking other relevant areas within the IT field. The findings may not fully represent the broader spectrum of IT skills or consider emerging technologies that require specialized language knowledge.
- The study may only provide a snapshot of the relationship between English language proficiency and IT skill acquisition at a specific point in time. Conducting a longitudinal

analysis to track language development and skill acquisition over a more extended period would provide deeper insights into the dynamics and changes in this relationship.

Literature Review

A. Striuk (2020) emphasizes the essential knowledge and skills required by software engineering specialists, including a deep understanding of computer hardware, system infrastructure, development methods, tools, and technologies. These professionals should possess the ability to design, develop, and maintain software effectively. Moreover, in the field of information technology, projects of varying scales necessitate proficient project management. Hence, students specializing in "Software Engineering" are trained to address challenges related to project justification, planning, economic efficiency, quality assurance, and timely execution of software projects within team environments. Additionally, due to the prevalence of software development utilizing the internet in the context of globalization, students are also educated on the relevant technologies.

While the author highlights the significance of soft skills for software engineering students, they overlook the importance of English as the foreign language training for IT specialists. It should be noted that proficiency in foreign languages holds considerable value in the IT industry, enabling professionals to effectively communicate and collaborate with a diverse range of stakeholders on an international scale. Therefore, incorporating foreign language education into the curriculum for IT-specialists is of utmost importance.

According to the findings of O. Kirilenko (2016), a researcher who conducted an analysis of international standards for software engineering education, such as the Curriculum Guidelines for Undergraduate Degree Programs in Software Engineering by ACM/IEEE, it is evident that the required abilities encompass not only specialized engineering knowledge and skills but also proficiency in various areas. These include effective reasoning, the capacity to collaborate in multidisciplinary teams, comprehension of professional and ethical responsibility when making engineering decisions, the ability to analyze and critique decisions, adeptness in people management, and recognition of the importance of lifelong learning.

Kirilenko's work emphasizes that these skills and the recognition of the significance of continuous learning cannot be achieved without a solid grasp of the English language. English has become the lingua franca of the modern world, and it is virtually impossible to acquire the necessary knowledge and skills without a proficiency in this global language. English proficiency plays a vital role in software engineering education, enabling individuals to effectively communicate, access vast resources and research in the field, and collaborate with international colleagues.

Understanding the importance of the English language in the context of software engineering education is crucial for students and professionals aiming to thrive in this field. It not only enhances their technical abilities but also broadens their horizons, facilitates global networking, and enables them to stay updated with the latest developments and advancements in software engineering. Therefore, a strong emphasis should be placed on the acquisition and development of English language skills alongside the specialized knowledge and abilities required for software engineering professionals.

V. Strilets (2010) shares a similar viewpoint, emphasizing the need for programming specialists in today's society who possess systems thinking, idea generation abilities, a sense of responsibility for decision-making consequences, adaptability to new conditions, problem-solving skills, information literacy, and proficiency in utilizing electronic communications and various software tools for production tasks. In the professional domain, software engineers often rely on foreign languages for searching and processing information from internet resources, programming, and engaging in electronic communication with foreign partners. Consequently, the process of foreign language training for future software engineering specialists holds significant importance.

These include reading and comprehending various types of computer messages, system help programs, specifications, instructions, articles from electronic professional publications, materials from professional community forums, and online workshops. Additionally, effective communication skills encompass active participation in dialogues or discussions, both in direct interactions and through electronic means. The ability to deliver effective monologue presentations and produce well-written instructions, reports, and forum posts are also crucial for programmers.

Strilets proposes that these skills be cultivated through a project-based methodology in teaching English to future programmers, utilizing distance learning courses. This approach facilitates the integration of communicative skills within the context of practical projects, allowing students to apply their language skills in a relevant and meaningful manner.

By implementing such an approach, educational institutions can effectively enhance the communicative competencies of future software engineering professionals, equipping them with the necessary language skills to excel in their careers. Strong communicative abilities enable programmers to navigate diverse information sources, collaborate effectively in both local and global contexts, and contribute to the development of innovative software solutions.

In today's rapidly changing landscape, I. Chirva (2008) emphasizes the growing importance of software engineers acquiring skills in dialogic speech. This need arises from the ongoing economic reforms taking place in Ukraine, which involve technical specialists interacting with foreign partners in various capacities such as establishing joint ventures and working with imported equipment. Chirva strongly asserts that students pursuing software engineering must possess effective communication abilities, particularly in the English language.

According to the requirements outlined in the English for Specific Purposes (ESP) program, prospective software engineering professionals should be capable of actively participating in discussions, identifying crucial information, and comprehending key concepts during detailed conversations, formal presentations, lectures, and relevant interactions pertaining to their training and profession. The attainment of a high level of foreign language communicative competence among future software engineers is not only essential but also serves as a guarantee for enhancing their professional expertise, expanding their knowledge within their field, and ensuring success in their professional endeavors.

In light of the evolving global landscape and the interconnectedness of the software engineering industry, effective communication skills, particularly in English, play a vital role. Software engineers who possess strong language proficiency are better equipped to engage in international

collaborations, leverage opportunities with foreign partners, and stay abreast of the latest advancements in their field through access to a wider range of resources and networks. Furthermore, effective communication enables software engineers to effectively convey their ideas, requirements, and solutions to diverse stakeholders, facilitating efficient teamwork, project management, and successful professional outcomes.

It is crucial for educational institutions and software engineering programs to prioritize the development of foreign language communicative competence among students. Incorporating language learning opportunities, specialized language courses, and providing a supportive learning environment can significantly contribute to the overall growth and success of future software engineers.

Ya. Bulakhova (2007) highlights the significance of active cooperation between software engineers and foreign partners, who may come from diverse cultures and possess varying levels of professional competence. In order to excel in their professional endeavors, software engineers must stay updated on the latest scientific and technological advancements within their field, utilizing foreign sources of information. The author emphasizes that effective communication skills and foreign language proficiency are critical for achieving success in their professional activities.

Based on these considerations, Bulakhova insists that the effective acquisition of a foreign language should adhere to the following requirements.

- 1. A teaching system that fosters a comprehensive understanding of the subjects being studied, enabling students to develop a systemic vision.
- 2. content that is flexible and adaptable, tailored to meet the educational needs and individual abilities of students.
- 3. A human-centered approach to technical education.
- 4. An orientation towards mastering new information technologies.
- 5. The assurance of methodological, specialized scientific, and professional competence of the specialists involved. Throughout their studies, students should be cognizant of both the substantive and procedural aspects of their future professional activities.

By fulfilling these requirements, educational institutions can provide software engineering students with the necessary foundation to enhance their communication skills, develop a global perspective, and effectively engage in cross-cultural collaborations. This approach also encourages students to embrace lifelong learning, adapt to emerging technologies, and stay abreast of advancements in their field.

Ensuring that students are well-prepared for their future professional endeavors requires a holistic approach that combines technical knowledge, practical skills, and a strong emphasis on effective communication and foreign language proficiency. By integrating these elements into the curriculum, educational institutions can empower software engineers to excel in their careers and contribute effectively to the global software engineering community.

Proficiency in professional communication is considered a crucial aspect for software engineers by H. Babii (2012). According to Babii, the development of modern software necessitates the

collaboration of a diverse team of specialists. To achieve meaningful professional outcomes, it is essential for software engineers to possess teamwork skills, a foundational understanding of psychology, group dynamics, and effective communication.

Babii identifies two key categories of competences that form the cognitive foundation for future software engineers' readiness in professional communication: instrumental competences and specialized-professional competences. In the first category, Babii highlights the importance of native language proficiency, encompassing the ability to use language accurately and appropriately for different communication contexts and purposes, including the creation of business documents. Practical knowledge of one or more foreign languages relevant to professional requirements is also emphasized, enabling effective communication in subjects related to the software engineering field. Additionally, Babii emphasizes the significance of oral language skills in domestic, social, political, and professional contexts, as well as the ability to translate general economic texts from a foreign language into the native language. Research skills, specifically the application of research methodologies within specialized disciplines, and the ability to create technical documentation for software projects, are also deemed essential in this group.

The second group of competences identified by Babii encompasses the ability to conduct business negotiations with partners and the skill to persuasively convey the validity of proposed solutions to colleagues. This includes the ability to effectively communicate one's own position to others, allowing for productive discussions and decision-making processes within a professional setting.

Recognizing and developing these competences is vital for future software engineers to excel in their careers. Proficient professional communication not only enhances collaboration and teamwork but also facilitates effective project management, efficient problem-solving, and successful implementation of software development initiatives.

A high level of foreign language communication competence is considered an essential characteristic of modern IT specialists in their professional activities and work environments. I. Viakh's (2013) research highlights the specific tasks that IT professionals need to successfully accomplish in a foreign language to be considered competent. These tasks include:

- 1. Independently finding necessary information in foreign language texts.
- 2. Understanding technical instructions, articles, and educational texts in foreign languages related to popular and emerging areas of the IT industry.
- 3. Utilizing tools such as electronic dictionaries and glossaries to enhance comprehension of foreign language texts.
- 4. Continuously improving foreign language skills.
- 5. Delivering structured written presentations in a foreign language.
- 6. Engaging in competent correspondence with clients and employers through messenger programs and email in a foreign language.
- 7. Clearly and concisely expressing facts orally and in writing in a foreign language.
- 8. Effectively presenting oneself, skills, experience, goals, and aspirations in a foreign language.
- 9. Crafting an effective and compelling resume in a foreign language to showcase one's skills.
- 10. Delivering oral presentations in a foreign language.
- 11. Articulating and communicating ideas verbally and in writing in a foreign language.

- 12. Providing technical guidance and instructions in a foreign language, both orally and in writing.
- 13. Offering advice and assistance to clients and colleagues in a foreign language.
- 14. Explaining information to different audiences in a foreign language.
- 15. Clarifying information for oneself in a foreign language.
- 16. Effectively negotiating with customers in a foreign language regarding subject area, product requirements, payment, terms, and support.
- 17. Distinguishing main points from a spoken broadcast in a foreign language.
- 18. Understanding oral language in direct conversations, telephone conversations, or through messenger programs.
- 19. Recognizing and accounting for differences in the concept of time across different countries.
- 20. Being knowledgeable about domestic and international business etiquette.
- 21. Possessing socio-cultural knowledge of other countries, including holidays, weekends, greetings, taboo topics, etc., and incorporating them into communication.
- 22. Engaging in professional self-education by reading professional literature, blogs, and forums in a foreign language.
- 23. Participating in projects, project planning, project management, and project evaluation using a foreign language.

Based on these tasks, the researcher concludes that English as the foreign language communication competence plays a crucial role in employment and career development within the IT field.

A significant contribution to the vocational training theory for future software engineering specialists has been made by O. Dubinina (2016). Dubinina has formulated a comprehensive job description for professionals in the field of software engineering, outlining the qualities necessary for success in this field. These qualities have been categorized into personal attributes, interests, aptitude, and abilities.

Dubinina's research also focuses on identifying the professional tasks that software engineering specialists should be able to fulfill based on the types of professional activities they engage in. For instance, within the realm of analytical activities, professionals are responsible for tasks such as gathering and analyzing customer requirements for software, formalizing the subject area of a software project based on the provided terms of reference, aiding customers in software evaluation and selection, and participating in the preparation and approval of commercial offers and contract documents.

Regarding design activities, specialists are expected to contribute to the design of software components as required, including coding, debugging, unit and integration testing, code refactoring, participation in software component integration, and the creation of test environments and scenarios. They are also responsible for developing project documentation, including sketches, technical documents, and working project documents.

In terms of technological activities, professionals should possess the skills necessary for tasks like developing and utilizing automated design, development, testing, and maintenance of software. They should also be adept at employing methods and tools for managing engineering activities and software life cycle processes. Additionally, they should have knowledge of standard control

methods, evaluation techniques, and quality assurance practices for software. Ensuring compliance with both Ukrainian and international standards, specifications, and enterprise norms is crucial, as is contributing to relevant research within the field.

However, it is important to note that Dubinina did not explicitly highlight the significance of communicative competence, including the importance of English as the foreign language proficiency, which plays a vital role in successfully executing many of these professional tasks.

Significance

The significance of the research titled "Role of English Language in Acquiring and Enhancing IT Skills of People" lies in its potential to unveil crucial insights and bring forth a deeper understanding of the interconnectedness between language proficiency, specifically English, and the acquisition and enhancement of IT skills. By exploring this relationship, the research holds the following significance:

- 1. Addressing a Global Phenomenon: The study acknowledges the widespread use of English as a lingua franca in the IT industry, which operates on a global scale. By investigating the impact of English language proficiency on IT skill development, the research acknowledges and analyzes a global phenomenon that affects individuals from diverse cultural and linguistic backgrounds.
- 2. <u>Bridging the Language-Technology Gap</u>: The research recognizes the language barrier that individuals face when acquiring and enhancing IT skills. By shedding light on the role of English as a language of technical communication and collaboration, the study aims to bridge this gap, enabling non-native English speakers to navigate the IT landscape more effectively and gain equal access to knowledge and opportunities.
- 3. Enhancing Employability and Professional Growth: The research holds significant implications for individuals seeking to enter or advance in the IT industry. By identifying the relationship between English language proficiency and IT skills, the study highlights the importance of linguistic competence in securing employment, professional development, and career advancement in an increasingly globalized and competitive job market.
- 4. <u>Promoting Inclusive Education and Training</u>: The findings of this research can inform educational institutions and training programs on the significance of integrating English language instruction into IT curricula. Understanding the role of English in acquiring IT skills can lead to the development of more inclusive and effective learning environments, ensuring equal opportunities for all individuals regardless of their linguistic background.
- 5. <u>Informing Policy and Practice</u>: The research has the potential to inform policy decisions regarding language education and training initiatives. By recognizing the role of English in IT skill acquisition, policymakers can design strategies to promote language proficiency and ensure that language barriers do not hinder technological development, innovation, and collaboration on a global scale.
- 6. <u>Advancing Technological Empowerment</u>: Ultimately, the research aims to contribute to the empowerment of individuals by facilitating their access to IT skills and knowledge. By understanding the significance of English language proficiency, the study seeks to foster a more diverse, skilled, and interconnected global IT community, where language acts as a stepping stone rather than a barrier to technological empowerment.

In summary, the research holds significant implications for individuals, educational institutions, policymakers, and the IT industry at large. By highlighting the role of the English language in acquiring and enhancing IT skills, the study aims to promote inclusivity, bridge linguistic gaps, and foster a more globally competent and empowered IT workforce.

Research Methods and Instruments

4.1: Methods

I did a survey for this research from a few of my friends who work in any field of IT. Some of them are from engineering background and some have other subjects in their background but with a pure desire to play with technology. The reason for me to collect my required information from these types of tech-guys is because they are currently working in their sectors and have achieved much more than others of their age. Some of them are already in a plan to move to a greater platform for a greater achievement. I asked for their opinion of the importance of English in their sectors, how they have come to this position and what was the impact of English to build their career. I assume that I have got positive and genuine answers from them because they practically faced the circumstances and also witnessed the fellow workers around them who lost their tracks already in this journey. I have collected my required data methodically and arranged them in charts so that I could have a proper concept of the people who work with IT. As my research is on only the people of IT who fall on trouble with English while enhancing their skills, I precisely wanted to know their personal experience. I not only collected data from IT experts but also from whom IT has dissociated. Their experience is also very important for my research to know the reason for their failure, what is the percentage of English in this failure. In this way I practically did my research by doing a survey. Any research paper gets more appreciation and acceptance if done practically with real life examples. This survey does not include any information from any professional tech-guy, rather it carries the experiences of average people of our society. By this way it becomes the experience of almost every person who works with information technology. This way I got information from real life experience which makes my research more authentic and capable of acceptance.

4.2: Feedback

I did a survey from the people of IT for my research to see what role does English play in their life to enhance their skills of IT.

- A major number of people think that English is the wing for them to fly higher in the world of IT.
- All their learning materials were in English and they could not learn anything if their English was not well furbished.
- There are clients from all over the world and for communication English is mandatory.
- If any session needs to be conducted, knowing the meaning of the English words are important, otherwise the learners will not be able to learn anything.
- Those who do not know English, cannot cope up with other learners of their fellow students. As they fall behind, a moment comes when they give up on this field and they bury 'IT' within their heart.

4.3: Instruments

Using social media platforms and some mutual connections, I identified technology experts whose expertise aligned with my research objectives. I reviewed professional profiles to find experts actively engaged in discussions related to my research topic.

Once I identified potential experts, I reached out to them through direct messages or phone calls, introducing myself, explaining the purpose of my research, and expressing my interest in conducting an interview. I ensured my messages were concise, polite, and highlighted why their insights were valuable to my research.

Social media interviews often took the form of asynchronous exchanges. Experts and I communicated through direct messages, allowing flexibility in response times. I prepared well-structured and focused questions, taking into account character limits or message lengths, to encourage thoughtful responses from the experts.

While social media provides initial connections, phone calls offer an opportunity for more in-depth conversations with technology experts.

By using social media platforms and phone calls, I have effectively connected with technology experts and gathered their opinions for my research purposes. Social media platforms offer access to a diverse pool of experts, while phone calls enable more in-depth and personal conversations. Combining these approaches allows researchers to tap into the wealth of knowledge held by experts, enhancing the quality and relevance of their research findings.

Data Analysis

5.1: Expertise of the IT interviewees: For my research I have interviewed a few people who work or have worked in different IT sectors. 40% of them have good experience in web development and also in application development. Most of them are professionally involved in these sectors. Less than them, 20% of them are people who love to illustrate whatever they wish. It is more of a part of their hobby. There are 10% people who are involved in paid advertisements in social media platforms and google, 10% graphics designer, 10% with basic knowledge of computer, 10% who works in different sectors of IT.

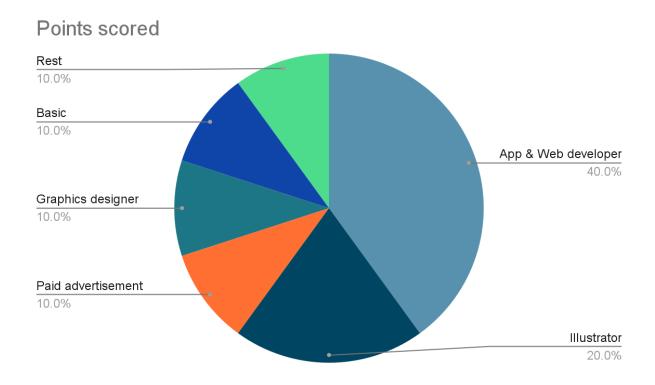


Figure 1: Expertise of the IT interviewees

5.2: Opinion on the helpfulness of English: While Interviewing, 90% of them think that knowing the English language is very helpful to acquire and enhance their skills of their expertise. Almost everyone agreed that they have gained many things in the field of IT with the touch of English. Because if they did not know the English language, then it would be very difficult for them to acquire their knowledge in these sectors. As the most useful learning resources are found in English, if they did not know this language then they could not have come this far. But there are also few people who are in the 10% who think that knowing English may help some people to acquire their skills but it is not mandatory that everyone needs to know English to be resourceful in IT. According to them a person can still be a tech-guy without much help from English.

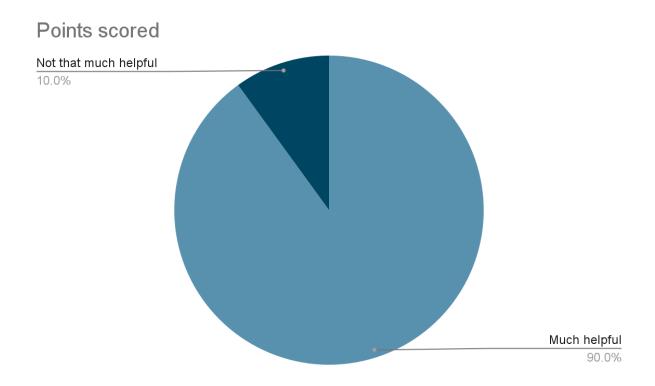


Figure 2: Opinion on the helpfulness of English

5.3: Opinion on English being an obstacle: 80% people think that with no knowledge or little knowledge of English one cannot be an IT professional. It is a huge obstacle for them who seek to be something in the world of information technology. One cannot simply communicate with their clients without knowing English. In that way one cannot be in international platforms of information technology. There are also some people with a 10% ratio who think that maybe it is not an obstacle but at least a little knowledge is required in order to survive. But still, it does not make him less in any way. The rest of the 10% people think that English does not require much to be an IT professional. One can do quite well with native language and local clients.

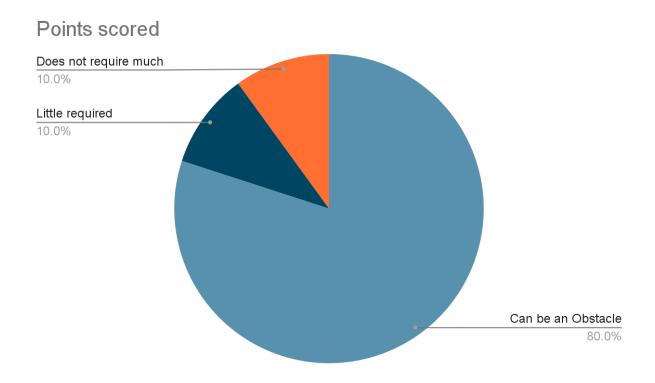


Figure 3: Opinion on English being an obstacle

5.4: Opinion on being a competitor: 70% of people think that it is impossible for someone to compete with the world of IT with some local language and knowledge. Because it also requires English for someone to gather information about IT. Only with local language, a boundary is made around them and they can never go beyond that even if they want to. Not only about gathering knowledge, but also it is about communicating with people in foreign. The competition is not only in their country rather the main competitors are outside this country. To handle foreign clients, to participate in worldly activities, to have information about the world and to reach the highest peak of the world of IT one needs to have English competence. Yet there are some people which is 20% of whom think that it is possible to compete with the world in some sectors. There are some fields of IT where local language becomes sufficient and also there are no direct clients for communication. That is how sometimes only with local language one can do many great things. Very few people with a 10% ratio think that no matter what sector of IT people work in, only native language can make them a good competitor against the world. Though they agree that English proficiency is very important, it would be wrong to say that one cannot compete with the world if he or she does not know English.

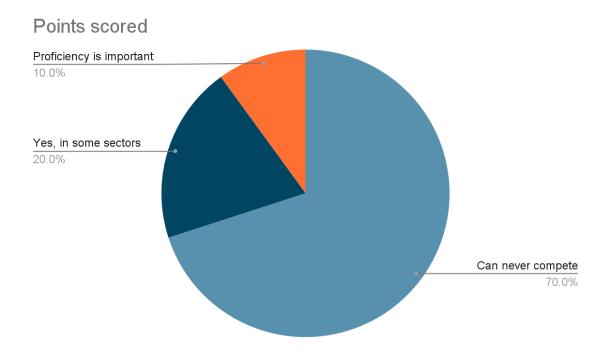


Figure 4: Opinion on being a competitor

Personal Opinion

I strongly believe that English is truly important for a person to be an IT expert. My personal belief could be a little different from a few people. But I think my reasons are completely rational and acceptable as well. I am explaining my few points of view of that belief.

- 1. <u>Global Language of Technology</u>: English has emerged as the global language of technology and is widely used in IT industries, research papers, programming languages, and technical documentation. Having a strong command of English allows individuals to access and understand these resources, leading to better acquisition and enhancement of IT skills.
- 2. <u>Effective Communication</u>: Communication is a vital aspect of working in the IT field. English proficiency enables effective communication with colleagues, clients, and global teams, fostering collaboration and teamwork. It allows IT professionals to express ideas, present technical solutions, and discuss complex concepts with clarity and precision.
- 3. <u>Access to Learning Resources</u>: The majority of IT-related learning resources, tutorials, and forums are available in English. Being proficient in the language gives individuals unrestricted access to these valuable resources, which are crucial for acquiring new skills, staying updated with industry trends, and seeking guidance from the global IT community.
- 4. <u>International Job Opportunities</u>: English fluency opens doors to international job opportunities in the IT sector. Many companies require English proficiency as a prerequisite for employment, especially in multinational organizations. Having strong English language skills increases the chances of securing global job placements and career advancements.
- 5. <u>Cross-Cultural Understanding</u>: IT professionals often work in diverse multicultural environments. English proficiency enables individuals to engage in cross-cultural interactions, understand different perspectives, and appreciate diverse working styles. This cultural intelligence enhances teamwork, problem-solving, and adaptability in the IT industry.

In summary, the English language plays a crucial role in acquiring and enhancing IT skills. It enables effective communication, provides access to a wealth of learning resources, facilitates networking, and opens up international job opportunities. Developing English proficiency alongside technical expertise is essential for individuals aspiring to excel in the IT field.

6.1: To do list: A draft chart is shown below. If this chart could be made for an individual to follow then I assume that lacking of English will not be a barrier for that person to become a skillful technologist.

	,
Age range.	
Area of interest in IT.	
If there is any restriction and why.	
How good or bad is his/her expertise in English.	
Inform him how English can enhance his/her confidence.	
Inform him how English can bring him/her more resources.	
Inform him how English can introduce him to the broader world outside.	
His/her comfort zone.	
How to bring English learning inside his/her comfort zone.	
Provide him/her short courses for English learning.	
Maintaining his/her motion of learning English.	

Table 1: To do list to improve English

Conclusion

In conclusion, this research paper has explored the vital role of the English language in acquiring and enhancing IT skills among individuals. The findings have highlighted the interconnectedness between language proficiency and success in the field of information technology. Through a comprehensive analysis of various aspects, such as technical documentation, communication with global teams, and accessing learning resources, it is evident that English proficiency plays a crucial role in facilitating effective learning, collaboration, and career advancement in the IT industry.

The research has demonstrated that a strong command of English empowers individuals to navigate the vast amount of technical literature and documentation available in the language. Moreover, it enables effective communication and collaboration with colleagues, clients, and global teams, fostering better teamwork and synergy. The ability to articulate technical concepts in English also enhances one's professional credibility and opens doors to international opportunities in the IT sector.

Furthermore, the research has shed light on the importance of English language skills in accessing a wide range of online resources, including tutorials, forums, and open-source communities. These resources serve as valuable platforms for acquiring new IT skills, staying updated with industry trends, and seeking assistance from the global IT community. Proficiency in English enables individuals to fully leverage these resources, enhancing their learning experience and keeping them at the forefront of technological advancements.

However, the research also recognizes the challenges individuals may face in acquiring and enhancing their English language skills. It emphasizes the need for language learning initiatives, both within educational institutions and through self-directed efforts, to provide support and resources for IT professionals and aspiring learners. These initiatives should focus on developing not only general English proficiency but also domain-specific vocabulary and technical communication skills.

In conclusion, the English language plays a pivotal role in the acquisition and enhancement of IT skills for individuals. The ability to comprehend technical documentation, communicate effectively, and access a vast array of learning resources in English empowers individuals to excel in the IT industry. Recognizing the significance of English language proficiency and implementing targeted language learning strategies will contribute to the professional growth and success of individuals in the ever-evolving world of technology.

Appendix

Questionnaire:

- Name.
- In which field of IT do you work?
- Area of expertise.
- Duration of experience.
- Do you think knowing the English language is helpful to acquire and enhance your skills? Explain how it does or does not.
- Is no knowledge or little knowledge of English an obstacle to be an IT expert? Why or why not?
- Can a person compete with the world of IT only with native language except for English?

References

- 1. Semerikov, S., Striuk, A., Striuk, L., Striuk, M., & Shalatska, H. (2020). Sustainability in Software Engineering Education: a case of general professional competencies.
- 2. Kirilenko, O. (2016). Communicative skills of foreign students in the field of software engineering from the standpoint of the competency approach. Young researcher, 3, 388-393.
- 3. Strilets, V. V. (2010). Project work methods of teaching English to future programmers using information technologies. Unpublished candidate dissertation). Kyiv national linguistic university.[in Ukrainian].
- 4. Chirva, I. V. (2008). Teaching English speaking using computer software to future engineers-programmers. Unpublished candidate dissertation). Kyiv national linguistic university.[in Ukrainian].
- 5. Bulakhova, Ya. (2007). Dissertation. Luhansk National Pedagogical University. Named after Taras Shevchenko.
- 6. Babii, H. (2012). Higher education of Ukraine 1, 162–170.
- 7. Viakh, I. (2013). Dissertation. Vinnytsya State Pedagogical University. After Mykhailo Kotsyubynskyi.
- 8. Dubinina, O. (2016). Dissertation. Kharkiv National Pedagogical University.