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EFL Instructors' Perspectives on Utilizing AI-Technologies in Language Instruction

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Abstract

With the rapid advancements in AI technologies, there is a growing interest in emerging Artificial Intelligence (AI) tools to enhance language teaching and learning experiences. To this end, the current research aims to understand the perspectives of EFL instructors on utilizing AI technologies in EFL teaching. Based on that, data were collected through a questionnaire of 20 items divided into four sections regarding EFL instructors' general perspectives on AI in EFL teaching, benefits of AI in EFL teaching, challenges of using AI in EFL settings, and use and experience of AI in education. The questionnaire was presented to 40 EFL instructors at Al-Noor University and Ninevah University.

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Finally, data were analyzed statistically, and results show that most EFL instructors favor the positive role of AI in language instruction. However, some concerns were raised regarding utilizing AI in language instruction.

Keywords: Artificial Intelligence, AI, Technology, EFL.

وجهات نظر مدرسي اللغة الإنكليزية كلغة اجنبية حول استخدام تقنيات الذكاء الاصطناعي في تدريس اللغة

الخلاصة

مع التطور السريع في تقنيات الذكاء الاصطناعي، هناك اهتمام متزايد بتطبيقات وبرامج الذكاء الاصطناعي لتحسين تجارب تعليم وتعلم اللغة. وإلى هذه الغاية، يهدف البحث الحالي إلى فهم وجهات نظر المعلمين لاستخدام تقنيات الذكاء الاصطناعي في تدريس اللغة الانكليزية كلغة أجنبية. بناءً على ذلك، تم جمع البيانات باستخدام استبيان يتكون من 20 فقرة مقسمة الى اربعة أقسام وهي وجهات نظر مدرسي اللغة الانكليزية كلغة اجنبية العامة حول دور الذكاء الاصطناعي في تدريس اللغة الإنكليزية كلغة اجنبية، وفوائد الذكاء الاصطناعي في تدريس اللغة الانكليزية كلغة أجنبية، وتحديات استخدام الذكاء الاصطناعي في بيئة اللغة الانكليزية كلغة أجنبية، واستخدام وتجربة الذكاء الاصطناعي في التعليم. تم تقديم الاستبيان إلى عينة مكونة من 40 مدرساً للغة الانكليزية كلغة اجنبية في جامعة النور وجامعة نينوى. أخيراً، تم تحليل البيانات إحصائياً وتظهر النتائج ان غالبية مدرسي اللغة الانكليزية كلغة اجنبية يؤيدون الدور الإيجابي للذكاء الاصطناعي في تعليم اللغة على الرغم من اظهار بعض المخاوف بشأن استخدام الذكاء الاصطناعي في تدريس اللغة.

الكلمات المفتاحية: الذكاء الاصطناعي، التكنولوجيا، اللغة الإنكليزية كلغة اجنبية

1. Introduction

Teaching English as a foreign language (EFL) is an essential field of study. English has become the predominant lingua franca in different fields, including technology, especially with the rapid emergence of technology and digital transformation. With the emergence of Artificial Intelligence (AI) solutions, there has been a growing interest in exploring its potential in English language teaching.

John McCarthy was recognized as the first to introduce the term "Artificial Intelligence" (AI) in 1956 at the well-known Dartmouth College Workshop. This field emerged after World War II when aviation engineers created machines replicating human cognitive processes and behaviors (Russell Norvig, 2003). Building on that, it is evident that we are experiencing once in a consideration period with the rapid growth of AI technologies in superimposition to the Fourth Industrial Revolution. Integrating AI with big data has created new possibilities being generated and subsequently examined using digital devices and platforms in conjunction with international communication networks (Luan et al., 2020).

The former president of the Association for the Advancement of Artificial Intelligence (AAAI), Eric Horvitz, defines AI as "that field of computer science which focuses on the issues of cognition, which are thought to be solvable by computers, including but not limited to perception, reasoning, learning, natural language use" (Fast & Horvitz, 2017). In the same vein, according to Sarma & Jose (2023), AI is "the capacity of a machine to imitate

intelligent human behavior." These definitions determine the objective of AI as an effort to reconstruct and solve problems of human reasoning using technology. In other words, AI, defined as the ability of machines to perform human brain work, has improved and now brings customized solutions, forecasts, and recommendations relevant to the particular context in various disciplines.

Among the fields that AI has influenced is the educational sector. According to Chen et al. (2020), integrating AI into education positively impacts teaching and learning through different technologies, such as tutor robots, adaptive learning systems, and innovative tutoring technologies. Such tools and technologies permit educators to develop teaching strategies to meet students' needs in this era. However, successfully integrating AI tools in education depends on teachers' attitudes and beliefs (Johnson et al., 2016). The teacher's role is vital for effectively integrating AI technologies in the classroom (Razak et al., 2018). Hence, AI can also be beneficial for both students and teachers. For instance, Rusmiyanto et al. (2023) have found that some AI-supported applications, such as speech recognition and virtual teachers, have developed students' speaking and pronunciation skills. They have also found that students who got feedback from AI perform better than those who didn't.

The current research explores EFL university teachers' perspectives on utilizing AI technologies in language instruction in terms of general perspectives, benefits of AI, challenges of using AI, and Use and experience of AI. Thus, it is hypothesized that:

1. EFL teachers have positive perspectives about AI in language instruction
2. EFL teachers find AI beneficial in language instruction.
3. EFL teachers face difficulties in integrating AI technologies into language instruction.
4. EFL teachers have restricted use and experience of AI.

The following research questions have enhanced these hypotheses:

1. Do EFL university teachers have positive perspectives on AI in EFL instruction?
2. Do EFL teachers find AI beneficial in EFL instruction?
3. Do EFL teachers face challenges in implementing AI in language instruction?
4. Do EFL teachers have experience in using AI?

2. Literature Review

2.1 Artificial Intelligence in Education

Integrating AI technologies in education is new to researchers, teachers, and students. According to Ouyang and Jiao (2021), this process consists of three parties: the learner as the recipient (AI-directed), the learner as a collaborator (AI-supported), and the learner as the leader AI-empowered. This means that learners receive personalized learning, have corrective feedback on their needs, and are exposed to authentic language through conversations with virtual teachers and instructors.

Furthermore, Chiu et al. (2023) categorize the roles and outcomes of AI in Education. In their paradigm, they try to identify the potential of AI in Education by dividing the role of AI into four main categories: learning, teaching, assessment, and administration as follows:

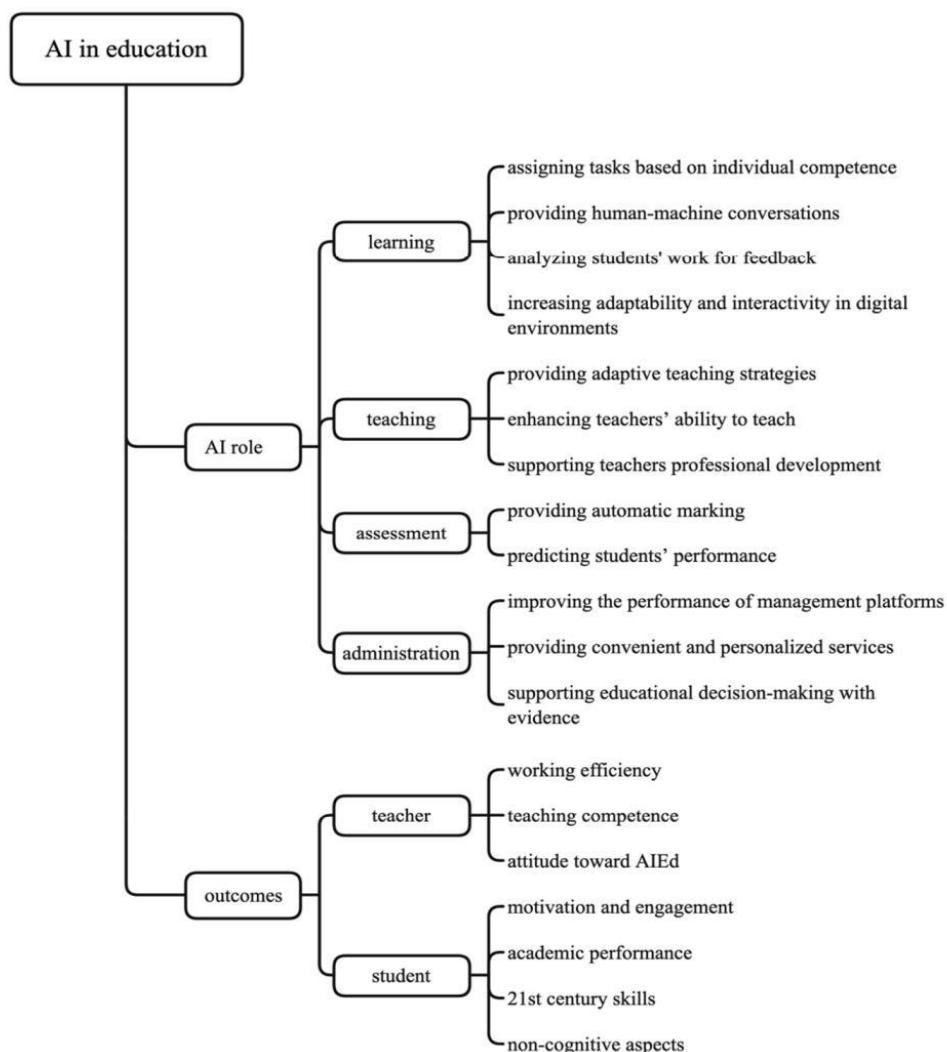


Figure (1): The Roles and Outcomes of AI in Education (Chiu et al., 2023)

2.2 Artificial Intelligence and English as a Foreign Language

As far as EFL is concerned, AI technologies are crucial in teaching and learning. In other words, some technologies can provide teacher-like tasks. For example, some applications could provide grammatical feedback on EFL students' writing without the teacher's help. Additionally, some applications develop other language skills, i.e., listening, speaking, reading, and vocabulary learning (Stockwell, 2012; Persson & Nouri, 2018).

In light of that, many Researchers have found that technology and AI tools positively help teachers and students. For example, they have found that technology helps speed learning process, increases social interactions, motivates students, improves students' confidence leading to cooperation between learners and teachers and increases exposure to English in authentic contexts (Mouza, 2008; Baytak et al., 2011; Rodinadze & Zarbazoia, 2012; Sabzian et al., 2013; Godzicki, 2013; Arifah, 2014; Parvin & Salam, 2015; Zhao, 2022). Additionally, Chiu et al. (2023) conclude that AI benefits learning in different aspects, including task assignment, human-machine conversations, feedback analysis, and enhancing adaptability in digital settings.

However, AI presents autonomous learning so that students might learn without the teacher. It is believed that the integration of technology shifted the focus of the learning process from instructors to learners, and learners take responsibility for their learning (Biggs, 1996; Brown, 2002)

Whether AI is a friend or foe to the teachers arises. The answer to this question is through exploring EFL teachers' perspectives on AI in language instruction since teachers could affect students' learning outcomes (Cope & Ward, 2002; Ertmer, 2005; Ottenbreit-Leftwich et al., 2018; Ding et al., 2019)

In EFL educational settings and closely related to the current study, the findings of previous studies have proved the possibility of integrating AI in EFL. For example, Ozdemir and Mede (2024) have found that AI is beneficial in solving large class sizes and problems with the lack of resources in EFL classrooms. Moreover, such AI tools decrease teachers' workload.

In another study, Davis (2020) points out that AI tools enhance language teaching by providing students with the necessary feedback and resources.

However, some studies revealed that AI highly depends on teachers' perspectives on integrating AI tools in education. Moreover, the teachers need training courses in emerging AI technologies in Education (Choi et al., 2023).

Accordingly, the previous studies emphasize the importance of AI according to EFL instructors' perspectives since their perspectives and perceptions affect the integration and success of AI in the EFL process. This study aims to explore EFL instructors' perspectives on utilizing AI technologies in language instruction.

2.3 Artificial Intelligence Technologies

There are numerous popular applications of AI in many fields, including engineering, medical care, art, etc. AI has

also been incorporated into education, language teaching, and learning. The first example is electronic dictionaries, which allow EFL students to learn vocabulary meaning, pronunciation, speaking, and listening. Hence, the following are some of the significant AI-based language learning applications and technologies:

- **Machine translation (MT)** is translating a text, spoken or written, from one language to another by computers. Such machine translations have recently been developed and equipped with AI technologies, which have improved translation quality with free-access services, leading millions of users to use them. Some of these are Google Translate, DeepL Translate, Foreign Word, and Web Trance (Rogers, 1996; Myers, 2000; Niño, 2009; Cook, 2010; Garcia & Pena, 2011; White & Heidrich, 2013; Lee, 2020)
- **AI-powered writing assistance: helps learners and teachers with** different writing assignments. These technologies help in detecting grammatical errors and provide corrective feedback. In this respect, they help learners with autonomous learning and self-correcting (chatGPT, Grammarly, Essaybot).
- **Chat robots (chatbots) are AI-based communication tools that reflect human-machine** interaction. Humans can engage in a conversation with these tools (written or spoken) using their native or target language, which effectively serves in foreign language classrooms to develop listening and speaking skills by providing adequate answers to users' questions (Kerly et al., 2007; Jia, 2008). Some studies have proved this, showing that students feel

more comfortable conversing with chatbots than their peers or teachers.

However, several related technologies assist students' EFL learning. Such tools can be of great value to teachers and students as they provide EFL training practices, namely correct pronunciation, spelling, visual aids, etc., improving all language skills (listening, speaking, reading, writing) and grammar.

3. Method

3.1 Instrument

The study investigates EFL instructors' perspectives on utilizing AI technologies in language instruction. In light of that, a questionnaire was conducted, based on literature and previous studies, consisting of four sections: EFL instructors' general perspectives, benefits of AI in EFL, challenges of using AI in EFL settings, and use and experience of AI. Each section consists of five statements, a total of 20 terms, with a five-point Likert scale ranging from (strongly agree to disagree strongly).

3.2 Sample of the Study

The study sample included 40 EFL teachers who had experience teaching EFL. They were chosen randomly from Al-Noor University and Ninevah University in Iraq, Mosul, during the academic year 2023-2024.

4. Results and Discussion

The data obtained on investigating EFL instructors' perspectives regarding integrating AI technologies in language instruction were analyzed statistically. Results, in general, show positive responses concerning AI in language education, as most instructors recognize AI as a modern

tool for enhancing the EFL educational system. These results are divided into four categories (General Perspectives, Benefits of AI, Challenges of Using AI in EFL, and Use of AI in EFL) as illustrated in the following tables:

Table (1): Results of Instructors' Responses to General Perspectives

| No. | Items | Degree of Severity | Percentage Weight | New Arrangement |
|--------------|--|--------------------|-------------------|-----------------|
| 1 | AI technologies enhance EFL teaching practices. | 4.100 | 82.00% | 2 |
| 2 | AI tools provide opportunities to personalize teaching and learning in EFL settings. | 4.700 | 94.00% | 1 |
| 3 | AI needs to be Utilized in language teaching due to the needs of modern education. | 3.800 | 76.00% | 3 |
| 4 | integrating AI technologies makes me comfortable in my teaching practices. | 3.675 | 73.50% | 4 |
| 5 | The employment of AI technologies in EFL teaching is not a life-long practice but a temporal solution. | 1.625 | 32.50% | 5 |
| Total | | 3.580 | 71.60% | |

According to Table (1), results highlight highly positive attitudes towards AI in EFL teaching and learning with an overall percentage weight of 71.60%. However, most instructors agree that AI tools provide opportunities to personalize teaching and learning in EFL settings (94%), which indicates that instructors highly value AI in contextualizing their teaching practices. With slightly lower scores, most instructors find AI as a modern tool for modern education (76%) and that it is beneficial to integrate AI technologies into teaching practices. Interestingly, most instructors are against AI as a temporal solution. Hence, they see AI as a promising future in EFL education rather than a passing trend.

Table (2): Results of Instructors' Responses to Benefits of Artificial Intelligence

| No. | Items | Degree of Severity | Percentage Weight | New Arrangement |
|--------------|--|--------------------|-------------------|-----------------|
| 1 | AI can improve teaching practices and students' language learning outcomes. | 4.525 | 90.50% | 5 |
| 2 | AI helps to save time and effort. | 4.875 | 97.50% | 1 |
| 3 | AI provides valuable resources that enhance teaching. | 4.750 | 95.00% | 2 |
| 4 | AI technologies keep EFL instructors familiar with modern teaching methodologies. | 4.700 | 94.00% | 4 |
| 5 | AI can reduce the workload of teachers—especially grading and correction feedback. | 4.750 | 95.00% | 3 |
| Total | | 4.720 | 94.40% | |

Concerning the instructors' responses to the benefits of AI in EFL, the results in Table (2) above show overwhelming consensus regarding the positive benefits of AI (94.40%). Specifically, the benefit of saving time and effort ranked the highest at (97.50%). This reflects the robust conviction that AI is a helping tool for instructors that reduces long-time and workload efforts by providing (according to participants' responses) valuable resources that enhance their teaching (95%). Furthermore, Instructors find AI beneficial for EFL teachers and students by improving learning outcomes through AI technologies (90.50%). Moreover, respondents highly value AI assistance in grading and correction feedback (95%). In conclusion, regarding the benefits of the AI category, most respondents find AI highly beneficial in teaching and learning EFL.

Table (3): Results of Instructors' Responses to Challenges of Artificial Intelligence

| No. | Items | Degree of Severity | Percentage Weight | New Arrangement |
|--------------|---|--------------------|-------------------|-----------------|
| 1 | Unfamiliarity and lack of training in AI tools make their implementation challenging for instructors. | 4.475 | 89.50% | 1 |
| 2 | AI tools might affect the role of teachers in EFL teaching. | 3.250 | 65.00% | 4 |
| 3 | Internet and technical issues such as poor internet connections disrupt AI-tools' use in EFL instruction. | 2.925 | 58.50% | 5 |
| 4 | Over-reliance on AI might negatively affect human teaching-learning progress. | 4.275 | 85.50% | 2 |
| 5 | Misusing AI tools may lead to unreliable tasks, such as essay writing. | 4.275 | 85.50% | 3 |
| Total | | 3.840 | 76.80% | |

According to the results in Table (3) above, respondents raised concerns regarding the use and effect of AI. At the highest, it is shown that respondents face barriers in implementing AI due to lack of experience and training (89.50%). Additionally, notable concerns regarding over-reliance on AI might negatively affect human communication in the teaching-learning process (85.50%). These concerns align with the misuse of AI tools, which leads to unreliable tasks (85.50%). However, low-rated challenges, including technical issues (58.50%), indicate that the primary concerns are related to training and reliance rather than infrastructure effects. In the same respect, the adverse impact on the role of the teacher is low-rated as well (65%), which indicates that despite the revolutionary benefits of AI in EFL education, it cannot replace teachers' roles.

Table (4): Results of Instructors' Responses to the Use and Experience of Artificial Intelligence

| No. | Items | Degree of Severity | Percentage Weight | New Arrangement |
|-----|--|--------------------|-------------------|-----------------|
| 1 | I always use AI technologies in EFL teaching, such as Grammarly, Duolingo, ChatGPT, etc. | 4.050 | 81.00% | 3 |
| 2 | I use AI tools in grading and generating homework suggestions | 3.825 | 76.50% | 4 |
| 3 | I encourage students to use AI tools for EFL learning. | 4.400 | 88.00% | 1 |
| 4 | Using AI technologies has become an essential part of my teaching practices. | 3.575 | 71.50% | 5 |

| | | | | |
|--------------|---|--------------|---------------|---|
| 5 | AI tools can improve the four language skills (i.e., Listening, Speaking, Reading, Writing) | 4.400 | 88.00% | 2 |
| Total | | 4.050 | 81.00% | |

The results in Table (4) concern AI's practical use and experience. The highest scores of instructors' responses of No. 3 (I encourage students to use AI tools for EFL learning) and 5 (AI tools can improve the four language skills (i.e., Listening, Speaking, Reading, Writing) emphasize the importance of encouraging students to employ AI in developing their language skills, i.e. (listening, speaking, reading and writing). However, lower rates of No. 1 (I always use AI technologies in EFL teaching, for example, Grammarly, Duolingo, ChatGPT... etc.), 2 (I use AI tools in grading and generating homework suggestions), and 4 (Using AI technologies has become an essential part of my teaching practices) suggest that using AI still needs training and support for practical use and implementation.

Table (5): Conclusion of Results

| No. | Items | Degree of Severity | Percentage Weight | New Arrangement |
|-----|-------------------------------|--------------------|-------------------|-----------------|
| 1 | GENERAL PERSPECTIVES | 3.580 | 71.60% | 4 |
| 2 | BENEFITS OF AI | 4.720 | 94.40% | 1 |
| 3 | CHALLENGES OF USING AI IN EFL | 3.840 | 76.80% | 3 |
| 4 | USE OF AI IN EFL | 4.050 | 81.00% | 2 |

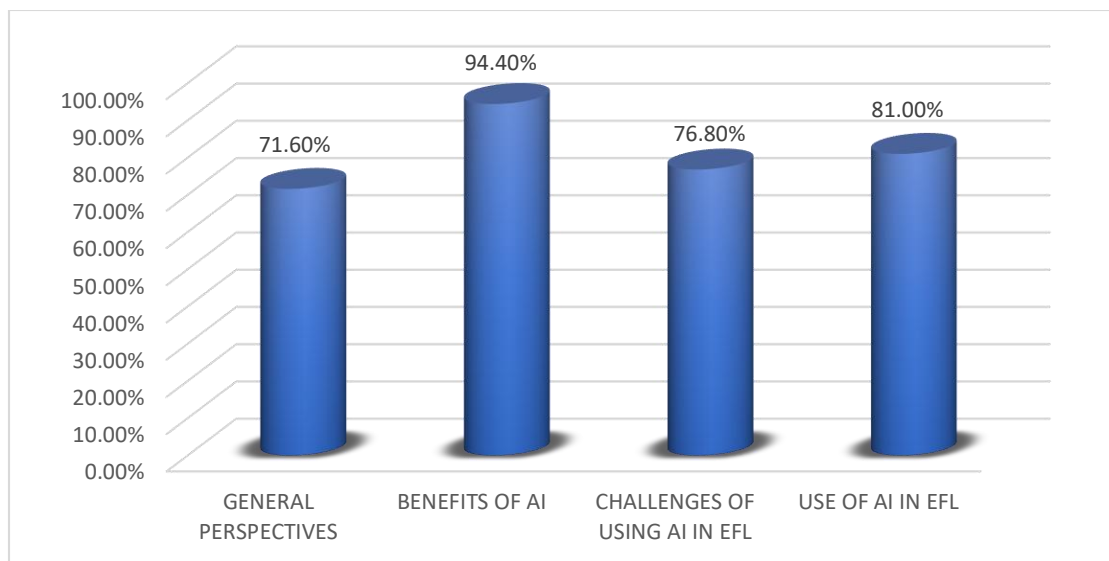


Figure (2): Conclusion of Results

In conclusion, results show that instructors highlight the *benefits of AI in EFL education* (94.40%) as the most significant part, emphasizing the importance of AI in improving teaching practices, resources, and student outcomes. Then, the *Use of AI* (81%) follows benefits reflecting the growing need for integrating AI in EFL teaching-learning through training and support. *Challenges of Using AI* (76.80%) reveal serious concerns and barriers to implementing and utilizing AI technologies in EFL education. Finally, *General Perspectives* (71.60%) indicate that while AI is widespread among educators and students, using AI technologies in language teaching still needs practice and training for successful implementation. Based on that, the four hypotheses of the study are verified.

5. Conclusion

The main aim of the current study is to explore EFL instructors' perspectives on utilizing AI technologies in EFL. In light of the results obtained, it is concluded that AI

is a modern potential tool in EFL rather than traditional teaching practices, especially in improving teaching practices, learning outcomes, and providing resources. However, despite acknowledging AI's value in EFL education, challenges and barriers like lack of experience, over-reliance, and technical issues still need support and development. While encouraging the use of AI in EFL education, there must be a balance between the human teaching-learning process and AI technologies to preserve teachers' roles and natural communication. Finally, AI can be a powerful ally in modern demands.

6. Recommendations

In light of the results obtained and conclusions drawn, it is recommended to:

1. Provide periodical training courses for EFL teachers regarding utilizing AI technologies in EFL education.
2. Maintain a balance between human teaching communication and AI-driven technology communication.
3. Provide support to ease the use of AI.
4. Encourage teachers and students to utilize AI technologies in their teaching-learning practices.

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