

Autonomous English Learning in a Digital Context: Insights from Chinese College Educators

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ABSTRACT

With an emphasis on how digital technologies, teacher beliefs, and institutional frameworks influence learner autonomy, this study explores Chinese college educators' perspectives on autonomous English learning in a digital setting. The study, which is based on qualitative data from interviews and thematic analyses (Tables 1–9), shows that students' attitudes toward autonomy are divided: some exhibit skepticism, an excessive dependence on translation software and artificial intelligence (AI) tools, and a lack of intrinsic motivation, while others show enthusiasm, resourcefulness, and goal-oriented self-direction. This disparity highlights how the digital world can be both a facilitator and a crutch, exacerbating differences in preparedness for independence. The results emphasize how important teachers are in mediating autonomy. It is widely acknowledged that autonomy is socially constructed rather than entirely individual, and that educators' views, personalities, and pedagogical decisions have a substantial impact on students' ability to self-regulate. Furthermore, while digital conveniences like smart apps, multimedia materials, and flexible access increase learning opportunities, their usefulness hinges on how well students can use them. Although extracurricular activities and curriculum structures offer encouraging environments, opportunities for independent learning are restricted when there is an excessive focus on teacher-assigned work. According to the study's findings, autonomy is a developmental process that calls for specialized support as well as an outcome. Although there is a lot of promise for enabling self-directed English learners in digital contexts, success depends on the cooperation of systemic support, teacher facilitation, and learner preparation.

INTRODUCTION

Research Background

Learner autonomy is commonly regarded as a primary goal in second or foreign language teaching since it promotes lifelong learning and enhances language achievement (Little, 2022). Digital technologies have recently increased the opportunities for autonomous language learning by making real input, learning analysis, and autonomous exercises more available outside of the classroom (Pratiwi & Waluyo, 2023). However, the sheer availability of digital tools does not ensure autonomous learning in practice (Khan et al., 2022). Empirical research shows a wide range of learners' real autonomy in digital contexts: some students demonstrate readiness and successful use of online resources (Khan et al., 2022), whilst many others have unclear goals, poor method utilization, low self-regulation, and a restricted ability to capitalize on digital opportunities (Cusumano et al., 2021).

An increasing amount of evidence emphasizes the role of teachers in promoting learner autonomy in digital situations, and the learning environment is directly shaped by educators' ideas, pedagogical practices, and digital literacy, which influence whether students gain the preparation and abilities required for autonomous learning (Wei, 2024). In the Chinese setting, differences in institutional resources, teacher readiness, and pedagogical techniques contribute to various outcomes in autonomous learning projects (Lin & Gao, 2023). Despite government emphasis on autonomous learning and the widespread availability of digital tools, a

significant problem persist, there is a notable gap between the potential of digital technologies and the actual development of learner autonomy among Chinese college EFL students. Many students struggle with low self-regulation, over-reliance on passive tools like translation software, and a lack of intrinsic motivation, which prevents them from capitalizing on digital opportunities. Furthermore, there is insufficient understanding of how educators perceive these challenges and what specific strategies they use to address them.

Despite government emphasis on autonomous learning, there is still a need for research that bridges the gap between potential and practice, namely, research that looks at both student readiness for autonomous learning in the digital age and the tactics educators use to promote it. Understanding students' level of preparedness can assist in identifying areas that require targeted support, whereas investigating instructors' approaches can reveal effective practices and institutional models for developing autonomy in digitally enhanced contexts (Cook et al., 2023).

So, the current work addresses two major research questions: What is the overall readiness of Chinese college students for autonomous English learning in the digital age? What approaches do Chinese college educators employ to promote learner autonomy among EFL students in a digital environment?

Objective of Study

This research aims to investigate the scenario of learner autonomy among college EFL students in Fujian Province, China. Hence, the following are the study's objectives: To investigate Chinese college EFL students' overall readiness for learner autonomy in the digital environment. To explore the pedagogical approaches and digital strategies that educators employ to foster learner autonomy, both inside and outside the classroom..

LITERATURE REVIEW

Autonomous Learning

Learner autonomy has been a cornerstone of language instruction for almost four decades. The basic definition, the ability to take charge of one's own learning, was developed by Henri Holec and is still largely regarded as the core explanation of autonomy in language learning (Yen et al., 2024). Musonda (2025) expanded on the concept by emphasizing the learner's psychological connection to the learning process and autonomy as a set of skills that can be taught and improved rather than a permanent attribute. Contemporary conceptualizations of autonomy take multiple, complementary perspectives. Phil Benson's synthesis emphasizes autonomy as a learner and teacher issue. Teachers' ideas and behaviors are critical to whether autonomy thrives in regular classrooms (Zhang et al., 2022). Digital technologies complicate and broaden these concepts. Recent evaluations indicate that technology provides new options for autonomy, such as flexible access to input, adaptive practice, learning analysis, and informal learning, but they also emphasize that technology is neither required nor adequate on its own (Soma et al., 2022).

Strategies to Encourage Autonomous Learning

Providing explicit training in self-regulated learning (SRL) abilities.

According to Chen et al. (2025), goal setting, planning, monitoring, and reflection are all examples of meta-cognitive and regulatory skills that are required for autonomy. Interventions that teach SRL skills, such as modeling, planning, monitoring routines, the use of learning logs, and organized reflection prompts, consistently enhance students' ability to manage their learning. E-portfolios, automated reminders, and self-assessment prompts are all examples of digital platforms that can house and scaffold SRL practices.

Scaffolding that diminishes as skill increases.

According to Ge et al. (2005), scaffolding, which involves breaking work down into manageable steps, providing prompts and exemplars, and progressively withdrawing support, helps students transition from teacher-dependent to learner-driven activities. Scaffolding can be implemented in digital settings through

staged exercises, guided tutorials, adaptive sequencing, and peer-supported forums, which should be gradually lowered as learners exhibit readiness.

Teacher beliefs and instructional design emphasizing choice and reflection.

Flowerday and Schraw (2000) found that teachers' views about learner control are important. When teachers create assignments that allow for meaningful choice, such as themes, resources, evaluation modes, and reflective checkpoints, students are encouraged to take responsibility. Professional development that integrates teachers' ideals with actual techniques for promoting autonomy is therefore essential.

Learning settings and evaluation procedures that highlight progress.

Vosoughian and Ramezani (2024) found that making learning processes and outcomes visible, such as dashboards, progress trackers, e-portfolios, and peer-feedback loops, promotes motivation and meta-cognition. Transparent rubrics and self-assessment routines allow students to judge and direct their own progress, while analysis can provide targeted suggestions for strategy implementation.

In summary, the studies show that autonomy is teachable and technology-enhanced autonomy is feasible. However, effectiveness is dependent on (a) explicit SRL instruction, (b) purposeful instructional design and scaffolding, (c) teacher beliefs and personal development, and (d) institutional resources that make learner activity visible and valued. What remains unexplored, particularly in the Chinese college context, is the overall picture of student preparation and the specific ways educators approach it. This gap is precisely what the two research questions address.

METHODOLOGY

Research Design

This study employs a qualitative approach to meet its objectives. In this study, the semi-structured interview data were analyzed and interpreted using a qualitative method. The interview consists of six items. The first three items examined participants' understanding of students' readiness for autonomous learning. The three remaining elements from the semi-structured interview were utilized to identify techniques for enhancing learner autonomy among college EFL students utilizing digital technologies. Given the qualitative and exploratory nature of this study, which seeks to understand the nuanced perspectives of educators, the research was not designed to test specific hypotheses. Instead, it was guided by the two central research questions to thematically analyze and interpret the experiences and views of the participants.

Instrument

The semi-structured interview is used to gain a complete description from the educators and English instructors of autonomous learning. These nine feedback questions are designed to make it easier for educators and English instructors to discuss the situation of Chinese students' college English autonomous learning in the digital environment (RQ1), and explore how the digital environment helps to promote learner autonomy (RQ2).

Respondents

The researcher used purposive sampling to select nine participants from Fujian Forestry Vocational and Technical College, Northern Min Vocational and Technical College, and Wuyi College as the interview subjects. Three participants were selected for the interviews in each college, namely one college president, one dean of the college's English department, and one English language lecturer, respectively. The rationale for choosing purposive sampling is that the researcher wanted to gain insight into the education officers' and language lecturers' views on the network situation of learner autonomy and approaches to promote learner autonomy.

Although the sample size may appear small, Patton (2014) states that qualitative research stresses on depth of insights rather than breadth. Also, previous studies show that thematic saturation can often be reached in 6 to 12 interviews (Chitac, 2022). Creswell and Poth (2016)) recommended 5 to 25 interviews for phenomenological research as an accepted norm. Similarly, Malterud et al. (2016) suggested that the number of participants selected would sufficiently provide information power and relevant data to address the objectives of the study.

Data Collection

This study was carried out at three colleges in Fujian Province. The samples were three college presidents, three deans of college English, and three English lecturers. After the participants sign the consent form, the interview was conducted with them. Each interview lasted approximately 25 minutes. To gather reliable qualitative data, the full interview procedure was recorded in Chinese.

Data Analysis

NVIVO was used by the researcher to examine the qualitative data. NVIVO is a method for finding, examining, and summarizing themes in qualitative data (Allsop et al., 2022). It meticulously describes and minimally organizes the data. The greatest benefit is its adaptability. The process includes getting to know the data, developing preliminary codes, searching for themes, analyzing themes, defining and labeling themes, and preparing the report (Elliott, 2022). As a result, NVIVO is used by numerous researchers in their work.

FINDINGS

This section encapsulates the findings of the pilot study that address the research objectives. RO 1: To determine college EFL students' readiness for learner autonomy in the digital age in Fujian Province, China.

Table 1. The Situation of Chinese students' college English autonomous learning in the digital environment

Theme and frequency	Excerpts from the interviews
Negative acceptance of autonomous learning (N=4)	"Few students can conduct independent learning" (D1) "...autonomous learning of college English in the network environment presents a relatively complex situation" (D2) "Students are not very autonomous and rely more on translation software and AI" (P1) "for students with weak English foundation and low interest, there is less motivation or action for independent learning." (T2)
Positive acceptance of autonomous learning (N=4)	"The enthusiasm for learning is high, and the conditions for learning English online are convenient and the resources are rich." (D3) "The network environment promotes students' interest in English and encourages them to learn English actively." (P2) "In the Internet environment, college students can easily find relevant resources" (T1) "Students with core goals will conduct independent learning and search for valuable resources online." (T3)

*P=President; D=Dean; T=Teacher.

Table 1 illustrates the duality of Chinese college students' attitudes toward autonomous English learning in a digital environment. While half of the participants (N=4) express positive acceptance, emphasizing enthusiasm, resource accessibility, and goal-oriented self-directed study, the remaining respondents (N=4) displayed skepticism, citing over-reliance on translation software, AI tools, and a lack of intrinsic motivation,

particularly among students with weaker linguistic foundations. This divergence suggests that the digital environment acts as both an enabler and a crutch. On one hand, abundant online resources and the flexibility of self-paced learning empower motivated learners to engage actively and independently. On the other hand, the same accessibility may inadvertently foster passive dependency, where students default to automated tools rather than developing linguistic competence through sustained effort. These findings align partially with Benson’s framework on learner autonomy, which highlights that autonomy in digital contexts is contingent on students’ capacity for self-regulation (Benson, 2011). In the Fujian context, the presence of motivated, self-directed learners suggests that the infrastructure for autonomy exists. However, the equal presence of disengaged learners points to a structural gap in scaffolding strategies, indicating that digital tools alone are insufficient without pedagogical interventions that cultivate meta-cognitive skills and resilience. Thus, the mediocre overall acceptance is less a reflection of the digital medium’s limitations and more an indicator of uneven readiness for autonomy within the cohort. This reinforces the need for differentiated support, where educators identify varying levels of learner preparedness and tailor digital engagement strategies accordingly.

Table 2. Values of Learner Autonomy

Theme and frequency	Excerpts from the interviews
Personal development (N=3)	“From the perspective of personal development, autonomous learning ability is the cornerstone of students' lifelong learning.” (D2) “Need to learn some knowledge for daily use (mainly for work)” (P2) “Improve academic performance” (P3)
Intrinsic motivation (N=3)	“Autonomous learning can stimulate students' interest in learning and internal motivation.” (D2) “The value of learner autonomy is the internal driving force of learning, which makes learners interested in learning.” (T1) “It mainly depends on the learner's own internal motivation and sense of responsibility, and the supervision of external forces is also indispensable.” (T3)
Cultivate Multiple skills (N=1)	“Autonomous learning helps to cultivate students' independent thinking ability, problem-solving ability, time management ability and self-reflection ability.” (D2)
Usefulness (N=1)	“Can be useful” (P1)

*P=President; D=Dean; T=Teacher

Table 2 depicts four themes that describe the perceived values of learner autonomy: personal development (N = 3), intrinsic motivation (N = 3), development of different abilities (N = 1), and utility (N = 1). The majority of replies emphasize learning autonomy in promoting lifelong learning, career preparation, and academic improvement, while an equal number emphasize the importance of internal motivation. Less frequently, participants identify skill improvement in problem-solving, time management, and self-reflection, or simply its practical use. The comments demonstrate a balanced appreciation of learning autonomy’s benefits for both personal and intellectual development. Personal growth and intrinsic motivation appear equally significant, implying that participants regard autonomy as both a means to an end (achievements, skills) and an end in itself (motivation, self-reliance). The lower number of mentions of skills and usefulness may imply that these are viewed as secondary aims, or that respondents believe they are implicit within greater developmental goals. This distribution represents Bhardwaj et al. (2025) claim that learner autonomy promotes not only immediate academic achievement, but also deeper psychological preparation for lifelong learning. The emphasis on intrinsic motivation is consistent with the idea that autonomy grows when students take responsibility for their goals, resources, and techniques. At the same time, recognizing skill development is related to the idea that autonomy includes both cognitive and meta-cognitive progress. Overall, Table 2 indicates that participants value learner autonomy for its simultaneous contribution to self-directed engagement and long-term personal potential, even though practical skill gains are noted less frequently. This balance indicates the necessity for autonomy-supportive behaviors that foster both mindset and skill set.

Table 3. To the extent you believe in these values

Theme and frequency	Excerpts from the interviews
Teacher plays a key role (N=5)	“Teachers' personal charm and professional knowledge have a certain influence on students' independent learning.” (D1) “Teachers' beliefs have a vital impact on learners' autonomy and can be said to play a key role.” (D2) “The core lies in the teaching level of teachers and the internal motivation of learners.” (D3) “Teachers can influence learners' autonomy to a great extent.” (T2) “Teachers' beliefs can be a catalyst for the development of student autonomy.” (T3)

*P=President; D=Dean; T=Teacher

Table 3 shows a single dominant theme: teachers have an important role (N = 5) in promoting learner autonomy. Respondents emphasize the importance of teachers' personalities, professional experience, and views, as well as the relationship between outstanding teaching and student motivation. The unanimity of this issue demonstrates that respondents believe the teacher's role is critical in molding how students perceive and act on autonomy. The variety of passages, from personal charm to trigger, shows that both relational and instructive qualities are important. The emphasis on shared responsibility implies that autonomy is co-constructed by the teacher and the learner rather than being solely self-initiated. This is consistent with Ludwig and Tassinari (2023) notion that autonomy is socially mediated; teachers model behavior, establish expectations, and create situations that foster or limit self-direction. In this view, the teacher's duty goes beyond simply imparting knowledge to actively developing the learner's ability to self-regulate and self-motivate. Table 3 underscores the idea that teacher influence is critical in instilling autonomy ideals, and that educators must actively include these values into their teaching techniques to develop long-term learner freedom.

RO 2: To examine the approaches to promoting learner autonomy among college EFL students using digital technology.

Table 4. Network convenience can be used to promote learner autonomy

Theme and frequency	Excerpts from the interviews
Intelligent Tools and Apps (N=3)	“Recommend students to use some intelligent English learning software.” (D2) “Various teaching apps.” (D1) “The development of various learning apps and artificial intelligence has a very good promoting effect on autonomous learning.” (P3)
Flexible Time and Place (N=2)	“You can use fragmented time to learn knowledge.” (P1) “The Internet makes learning time and place unlimited.” (T3)
Engaging Content (N=3)	Teachers Multimedia “Teachers use the Internet to share learning resources.” (D3) “Can recommend relevant good learning websites for students to study.” (T1) “Using vivid and interesting videos or materials to replace boring, pure text materials.” (T2)

*P=President; D=Dean; T=Teacher

Table 4 identifies three themes: intelligent tools and apps (N=3), engaging multimedia content (N=3), and flexible time and place (N=2). These represent the technological, motivational, and logistical benefits of network-enabled learning. Participants see network convenience as a complex driver of autonomy. Intelligent tools and apps personalize learning, provide adaptive feedback, and allow for targeted practice, making it more efficient and relevant. Engaging multimedia content, including movies, interactive resources, and curated websites, helps to keep learners interested while reducing the monotony sometimes associated with traditional

materials. Flexibility in time and place removes limits, allowing students to incorporate study into their daily routines, make good use of brief "fragmented" periods of time, and access resources at any time. These characteristics work together to expand learning outside the classroom and promote continual engagement. The same convenience, however, might lead to passive consumption if students are not taught how to use these resources efficiently. Without self-discipline and intelligent application, the potential for network convenience may be underutilized. This represents Lai (2022) believe that technology promotes autonomy when students actively control how and when they use resources. It provides opportunity and access, but its full potential is realized only when combined with self-regulation and goal-oriented use. Table 4 shows that network convenience increases both the capacity and attraction of autonomous learning, but its ultimate usefulness is dependent on learners' ability to use it wisely.

Table 5. Promote learner autonomy in class

Theme and frequency	Excerpts from the interviews
Interactive Activities (N=3)	"Classroom interaction." (D1) "Design group interactive activities." (D3) "Cultivate the ability of independent learning through some reward mechanisms, group activities." (T2)
Goal Setting (N=2)	"To cultivate students' self-planning ability." (D2) "Set goals and guide students to work towards them." (P3)
Flipped Learning (N=2)	"Arrange pre-study tasks in advance and report and present in class." (D3) "I will conduct a flipped classroom" (T1)
Self-Questioning (N=2)	"Students ask questions themselves." (P1) "Encourage students to think by asking questions." (T2)

*P=President; D=Dean; T=Teacher

Table 5 presents four themes: interactive activities (N = 3), goal setting (N = 2), flipped learning (N = 2), and self-questioning (N = 2). These strategies combine collaboration, planning, preparation, and reflection. Interactive activities dominate the responses, indicating that teachers value participation and peer-to-peer learning as approaches to promote autonomy. These exercises encourage students to participate actively, exchange ideas, and share responsibility for chores. Goal setting emerges as an important tool for assisting students in planning their learning path, providing a feeling of direction. Flipped learning places the duty for initial information acquisition on students before class, allowing for deeper participation during lesson time. Self-questioning fosters critical thinking skills, allowing students to evaluate their comprehension and discover areas for development. The multiplicity of techniques implies that teachers employ numerous entrance points to incorporate autonomy into their classroom practices. However, in order to effectively execute these tactics, structure and flexibility must be balanced, ensuring that pupils receive enough guidance to thrive without becoming dependent. These activities are consistent with Paethrangsi et al. (2024) belief that autonomy grows through active engagement, self-reflection, and the gradual transition of responsibility from instructor to student. Teachers prepare students to make informed learning decisions by encouraging teamwork as well as autonomous thinking. Table 5 demonstrates that classroom-based autonomy promotion is most effective when interactive, reflective, and preparation tactics are used to provide a supportive yet challenging learning environment.

Table 6. Promote learner autonomy out of class and as extra-curricular activity

Theme and frequency	Excerpts from the interviews
Assignment of Tasks / Homework (N=7)	"Arrange learning tasks in advance through the Internet." (D1) "Assign homework." (D3) "By assigning tasks." (P1) "Assign homework." (T1) "after-class tasks." (T2)

	“Assign learning tasks.” (T3) “Assign open coursework.” (P2)
Extracurricular Activities (N=3)	“Establish an English learning club.” (D2) “Encourage participation in English speech contests, adding English subtitles to short videos, etc.” (P3)

*P=President; D=Dean; T=Teacher

Table 6 illustrates two themes: task/homework assignment (N=7) and extracurricular activities (N=3). Most solutions require structured work prescribed by teachers, with few encouraging voluntary or interest-driven participation. The predominant emphasis on task assignment implies that out-of-class autonomy promotion frequently resembles classroom structure, including teacher-directed activities. These include homework, after-class activities, and open coursework, which are frequently assisted by online platforms. While such projects promote learning continuity and interest, they may not necessarily foster genuine self-direction because students continue to respond to external stimuli. Extracurricular activities, such as English clubs, speech contests, and creative projects, provide more opportunity for students to take initiative. These exercises can improve motivation, social engagement, and skill application in real-world settings. The contrast between the high frequency of given tasks and the decreased emphasis on voluntary participation implies a need to encourage students to pick, develop, and lead their own educational experiences. Hass et al. (2021) believe autonomy thrives when students have both structured direction and the freedom to pursue their own interests. A excessive dependence on teacher-directed tasks may impede the development of initiative, whereas a mix of structured and self-initiated activities provides a more balanced approach. Table 6 emphasizes the importance of incorporating more voluntary, interest-driven opportunities alongside assigned work to improve students' abilities to manage their own education.

DISCUSSION

The findings of this study reveal a complex picture of college EFL students' readiness for autonomous learning in the digital age in Fujian Province, China. Consistent with RO1, the data suggest a dual orientation toward digital autonomy. While some learners demonstrate enthusiasm, resourcefulness, and goal-oriented behaviors, others show dependency on translation software and AI tools, reflecting insufficient intrinsic motivation and weaker linguistic foundations. This polarity indicates that the digital environment functions both as an enabler and a crutch. Its abundant resources can empower motivated learners but also risk fostering passive reliance among less prepared students.

In terms of perceived values (Table 2), educators emphasized autonomy's role in personal development and intrinsic motivation, positioning autonomy as both a means of skill acquisition and a pathway to lifelong learning. This suggests that autonomy is valued not only for immediate academic outcomes but also for long-term personal growth. Nevertheless, the relatively limited focus on specific skills such as time management or self-reflection indicates a need for explicit cultivation of these competencies in educational practice. Moreover, beliefs about the role of teachers (Table 3) reveal a strong consensus that teacher influence is indispensable in fostering autonomy. Autonomy is thus framed not as an isolated learner quality but as a co-constructed process mediated by teacher guidance, modeling, and relational engagement. With respect to RO2, the findings further demonstrate how digital tools and pedagogical strategies intersect to promote autonomy. On the technological side (Table 6), participants valued intelligent apps, engaging multimedia, and flexibility of access. These convenience enhance efficiency, motivation, and continuity of learning, though they may encourage superficial engagement without self-regulation. In classroom contexts (Table 5), interactive activities, goal-setting, flipped learning, and self-questioning emerged as core approaches, underscoring the role of structured participation and reflective practice in nurturing autonomy. Out-of-class strategies (Table 6) relied heavily on teacher-assigned tasks, ensuring continuity but limiting student initiative. While extracurricular activities offered opportunities for genuine self-direction, their lower frequency suggests an underutilized potential for fostering ownership of learning.

In sum, these findings reveal that while digital technology provides infrastructure and opportunity for autonomous learning, its success depends on the interplay of learner readiness, intrinsic motivation, and pedagogical mediation. Effective autonomy promotion requires balancing structured support with opportunities for voluntary, self-initiated engagement, enabling students to transition from dependence to independence in their learning practices.

CONCLUSION

This study investigated Chinese college students' readiness for autonomous English learning in a digital environment (RO1) and the approaches to promoting learner autonomy using digital technology (RO2). The results indicate that students demonstrate uneven readiness: while some embrace digital autonomy with enthusiasm and goal orientation, others rely excessively on technological shortcuts, reflecting a lack of intrinsic motivation and meta-cognitive skills. Learner autonomy is valued primarily for its contribution to personal development and intrinsic motivation, though the role of teachers remains central in guiding and shaping students' readiness.

The approaches to fostering autonomy combine digital convenience and pedagogical strategies. Intelligent apps, multimedia resources, and flexibility of access extend learning opportunities beyond the classroom, but effective use depends on learners' ability to self-regulate. Classroom practices, including interactive activities and reflective strategies, provide structured pathways to independence, while out-of-class practices remain dominated by teacher-directed tasks, limiting genuine self-direction.

Overall, the findings underscore that digital technology alone does not guarantee learner autonomy. Rather, it must be coupled with targeted pedagogical support that cultivates self-regulation, resilience, and voluntary engagement. For practitioners, this implies the importance of designing differentiated strategies that account for varying levels of learner readiness, balancing structure with freedom, and creating opportunities for both guided and independent learning.

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