

English-Learning Mobile Apps for Business Students: A Case Study from Vietnam

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Abstract

The purpose of this research is to draw attention to the difficulties students had when using English learning apps and to give recommendations to English learning app creators on how to improve their products or tailor them to the demands of business students or employees. The apps are evaluated using a Likert-scale questionnaire that Rosell-Aguilar (2017) presented. It includes four criteria: material, methodology, technology, and user experience. Cronbach's alpha is used by the researcher to assess the scale's reliability, internal reliability is assessed using EFA analysis, and the study themes are covered by descriptive analysis. Focus group interviews were conducted to gain deeper insight into the factors influencing the choice of students to use these apps to learn English. The findings indicate that several apps are quite helpful for undergraduate students, but materials and methodology should get more focus because their level of satisfaction is the lowest. The results from qualitative data confirmed that factors such as motivation, engagement, flexibility, and user experience are critical in influencing students' choice to use mobile English learning apps.

Keywords: English-learning apps, difficulties, professional English, improvement, self-study.

Introduction

Since the COVID-19 pandemic, Industry 4.0 has gained attention (Clarke-Potter, 2020) and has impacted a wide range of industries on a more global scale than before, including education, which is necessary to develop an inventive, creative, and competitive generation (Lase, 2019). The old offline paradigm of education in Vietnam is being swiftly replaced by online teaching and learning under pressure. The impacted parties include teachers as well as students of all ages. According to UNICEF, students have experienced problems with time management, a lack of technological equipment, disruptions in internet or energy service, and most importantly, they are unable to get true, permanent knowledge (UNICEF Annual Report 2021, 2022). Undergraduates, who are gathering a significant quantity of professional information and abilities, have been negatively impacted by these. In response to this issue, many people have decided to attend more webinars or study from various websites that provide online courses, such as Coursera and MasterClass. Additionally, some individuals choose to learn by utilizing mobile applications to fulfill the demand in the labor market. Several studies suggest that mobile devices might give undergraduates additional learning opportunities (Shonola et al., 2016, Lekawael, 2017). EFL students in Vietnam have employed a number of technologies, primarily electronic dictionaries and smartphone apps for English self-study. Many studies have been conducted to delve deeper into this subject. Mobile learning's capacity to offer students a learning strategy that is "just in time, exactly right, just suitable for me" is one of its main characteristics, according to Kristine Peters (2007). Wang (2021) concludes that using cellphones and educational apps can make studying English more successful. Employers frequently look for candidates who can utilize English well, especially in Vietnam. Almost 95% of employers in several non-native English-speaking nations want their candidates to be skilled in English, according to study data on language skills in the workplace from 2016. According to a 2018 Navigos

Group poll, approximately 40% of applicants who do not speak proficient English receive salaries of less than 10 million VND (~450 USD), compared to up to 60% of those who are proficient in English. This indicates that businesses prioritize hiring workers who are fluent in a foreign language and are ready to pay them more. The Department of Higher Education in Vietnam in 2015 indicated that 49.3% of students and graduates had the necessary English proficiency, 18.9% had failed, and 31.8% required more training (Hoa & Tuyet, 2016). This indicates that a majority of recent graduates do not achieve the English proficiency standards set by businesses, contributing to a high unemployment rate.

Vietnam's rapidly globalizing economy and the increasing interaction with international markets necessitate a workforce proficient in multiple languages, particularly English, which is often considered the lingua franca of global business. English proficiency within the region is becoming a key factor in the employability of graduates and their potential to contribute effectively in multinational environments (British Council, 2015). Furthermore, Vietnam's educational policy initiatives, such as the National Foreign Language 2020 Project, aim to improve language competencies across the population, emphasizing the importance of multilingualism in the country's strategic development goals (Nguyen, 2019).

Many EFL students who want to improve their English have chosen English learning applications like Duolingo, ELSA, Cake, and others over paying for online lessons from an English learning center since they are more convenient and affordable. These English-learning applications have been the subject of extensive investigation. For instance, according to Sanda and Klimova (2021), Duolingo is simple to use and appropriate for all levels of learners, while SpeakingPal is said to have a variety of topics, built-in pronunciation technology features, exercises, and a "to-the-point" teaching process that encourages learners' listening skills. These studies suggest that despite their drawbacks, English learning apps help users' English competence. The studies do not, however, concentrate on whether or not they may enhance English competence in a professional environment. This research was conducted to examine users' perspectives in order to improve English learning apps and meet the needs of students who already work at the company, plan to work there, or are in a multilingual environment.

Therefore, the research objectives are:

- To identify the pros and cons of English-learning apps from the perspectives of Vietnamese EFL business students
- To offer recommendations for app developers on how to enhance their apps to meet the needs of business undergraduates

The research questions are:

1. What are Vietnamese EFL business students' opinions when using English-learning mobile applications?
2. What are the influencing factors for EFL business students in choosing an English-learning mobile app?
3. Are English-learning apps beneficial for their study and their future work in a multilingual environment?
4. What are some problems when using-English-learning mobile apps?
5. How mobile applications such as Elsa Talk, Duolingo, could be made better to fit the requirements of Vietnamese EFL business students?

Literature Review

The proliferation of mobile-assisted language learning (MALL) has introduced a variety of tools that are reshaping educational paradigms, particularly for language acquisition. Research has consistently highlighted the benefits of mobile apps in enhancing language learning through increased accessibility and user engagement (Godwin-Jones, 2011; Stockwell, 2013). These tools offer learners the flexibility to engage with language learning materials anytime and anywhere, potentially increasing learning opportunities outside the traditional classroom (Kukulska-Hulme, 2012). While the general effectiveness of mobile learning apps is well-documented, the literature reveals significant gaps in our understanding of their specific efficacy in professional contexts. Most studies focus on general language acquisition and do not address the nuanced needs of business students or professionals who require specialized vocabulary and communication skills (Loewen et al., 2019). Moreover, there is limited research exploring the effectiveness of these apps in multilingual environments like Vietnam, where English is increasingly crucial in the business sector but not the first language for many learners.

This study is anchored in the communicative approach to language learning, which emphasizes the importance of context in language education and the ability of learners to communicate effectively in real-world settings (Canale & Swain, 1980). Mobile apps, with their capacity to simulate such environments through interactive tasks and real-time feedback, could theoretically enhance this communicative competence. However, empirical evidence is needed to confirm whether these theoretical benefits translate into practical outcomes, especially in professional settings. The lack of focused studies on the application of English learning mobile apps in professional settings, particularly among business students in a non-native English-speaking country, underscores a critical research gap. Investigating this gap is vital as it can provide insights into how mobile apps can be tailored to better meet the needs of this demographic, potentially affecting their career prospects and professional development. Furthermore, exploring this area could contribute significantly to the design and development of next-generation educational technologies that are specifically optimized for professional and multilingual learning environments. This research seeks to map the intersection of mobile learning and professional English education, aiming to articulate a nuanced understanding of how mobile applications can be optimized for business students in Vietnam. By focusing on this intersection, the study intends to offer significant contributions to both the fields of educational technology and business English, providing a foundation for future innovations in language learning.

Application

An application, often known as an app, is a piece of software created to assist users in carrying out particular activities. It is used and developed in many different contexts. Desktop apps are those used on laptops or PCs, whilst mobile applications are those used on smartphones (*Computer Basics: Understanding Applications*, n.d.). To assess the semantic meaning of mobile applications, Xin Li, Ya-hong Lian, and Hong Yu (2016) grouped them into one or more groups based on predefined criteria. A categorical tree with each branch denoting a specific application category is known as an app classification tree. They only use seven parallel categories—gaming, social media, business, education, navigation, photography, and health—during their follow-up investigations.

There have been mobile applications for a while. The development of apps has changed how technology is used. According to data produced by Statista.com (Ceci, 2021), as of the first quarter of 2021, Android users have access to 3.48 million apps in the Google

Play App store, making it the application store with the largest selection. The Apple App Store is the second-largest software store, with approximately 2.22 million iOS apps available. Nonetheless, while rising quickly, it is anticipated that these numbers would still fall short of meeting all human requirements. There is a sizable selection of iOS and Android apps that support learning foreign or second languages (Godwin-Jones, 2011). Although the apps' goals, approaches to teaching, and designs vary, they all aim to support individual learners with reading, writing, speaking, listening, and/or vocabulary development through a sequence of audio-visual lessons (Chik, 2014). To strengthen the argument for the effectiveness of mobile apps in language learning, recent studies provide compelling evidence supporting their benefits. For instance, research by Kukulska-Hulme and Shield (2008) demonstrates that mobile apps can enhance language learning through interactive and personalized content, leading to improved engagement and retention rates (Kukulska-Hulme & Shield, 2008). Further, a meta-analysis by Sung, Chang, and Liu (2016) confirms that mobile-assisted language learning significantly improves students' oral skills and vocabulary acquisition compared to traditional learning methods (Sung, Chang, & Liu, 2016). These findings are consistent with Godwin-Jones (2011), who emphasizes the flexibility and accessibility of mobile learning, allowing students to learn at their own pace and in varied contexts, thereby enhancing their practical language skills in real-world settings (Godwin-Jones, 2011). Collectively, these studies underscore the transformative potential of mobile apps in facilitating more effective and engaging language learning experiences.

MALL & Students' perceptions towards MALL

According to Fouz-González (2020); Loewen et al., (2019), mobile-assisted language learning (MALL) is the process of learning a second language or a foreign language with the use of portable devices with wireless connectivity. Smart phones have surpassed other mobile technology carriers in popularity and have given users new opportunities to learn foreign languages because of their portability, affordable price, and variety of features (Wang & Smith, 2013). For those learning English, a variety of mobile applications have been created, including podcasts, mobile dictionaries, and AR or VR simulations.

The four language skills—reading, listening, speaking, and writing—as well as grammar, and vocabulary, were the main focus of earlier research on the potential of MALL (Lan et al. 2007, Rueckert, Kiser, & Cho, 2012; Ganapathy, Shuib, & Azizan, 2016). Few studies have looked at the reasons underlying the opinions of learners of utilizing mobile apps, and there hasn't been much study on this topic either. In the MALL sector, several studies have examined students' attitudes towards utilizing mobile devices for language learning and have produced useful findings; however, less research has examined students' perceptions of MALL in the literature (Abedalla, 2015). The five standards for foreign language learning (Five Cs: Communication, Cultures, Connections, Comparisons, Communities) (National Standards in Foreign Language Education Project, 2013) served as the theoretical framework for Abedalla's (2015) measurement of students' perceptions of using mobile phones and iPads in learning Arabic. In a different study, Kim et al. (2013) examined 53 TESOL students using a pre- and post-study survey, gathered student reflections on class projects, and discovered that students were more eager and self-assured to participate in activities involving mobile phones than those involving computers. While Kim et al. (2013) and Abedalla (2015) both focused on students' perspectives on utilizing mobile applications for language learning, there are still some unanswered concerns.

The theoretical basis for this study was supplied by Abedalla (2015), although the results of the study on Arabic students might not be transferable to the English as a Foreign Language (EFL) setting. Furthermore, while Kim et al. (2013) provided some insights into

how students utilize mobile devices, the reasons for students' impressions of mobile applications were not addressed.

Language Learning

"Lexical knowledge is crucial to communicative ability and the learning of a second language," says Schmitt (2000). According to Alqahtani (2015), vocabulary is the total amount of words needed to convey the speaker's views. The author also concludes that mastering a language's vocabulary is crucial and that it should be regarded as one of the language's fundamental elements. Language competency, which is built based on their interests, requirements, and motivation, also includes mastering a broad vocabulary.

The author also highlights the significance of four linguistic abilities as prerequisites for learning any language. It is important to make a distinction between hearing and listening before getting into the specifics. Listening is a talent, whereas hearing is a physical capacity. One may grasp and make sense of what another person is saying with the use of good listening skills. To be more specific, listening enables people to understand what someone is saying. As listening is a passive talent, the listener doesn't have to do anything to hear something since the sound will come into his or her ears naturally. For people to sustain successful communication in both everyday situations and academic settings, listening is essential (Yildirim & Yildirim, 2016).

According to Abdalgane (2020), "language is a component of culture and culture is a part of the language," language and culture are intertwined. According to Kim's research (2020), more multilingual individuals can communicate with others successfully since they have absorbed culture through language and vice versa. Countries that speak the same language will use it differently due to cultural differences in vocabulary, grammar, pronunciation, and intonation. Moreover, it broadens the linguistic spectrum. Languages vary significantly between geographies and within regions between social groups. The distinctions include those in pronunciation, vocabulary, and syntax (Zan, 2011). The learner's experience will be enhanced by knowing about the culture, and they will pick up the language more quickly (William, 2020).

Learning Material

In the process of learning a language, materials are crucial. Ajoke (2017) asserts that the materials make learning more interesting, useful, realistic, and attractive. Also, according to Abolade (2009), instructional materials help students pay attention to and grow interested in what they are studying.

According to Kochhar's study from 2012, teachers must discover additional instructional tools to augment what is offered in textbooks to widen concepts and pique students' interest in the topic. Oso (2011) concurred that the ideal method for instructors to use their manipulative abilities is to improvise to at least partially fulfill their educational objectives. The applications in this scenario act as teachers.

Methodology

The many techniques used to impart information and understanding through lesson planning by teachers to aid students in achieving learning objectives are known as pedagogies. The ultimate objective is to determine how the resources may support learning and the degree to which their use aligns with reliable learning theories (Kervin & Derewianka, 2011). A set of abilities similar to those found in classroom instructions are

included in the technique for teaching English in the setting of an app (vocabulary, grammar, speaking, listening, writing, and reading).

Vocabulary and Grammar

Schmitt (2000) highlights the importance of learning a second language and the connection between lexical knowledge and communicative competence, arguing that learning vocabulary is the foundation of one's ability to speak. According to how it is utilized, vocabulary is divided into two categories: Active Vocabulary (spontaneously picked up words) and Passive Vocabulary (easier, frequently used). In terms of rules and abstract knowledge, grammar is seen as both. Any educational program for adults or in schools must include grammar teaching. Speaking or writing with incorrect grammar causes words to lose a lot of their meaning and value. The Grammar Translation Method (GTM), which has been the primary technique of Second Language Acquisition (SLA) for more than two millennia, is the conventional approach to learning grammar. Recent research, however, has shown that this approach is detrimental to the acquisition of grammar. According to (Ölçer, 2018), GTM is a waste of time when it comes to teaching and learning languages since it lessens student autonomy and the desire to study. As an alternative, the direct technique was created since it sparks attention and passion.

Listening and Speaking skills

Understanding what we hear is a conscious, purposeful effort called listening (Helgesen, 2003). It has a startling influence on both input and output, making it a critical ability for learning a new language. The quality of a hearing text is influenced by a variety of factors, but it may typically be divided into two categories: content and delivery. Three stages—pre-listening, while-listening, and post-listening—are provided for understanding the substance of a discussion (Ekrem, 2016). To help students better understand the discourse, the subject should be given at the pre-listening phase so they can speculate and come up with ideas. Participants would act out while hearing or shortly after throughout the while-listening phases because they are inextricably related to the listening information. The technique should also be appropriate for teaching purposes. Post-listening is a stage that involves evaluation and conclusion-making. Many techniques, such as audio segments (podcasts, audio messages, radio), video segments (documentaries, news, interviews), and other formats have been utilized to strengthen these abilities, although some of them are old and do not apply to the 4.0 industry. In an effort to increase awareness, the focus has shifted to comprehending specifics and the substance of communications with a communicative objective and learner-centered foundation. According to Richards (2006), learning materials should be authentic and comprehensive, and students should advance in their own learning. After all, listening is undoubtedly a laborious process rather than a finished good (Vandergrift, 2007).

Trent (2009) noted that a student's lack of confidence and anxiety about making errors should be taken into account when evaluating their oral communication abilities. The ability to participate in a range of intercultural activities should be provided to students, as suggested by Talley and Hui-ling (2014). It is possible to grab pupils' interest when they learn about unfamiliar cultural traits or consider their own ideologies from the viewpoint of a foreigner. Three communicative activities—discussing, problem-solving, and role-playing—have an effect on people's ability to engage, according to Oradee's (2012) research.

Reading and Writing skills

Reading is a crucial, essential way to learn new things when learning a language. Reading comprehension texts requires a variety of hidden talents, including metacognition, vocabulary background, and reading strategies, according to Garca-Madruga et al. (2013). With repetition, literacy abilities may be strengthened. A student must come across the "Four Resources Model" to become a skilled reader (Luke & Freebody, 1999). Knowing how to decipher paragraph codes, make literal and metaphorical meanings of texts, and recognize the occasions when, how, and why reading and writing actions fulfill social and cultural functions. Texts should be transformed and critically dissociated.

Reading and writing are related, with writing residing within the three abilities of speaking, listening, and reading, respectively. To mirror the writing processes inherent in writing in one's native language and enable learners to express themselves more effectively as individuals, process writing (Fowler, 1989) was developed. Learners investigate and combine their materials in a succinct piece of writing by employing cognitive skills. The most effective teaching strategy is Process writing, which aims to balance reading and writing abilities while also fostering writing skills (Zampardo, 2008).

Technology

Goods in general, and mobile applications in particular, are created to satisfy customers. Also, incorporating technology into the design of an application is essential since it affects the development and success of the technology. It's crucial to consider how technology and user expectations interact. In other words, technological development based on client needs is essential to an application. Due to the usefulness and affordability of the app for students, more research is being done to create applications to meet student needs. Technology has been utilized as a teaching tool in several studies to help students learn more about a variety of disciplines, according to researchers (Brush & Saye, 2000; Oliver and Lee, 2011.)

Students of all ages and educational backgrounds have found mobile technology to be appealing (Domingo & Garganté, 2016). While creating an application, some factors are more crucial than others. Interface, Notification, Gamification, and Stability are just a few. One of the most crucial parts of the program is its interface, and designers are always looking for ways to improve it. Users Interface design, often known as user interface design (UI design), is the aesthetic design of the visual elements of a digital product's user interface, particularly the product's presentation and interactivity (Wang & Li, 2021).

According to Goldfarb and Kondratova's (2005) study, an innovative technique for creating user interfaces is to employ a visual interface design tool they recommend in order to meet the inherent need for a client-centered design approach in the creation of educational software. The client-centered design approach, they claimed, would be best for creating visual user interfaces (UIs) for instructional multimedia products. Yet, it is usually difficult for developers and researchers to put this idea into effect. When it comes to interface design, there are times when designers struggle to completely understand the behavior of their users, according to Stockinger et al. (2014).

Notifications are a feature of educational applications' technology since learning occasionally needs reminders. A user gets informed when fresh information is available using a smartphone notification. Examples of material types that can be transmitted via smartphone alerts include texts, SMSs, calls, and mail services. For consumers to be made aware that they have received a notification, smartphones provide a range of techniques, including a status bar, LED indication, screen pop-up, vibration, sound, or a combination of these (Yoon

et al., 2014). But, not everyone finds them appealing. Some are even "opt-out," which means that they are turned on by default and require user input to turn off. The problem is that allowing a lot of notification services often messes up people's work flow and makes them distracted (Stockinger et al., 2014). Yoon et al. concluded that many smartphone users are agitated because they are continually barraged with alerts in a study article on stress management brought on by the Messenger program on a smartphone.

The element that makes gamification engaging and fascinating for app users. The phrase "using game elements to non-game activities to modify the user's behavior of an application" is a better definition of gamification. Keeping track of the points earned through various application actions raises user engagement (Law et al., 2009). The research report by Kim et al. (2015) demonstrates the benefits of gamification in a variety of fields, including education. Playing educationally oriented serious games might keep students' attention. A similar idea was shared by Miangah and Nezarat (2012) in their work, who suggested that mobile learning games might be used to teach second language skills including vocabulary, pronunciation, grammar, listening and reading comprehension, and spelling. Since they are so common, affordable, and wireless, cell phones are the ideal learning platform.

Stability, or how dependable your app is, is one of the most challenging barriers to app trust. The capacity of an app to act appropriately is referred to as stability. Crashes and app stability are typically related. Although it is evident that there are major issues when an app fails, a single incident does not always mean that the software is unstable (Mansour, 2021). Mansour thought that delivering a consistent and flawless experience to your users might not be enough to guarantee success. On the other hand, a faulty app will almost surely fail.

User experience

User experience (UX) refers to a person's reactions and perceptions concerning the usage of an app, service, or product, and it comprises the outcomes of both anticipated and current use (Law et al., 2009). Peter Morville's invention, the UX Honeycomb, breaks down the principles of user experience and offers a framework for anybody building a website or app and advertising their services to people.

In-app advertising is another significant issue connected to user experience, in addition to the elements mentioned above. One kind of advertisement that occurs inside mobile apps is in-app advertising. Advertising in applications has been a big source of income for many companies. Yet, Freer (2023) revealed that over half of consumers had removed applications because of upsetting mobile adverts, causing a major decline in app usage. Developers might then come up with an incentive scheme to lessen customers' dislike of adverts. Also, the frequency of the advertising should be adjusted to what app users find tolerable.

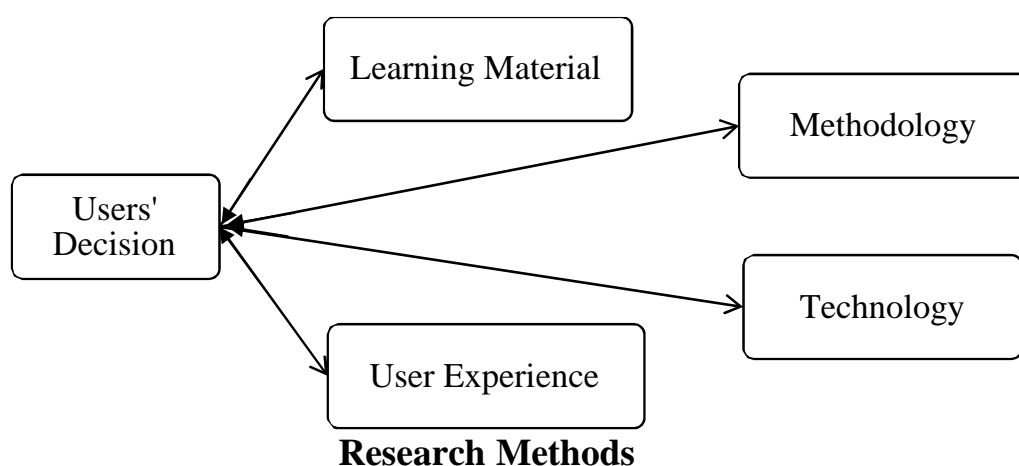
TAM and the Research Model

The Technology Acceptance Model (TAM), initially proposed by Davis in 1989, has been extensively used to predict and explain user acceptance of technology-based solutions. It focuses on two primary predictors: perceived usefulness and perceived ease of use. In the context of English language learning applications, the TAM has been adapted to assess specific factors that influence learners' acceptance and effective use of these technologies. According to earlier research that modified TAM to fit the educational technology context, the following model for evaluating an English learning app must include four critical elements to ensure a comprehensive assessment. Firstly, Perceived Usefulness remains a cornerstone, where users must believe that the app will enhance their language learning

outcomes. Literature indicates that the perceived improvement in language skills directly correlates with increased usage intention (Venkatesh & Bala, 2008). Secondly, Perceived Ease of Use is crucial; a user-friendly app encourages repeated engagement, as confirmed by Park (2009), who found a positive relationship between ease of use and students' attitudes towards using technology for learning. Thirdly, Attitude towards using the technology, which reflects a learner's overall affective reaction to using the app, should be included as it mediates the relationship between perceived usefulness and the intention to use (Davis, Bagozzi, & Warshaw, 1992). Finally, actual usage, the extent to which students actively engage with the app, needs to be measured to evaluate the real-world application of the theoretical model (Taylor & Todd, 1995).

According to earlier research that modified TAM and the goals of this study, the research model for evaluating an English learning app must comprise four elements shown in Figure 1:

Figure 1
Research Model



Research Design

This study employed a mixed-methods approach to provide a comprehensive analysis of the effectiveness of mobile English learning apps for business students. Quantitative data were collected through a structured questionnaire, while qualitative insights were derived from semi-structured focus group interviews. This design allowed for a robust triangulation of data, enhancing the validity and depth of the findings.

Sampling Method

The study targeted four batches of students (from the years 2018 to 2021), with efforts made to include at least ten participants from each batch to ensure generational diversity in mobile app usage and learning preferences. The sampling method was purposive, focusing on students who had previously or were currently using any of the targeted English learning apps. This approach ensured that the feedback and data collected were based on actual user experiences, thereby increasing the reliability of the study results. The selection process was meticulously structured to include a diverse range of English proficiency levels, usage frequency of mobile apps, and academic backgrounds. Potential participants were invited via university email and social media platforms, where they were provided with a detailed information sheet about the study's scope and ethical considerations. Informed consent was

obtained from all participants, ensuring transparency and voluntary participation. The selection aimed to achieve a representative sample of the student population concerned with enhancing their professional English skills through mobile apps.

Research subjects

The research subjects are applications for learning English, which were divided into three categories by Rosell-Aguilar (2017): those intended for language learning, dictionaries, and translators, and those not intended for language learning but helpful. This study concentrates on applications from the first group in this study. As of June 2021, the most widely used mobile language-learning programs in Vietnam are Duolingo, Cake, Elsa Speak, and Busuu (Statista, 2021).

Research population and participants

The research was conducted at the University of Economics Ho Chi Minh City (UEH), a well-established and prestigious business university located in the southern region of Vietnam. The study targeted undergraduate business students from UEH, specifically those enrolled in batches 45 to 48, covering academic intakes from 2018 to 2021. A purposive sampling technique was utilized to select participants who were most likely to have substantial experiences with English learning mobile apps, thus ensuring the data collected were pertinent and rich in detail. The recruitment process involved distributing informed consent forms through various Facebook Groups—dynamic community spaces where students and teachers exchange information about academic and extracurricular activities and support each other's educational journeys. This approach facilitated the participation of 246 volunteers who provided diverse insights into the evolving technologies and pedagogical approaches of mobile apps over the specified periods.

Research instruments

For the quantitative data, an English-Vietnamese questionnaire comprising 23 statements and a Likert 5-point scale was provided for the participants to complete. Each statement was accompanied by a five-point Likert scale, which participants used to select their opinions by checking only one cell in the concept columns. The questionnaire's items are adapted from Rosell-Aguilar (2017), albeit the observed factors in the scale have been changed. The reliability of the scale is assessed using Cronbach's Alpha, its internal reliability is examined using EFA analysis, and the filtered data is further examined using the descriptive analysis approach. The research measurement items in the questionnaire can be found in Appendix A.

To get the qualitative data, a set of questions for the focus group interview was developed based on the objectives of the research and the results from the quantitative data analysis. The interview questions were compiled following the research framework to dig deeper into the participants' perspectives towards the English-learning apps they chose to use. All the questions later were sent to three experts in the field of English Language Studies to check for validity. They were all good and closely followed the research's objectives and were kept unchanged. For the focus group interviews, participants were further selected based on their detailed responses to the initial questionnaire and their expressed willingness to engage in deeper discussion. The criteria for selection included diversity in terms of app usage frequency, proficiency levels, and specific needs or interests in English language

improvement for professional purposes. This stratified approach ensured that the focus groups represented a wide array of user experiences, which is crucial for capturing varied insights into the app functionalities, user interface, content relevance, and learning outcomes.

Data Collection and Analysis

The process of data collection occurred in the last semester of the 2021 academic year at UEH. At that time, Vietnam was suffering greatly from the COVID-19 pandemic's disastrous consequences. This issue also served as the main reason for the implementation of quarantine laws, which mandated that everyone remained indoors. Students studied at home using Zoom, Google Meet, or Microsoft Teams when all campuses were closed. The survey questionnaire was delivered to all recruited participants via Google Forms online. This was approved by the University Research Ethics Committee of the research site. To confirm the accuracy of the replies, the researcher double-checked the data beforehand. The first part of the questionnaire, where participants were asked about their demographic data and their experience using an English-learning mobile app, was taken into account as the first screening step. The subsequent responses were automatically eliminated and not taken into consideration for data analysis if the answers to the initial questions were determined to be invalid. After the raw data from the 234 initial responders had been collected, a second data filtering was carried out. The researchers chose to discard any replies that seemed to be spam after taking into account the possible threat to the validity of responses created by utilizing Google Forms online.

After obtaining a sample of 234 respondents, we excluded 15 of them since they had little experience with English learning applications. SPSS software (version 26) was employed for exploratory factors analysis (EFA) and descriptive analysis. Duolingo is the most popular of the four applications the study team selected, having been used or being used by 85.6% of respondents. The choice of 51.7% of respondents, ELSA Talk, comes in second. The cake was used or is currently being used by 44.3% of respondents. And only 4% of respondents said they use Busuu to study English. Other programs like Drop, Mochimochi, Memrise, Rosetta Stone, Hello English, etc. are also recommended by the respondents. But, when all of them are combined, they only account for 7.5%, which is considerably less than the four aforementioned applications.

For the qualitative data, the researcher purposively sent invitations for 40 participants (10 from each Batch) to get more insightful perspectives from various experienced users; and 12 respondents agreed to join in the focus group interviews. The interviews were conducted in Vietnamese, the participant's L1, for the convenience and comfortable attitude of the interviewees. They were recorded, then translated and transcribed in English by the researcher for the thematic analysis. Not only the aforementioned 4 themes from the research framework, adapted from TAM, but the participants also mentioned the influence of English-learning apps on their future prospects in multinational environments.

Pilot Testing

A pilot test involving 25 students from the University of Economics Ho Chi Minh City was conducted to validate the survey and interview protocols, leading to refinements in questionnaire wording and adjustments in data collection procedures to enhance clarity and effectiveness.

Results and Discussions

Results from quantitative data

The quantitative analysis of the study highlighted the effectiveness of mobile English learning apps across four main factors: Learning Material, Methodology, Technology, and User Experience. Learning materials were highly rated for their quality and relevance, particularly in vocabulary and grammar suited for professional use. Methodology received positive feedback for its interactivity, though suggestions were made for incorporating more advanced learning strategies. The technology aspect was praised for intuitive design and user-friendly interfaces, despite some concerns over occasional technical issues. Lastly, user experience was generally favorable, underscored by the apps' flexibility and accessibility, although the presence of advertisements slightly detracted from the overall satisfaction. Overall, the apps were found to be effective tools for language learning, with room for enhancements in method integration and user interface optimization.

The internal co-efficiency of the scale is calculated using Cronbach's Alpha analysis on the 201 respondents that satisfy the criteria. According to Nunnally (1978), a factor is considered dependable if the Right Item - Total Correlation value is equal to or greater than 0.3. The conclusion in the table below demonstrates that every one of the provided criteria has a Cronbach Alpha value greater than 0.3. This indicates that they are trustworthy and capable of assessing EFA.

There are a few requirements for an EFA analysis to be appropriate. The KMO value must first be 0.5 – 1.0. A second requirement is that sig Bartlett's Test be less than 0.05. Thirdly, its Eigenvalue must be less than 1. The total variance explained should, at the very least, exceed 50%. The team also settles on 0.4 as the Factor Loading. (Williams et al., 2010)

The outcome indicates that the KMO value of the scale is 0.907, meeting the criteria of $0.5 \leq \text{KMO} \leq 1.0$ and that the sig. Bartlett's Test is equal to 0.000. This demonstrates that this scale is appropriate for EFA analysis. The outcome is displayed in the table below, where 15 items are being eliminated. The remaining 23 items are divided into 4 groups, which correspond to 4 factors with an Eigenvalue > 1 and account for 54.96% of the total variance.

Table 1
EFA analysis result

Item	Factors			
	1	2	3	4
LM9	0.729			
LM1	0.69			
LM8	0.601			
M4	0.59			
LM5	0.587			
LM2	0.572			
M7	0.519			
M16	0.491			
M14	0.415			

M11	0.739	
M8	0.67	
M12	0.583	
M17	0.581	
M15	0.53	
UE5		0.753
TN3		0.682
UE3		0.609
UE4		0.579
UE2		0.536
TN5		0.8
TN4		0.789
TN6		0.581
M2		0.485

Results from qualitative data

The qualitative data was collected through focus group interviews with a diverse group of students who have used mobile English learning apps such as Duolingo and Elsa. The interviews were conducted to gain deeper insights into the factors influencing students' choice to use these apps for learning English. Firstly, for “Motivation and Engagement”, a majority of the participants expressed that they were initially drawn to these apps due to their interactive and gamified nature. This finding was in line with previous studies when they claimed that gamification and other elements of the application's motivating design, such as the record-keeping feature, have a big impact on how motivated learners are in MALL (Stockwell, 2013; Loewen et al., 2019). One participant stated,

"I like how Duolingo uses rewards and achievements to keep me motivated. It feels like playing a game, and I want to reach higher levels."
(S4)

Another participant added,

"Elsa's pronunciation exercises made me feel more engaged as it felt like a real conversation partner." (S12)

Secondly, regarding “Flexibility and Convenience”, most participants appreciated the flexibility offered by mobile apps, allowing them to learn English at their own pace and schedule. One participant mentioned,

"I can use Duolingo whenever I have spare time, like during commutes. It's so convenient." (S1)

Another interviewee highlighted,

"Elsa's mobile app allowed me to practice speaking anytime and anywhere, which was crucial for improving my spoken English." (S9)

Thirdly, the overall User Experience played a significant role in the participants' preference for certain apps. One interviewee said,

"The interface and design of the app matter a lot to me. I found

Duolingo's app more intuitive and easy to navigate." (S8)

Conversely, a participant shared,

"I encountered some technical glitches with Elsa's app, which made me less likely to use it regularly." (S2)

Fourthly, while the gamified elements were praised, participants also emphasized the importance of effective learning materials. A participant stated,

"Duolingo's lessons were great for vocabulary, but I wished they had more cultural insights. Understanding cultural nuances is important for language fluency." (S6)

Another interviewee added,

"I found Elsa's pronunciation exercises helpful, but it would be even better if they provided more business-related content." (S7)

Finally, when exposed to career prospects and employability, some participants highlighted that using mobile English learning apps had a positive impact on their future career prospects. A few interviewees were currently interning at businesses, emphasized the importance of English language proficiency in today's globalized job market:

"I decided to use Duolingo because I've heard from friends that having strong English skills can open up more job opportunities, especially in multinational companies. I want to increase my chances of getting a good job after graduation." (S5)

"During my internship, I had to interact with colleagues and clients from different countries. Thanks to regularly using Duolingo, my English skills improved significantly, which made me more confident in handling international communication. It's definitely a skill that will benefit my career in the long run." (S12)

"English is the universal language in the business world. I noticed that having a good command of using English-learning apps not only helped me in writing better emails and reports but also made me stand out among other interns. It's like a prerequisite for a successful career in marketing." (S11)

Learning material

After running the EFA analysis, 9 items are included in the Learning Material factor, respectively LM9, LM1, LM8, LM2, LM5, M4, M7, M14, and M16.

Table 2

Descriptive Analysis of Learning Material

Item	Mean	SD
LM9 The application teaches a variety of English (American English, British English, etc.)	3.92	0.805
LM1 The application provides many listening materials with a variety of subjects related to the workplace	3.89	0.672
LM8 The application offers knowledge about the customs and traditions of countries using English as a significant language	3.78	0.821
LM2 The application provides many speaking materials with a variety of subjects related to the workplace	4.02	0.731

LM5	The application provides a vocabulary that is widely used in workplace	3.95	0.709
M4	The app helps you know various meanings of a word	3.9502	0.7124
M7	The app helps you to identify the structure of a sentence	3.8159	0.72177
M14	The app helps you to fully understand what others are saying	3.9453	0.71553
M16	The app helps users convey ideas in a short and effective way	3.8955	0.6885

As all items have values between 3.78 and 4.02, it is clear from the statistics above that all viewpoints agree that the applications offer educational content that is appropriate for learners and useful in the workplace. They were all happy with the speaking, and writing tasks with sufficient practice for various pronunciation and vocabulary. This is in line with a study from Zhang & Liao (2015), which confirmed the learners' positive interest in the learning materials of using apps. Users are quite pleased with the material that fits the mobile learning environment (Liu et al., 2018). The question concerning the apps' English grammar exercises received the highest ratings, demonstrating the users' satisfaction with the app's grammar resources. The capacity of the applications to impart information about traditions and practices in English-speaking regions, however (LM8), is most grossly underestimated. High-quality content for mobile applications should be made available wherever they are required, providing information and education to those who long for it and, in particular, attending to the needs of those who are unable to access great education.

After running the EFA analysis, 5 items are involved in the Methodology factor, respectively M8, M11, M12, M15, and M17.

Table 3
Descriptive Analysis of Methodology

Item		Mean	SD
M8	The app helps you not to forcefully remember structure of a sentence	3.7264	0.74145
M11	The app enables you to analyze business documents	3.597	0.8317
M12	The app helps you to write like a native	3.7761	0.79033
M15	The app helps you to make conversation confidently in any situations	3.7861	0.6921
M17	The app uses role-playing in speaking lessons	3.8856	0.74286

According to Table 3, all of the measure variables have high means ranging from least favorable (3.597) to most favorable (3.8856), which indicates that the respondents are generally pleased with the Instructional Pedagogy of the applications. Notably, the measure variable "The app enables you to study business documents" (M11) has the lowest score, indicating that users are not very satisfied with the method by which the applications allow them to do so. Together with that, the second-lowest measure variable, "The app helps you

not to aggressively memorize the structure of a phrase" (M8), obtained a mean value of 3.7264, barely 0.1294 pts higher than M11 (see also below). In other words, the respondents believed that the applications did not satisfy users' requests to aid them in preventing the need to comply with recall phrase structure.

Technology

After running the EFA analysis, 4 items are included in the Technology factor, respectively TN4, TN5, TN6, and M2.

Table 4
Descriptive Analysis of Technology

Item		Mean	SD
TN4	The app's lessons are designed using gamification.	4.1592	0.72424
TN5	The gamification designs help you learn more easily and remember more.	4.1642	0.70563
TN6	Reminder notifications help you study harder.	4.0348	0.75748
M2	The app provides lessons that are suitable for your English level.	4.12	0.704

The table reveals that the mean values for all the measure variables are high, ranging from least favorable (4.0348) to most favorable (4.1642), demonstrating that the respondents are generally pleased with the technology used in the apps. The notification element item, "Reminder notifications help you study harder" (TN6), has a mean value of 4.03, which is a staggeringly high figure and indicates that there is a lot of agreement on how useful notifications are. Based on these findings, it can be said that the majority of app alerts serve as a good reminder for users to study English more assiduously and effectively. It has the lowest degree of satisfaction in the Technology element, nevertheless, when compared to other products. During their examination of mobile applications for language learning, Arús-Hita et al. (2013) discovered that over 33% of the apps they downloaded had malfunctioned and were not functioning properly. Students provided several ideas for improving the usability of mobile app material in a prior study (Ganapathy et al., 2016), which showed that not all applications are completely comprehensive and faultless.

User Experience

After running the EFA analysis, 5 items are included in the User Experience factor, respectively UE2, UE3, UE4, UE5, and TN3 as shown in Table 5.

Table 5
Descriptive Analysis of User Experience

Item		Mean	SD
UE2	Responses to the users are fast and efficient	3.8955	0.75102
UE3	The app is designed so that not only normal people but those who are disabled in some respect can still use the app	4.0896	0.70138
UE4	You do not spend a lot of money to download the app	4.1045	0.73758
UE5	The app has a small number of advertisements	3.8358	0.84137
TN3	The app rarely crashes or lags	4.0448	0.74363

The user experience of the app is fairly excellent and fits users' demands, as shown by Table 5's reasonably high mean values (3.8358 - 4.1045) for all variables that were observed. The item "The app has a minimal quantity of adverts" (UE5), on the other hand, has the item with the lowest mean value (3.8358), demonstrating that users are generally content with the app's advertising, albeit not too so. People could feel irritated since these adverts divert their attention, make them waste time clicking away, and subtly slow down and lag their motions. As a result, this feature of the applications has to be upgraded to better meet the targeted needs of the app's users.

This study utilizes a study by Rosell-Aguilar (2017) as a source of reference for its research paradigm. There is some overlap between the requirements, according to Rosell-Aguilar, though. As a result, Learning Material is used in place of the study's Language Learning group category. Also, each category's questions have been modified to be consistent with the aforementioned research study. Also, this study offers a unique perspective on the existing English learning applications, which benefits both users and developers by boosting user satisfaction and the competitiveness of developers' businesses.

The qualitative data from the focus group interview provided valuable insights that complement the findings from the quantitative analysis. It confirmed that factors such as motivation, engagement, flexibility, and user experience are critical in influencing students' choice to use mobile English learning apps. The interviews shed light on the specific aspects of the apps that appealed to the participants and influenced their decisions. Furthermore, the qualitative data reinforced the quantitative findings related to the need for improvements in learning materials and methodologies. Participants expressed a desire for more culturally-oriented content and business-related reading material, indicating that these areas should be prioritized by developers. The discussions around app alerts and gamification-related challenges in the qualitative data helped clarify the technology concerns raised in the quantitative analysis. This was supported by Zichermann et al. (2011) when they claimed that "gamification" encourages users' motivation and positive reinforcement. Pegrum (2014) thinks that gamification in language applications is an additional means of boosting student motivation. According to him, applications that incorporate gaming aspects promote favorable attitudes towards learning by providing positive reinforcement in the form of points and/or awards. Participants' experiences with technical glitches and preferences for well-designed interfaces highlight the importance of addressing these issues to enhance user satisfaction. Additionally, the emphasis on user experience and ad display tactics in the qualitative data provided valuable insights into maintaining customers' loyalty to the app brands. Developers should consider incorporating users' feedback and preferences to create a seamless and enjoyable learning experience. Additionally, the manuscripts from the

interviewees provide direct evidence of how using these apps contributed to their professional development during their internships. The enhanced English language skills not only enabled them to communicate effectively with colleagues and clients from diverse cultural backgrounds but also boosted their confidence in handling international business interactions. This aligns with the current demands of the global job market, where cross-cultural communication and collaboration are essential skills (Sahadevan & Sumangala, 2021). Moreover, the qualitative findings reaffirm the importance of incorporating business-related reading materials and sentence structures in the app's methodology. The interns emphasized the practicality of English skills in real-world business scenarios, indicating that learning materials should cater to career-specific language needs to better prepare students for professional success. By addressing the career-oriented aspect, developers can increase the attractiveness of their apps to a wider audience of students who are seeking to improve their English language proficiency for future job opportunities. Additionally, incorporating industry-specific content and case studies into the app's learning materials could further enhance students' readiness for the workplace. While the study recognizes the limited resources available to developers, focusing on the career benefits of using these apps could prove to be a strategic approach. As English continues to be the lingua franca of the business world, students are increasingly motivated to invest time and effort in language learning apps that offer tangible benefits for their future careers (Nickerson, 2005). Overall, the qualitative data not only supported the quantitative findings but also delved deeper into the participants' experiences and preferences. The combination of both quantitative and qualitative approaches provides a comprehensive understanding of the factors influencing students' choice to use mobile English learning apps and offers valuable recommendations for developers to enhance their applications effectively.

Conclusion and Recommendations

The four English learning apps under study are excelling in four areas, including Learning Content, Methodology, Technology, and User Experience, which have an impact on users' decisions, particularly those of students who want to learn English that will be beneficial in the job. These four criteria must still be improved for programs to better satisfy users, though. Developers should include additional lessons about understanding cultures and traditions in the learning materials. Business-related reading material and sentence-form teaching should be given priority in the methodology section. Developers should concentrate on enhancing app alerts and addressing various gamification-related challenges when it comes to technology concerns. Developers should consider user experience when deciding on the best ad display tactics for mobile applications in order to maintain customers' loyalty to the brands. Since developers and managers have limited resources, including time, personnel, and particularly financial resources, this study only makes a small contribution to improving English learning applications by outlining the aspects that should be prioritized and the directions in which research should be directed. Because they have the lowest degree of satisfaction, learning materials and methodologies are what app developers should pay more attention to.

To enhance the practical application of mobile English learning applications for business students in Vietnam, several key improvements are suggested based on both the current study findings and established literature. Incorporating business-relevant and culturally informed content into the learning materials is crucial. Developers should integrate simulations of real business interactions and negotiations, along with culturally rich content that depicts the customs and traditions of English-speaking nations. This approach should utilize multimedia resources such as videos, scenarios, and interactive case studies to provide

learners with a deep understanding of cultural nuances in business contexts (Kim, 2020). Engaging learners through community features such as forums for discussion, knowledge sharing, and competitive activities can enhance their learning experience and application of the language in real-world contexts.

Further enhancement of instructional methods for professional language use is necessary. Learning tools should be developed to aid in the analysis of business documents such as contracts, reports, and proposals, facilitating early familiarity with the business environment. Apps should educate users on fundamental business terminology and the contextual use of language, incorporating methods such as role-playing for practical experience in business communication. Additionally, incorporating music, jingles, and visual aids can aid in memorization and understanding of complex language structures, fostering a more intuitive learning process (Hoque, 2018; Rakshit et al., 2021). Implementing adaptive learning technologies can tailor the educational content to fit individual user needs, enhancing the learning experience through customized difficulty levels and relevant content suggestions. Effective management of notification times is crucial; notifications should be scheduled at optimal times when users are most likely to engage, such as early mornings or late evenings. Providing users with the ability to customize notification times will also ensure that these reminders are supportive rather than disruptive (Hoque, 2018). While in-app advertising is a common revenue model, its impact on user experience must be carefully managed. Offering a premium version of the app can provide a revenue stream while removing disruptive advertisements, thus improving user engagement and satisfaction. For those not opting for the premium model, developers should consider employing incentivized advertisements where users receive tangible benefits from viewing ads. Moreover, introducing an option to skip longer ads can tailor the advertising experience to user preferences, potentially increasing the overall acceptance and effectiveness of in-app advertisements.

Limitations and Future Research

This research focuses solely on the opinions of undergraduate business students. Nonetheless, university students of other majors, or high school students may be users who are learning English with the intention of entering the workforce. As a consequence, students of various disciplines at different levels should be considered as study subjects in future studies. Moreover, it is essential to acknowledge the limitations of the study, including the small sample size of the focus group and the specific context in which the interviews were conducted, the lack of inferential statistical analysis, and the findings may not fully represent the experiences and perceptions of all app users. Further collaboration with app users could lead to more comprehensive improvements in mobile English learning applications.

The findings from this study illuminate the potential benefits and current applications of mobile English learning apps for business students in Vietnam. However, there remains a vast landscape of unexplored areas that could further advance our understanding of mobile-assisted language learning (MALL). To deepen and expand this knowledge base, the following future research directions should be under consideration. First, future research should aim to investigate the long-term impacts of consistent mobile app usage on learners' language proficiency and professional success. Such studies would ideally track learners over multiple years to assess the sustained impacts of app engagement on their career advancements and effectiveness in multilingual business environments. Second, considering the variety of available learning methods, future studies should compare traditional language learning methods with mobile-assisted approaches, employing a mixed-methods design to quantitatively measure language improvement and qualitatively gather learner feedback on

satisfaction and engagement. This will help in understanding the relative advantages or potential drawbacks of app-based learning in real-world scenarios. Third, the adaptation of learning content to fit cultural contexts remains understudied. Future work could focus on exploring how culturally tailored app content influences learning outcomes. Such research could involve developing apps that integrate local idioms, business practices, and societal contexts, specially tailored for Southeast Asian markets, to see how these adaptations affect engagement and retention of language skills. Fourth, the rapid evolution of technology offers new avenues for enhancing educational tools. Future research should explore the integration of cutting-edge technologies like artificial intelligence (AI) and augmented reality (AR) in MALL. Technological innovations in MALL could include evaluating the effectiveness of AI-driven personalized learning paths and AR for immersive language practice scenarios, providing insights into the potential of these technologies to revolutionize language learning. Lastly, understanding and addressing barriers to effective learning is essential for the development of more effective educational tools. Future studies should aim to identify and overcome barriers such as technological literacy, motivation, and time constraints that learners face. Research in this area could lead to significant improvements in app design and educational strategies, making mobile learning more accessible and effective for a broader range of learners.

Acknowledgements

This research was funded by the University of Economics Ho Chi Minh City, Vietnam.

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Appendices

Appendix A Research Measurement Items

Learning Material (LM)	
LM1	The application provides many listening materials with a variety of subjects related to workplace
LM2	The application provides many speaking materials with a variety of subjects related to workplace
LM3	The application provides many workplace-related reading materials
LM4	The application provides exercises for practicing genres of writing that are commonly used in the workplace
LM5	The application provides vocabulary that is widely used in workplace
LM6	The grammar exercises cover from easy to difficult level.
LM7	The application offers activities to practice pronunciation and intonation
LM8	The application offers knowledge about customs and traditions of countries using English as a significant language
LM9	The application teaches a variety of English (American English, British English, etc.)
Methodology (M)	
M1	The app's lessons combine old and new knowledge
M2	The app provides lessons that are suitable to your English level
M3	The app uses methods that help you learn vocabulary efficiently
M4	The app helps you know various meanings of a word
M5	The app enables you to know which word to be used in which situations
M6	The app enables you to develop a skill of guessing a meaning of a word without looking it up in dictionaries
M7	The app helps you to identify structure of a sentence
M8	The app helps you not to forcefully remember structure of a sentence
M9	The app helps you to identify errors in structure of a sentence by yourself and how to fix them
M10	The app enables you to understand a paragraph quickly
M11	The app enables you to analyze business documents

M12	The app helps you to write like a native
M13	The app helps you to write business documents professionally
M14	The app helps you to fully understand what others are saying
M15	The app helps you to make conversations confidently in any situation
M16	The app helps users to convey ideas in a short and effective way
M17	The app uses role-playing technique in speaking lessons
Technology (TN)	
TN1	The app's interface is clear and uncluttered
TN2	The app's interface is user-friendly
TN3	The app rarely crashes or lags
TN4	The app's lessons are designed using gamification
TN5	The gamification designs help you learn easier and remember more
TN6	Reminder notifications help you study harder
TN7	Reminder notifications do not disturb you
User Experience (UE)	
UE1	Instructions of the app are helpful to you
UE2	Responses to the users are fast and efficient
UE3	The app is designed so that not only normal people but those who are disabled in some respect can still use the app
UE4	You do not spend a lot of money to download the app
UE5	The app has a small number of advertisements

Appendix B
Cronbach Alpha analysis result

	Item	CA
LM1	The application provides many listening materials with a variety of subjects related to workplace	0.67
LM2	The application provides many speaking materials with a variety of subjects related to workplace	0.555
LM3	The application provides many workplace-related reading materials	0.592
LM4	The application provides exercises for practicing genres of writing that are commonly used in the workplace	0.60
LM5	The application provides vocabulary that is widely used in workplace	0.637
LM6	The grammar exercises cover from easy to difficult level.	0.582

LM7	The application offers activities to practice pronunciation and intonation	0.561
LM8	The application offers knowledge about customs and traditions of countries using English as a significant language	0.626
LM9	The application teaches a variety of English (American English, British English, etc.)	0.512
M1	The app's lessons combine old and new knowledge	0.577
M2	The app provides lessons that are suitable to your English level	0.495
M3	The app uses methods that help you learn vocabulary efficiently	0.548
M4	The app helps you know various meanings of a word	0.514
M5	The app enables you to know which word to be used in which situations	0.61
M6	The app enables you to develop a skill of guessing a meaning of a word without looking it up in dictionaries	0.64
M7	The app helps you to identify structure of a sentence	0.631
M8	The app helps you not to forcefully remember structure of a sentence	0.522
M9	The app helps you to identify errors in structure of a sentence by yourself and how to fix them	0.628
M10	The app enables you to understand a paragraph quickly	0.611
M11	The app enables you to analyze business documents	0.524
M12	The app helps you to write like a native	0.564
M13	The app helps you to write business documents professionally	0.619
M14	The app helps you to fully understand what others are saying	0.636
M15	The app helps you to make conversations confidently in any situation	0.613
M16	The app helps users to convey ideas in a short and effective way	0.694
M17	The app uses role-playing technique in speaking lessons	0.642
TN1	The app's interface is clear and uncluttered	0.592
TN2	The app's interface is user-friendly	0.627
TN3	The app rarely crashes or lags	0.555
TN4	The app's lessons are designed using gamification	0.647
TN5	The gamification designs help you learn easier and remember more	0.593
TN6	Reminder notifications help you study harder	0.531
TN7	Reminder notifications do not disturb you	0.425
UE1	Instructions of the app are helpful to you	0.618
UE2	Responses to the users are fast and efficient	0.585

UE3	The app is designed so that not only normal people but those who are disabled in some respect can still use the app	0.665
UE4	You do not spend a lot of money to download the app	0.532
UE5	The app has a small number of advertisements	0.527