Adoption of online technologies for language teaching during the COVID-19 pandemic in narrative frames

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ABSTRACT

Most Higher Education Institutions, including in Indonesia, must adopt and utilize online technologies for emergency remote teaching during the COVID-19 pandemic to keep the pedagogical practice running. Having done the practice for about one year, there is paramount to understand teachers' experience in adopting technologies. Arguably, there has been zero study employing narrative frames conducted in Indonesia investigating EFL (English as a foreign language) university teachers' experience in adopting online technologies for their teaching during the pandemic. Therefore, the present narrative study examines this issue. Four narrative frames were developed as the instruments of the study by referring to two core variables and one outcome variable of the Technology Acceptance Model (TAM) consisting of perceived ease of use, perceived usefulness, and reported general use of online technologies. Sixteen narrative frames completed by participants from seven universities in East and West Java unveil that despite the arduous initial process of shifting from face-to-face into online teaching, problems and difficulties which were still encountered during the pedagogical undertaking and a somewhat limited number of online platforms that had been utilized, the teachers' very positive perceptions on the usefulness of online technologies led to persistence and optimism in their reported general use of the technologies in their teaching. It was concluded that teachers are quite ready to further implement online technologies in their teaching. However, supporting facilities, facilitating conditions, as well as training for developing technological knowledge and skills are needed to support the process.

Keywords: COVID-19 pandemic; narrative frames; online technologies adoption; university EFL teachers

INTRODUCTION

After COVID-19 was declared a pandemic by the World Health Organization (WHO) on March 11, 2020 (WHO, 2020), countries around the world issued travel restrictions, social and physical distancing regulations, and other measures to slow down the spread of the virus (Sahu, 2020; Schleicher, 2020). The situation has hugely impacted many aspects of life, including education (Aristovnik et al., 2020; Marinoni et al., 2020; Sahu,

2020; Schleicher, 2020). In the field of education, adaptations and changes must be made to how pedagogical practices are conducted in almost all levels of education for countries that have triggered school and university closures (Aristovnik et al., 2020; Kuhfeld et al., 2020). Based on *Education at a Glance 2020* data, to some extent, the school closures had taken into effect in all 46 countries under its coverage since March 2020 (Schleicher, 2020). By April 2020, based on UNESCO data,

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around 185 countries closed their schools and Higher Education Institutions (henceforth, HEIs) (Marinoni et al., 2020).

This uncommon development forces educational institutions to alter the process of teaching and learning from typical classroom face-to-face meetings to an online system (Aristovnik et al., 2020; Atmojo & Nugroho, 2020; Kuhfeld et al., 2020; Sahu, 2020; Schleicher, 2020). Consequently, teachers and students have to adapt and apply different strategies for their educational practices (Marinoni et al., 2020). In the HEI context, since the closure of universities requires students to study from home, the utilization of information and communications technology (ICT) suitable for distance and online teaching in most cases is mandatory (Aristovnik et al., 2020; Sahu, 2020). Thus, university teachers have to immediately adopt online technologies needed to support the pedagogical practice shifts, which in many circumstances might present serious challenges for them (Aristovnik et al., 2020). Similarly, university closures and the immediate need to adopt online teaching technologies for pedagogical practice also applied to HEIs in Indonesia. Officially, as instructed by the Ministry of Education and Culture (MOEC) on 17 March 2020, universities in the affected areas were required to conduct online teaching instead of face-to-face teaching (Mendikbud, 2020). Thus, the undertaking has been done for more than one year as of now.

In relation to this matter, particularly for language learning, ICT has revamped how we read and learn (Chun et al., 2016; West, 2013) and has brought about changes for educational institutions and challenges for 21st-century language teachers in integrating digital technologies into their teaching (Djiwandono, 2019; Gleason, 2018; Kurniawati et al., 2018; Lubis, 2018). With its rapid development, ICT provides greater opportunities for language teaching and learning (Richards, 2015) since it is relatively easy nowadays for different people, languages, cultures, and social practices to access the technology (Chun et al., 2016; Kurniawati et al., 2018). It is in line with the growing number of research conducted to investigate the development of ICT and its integration into language teaching. However, although ICT has been a concern of many language teachers before the COVID-19 pandemic, integrating online technologies into language teaching was still optional for many language teachers in Indonesia. They integrated it at any point in their teaching, depending on many factors such as students' needs, curriculum, teaching approaches, or strategies. This situation is similar to other countries where online learning and teaching before the COVID-19 pandemic was still not substantial (Aristovnik et al., 2020; Bashir et al., 2021; Khan, 2020). Without being able to conduct face-to-face teaching, language learning must be mediated through ICT by utilizing online technologies. This kind of situation which forces teachers to alter their day-to-day pedagogical practice, may be especially undesired.

Thus, with reference to the most recent circumstance where the requirement to adopt online technologies was not merely due to the importance of ICT for language learning development but resulted from an unprecedented situation, it is interesting to investigate this matter. In particular, it is fundamental to emphasize that a study that can portray university EFL teachers' experiences regarding the issue is considered paramount. Therefore, we employ narrative frames for our investigation. In addition, narrative frames are considered a relatively novel instrument in qualitative data collection. Despite the potential strength of narrative frames, there is only a modicum of, if not zero, a study conducted in Indonesia utilizing this type or source of data. Moreover, in the context of publication in Indonesia, studies mostly employed questionnaires and/or interviews as their data collection instruments (Zein et al., 2020). By employing narrative frames for the revelation of Indonesian university EFL teachers' stories, this study will be an important addition to the map of narrative inquiry studies. In this case, to the best of our knowledge, no study so far has been reported focusing on this matter in Indonesia's HEIs context.

As far as ICT is concerned, in the educational context in general, studies focusing on the integration of ICT in pedagogical practices have reported that ICT was beneficial in supporting learners' learning process and the development of knowledge and skills (Scardamalia & Bereiter 2015). ICT integration into teaching is also reported as beneficial for disadvantaged students (Bai et al., 2016; Khan, 2020). Turning to language teaching context, emerging literature, and research reports have shown that the integration of ICT into ELT positively develops language skills (Abrams, 2019; Blake, 2016; Godwin-Jones, 2018; Hsu & Lo, 2018; Li & Li, 2018; Nguyen & Pham, 2021; Tsai, 2019), facilitates language learning, cultivates positive attitudes, develops thinking skills such as creativity and problem-solving, and increases students' motivation for learning due to enjoyment in using technology and better engagement in learning (Blake, 2016; Chong & Reinders, 2020; Rodliyah, 2018; Suherdi, 2019).

Other studies have reported the utilization of platforms such as Wiki technology (Hsu & Lo, 2018), WhatsApp (Barhoumi, 2015; Hamad, 2017), Edmodo (Purnawarman et al., 2016), and Google Docs (Abrams, 2019). Besides its integration, studies have also focused on teachers' perceptions and the factors that influence the integration of ICT into ELT (Celik et al., 2014; Djiwandono, 2019; Lubis, 2018; Rodliyah, 2018). Furthermore,

previous studies on the utilization of technology for English language learning unveiled that, when used appropriately, technology will benefit teachers and learners immensely (Ahmadi, 2018). In particular, studies focusing on the implementation of online teaching technologies during the COVID-19 pandemic in HEIs have reported that real-time video conferences were the most dominant platforms used by lecturers, which are also considered the most satisfying forms of online learning by students (Aristovnik et al., 2020). Meanwhile, Amin and Sundari (2020) reported that among the three digital learning platforms being investigated, Google Classroom has been given the highest score by students concerning its functions for learning. The study showed a similar result to another study by Al-Maroof and Al-Emran (2018).

Referring to the fact that there is arguably no existing study that has been conducted investigating university EFL teachers' adoption of online teaching technologies in their one-year online teaching during the COVID-19 pandemic in Indonesia, it is fundamental to conduct a study that can portray their experiences. Furthermore, despite narrative frames' strong reputation, until recently, no existing study has employed this innovative data collection instrument in Indonesia. Additionally, considering that questionnaires and/or interviews are still the dominant data collection instruments utilized by most studies published in Indonesia (Zein et al., 2020), employing this novel instrument to unveil Indonesian university EFL teachers' stories in this study is crucial for the development of narrative inquiry studies, particularly in Indonesia context. Due to its focus on technology adoption, this study employs narrative frames as the instruments developed from the variables of the Technology Acceptance Model (TAM) to answer the research questions. The frames are set out to uncover the EFL teachers' experiences, including perceived ease of use, perceived usefulness, and reported general use of technology. It addresses the questions of (1) the university EFL teachers' perceptions of the ease of use and usefulness of online technologies for language teaching and (2) the university EFL teachers' reported experience in the general use of online technologies for language teaching during the COVID-19 pandemic.

METHOD
Research Design
In accordance with the focus of this study which is teacher experience, narrative inquiry is suggested as an appropriate means of conducting the exploration (Barkhuizen, 2008; Clandinin & Connelly, 2000) since it focuses on making sense of people's experiences by using their stories from their own perspectives (Barkhuizen et al., 2014). In the educational field, a narrative inquiry has been

reported as particularly worthwhile in studies concerning teachers' professional lives and careers (Bathmaker & Harnett, 2010; Clandinin & Connelly, 2000; Mehrani, 2017). Barkhuizen et al. (2014) emphasized that narrative inquiry is claimed as a relevant approach due to its usefulness in understanding "the inner mental worlds of language teachers and learners and the nature of language teaching and learning as social and educational activity" (p.2). This study employs narrative frames to capture the narrative data. Narrative frames were introduced by Barkhuizen and Wette (2008) as research instruments that enable the possibility of having directives and assistance in both the form and content of narrative so that the data collected from the frames will ensure the expected content is produced and presented in narrative structure. Structured as a story in a skeletal form where participants fill the spaces on the basis of their own experiences and reflections on the frames, its aim is to ensure the production of coherent stories from the respondents. With this structure, participants are enabled to compose their narration narratively, which will provide the researcher with a written reflective experience in a coherent narrative form (Barkhuizen, 2014). By referring to TAM's variables, the present study develops the instrument in the form of narrative frames. By using narrative frames for this study, the university EFL teachers' experiences in adopting online technologies for their teaching during the COVID-19 pandemic could be wrapped in cogent narrative stories.

Data Collection and Participants
To guide the construction of university EFL teachers' personal experience and the reflection from experience both in structure and content of the narrative (Barkhuizen & Wette, 2008; Barkhuizen, 2014), a set of narrative frames is employed. For this purpose, we designed five templates of short narrative frames to enable teachers to tell and reflect on their experience in adopting online teaching technologies in their online teaching for the past year of the COVID-19 pandemic. The frames were arranged particularly to keep the teachers focused on telling their stories in relation to the research questions of this study.

As far as online teaching technologies adoption is concerned, TAM is one of the frameworks that mostly prevalent for investigation. TAM has dominantly been used for research and is considered a powerful vehicle to delineate teachers' technology adoption compared to other models (Scherer et al., 2018). TAM has also been considered an effective model for investigating online learning acceptance (Sumak et al., 2011). To explain the use of online technologies, the narrative frames were developed by referring to the variables of TAM. The main variables referred to in this study are the core variables (perceived ease of use (PEU) and

perceived usefulness (PU)) and the actual use of online technology as the outcome variable (Marangunic & Granic, 2015; Scherer et al., 2018). It is crucial to note that the outcome variable in this study is not based on observation but on the participants' reports in their narratives. Thus, the narrative frames consist of the participants' PEU and PU of online technology and the participants' reported experiences in their actual use of online technology for their teaching during the one year of the COVID-19 pandemic. Each frame consists of starting sentences followed by a short space to be completed by the participants using their statements (Barkhuizen & Wette, 2008). The narrative frames and invitations to be completed and returned were sent by WhatsApp to the participants.

The participants of the study were 16 university EFL teachers from seven universities in West Java and East Java, Indonesia. During the one year (April 2020 until March 2021) of the COVID-19 pandemic, these universities fully applied online teaching for their students. Thus, the participants had been adopting online teaching technologies in their pedagogical practice for more than one year. To approach the participants and to gain their informed consent to take part in the study, ethical procedures were employed. The participants were ensured that their participation was fully voluntary and all the statements collected from them were treated confidentially. Even though the approval

process from the Institutional Review Board (IRB) in Indonesia is not prevalent (Mukminin et al., 2019; Noprival et al., 2021), ethical issues concerning the study were followed by protecting the rights and the privacy of the respondents through the exertion of anonymity.

Data Analysis
The narrative frames were analyzed by following the stages in qualitative content analysis (Miles & Huberman, 1994). The steps included coding and categorizing the themes, identifying the connection between the themes and the categories that emerged, and making interpretations of their interconnections. Furthermore, the narratives from the respondents were rewritten by the researchers as succinct and coherent stories. To verify the authenticity and the submission of consent for use from the teachers, the stories were then sent back to them. Any additional information, comment, or alterations given by the teachers were negotiated until a settlement was met for accurate scenarios of the themes from the stories.

FINDINGS AND DISCUSSION
How do university EFL teachers perceive the ease of use and usefulness of online technologies for their teaching?
Table 1 presents the participants PEU, while Table 2 provides their PU of online technologies.

Table 1
Perceived ease of use (PEU)

Categories	Frequency	Examples from participants' responses
Learning to use online technologies:		
Interesting.	5	(T1) very interesting.
Challenging.	8	(T6) so frustrating at the beginning.
Both interesting & challenging.	3	(T8) so interesting and challenging.
Past interaction with online technologies:		
Requires strong and continuous efforts and facilitating conditions.	12	(T10) to learn about some applications that I never used before and it required much time in preparation.
Requires technological skills and knowledge.	4	(T4) more practical knowledge.
Becoming skillful at using online technologies:		
Time-consuming & exhausting	2	(T9) required more time and work load needed in addition to preparing the materials also less likely to be effectively applied in a 'comfortable' conventional manner before the pandemic.
Demanding persistence	14	(T4) was done through continuous practice on the technologies that we were using.
Using online technologies:		
Arduous undertaking	7	(T10) time consuming and the class was not too interactive in the process. So it was a bit hard to do.
Uncomplicated practice	7	(T5) easy if we would like to learn and adapt them, and integrate in our teaching-learning especially in the language classroom. Then learning language will be appropriate with the proper platform used or chosen by teachers and students.
Both interesting & challenging	2	(T13) fun and challenging.

In particular, regarding the process of learning to use online technologies for language teaching, more than half of the participants seemed to agree that the process was quite challenging, some others indicated that the learning process was quite easy, while a small number of the participants thought that it was fun yet quite complicated at the same time. Considering learning to use online technologies as a quite difficult undertaking, T6, T9, T12, and T14 concealed the challenging nature of the process for their teaching: for T6 and T9, it was due to the lack of facilities and operating skills, the initial change was frustrating and challenging for them; for T12 it was a very complicated process since she was not familiar with the technologies; for T14 it was challenging considering his inability to conduct a face-to-face meeting to confirm learners' understanding and severe internet connection problems. Similarly, T3, T7, T10, T4, T5, T8, and T16 also found that the process was challenging because of typically similar considerations. On the other hand, reckoning the learning stage as quite easy, T13 noted that she was adjusted to using online technologies. Corresponding to T13, the rest of the respondents emphasized the beneficial features provided by online technologies, which made it easier for them to conduct their teaching. This group seemed to have very positive perceptions toward the benefits of online technologies for language teaching, which somehow eased the process of learning to use the technologies.

What was required during the participants' past interaction with online technologies also informs their PEU. It was revealed that their past interaction with online technologies was not an easy undertaking since it required certain conditions. The vast majority of the participants wrote that it required strong and continuous efforts and facilitating conditions, while the rest emphasized technological skills and knowledge about the technologies. T10 and T16 pointed at the same requirements: efforts and preparation. Further, T10 mentioned that she spent much time in the preparation because she needed to learn about some applications that she had never used before. On the other hand, T4 and T6 underlined that it entailed practical knowledge and specific technological skills.

Additionally, participants' narratives on becoming skillful at using online technologies also revealed their PEU. Despite some participants' positive view that it was important to be skillful at using online technologies, achieving it was believed to be a long process. In general, the participants agreed that becoming skillful at using online technologies was important as a part of their professional development. However, in addition to being time-consuming and exhausting, the process might demand persistence since it required hard work and continuous practice. T4, for example, believed that it could only be done through continuous practice in using the technologies. Similarly, T13 reckoned that it was achievable as long as she was willing to learn, which was in line with T11, who stated that continuously implementing the technologies in teaching would be the best way to become skillful. T14 added in his writing that through continuous practice and maximizing access to YouTube and Internet public forums, becoming skillful at using online technologies for teaching could be attained. T9 was further convinced that it required much time and lots of work.

Furthermore, regarding the utilization of online technologies for language teaching, participants were equally divided. They perceived it either as an arduous undertaking or uncomplicated practice, or both. Overall, based on the participants' narratives on PEU, it could be stated that they perceived the use of online technologies as more of a challenge rather than an easy enterprise. It can be deduced that the participants believed using online technologies as bringing about difficulties and requiring great effort . However, despite the challenges and difficulties, in general, they agreed that using online technologies for language teaching is necessary and crucial for today's era.

Table 2
Perceived usefulness (PU)

Categories	Frequency	Examples from participants' responses
For accomplishing tasks:		
Quite complicated.		
Useful & helpful.	5	(T7) was difficult.
	11	(T2) was faster and much more effective and efficient.
For performance:		
Improve performance	14	(T14) has gone better; at the very least, I am able to provide some assistance to my workplace.
Not improve performance	2	(T8) needs to be upgraded.
For productivity:		
Positively affect productivity	16	(T11) enable me to create learning materials with various technological multimedia such as PPT with audio.
For effectiveness:		
Positively improve effectiveness	16	(T14) significantly improved as online technologies technically assist the management of tasks better.

Regarding the usefulness of online technologies to accomplish tasks, although some participants perceived it differently, most participants wrote that it was useful and helpful. Considering usefulness on performance, almost all participants perceived those online technologies brought about improvement in their language teaching practice. T11 believed that her performance improved, while T15 considered that her performance was actually not really good but online technologies helped her improve. Unlike most of the participants, T10 was not convinced that her performance was positively improved. It was due to difficulties in utilizing the application and facilitating conditions. Further, regarding the participants' productivity, all of them felt that their productivity had improved by using online technologies. T2 considered that online technologies did not only assist her in producing teaching materials but also in teaching enrichment. Like T2, T9 stated that online technologies enabled him to produce best practice-related materials by opening more access opportunities. T11 also mentioned that online technologies made it possible for her to create learning materials with various technological multimedia. Furthermore, it was considered that online technologies positively improved the effectiveness of language teaching. The participants used the words "better; increased; improved; developed; or higher" to show the positive impact of online technologies on the effectiveness of their teaching.

All in all, the participants perceived online technologies as very useful platforms for language teaching indicated by their positive narratives. Therefore, by referring to the explanation of PU from Scherer et al. (2018), we can conclude that the participants believed the use of online technologies would enhance their performance in teaching.

How is the university EFL teachers' experience in the general use of online technologies for their teaching during the COVID-19 pandemic?
Table 3 until Table 8 provide reported experiences of participants' general use of online technologies for their language teaching during the COVID-19 pandemic. Table 3 presents the participants' reported experience in changing the usual face-to-face to online mode. Table 4 reveals the online technologies used. Table 5 provides the reasons behind teachers' choice of online technologies. Table 6 shows the difficulties faced during online teaching implementation. Table 7 unveils teachers' beliefs on students' adoption of online technologies for their learning. Table 8 presents teachers' feelings toward their online teaching.

Table 3
Experience in changing the usual face-to-face teaching into online mode

Categories	Frequency	Examples from participants' responses
Initial reaction:		
Unprepared & Uncomfortable with the change.	10	(T6) I felt a bit shocked since I myself was honestly not ready and our university did not force lecturers to utilize online instruction before the pandemic of COVID-19.
Prepared & quite comfortable with the change.	6	(T2) I did not find any serious obstacle as I have been familiar with some of the online-meeting platforms such as zoom and G-meet.
Initial strategy:		
Learning from an online tutorial or joining training and sharing sessions.	4	(T2) I mostly go to YouTube tutorial for getting some comprehensive explanations of the use of certain application. This is much more effective than asking my peer teacher at campus.
Using synchronous learning through video conferencing platform.	2	(T3) I still need to see the students and communicate with them through virtual meeting.
Using the easiest or most familiar platform for the students.	5	(T9) using the platform that caused the least hurdle that was WhatsApp, in which the material and discussion are delivered.
Trying various online technologies.	2	(T13) trying every platform available to be adjusted with my students' resources.
Introducing learners with ethics in online learning.	1	(T14) introducing the learners with ethics in the online learning mode, where every cheating is possible without the intervention of the teacher.
Using LMS (Google Classroom).	2	(T12) using Google classroom
Initial process:		
Challenging and time-consuming	11	(T9) challenging and time consuming since preparation time was longer as well as coordination with the class needed more effort and tolerance in excuses for weak internet service reception.
A little difficult	5	(T12) little bit difficult but it is running well today.

Regarding their initial reaction to changing the teaching practice during the COVID-19 pandemic, the participants' narratives show that they were unprepared and tended to feel uncomfortable with the shift. However, some participants seemed to be prepared and felt quite comfortable with the situation. This is quite similar to the report from Marinoni et al. (2020) that teachers' readiness and preparedness in dealing with the challenge were mixed. T2's and T10's narratives reveal that their readiness since the beginning of the change was due to previous experience using online technologies for teaching.

Next, the narratives inform that the participants' initial strategies for adopting online technologies were quite varied. As stated by Marinoni et al. (2020), as a consequence of the shift in pedagogical practice during the COVID-19 pandemic, teachers must adapt and apply different strategies for their teaching. Further, it was probably due to the teacher's and students' lack of readiness that most of the participants' initial strategies were by learning from online tutorials or joining training and sharing sessions and by using the easiest or most familiar online technologies for the students. They mostly learned about and implemented the technologies at the same time. Additionally,

participants' initial strategies also included: using synchronous learning through a video conferencing platform such as T3 who said that she needed to see and communicate with the students; trying various online technologies such as T13 so she could adjust to the students' resources; using learning management system (LMS), particularly Google Classroom such as T12; and introducing learners with ethics in online learning mode such as T14 who highly concerned about his students' limited knowledge about online learning environment.

Furthermore, related to how the initial process of changing the teaching mode operated, most of the participants considered it a challenging and time-consuming process, and only a few said that it was rather difficult. Their experiences in shifting from the usual face-to-face to online teaching during the COVID-19 pandemic particularly their situations at the beginning of the change showed that they were mostly not yet ready for the transformation and were not fully accustomed to using online technologies for teaching. In general, most of the participants were struggling to keep up with the change. It was reflected in their narratives concerning their initial reactions to the change, their initial strategies for the change, and how the initial process ran.

Table 4
The online platforms used by the teachers

Online technologies used:	Number of the participants	The most and the least frequently used online platforms by individual teacher			
		Mostly used	Freq	Least used	Freq
Zoom	13	Moodle	2	Edmodo	4
Google Classroom	11	Zoom	8	Schoology	1
		Google meet	4	Socrative	1
YouTube	4	Facebook	1	Jitsi	3
Moodle	2	Instagram	1	Cisco WebEx	1
Edmodo	6	WhatsApp	5	Blogs	1
SPADA	10	SPADA	11	WhatsApp	2
Jitsi	2	Google Classroom	4	Google Classroom	5
Google Apps	3	Edmodo	2	Zoom	2
Google Meet	7	YouTube	2	Google meet	2
Cisco WebEx	2	TedEd	1		
e-mail	1	Google Apps	3		
WhatsApp	10	(forms, sheets,			
Blogs	1	docs, slides, drive)			
Facebook	1				
TedEd	1				
Quiziz	1				
Canvas	1				
Schoology	1				
Socrative	1				

As reported in their narratives, the participants named at least 23 platforms that they had utilized. Out of the 23 applications, only six were dominantly used by the participants. Zoom was the most dominant platform, followed by Google Classroom, SPADA, WhatsApp, Google Meet, and Edmodo, respectively. This finding is in line with the study

conducted by Aristovnik et al. (2020), who reported that the most dominant online teaching was done through video conferencing platforms. However, it is very interesting to note that the most frequently used online application by individual participants was SPADA, an LMS provided by the Indonesian government. Zoom was the second most frequently

used application. The least frequently used platforms by the individual teacher were Google Classroom, followed by Edmodo. In this case, the functions of Google Classroom and Edmodo has been replaced by SPADA. It is interesting because Amin and Sundari (2020) reported in their study that Google Classroom was rated the highest by students based on its functions and potential. However, the study only compared Google Classroom with WebEx Meeting and WhatsApp without including SPADA. Thus, it will be very interesting to investigate further the utilization of the two LMSs in language teaching.

Table 5
Reasons for using certain online platforms

Categories	Frequency	Apps	Examples from participant responses
Reasons for mostly used:			
Usefulness (useful features and functions, performance & effectiveness, practicality).	12	Zoom, Google Meet, WhatsApp, Google Classroom, SPADA. Edmodo, Google Apps, Moodle, YouTube, Facebook, Instagram.	(T2) of its practicality. The apps which is complicated to use and not practical is not used frequently since it will take time to explain the technical matters for students.
Easiness	5	SPADA, Zoom, WhatsApp, Google Classroom.	(T16) easier to be used.
Simplicity	3	Google Classroom, Zoom, WhatsApp, TedEd, Google Apps, YouTube.	(T13) they have a friendly user interface
Requirement	9	SPADA.	(T8) the university requires us to use SPADA for online teaching
Familiarity	2	Edmodo, WhatsApp.	(T6) I am already familiar with the app before the pandemic
Reasons for least used:			
Unfamiliarity	4	Edmodo, Schoology, Socrative, Cisco WebEx, Blogs, Jitsi	(T4) the students are not very familiar with the apps (T3) network problem frequently experienced when using the app
Network problem. Limited features	1	Jitsi	(T1) the limited or incomplete features
and functions. Apps complexity.	7	Edmodo, WhatsApp, Zoom, Google Meet.	(T6) the features and utility are not quite simple to use
A second choice.	2	Jitsi	(T7) the function has been replaced by SPADA
	4	Edmodo, Google Classroom, Google Meet	

The factors influencing the participants' decision to use certain platforms were the *usefulness (effectiveness, useful features, functions, practicality), easiness, simplicity,* and *familiarity* of the technologies, and as a *requirement* from policy-makers. The most frequently mentioned reason was the *usefulness* of the technology associated with Zoom, Google Meet, WhatsApp, Google Classroom, SPADA, Edmodo, Google Apps, Moodle, YouTube, Facebook, and Instagram. Solely associated with the use of SPADA, the *requirement* was the second most given reason. As an LMS created specifically by the Indonesian government, the use of SPADA for online learning is required by MOEC. However, it seemed that not all teachers utilized SPADA in their teaching. The third most frequently mentioned reason was *easiness* which was associated with the use of SPADA, Zoom, WhatsApp, and Google Classroom. Interestingly,

SPADA was associated with all the top three reasons.

Meanwhile, the factors influencing their decision not to use certain applications were the *unfamiliarity* with the technologies, *network problems*, *limited features and functions*, the *app's complexity*, and the status of the technologies as a *second choice*. Out of all the factors, having *limited features and functions* was the most frequently used reason for not using certain platforms. It was associated with Edmodo, WhatsApp, Zoom, and Google Meet. It is also interesting to note that both Edmodo and Jitsi were associated with three factors for each. Edmodo was associated with *unfamiliarity, limited features-and-functions*, and being *a second choice*. Furthermore, *unfamiliarity, network problems,* and *app's complexity* were the factors associated with Jitsi.

Table 6
Problems faced during online teaching

Categories	Frequency	Examples from participant responses
Encountering problems:		
Never	1	(T5) did not
Rarely	6	(T1) rarely
Sometimes	8	(T11) sometimes
Often	1	(T14) often
Handling problems:		
Switching platform	15	(T1) changed to another platform that easier for me and the students.
Switching platform or rescheduling the class.	1	(T7) should be made up in different time or use different application (WA as the easiest application for students)
Problems:		
Bad internet connection due to poor infrastructures, limited internet coverage in some areas, and force majeure.	12	(T2) unstable connection and the expensive cost of data connection since not all students can afford it. *This is probably because* the country has not maintained a good networking infrastructure.
Difficulties in using the features and technologies of the platforms due to unfamiliarity or lack of knowledge and/or skills in using online technologies.	3	(T4) concerning with technicalities and familiarity with the online technologies. *This is probably because* our understandings on the use of online technologies are different from one to another.
Technical problems or hardware due to low-spec hardware and/or limited technological skills.	4	(T6) my laptop and students' internet connection. *This is probably because* I need to upgrade my laptop and improve the performance in order to ease my teaching activity. The students need to go the better signal in the city.
Students' participation and honesty in online learning environment due to their attitudes and the limitation of the online learning system.	4	(T16) checking students' honesty in doing the tasks. *This is probably because* haven't met in person (face to face) some of my new intake students that I find it is hard to distinguish their individual competence. Also, I once experienced some of my sophomore students copy pasted other students' answer. From this experience, sometimes it is hard for me to judge whether the answer is merely their own answer (especially when it was a written task).

It is quite interesting that despite struggling at the beginning of their online teaching using online technologies, the participants reported that the frequency of encountering problems in the past years was not quite high. Only one participant wrote that he often encountered difficulties during his online teaching, while half of the participants sometimes encountered problems, and six participants rarely encountered problems. What is most interesting is that one of the participants said she had never encountered any problem. Upon encountering problems, almost all participants chose to switch to another platform which could be both synchronous or from synchronous to asynchronous platform. There was one participant, however, who chose to cancel the meeting and reschedule the class.

Furthermore, unlike Atmojo and Nugroho's (2020) report, the participants' narratives did not indicate any problems associated with students' parents. The problem mostly encountered was bad internet connection which, according to the participants, was most probably caused by poor infrastructures, limited internet coverage in some areas, and force majeure. This finding supports the statement from Marinoni et al. (2020) that infrastructure and internet access are the most fundamental requirements for online teaching. Difficulties in using the features and technologies of the platforms due to unfamiliarity or lack of knowledge and/or skills in using online technologies were also encountered by some participants. For example, T1 found that the features of the platforms caused difficulties in utilizing the technologies because of unfamiliarity with the system. Similarly, T4 was concerned with technicalities and familiarity with online technologies since the teacher's and students' understanding of the use of online technologies might be different from one to another. Moreover, difficulties faced by the participants also included technical problems or hardware due to low-spec hardware and/or limited technological skills as experienced by T6 for example. Related to these problems, Aristovnik et al. (2020) have pointed out that supporting knowledge and skills as well as ICT hardware is substantial for countries where online learning has not been widely implemented prior to the outbreak. The last reported problems were

students' participation and honesty in the online learning environment due to their attitudes and limitations of the online learning system compared to face-to-face as reportedly experienced by, for example, T9 and T16. The shift from face-to-face to online teaching has been regarded as causing serious problems in assessment and evaluation where teachers found difficulties in ensuring students' honesty (Sahu, 2020).

Overall, the participants reported that the frequency of encountering problems was not particularly notable. Upon facing problems or difficulties, the main choice to handle them was by changing to another platform. Further, they reported that the most frequent problem was bad internet connection which was possibly caused by poor infrastructures and limited internet coverage in some areas.

Table 7
Students' adoption and responses toward online teaching

Students' responses	Frequency	Possible reasons
Positively improved	15	(T1) students were already familiar with the technologies.
		(T2) teacher's ability in maintaining students' motivation.
		(T3) students' autonomy.
		(T7) the flexibility aspects of online teaching such as time and space.
		(T12) mutual understanding between teacher and students regarding the strengths and weaknesses of the system.
		(T8) making the most of the technologies requires supporting facilities and
Both positive and negative	1	conditions.

As perceived by the teachers, students' adoption-and-responses toward the actual use of online technologies for language teaching show very positive improvement. It means that their initial adoption and responses were not quite positive, however, almost all participants reported that it had been getting better throughout the process. Regarding the possible reasons for students' positive adoption, T1 argued that it was because the students were already familiar with the technologies while T2 believed it was due to the teacher's ability in maintaining students' motivation during the process. Further, T3 reckoned that students' autonomy played important role in this situation which is quite similar to T4's opinion that students' ability in adapting to the situation and using new technologies

were the influencing factors. These factors are probably related to the fact that students belong to Generation Z (Poláková & Klímová, 2019) which is considered digital natives (Turner, 2015). Additionally, the flexibility aspects of online teaching such as time and space, as reported by T7, as well as mutual understanding between teacher and students regarding the strengths and weaknesses of the system, as stated by T12, crucially impacted the undertaking. It is also interesting to note that there was one participant, T8, who reported that students' adoption had been both positive and negative without much improvement which was mainly due to the lack of supporting facilities and conditions.

Table 8
Teachers' feelings toward their online teaching

Teachers' feeling	Frequency	Examples from participant responses
Happy & Optimistic	12	(T7) happy because I can run the teaching process.
		(T4) happy and satisfied.
Not quite happy	4	(T5) bored since I could not make a progress on my teaching related to the preparation of online materials.

Regarding the participants' feelings toward how their online teaching had been operating, the vast majority expressed their happiness and optimism about how the undertaking had been performed during the pandemic. T7 expressed her happiness because she felt that she was able to manage to conduct the teaching process quite well. Similarly, T4 said that he was happy and satisfied with his online teaching. However, there were also a quarter of the participants who were not quite happy with the practice. T9, for example, was not happy because he could not expect the same atmosphere as face-to-face teaching. As Sahu (2020) stated, some teachers who are not techno-savvy may not be able to cope with the challenges posed by online teaching.

As stated by Marangunic and Granic (2015), TAM core variables explain the outcome variables. In this study, the core variables focused on the participants' PEU and PU. Meanwhile, the outcome variable intended to be explained is the participants' reported general use of online technologies. The reported general use of online technologies during the COVID-19 pandemic, particularly how the participants deployed various strategies for their teaching, handled difficulties they encountered, and kept being optimistic, might be related to their positive perceptions. As reported before, perceptions indirectly influence the use of technologies (Scherer et al., 2018).

CONCLUSION

The present study resulted in findings concerning Indonesian University EFL teachers' adoption of online technologies for their language teaching during the COVID-19 pandemic. The first main findings include their PEU and PU of online technologies as the core variables, namely, that the use of online technologies was still perceived as more of a challenge rather than an easy enterprise. Yet it is also considered a very useful platform for language teaching. The second main finding revealed the teachers' reported general use of online technologies, as the outcome variable, in their teaching practice during the COVID-19 pandemic, comprising: unreadiness of the participants with the transformation at the beginning of the change, video conferencing platform Zoom as the most dominant online platform used by the teachers and SPADA as the most frequently used platform by an individual teacher, usefulness of the platforms as the most mentioned reason in using the platforms while limited features and functions as the main reason for not using certain platforms, quite low frequency of encountering problems, switching among platforms as the main strategy in handling problem, bad internet connection as a mostly encountered problem, positive responses from students, and teachers' satisfaction with their teaching.

Further, it is paramount to reiterate that this study was intended to obtain an understanding of the participants' lived experiences through narrative inquiry. The narrative frames were used to help the participants construct their experiences narratively in relation to the research questions of the study. The frames were developed by referring to the variables of TAM to help explain the teachers' adoption of online technology. Despite the arduous initial process of shifting from face-to-face to online teaching, difficulties that were still encountered during the pedagogical practice, and the somewhat limited number of online technologies that have been utilized, the teachers' very positive perceptions of the usefulness of online technologies led to persistence and optimism in their reported general use of the technology in their teaching. The gained understanding has implications for the continuation of online teaching implementation in the long run. It can be concluded that teachers are quite ready to further implement online technologies in their teaching. However, supporting facilities, facilitating conditions, as well as training for developing technological knowledge and skills are needed to support the process.

Finally, it is essential to note that the amount of detail from participants' responses reviewed in this study was limited. In addition, the information collected from the frames was about the participants' reported experiences as well as their general reflections on the reported experiences. Therefore, future studies can be devised to involve field observation to capture the actual practice of utilizing online technologies for language teaching. The frames also did not include behavioral intentions as one of the outcome variables from TAM and did not consider external factors in TAM which may influence the teachers' perceptions. In addition, further studies are also suggested to include participants' behavioral intentions to use online technologies as one of the outcome variables in TAM. Moreover, considering the relatively small number of samples, any conclusion made from this study may be merely suggestive.

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APPENDIX

Narrative Frames of online teaching technologies adoption during the COVID-19 Pandemic

Note: *The term online teaching technologies used in this study covers any online applications and/or online platforms which are used for your teaching such as, among other, LMS (SPADA, Google Classroom, Moodle, Socrative, etc.,), audio-video conferencing platforms (Zoom, Google Meet, Teams, WebEx, etc.,), Web 2.0 (wikis, blogs, social media, video hosting sites, etc.,), etc.*

Instruction: To get a clear idea on the frames, read the whole page BEFORE starting to write.

Frame #1: Demographic information
I am a _____ (gender) English teacher working in _____ (university). I have been teaching for _____ years. During the one year of COVID-19 pandemic, the face-to-face teaching in my institution has been changed into _____
_____.

Frame #2: Perceived ease of use towards online technologies
I recall that learning to use online technologies for me was _____
_____
_____. It was because _____
_____. For me, using online technologies to do what I wanted to do was _____ _____. My past interaction with online technologies required _____
_____. For me, to become skillful at using online technologies was _____
_____. Therefore, I found that using online technologies was _____
_____.

Frame #3: Perceived usefulness towards online technologies
I remember that accomplishing my task using online technologies _____
_____
_____. By using online technologies, my performance _____. Related to my productivity, using online technologies _____
_____. Overall, by using online technologies my effectiveness was _____.

Frame #4: Actual use of technology during COVID-19 pandemic
When I had to change my usual face-to-face teaching into online teaching, I _____
_____
_____ . My initial strategy to adopt the online teaching technologies was_____
_____ _____ . The initial process of changing the teaching mode for me was _____
_____. The online technologies that I have been using for my online teaching are _____
_____.
Among the online technologies and applications that I have been using for my online teaching, the ones that I have been using the most are _____.
I use them the most because _____ .
_____.
Among the online technologies and applications that I have been using for my online teaching, the ones that I have been using the least are _____.
I use them the least because _____
_____.
During my online teaching I _____ find difficulties/problems with the online technologies and applications that I use. When I experienced difficulties/problems with the online technologies and

applications that I used, my teaching _____
_____
_____ . The problems/difficulties that I encountered in using the technologies for my online teaching are _____
_____. This is probably because _____
_____.

So far, my students' adoption and responses toward the use of the online teaching technologies during my online teaching have been _____
_____. This is probably because _____
_____
_____ . Related to how my online teaching has been running so far, I feel _____
_____.