# Drivers of Student Technology Readiness in Using Cloud Accounting to Improve Student Performance

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Abstract—Cloud technology can make the learning process easy and done anywhere. However, in its use, some students feel anxious and prefer learning using offline software. This research targets students in Indonesia who study cloud accounting in computer accounting courses and introductory accounting. Researchers used the census method to get respondents, so a sample of 131 respondents was obtained. The incoming data is then tested for validity and reliability using PLS (partial least square) with the help of smartpls 3.0. After that, an analysis of technology readiness was carried out using technology readiness index (TRI), which consisted of optimism, innovativeness, insecurity, and discomfort. The results show that most students have medium technology readiness, with motivational factors such as optimism and innovativeness having a very high category. At the same time, the inhibiting factors in adopting technologies such as insecurity and discomfort are in the medium category. Most students also have the characteristics of explorers who like new technology, so cloud accounting is welcomed with great enthusiasm. However, based on the characteristics of male and female students, the technological readiness of male students is better than that of female students. One aspect that is lacking is the aspect of insecurity. Female students are worried when the assignments given do not reach their lecturers. So, cloud accounting service providers should provide an ecosystem that can facilitate all students. In addition, the findings of this study can also be helpful for lecturers to carry out learning by looking at the TRI from students so that learning can be more effective.

*Index Terms*—Academic performance, cloud accounting, technology readiness, student performance

#### I. INTRODUCTION

Technological developments in the education field have changed the way of teaching and learning, especially since the COVID-19 pandemic [1]. Online learning can make learning can be done anytime and anywhere [2]. One of them is by learning through gamification. The development of gamification in online learning is proliferating. Gamification smartphone applications have been downloaded worldwide by 147 billion in 2016 and increased to 218 billion in 2020 [3]. So the potential for gamification can be a promising learning method that can motivate and increase user engagement [4]. User involvement and intrinsic motivation most felt impact when are the implementing gamification [5–7]. Therefore the use of technology for the

Manuscript received November 24, 2022; revised January 14, 2023; accepted February 2, 2023.

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Education process is crucial today [1, 8].

As a result of COVID-19, all aspects, including education, are affected. As a result of policies that are almost universal throughout the world, such as social restrictions, unstable economic conditions, and enormous death threats occur [9]. The use of technology in learning can improve communication between students and lecturers even though the learning process is carried out online [10, 11]. Technology that can help improve learning is cloud computing. Cloud technology allows learning not to require physical storage via hard drives or flash drives. The storage process is carried out on a server that can be accessed if internet access is connected. In accounting education, much learning uses practicum in class, so it is only flexible to do with the help of technology. Through cloud technology, the learning process can be helped. However, not all cloud technologies support accounting learning. For example, to make financial reports, students must identify, classify, and journalize, which requires special software to help students make financial reports. Cloud accounting is accounting software that can process accounting transactions online, which can be done online through internet media using either a desktop or smartphone. So that learning can be done with the mobile learning method. Even after students graduate, students will be required to use an integrated information system, so it is crucial to study accounting technology well. A survey conducted by Age proves that 39% of professional accountants agree that accounting technology can improve accountant performance because it can reduce manual work and speed up work processes [12]. In addition, most professional accountants (56%) say that cloud accounting can increase productivity because they can work effectively and efficiently [13]. So this convenience and usability factor becomes a determinant for users in increasing technology readiness in their decision to adopt technology [14].

Even though most students have smartphones that can access online learning, only a few are worried about online learning because they need to prepare technologically [15]. 92% of students experience problems in online learning due to a lack of communication, internet signals, and class instructions from lecturers [16]. Previous literature reveals various reasons for the failure to implement e-learning in the learning process, namely due to a lack of digital literacy [17, 18], weak interaction between lecturers and students [19], and low self-efficacy [17]. Meanwhile, one of the reasons for the successful implementation of technology in learning is the ease of access [20] and system flexibility. Online technology can also increase convenience in terms of flexibility because it can be used anytime and anywhere using internet access [21]. Some previous research also revealed that learning cloud accounting can increase student understanding, especially in practical courses such as accounting [22–25].

The Technology Readiness Index (TRI) is the result of the development of Parasuraman in 2000 to measure the level of technological readiness of a person in using specific technologies [26]. Fifteen years later, Parasuraman developed TRI 2 to evaluate the technological readiness level more closely with current developments [27]. TRI has four main dimensions, which are divided into two factors, namely supporting factors that can motivate students to use technology, such as optimism and innovativeness [27]. While the inhibiting factors in adopting technology are insecurity and discomfort [27]. The higher the student's motivation compared to the inhibiting factors, the more prepared the user is to adopt the technology. Previous research has proven a relationship between technology readiness and adoption of technology use [28-32]. So that the determination of technology readiness is essential to do to improve student learning through technology

Optimism is a person's perspective on technology regarding the positive sides of this technology which can increase control, flexibility, and efficiency in the daily lives of users [27, 33]. High optimism allows technology users to recommend the technology to others [34, 35]. At the same time, Innovativeness refers to a person's tendency to be a pioneer in using technology so that usually, these users are at the forefront of trying new technologies [27, 36]. In addition to the driving factors for adopting technology: insecurity and discomfort. Insecurity shows a negative view of users who feel insecure due to uncertainty from service providers to ensure technology which is one of the inhibiting characteristics of technology adoption innovators [35, 37].

In comparison, discomfort is the opposite of optimism. Users will feel anxious if there is technology because they lose control and are uncomfortable using technology [27]. Discomfort can also hinder users from adopting technology, so they tend to reject it [38]. These motivational and inhibiting factors are usually inherent in technology users. So the role of the technology platform in learning is critical to make students have good technology readiness [39]. When students have high optimism and innovation and tend to ignore inhibiting factors such as INSC and DSCM, then they are ready to use technology. Thus, when accounting students are ready to use cloud technology, the learning process will be more effective and efficient. Based on this explanation, this study aims to assess the level of the student technology readiness index, especially in inhibiting factors and factors that trigger the adoption of this technology. So that the learning process can be adjusted to how ready students are to accept technology.

#### II. METHOD

This study aims to test technological readiness based on several research questions, namely: 1) what are student characteristics based on TRI; 2) what is the level of technological readiness based on the characteristics of TRI? The research questions were then used as parameters and design studies to answer research questions.

## A. Design Study

This research targets cloud accounting users in computer accounting courses and introductory accounting in the second and third years. During the learning process, students are given material through direct learning, and then in several meeting sessions, students study cloud accounting technology to learn accounting practicum. All material and questions at the meeting were processed using cloud accounting technology.

The number of respondents in this study amounted to 131, which was conducted from May to July 2022. The author uses the census method in research. The census method was used because the entire population was used as sampling, so a total of 131 students were obtained. After that, the questionnaire was distributed to students online with the help of Microsoft forms. We also made observations and interviews with students to obtain information that was appropriate to the research topic.

### B. Instrument

The items from construct technology readiness are based on the theory of technology readiness index (TRI) 2, adopted by Parasuraman and Colby [27], and consist of optimism, innovativeness, insecurity, and discomfort, as described in Table II. The optimism construct consists of five questions (OPTM1, OPTM2, OPTM3, OPTM4, OPTM5), the innovativeness construct consists of five questions (INNV1, INNV2, INNV3, INNV4, INNV5), the insecurity construct consists of 6 question items (INSC1, INSC2, INSC3, INSC4, INSC5, INSC6), and the discomfort construct consists of four question items (DSCM1, DSCM2, DSCM3, DSCM4). Respondents will be asked to answer the questionnaire online with a range of answers from strongly agree to disagree strongly. The author adopts question items with a Likert scale where the answers that strongly agree are worth 5 to the answers that strongly disagree are worth 1.

### C. Data Analysis

The author uses Partial least squares with smartPLS 3.0 to evaluate the validity and reliability of the data from the respondents' answers. Evaluation of validity using outer loading and Average Variance Extracted (AVE). While the reliability criteria were evaluated using Composite Reliability (CR) and Cronbach Alpha (CA). After the data has met the validity and reliability criteria, data analysis is carried out based on the TRI criteria. Users with a value less than 2.89 are categorized as "low TRI." TRI values ranging from 2.9 to 3.51 have a "medium TRI" category. In contrast, the TRI above 3.51 has a "high TRI" category [27]. Finally, the existing data were analysed descriptively. The final step is the conclusion and implications of the research results.

#### III. RESULT

## A. Respondent Profile

This section discusses the characteristics of respondents based on three types of criteria, namely gender, student level year, and TRI category according Table I. Based on female student respondents, 73 or 55.7% of 131 students. At the same time, the male respondents were 44.3% or as many as 58 students. Then the respondents at the second level amounted to 49.6%, and at the third level, 51.1%. Respondents grouped by type of TRI consisted of five clusters: explorers, pioneers, sceptics, paranoids, and laggards [26]. Most students are of the explorer type, namely 58%. Then students who are pioneers are 15.3%. Students who have paranoid and sceptics are 10.7% each. In comparison, students with the laggard had the most negligible proportion, 5.3%.

		Amount	Percentage	
Gender	Man	58	44.3%	
Gender	Woman	73	55.7%	
Student level	Second Year	65	49.6%	
Year	Third year	66	51.1%	
	Explorers	76	58.0%	
	Pioneers	20	15.3%	
TRI Category	Sceptics	14	10.7%	
	Paranoids	14	10.7%	
	Laggards	7	5.3%	

TADLE I. DEMOCRAPHIC DECEMPENT

#### B. Validity and Reliability Analysis

Discriminant analysis was used to determine the validity and reliability of data resulting from respondents' answers. First, to ensure data validity is met, an analysis using outer loading and AVE with recommended values, not below 0.7 for outer loading and 0.5 for AVE [40]. Meanwhile, evaluating reliability is carried out by evaluating CA and CR values with a value of not less than 0.7 [40].

The most considerable outer loading value in the OPTM

construct is in OPTM3 of 0.890. in contrast, the smallest value on OPTM1 is 0.820. then in the INNV construct, the most significant outer value lies in the INNV5 item (0.791) and the smallest item in the INNV1 construct (0.756). Then in the INSC construct, the smallest value is in the INSC3 item (0.792), and the largest is in the INSC1 item (0.709). While in the DSCM construct, the smallest value is in the DSCM1 item (0.795), and the largest is in the DSCM2 item (0.718). Based on this explanation, none of the OPTM, INNV, INSC, and DISC constructs have a value below 0.7. Then, another way to evaluate the validity of the respondent's data is to look at the AVE evaluation (AVE > 0.5). Based on table II, all AVE values exceed 0.5, with the enormous AVE value in the optimism construct (0.745) and the smallest AVE value in the insecurity construct (0.508). Based on the evaluation of the outer loading and AVE values, it was found that the two evaluations met the predetermined requirements. Therefore, the respondent data in this study has valid data.

To determine the PLS method's reliability using CA and CR evaluations. Table II below shows the highest CA value in the OPTM construct of 0.914. in contrast, the lowest CA value lies in the insecurity construct of 0.710. then other CA constructs, such as innovativeness and discomfort, have respective values of 0.826 and 0.764. the PLS output results show that all constructs in CA do not have a value less than 0.7, so the data in this study are reliable. In addition to evaluating CA, to analyze data reliability is also used CR. The highest CR value is in the optimism construct, equal to 0.904, and the smallest is 0.792, which lies in the discomfort construct. Thus, the CR value in this study is reliable because it has a value of more than 0.7.

TADIE III DATA VALIDITY AND DELIADILITY

Item	Construct	Outer loading	AVE	CA	CR
	Optimism (OPTM)		0.745	0.914	0.904
OPTM1	The existence of learning using cloud accounting makes understanding the				
	subject better	0.820			
OPTM2	Studying cloud accounting makes me productive	0.858			
OPTM3	I learn more freely when using cloud accounting compared to learning in the				
	traditional way	0.890			
OPTM4	Learn to use cloud accounting more effectively	0.872			
OPTM5	I use cloud accounting to be updated with developments continuously	0.875			
	Innovativeness (INNV)		0.590	0.826	0.878
INNV1	I know cloud accounting earlier than my classmates	0.756			
INNV2	I can use cloud accounting without the help of others	0.765			
INNV3	I can use cloud accounting in everyday learning	0.760			
INNV4	When using cloud accounting, I only encountered a few problems	0.767			
INNV5	I prefer to use cloud accounting technology compared to accounting software	0.791			
	that can only be used offline				
	Insecurity (INSC)		0.508	0.710	0.800
INSC1	I feel insecure when I provide my identity when using cloud accounting	0.709			
INSC2	I doubt my data gets spread when using cloud accounting	0.788			
INSC3	I must check the last work I did while using cloud accounting	0.792			
INSC4	I do not believe that the cloud accounting assignment that I am working on will				
	get to the lecturer if I do not conform with the lecturer	0.715			
INSC5	I prefer studying in notebooks compared to cloud accounting technology	0.738			
INSC6	I must always double-check in the database if my work is saved	0.722			
	Discomfort (DISC)		0.592	0.764	0.792
DISC1	In my opinion, the guide on the cloud accounting website did not help me master	0.795			
	cloud accounting	0.795			
DISC2	The guidance contained in cloud accounting is difficult to understand	0.718			
DISC3	Learning to use cloud accounting complicates my way of learning	0.783			
DISC4	I am embarrassed when I have difficulty using cloud accounting	0.787			

## C. Technology Readiness Index Analysis

Based on Table III, most students in this study had the

explorer category of 72 students or 58%. Explorers-type students have very high optimism (3.97) and innovativeness (3.94). While the inhibitory factors that can reduce the use of technology, namely insecurity (2.84), are in the low category, and discomfort is in the moderate category (3.02). So on average, the total TRI of explorer's type students is 3.44, categorized as a medium TR index. Meanwhile, 15.3% of students with Pioneers characteristics have High TRI in the OPTMS (3.98) and INNV (3.97) categories. In contrast, the insecurity and discomfort categories have a low Tri category, 2.74 and 2.76, respectively. The total average TRI in the pioneer segment is high TRI with a value of 3.363. In the sceptic category, the average value of type students has a high TRI of 3.588. Predictor values in adopting technology positively, namely OPTM (4.01) and INNV (3.93), have a high TRI category. Meanwhile, 2.65 students had INSC and 2.68 in the DSCM category. Overall, students with the paranoid type have an average TRI score of 3.233 in the medium TRI category.

In the Paranoid type, the overall value of the type of student is paranoid, which is 10.7%. This paranoid type has a high motivational value towards technology: optimism of 4.04 (high TRI) and INNV of 3.56 (high TRI). However, the paranoid type has a low inhibitor of technology, namely INSC of 2.65 (low TRI) and DSCM of 2.68 (low TRI). At the same time, the laggard type has an average TRI value of 3,658 or a high TRI category. The laggard student type has an optimism value of 4.02 (High TRI) and INNV of 3.83 (high TRI). While the factor inhibitor, laggard type, has a low TRI, namely INSC (2.87), and medium TRI, namely DISC (3.13).

TABLE III: STUDENT CHARACTERISTIC BASED ON TRI								
Segment	%	Optimism	Innovativeness	Insecurity	Discomfort	Total TR	TR Index	
Explorers	58%	3.97	3.94	2.84	3.02	3.443	Medium TR index	
Pioneers	15.3%	3.98	3.97	2.74	2.76	3.363	Medium TR index	
Sceptics	10.7%	4.01	3.93	3.05	3.36	3.588	High TR index	
Paranoids	10.7%	4.04	3.56	2.65	2.68	3.233	Medium TR index	
Laggards	5.3%	4.02	3.74	3.05	3.82	3.658	High TR Index	
Overall TRI	100%	4.01	3.83	2.87	3.13	3.46	Medium TR index	

Based on the classification of the TRI category (Table IV) according to the male sex, the majority are explorers, namely 70.7%. At the same time, the second largest proportion came from pioneers, 15.5%. In comparison, the minor type of men is the paranoid type of 1.7%. In the male gender category, student motivators toward cloud accounting are very high. This can be seen in the OPTM and INNV values of 3.978 and 3.969, respectively. In contrast, the inhibitors of technology readiness tended to be medium, with INSC and DSCM values of 2.931 and 3.095, respectively. So the overall TRI value is 3.493 or in the medium TRI category for the male.

In the TRI category, most women are explorers, namely 47.9%. However, paranoids, pioneers, and skeptics have values that are not too far away, namely 17.8%, 15.1%, and 13.7%, respectively. While the minor TRI type, according to the female, is the laggard type of 5.5%. In the female TRI category, the motivator value for technology is almost like the male gender, where the OPTM and INNV factors are in the high TRI category, 3.995 and 3.836. At the same time, factor inhibitors such as Insecurity have a value of 2.765 or are in a low category. Then from the DSCM aspect, it has a value of 2.962 or is in the medium TRI category.

		_		ABLE IV: CATEC				
	Туре	Percentage	OPTM	INNV	INSC	DSC	TR index	Category
Man			3.978 (High TRI)	3.969 (High TRI)	2.931 (Medium TRI)	3.095 (Medium TRI)	3.493	Medium TRI
	Explorers	70.7%						
	pioneers	15.5%						
	sceptics	6.9%						
	Paranoid	1.7%						
	laggard	5.2%						
Woman			3.995 (High TRI)	3.836 (High TRI)	2.765 (Low TRI)	2.962 (Medium TRI)	3.389	Medium TRI
	Explorers	47.9%						
	pioneers	15.1%						
	sceptics	13.7%						
	Paranoid	17.8%						
		5.5%						
Second year			3.981 (High	3.945 (High	2.91 (Medium	3.046 (Medium	3.470	Medium TRI
			TRI)	TRI)	TRI)	TRI)		
	Explorers	54.7%						
	pioneers	14.1%						
	sceptics	15.6%						
	Paranoid	12.5%						
	laggard	3.1%						
Third year			3.994	3.845 (High	2.768 (Low	2.996 (Medium	3.400	Medium TRI
			(High TRI)	TRI)	TRI)	TRI)		
	Explorers	61.2%						
	pioneers	16.4%						
	sceptics	6.0%						
	Paranoid	9.0%						
	laggard	7.5%						

Then based on the student year level category, this research is divided into two, namely the second and third years. Most students in the second year have the explorer type, 54.7%. Moreover, a minor TRI type in the second-year level category has a laggard type of 3.1%. In contrast, other types are sceptics (15.6%), pioneers (14.1%), and paranoid (12.5%). In the category of students in their second year, students' motivation toward technology is very high. This can be seen in OPTM and INNV values in the high TRI category, each having a value of 3.981 and 3.945.

In contrast, the inhibitors of technology readiness tended to be medium, with INSC and DSCM values of 2.931 and 3.095, respectively. So, the overall TRI value is 3.493 or in the medium TRI category for males. In contrast, other inhibitory factors that look at the negative side are ategorized as medium TRI. This can be seen with the INSC value of 2.91 and the DSCM value of 3.046. In the category of third-year students, the majority have explorer characteristics of 61.2%. In contrast, the least characteristic of the sceptic type is 6%. Other types of consecutive third-year students are pioneers (16.4%), paranoid (9%), and laggards (7.5%). Based on the category of students in the third year, the majority have a very high motivational factor toward technology, with categorical OPTM and INNV values of 3.994 and 3.845, respectively. In contrast, the inhibitor factor for technology has a moderate category even though it has a low INSC score (2.768) and a medium DSCM (2.996).

## IV. DISCUSSION

The technology readiness index is used to measure the technology readiness of users using technology through two main factors, namely motivators and inhibitors. The results of this study indicate that students are ready to use cloud accounting technology in the medium category (3.46). Students have high optimism about the features and facilities available in cloud accounting. This is proven by the average student score of 4.01 (high TRI). The advantage of using cloud accounting is that it allows students to study freely anywhere compared to traditional learning. This is because students need to improve due to the presence of COVID-19 in conducting learning in the classroom. The existence of cloud accounting can make accounting learning flexible so that it can be done anywhere because the use of cloud computing technology is done online. The more flexible the technology used, the tendency of students to use technology in every lesson will increase [25, 41, 42]. In addition, the menu in cloud accounting has the features and services needed by students to make students understand. This is because every input transaction made by cloud accounting can accelerate cycles in accounting. So that each input can produce financial report information in real-time without the need to manually record a journal or record a trial balance, these uses make students feel satisfied with the use of cloud accounting. The more satisfied the use of technology is, the more enjoyable learning will be, affecting overall academic performance [20, 43, 44].

Innovativeness indicates a positive view of students toward the use of cloud accounting. Based on the analysis, most respondents have a high TRI on innovativeness, equal to 3.83. learning with cloud accounting improves students' understanding of accounting courses because it can be operated online to be accessed anywhere and anytime. In addition, students can learn cloud accounting without asking for help from others. So, it takes a little effort to master cloud accounting. Students with high innovativeness tend to try new things with more renewable technology. So they are more comfortable using technology than the manual method [14]. Apart from optimism and innovativeness as factors that trigger an increase in technology adoption, two factors make someone reluctant to use technology: insecurity and discomfort [33, 35, 45]. Insecurity for users occurs when there is no certainty from technology service providers that the use of technology can be managed by the management [46]. For example, if there is a problem of data theft or loss of essential data, the technology manager can be willing to replace it materially or non-materially. Previous research revealed that motivational factors such as optimism and innovativeness significantly dominate contributions to technology [47].

The average student in this study had an insecurity score of 2.87 or was in the low TRI category. One form of student anxiety occurs when they are asked to do assignments through cloud accounting. However, students feel anxious when there is no confirmation from the lecturer that the work has been done is saved. Even if you look at the characteristics of cloud computing technology, all data will be automatically saved if there is internet access. In addition, based on field results, most students always check their work in the cloud accounting database to ensure that what students have done has been stored. This fact shows that there is insecurity from students about cloud accounting technology. The more insecure the technology used, the user will tend not to adopt or even avoid the technology [48-50]. While on the discomfort aspect, most students have the medium TRI category with a score of 3.13. This shows that the level of student discomfort toward cloud accounting technology is moderate. This is because the guides on the website could be more helpful for students in mastering cloud accounting. Some guidelines could be more understandable. Students must practice directly to understand the features and benefits of cloud accounting. Some students also complain that cloud accounting makes it difficult to study accounting courses. This is because some lecturers require their students to do it manually. Students with a high level of discomfort can result in discomfort when using technology, so there are difficulties understanding the technology-especially in the characteristics of learning accounting that requires high accuracy and focuses on making financial reports. So students are afraid that when there is an incorrect process, it can result in the work being done is not good. Previous literature states that users are uncomfortable with the technology used, so there is an excellent chance for users to avoid this technology [51–55].

Meanwhile, based on the type of TRI used, most students are explorers, namely 58%. After that, the proportion of other categories was quite balanced, such as pioneers (15.3%), sceptics (10.7%), paranoids (10.7%), and laggards (5.3%). Students with the explorer's type have high motivators, namely optimism (3.97) and innovativeness (3.94). At the same time, the inhibitor factor has a low score in the insecurity category (2.84) and a medium TRI for the discomfort category. Previous research also has the same results where users with the explorer type are the largest segment in terms of optimism so that they can view a new technology positively [46]. Users with high motivators tend to be ready to use technology, especially for continuous use [56–59]. Sceptical users generally have positive and negative perspectives on the presence of technology [14, 27, 60]. They have a good view of cloud accounting which can be used flexibly. However, on the one hand, skeptical students also view cloud accounting as quite inconvenient because they feel uncomfortable using the system if the assignments, they are working on one day do not reach the lecturers.

In contrast, the types of pioneers in this study tend to have high characteristics of motivation to use technology but have low inhibitors. The results of this study are supported by similar situations in several other countries where pioneers and sceptics have a reasonably high presentation [61]. The laggard type is a minor contributor to the field of accounting technology [62]. Male users tend to have better technology readiness than female users. Based on the evaluation results in the field, men have higher levels of optimism and innovativeness than women. Men tend to try to do new things. Meanwhile, female students tend to try new things slightly less than male students. Technology should be designed for all genders, including the needs of female users [63]. In research on the context of tax office employees, female users have higher optimism than women [62]. Technology should be used as an effective medium for enhancing learning. So it is imperative to integrate a technology-based curriculum. The existence of this policy will enable lecturers and students to increase technology readiness indirectly. They will prepare themselves before the lecture because there are things to be learned in the meeting. In the context of cloud accounting, most students are ready to use it because it has been included in the curriculum so that they can learn the technology before class begins. Higher technology readiness will enable students to voluntarily use the technology more often [14, 64, 65]. When the technology used in learning is of high quality, it will make students adopt it [66].

## V. CONCLUSION

This study shows that accounting students have medium technology readiness in accepting cloud accounting technology for their learning. Most students have the type of "explorer" who is very enthusiastic about the presence of technology in their learning. Students with exploratory characteristics are fearless in trying technologies such as cloud accounting. While students who are pioneers tend to have some concerns about cloud accounting, so there needs to be encouragement from lecturers or from the surrounding environment to use cloud accounting technology. At the same time, students with a "sceptic" type tend to concentrate on the more significant benefits than the negative ones. Then the paranoid type of students allows them to have more worries than the advantages of cloud accounting. The study's results showed that male students' technological readiness was better than female students. Male students tend to be brave in using new technology, so in terms of technological readiness, they are more prepared than female students. While female students have high technological readiness, it is just that they have a low-security perception compared to men. Especially when it comes to assignments given by lecturers. Female students tend to ask for certainty from the system or the lecturer that the assignments are received by the lecturer.

Therefore, cloud accounting service providers should create an adequate system environment to facilitate students, especially female students. The platform used is also critical to ensure notification of assignment acceptance so that students are better prepared to submit their assignments using technology. Then, for technology service providers, especially cloud accounting, can adjust the technology ecosystem to suit the needs of female students. So that all genders can increase technology readiness, especially in cloud accounting. In addition to evaluating students' technological readiness, lecturers can also design ways of learning in class by adjusting students' abilities to use technology. So based on this explanation, recommendations for the effective use of cloud accounting in the learning process, different approaches and explanations are needed depending on the characteristics of students, especially on several inhibitory factors such as optimism, innovativeness, insecurity, and discomfort that adapt to the characteristics of various types of TRI users (Explorers, pioneers, sceptics, paranoid, and laggards). Then for further research, it can observe the factors that can influence the technological readiness of female students to increase students' technological readiness in accepting technology.

#### CONFLICT OF INTEREST

The author declares no conflict of interest.

## AUTHOR CONTRIBUTIONS

Ayatulloh Michael Musyaffi created a research concept starting from problem identification, study design, data analysis, and article writing. Mario Colega Oli carried out the process of data analysis and article writing. While Bambang Afriadi played a role in the data collection and interpretation of research findings.

#### FUNDING

The author would like to thank Jakarta State University, Cagayan State University, and Sheikh-Yusuf Islamic University. They have supported this research materially and non-materially so that it can be completed properly.

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