

Digitizing accounting education trends during COVID-19: empirical evidence from Vietnamese universities

Digitizing
accounting
education
trends

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Hung Ngoc Tran

*Faculty of Accounting and Auditing, Industrial University of Ho Chi Minh City,
Ho Chi Minh City, Vietnam*

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Abstract

Purpose – The study mainly aims to evaluate factors that impact online accounting education in Vietnamese universities during COVID-19.

Design/methodology/approach – The study is exploratively conducted with a quantitative sample using purposive data-collecting techniques. The sample focused on teaching staff and students at public and private universities in Vietnam during COVID-19.

Findings – The study shows that infrastructure, working/living conditions during COVID-19 and lecturing time are the top three factors impacting online digitizing accounting education.

Research limitations/implications – This research is not without limitations. The limitations are limited time and resources, which did not allow for examining other factors that impact digitizing education in accounting. The forthcoming study should examine extended factors (not mentioned in the study) such as government sponsorship, lecturers' soft skills, national culture, qualifications and so on.

Originality/value – This study identifies and states significant factors that impact online digitizing accounting education in Vietnamese higher education during COVID-19.

Keywords Vietnamese universities, COVID-19 pandemic, Digitizing accounting education

Paper type Empirical study

1. Introduction

During the last two years, the global educational system has faced the most significant disturbance ever as the COVID-19 pandemic swept through the globe. Teachers, support teams and students had to bear the universal impact of the pandemic. This pandemic directly affected ongoing teaching activities in the educational sector and imposed difficulty in the everyday life of learners and teachers indirectly. According to data from the UNESCO and UNICEF, more than 1.6 billion learners were affected by this educational crisis when education systems halted almost all schools and universities worldwide (UNESCO, 2020a). During the pandemic, nearly all countries had no choice but to offer online learning opportunities of varied quality for learners. Despite the shift in the educational system, generally, it could be seen that virtual learning is recognized as beneficial and more qualified compared with traditional in-person learning. When deciding to convert to online learning, all in-campus activities were either canceled or postponed. Investment in online-based learning management systems (LMSs) (such as Microsoft Teams, Zoom or Google Meet) (Lim, 2020) enabled instructors to interact with learners basically through live or recorded lectures



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via chatting, online exams, assignments and quizzes (Mihret *et al.*, 2017; Helfaya, 2019). However, there were certain difficulties for some students and faculty members when it came to familiarizing themselves with the new teaching method. To study the impact of COVID-19 on global higher education, the International Association of Universities (IAU) directed a survey. Its result showed that almost all global institutions were affected by this pandemic. The disturbance included transitioning from the traditional way to online learning, canceling campus activities, technical infrastructure problems, financial problems and so on.

Due to the COVID-19 pandemic, there were many complications arising, including technological disruption, overseas expansion, intensive competition and rising costs. As a result, more and more businesses tried to seek professional external advice such as professional accountancy services. According to the survey by ACCA (2021), the demand for accounting services has increased due to urgent requirements for addressing the challenges posed by the pandemic and rising opportunities for business growth. Worldwide, accounting education is highly appreciated by young students because it is an important stage for them to master skills before becoming professional and talented accountants. Moreover, the accounting field is also concerned strictly with technical skills, which were impaired by the pandemic. In developing and low- and middle-income countries (including Vietnam), some higher-education institutions have claimed that most of their students face difficulties due to poor infrastructure, such as insufficient digital supplies and lack of access to the Internet. The reason was that they could not afford additional costs during COVID-19. Hung (2022) conducted a study about factors impairing the quality of online training at universities in Hanoi. Therefore, this study aims to determine factors that impact online digitizing accounting education in higher education (public and private universities) during the COVID-19 pandemic in Vietnam.

2. Literature review and hypothesis development

Here, the author discusses various concerns of COVID-19 impact on digitizing accounting education in Vietnam, such as online lecturing timing, self-study of students, student assessment process, students and self-efficiency of the lectures and support teams, during the COVID-19 pandemic.

2.1 Infrastructure

Digital education is known for utilizing technology in educational activities (e-learning). Concerning accounting education, incorporating technology in teaching activities has been considered significant, according to the Accounting Education Commission (AEC). This could help accounting education remain relevant and prepare more effective accountants. Until now, almost all universities worldwide have been investing in LMSs. It led to a massive surge in e-learning in general and accounting education. According to Mihret *et al.* (2017), applying technology in teaching activities facilitates guidance by lecturers and prompts feedback from learners about the studying materials and teaching methods' effectiveness. Helfaya (2019) stated that applying feedback methods and e-assessment in educational accounting fields has been highly appreciated by learners. Because of the flexibility of e-learning (considering both time and place for both teachers and learners), this type of learning has been increasing exponentially (Al-Hadrami and Morris, 2014).

H1. The infrastructure positively impacts digitizing accounting education.

2.2 Students' perceptiveness

One of the disadvantages of e-learning is the absence of learner-instructor human interaction. Educators should still concern themselves with the learning process of students (Humphrey and Beard, 2014). The abrupt conversion from traditional learning to e-learning

can be unexpected due to the absence of an effective learning process. Moreover, the effectiveness of digitizing accounting education depends on students' perceptions (Anaekenwa *et al.*, 2020). Most of the time, lecturing happens without instructors' monitoring, so how students perceive their future professional prospects will affect their voluntary study, which plays a vital role in digitizing accounting education.

H2. The students' perceptiveness positively impacts digitizing accounting education.

2.3 Assessment process for accounting students

In higher education, there are two assessment methods: summative and formative. In summative assessment, examinations determine the achieved level of learning goals. However, lecturers continuously evaluate students during the formative assessment during teaching time to catch up with the learners' needs. During the COVID-19 pandemic, almost all universities were closed, and it seemed that formative assessment was a better choice to have better feedback from students' learning (Lieberman *et al.*, 2020). According to a survey conducted by UNESCO (2020a), some alternative assessment methods were applied during COVID-19, such as home-based exercises, online tests, assignments, projects and so on (UNESCO, 2020b, c).

H3. The assessment process positively impacts digitizing accounting education.

2.4 Faculty employees

In higher institutions, almost all lecturers are familiar with LMSs, but delivering their courses through virtual teaching is still problematic. As a result, the quality of instruction may be affected by the sudden transition in teaching and learning methods. Additionally, faculty employees, whether lecturers or supportive teams, lack self-efficacy (Baroudi and Shaya, 2022; Ma *et al.*, 2021). Therefore, not only lecturers' self-efficacy, which is considered critical for the virtual education process, but also the other supportive things, such as available technical facilities and specialized training, could significantly impact the success of online teaching (Dawei *et al.*, 2014; Zheng *et al.*, 2018).

H4. The faculty employees positively impact digitizing accounting education.

2.5 Lecturing timing

Until now, there have been different points of view about lecturing timing. When comparing traditional and virtual teaching, scholars stated that online education took more time than traditional education, especially when it comes to evaluating students' remarking grades and solving technical problems. When lecturers conduct online instruction, they should incorporate various online activities, e.g. video lectures, debates and seminars, not to mention availing the necessary documents for the learning process to engage students and enhance their performance. Simultaneously, other researchers found the contrary; traditional education requires more time than virtual education (van de Vord and Pogue, 2012).

H5. The lecturing timing positively impacts digitizing accounting education.

2.6 Working/living conditions during COVID-19

In 2020, Vietnam faced two waves of outbreaks of the COVID-19 pandemic. With a harsh and relatively early response, Vietnam has been assessed as one of the few countries to be successful in controlling COVID-19. The direction and administration of the government have shown appropriate and flexible – yet consistent moves – with the “dual goal” while actively preventing the epidemic's downsides effectively and focusing on recovery and

promoting domestic production. According to economic sectors, the COVID-19 transition has affected workers across industries; some industries have a significant impact on the proportion of workers, such as arts and entertainment (88.6%); accommodation and catering services (81.7%); transportation and storage (79.7%); administrative activities and support services (72.7%); industry processing and manufacturing (70.1%); wholesale and retail, repair of automobiles, motorbikes (68.5%); educational training (68.5%) and real estate (67.8%) (Central Institute for Economic Management-CIEM, 2021). Digital services are the industry that capitalizes on growth opportunities during the pandemic. Taking advantage of the 68.17 million Vietnamese Internet users and 145.8 million mobile data network connections (as of January 2020), many communities' support services have been quickly deployed. During the epidemic, technology services were needed for working from home, online learning and home delivery, and electronic payments have grown more robust than before (Zoom, Google Meet, MS Team, etc.). On the other hand, blockade orders posed more complex challenges for universities. The main challenge involved continuing to teach when students, lecturers and support staff could not be present at the universities. The only solution was to deploy online teaching. In a relatively short time, universities had to convert their entire programs online, some starting a new semester entirely online. The epidemic has changed not only learners' behavior but also lecturers' and supportive teams', shifting from traditional to remote learning platforms. This period also witnessed a spike in learning activities and research on online studying sites such as LMSs, digital libraries, etc.

H6. The working/living conditions during COVID-19 positively impact digitizing accounting education.

3. Research method and methodology

3.1 The research model development

Based on the six hypotheses mentioned beforehand, the model was composed to test the impact of six independent variables on the dependent variable DIGI (digitizing accounting education).

The model is explained as below:

$$\text{DIGI}_i = \alpha + \beta_1 \text{INF}_i + \beta_2 \text{STU}_i + \beta_3 \text{ASS}_i + \beta_4 \text{EMP}_i + \beta_5 \text{TIM}_i + \beta_6 \text{COV}_i \varepsilon_i$$

where DIGI_i represents digitizing the accounting education factors including (1) DIGI1 – remote teaching activities with Zoom, Google Meet, MS Team, etc., (2) DIGI2 – midterm, final term exams and summative exercises are conducted online, (3) DIGI3 – learning materials are uploaded and assessed through LMS systems and (4) DIGI4 – interaction between instructors and learners happens through LMSs, online classes, emails, etc., α is a constant term, β_i is a coefficient of variables and ε_i is residual.

The variables included INF, STU, ASS, EMP, TIM and COV, which stand for infrastructure, students' perceptiveness, assessment process, faculty employees, lecturing timing and working/living conditions during COVID-19, respectively, which are expected to have an associated impact on digitizing the accounting education of Vietnamese universities.

The scales of variables mentioned above included

- (1) INF: representing infrastructure factors, which included (1) INF1 – the quality of Internet service in Vietnamese universities, (2) INF2 – the quality of digital libraries in Vietnamese universities, (3) INF3 – the quality of computer systems in Vietnamese universities, (4) INF4 – standardization and quality assurance system in Vietnamese universities and (5) INF5 – database systems (LMS) in Vietnamese universities.

- (2) STU: representing the students' perceptiveness factors, which included (1) STU1 – students' understanding that online learning is the mandatory solution for continuing the learning process during the COVID-19 breakout, (2) STU2 – students feel positive about online learning, (3) STU3 – students would like to use IT in studying activities, (4) STU4 – students consider online learning as an engaging learning method and (5) STU5 – overall, students accept online learning as one solution for the learning process.
- (3) ASS: representing the assessment process, which included (1) ASS1 – students' attendance assessment, (2) ASS2 – group assignment assessment, (3) ASS3 – group presentation skill assessment and (4) ASS4 – midterm and final term exams assessment.
- (4) EMP: representing faculty employee factors, which included (1) EMP1 – faculty employees' qualifications, (2) EMP2 – faculty employees' soft skills and (3) EMP3 – faculty employees' experiences.
- (5) TIM: representing the lecturing timing factors, which included (1) TIM1 – online teaching in classes, (2) TIM2 – timing spending on preparing digital teaching lectures and (3) TIM3 – timing spending for assessing students' online activities and their assignments.
- (6) COV: representing the working/living conditions during COVID-19 factors, which included (1) COV1 – encouraging remote studying/working, (2) COV2 – consulting for safe teaching/studying activities in university, (3) COV3 – loan and financial assistance for students, (4) COV4 – adjusting the teaching program and (5) COV5 – accurate, consistent and transparent information in the studying/working environment.

The way to calculate sample size (N) for multiple regression was recommended by Green (1991) as $N \geq 50 + 8p$, where p represents the number of independent variables. In this study, there were six independent variables. Consequently, the sample size value was at least 98. Sampling with lecturers, students and faculty staff in Vietnamese enterprises, we delivered 400 questionnaires for feedback. The results were 285 valid feedback questionnaires during the research process, representing a response rate of 71.25%. The questionnaire was designed by all questions which were described on a five-point Likert scale: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree and (5) strongly agree. SPSS 24.0 was used to check the model research, theoretical model and hypothesis testing with exploratory factor analysis (EFA) methods.

This research is summarized in Figure 1, which is explorative and explores COVID-19 impact on accounting education in Vietnamese universities. A quantitative survey instrument using nonprobability purposive sampling and snowball techniques to collect data was used in this study.

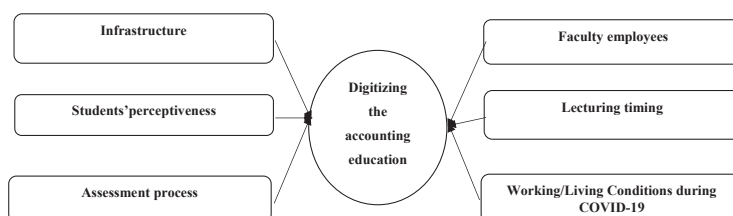


Figure 1.
Overview of the
research model

3.2 Measurements' development

The questionnaire items were designed according to the literature. It was divided into three sections: The first section aggregated information about participants, including lecturers, supportive team staff and students. The second section contains data about universities (both public and private), followed by an area that relates to the ideas about the impact of the current pandemic on the digitizing of accounting education. Before delivering the final formal questionnaires, a draft had been delivered to several scholars and experts in the field of questionnaire development to enlist their feedback on wording, content, the appropriateness of the questions, the extent of coverage of COVID-19-related dimensions from the perspective of researchers, simplicity and presentation. The survey, after amendments, was distributed to the target respondents of lecturers working in Vietnam's private and public universities. All model constructs' items are rated on a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

4. Findings

Using SPSS 24.0 and AMOS 24.0 for testing EFA, Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) models, some research results were found.

In Table 1, according to the Faculty Employees (EMP) scale, it was indicated that Cronbach's alpha was 0.092, lower than 0.6, so we dropped this scale in our study. The other variables had Cronbach's alpha values higher than 0.6, which means that their quality is appropriate for analysis. These scales included 27 variables, including 23 independent variables and four dependent variables.

The test results in Table 2 shows that $0.5 < \text{Kaiser-Meyer-Olkin} = 0.775 < 1$ and Bartlett test was statistically significant with a p -value < 0.05 . Thus, using the EFA model to evaluate the scale values of the independent variables was appropriate:

The analytical results in Table 3 show that the observed variables accounted for a 60.43% (>50%) variance in the factors. Hence, the EFA model was suitable, prompting the acceptance of the scale.

Table 1.
The results of the reliability and validity test

Name of the scale	Corrected item-total correlation	Cronbach's alpha (the number of observed variables)
Infrastructure (INF)	0.590-0.753	0.861 (05)
Students' perceptiveness (STU)	0.369-0.505	0.695 (05)
Assessment process (ASS)	0.573-0.760	0.822 (05)
Faculty employees (EMP)	0.104-0.130	0.092 (03)
Lecturing timing (TIM)	0.441-0.508	0.644 (03)
Working/living conditions during COVID-19 (COV)	0.554-0.731	0.848 (05)
Digitizing accounting education (DIGI)	0.596-0.716	0.823 (04)

Table 2.
KMO and Bartlett's test

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.775
Bartlett's test of sphericity	Approx. chi-square	2281.512
	df	231
	Sig.	0.000

Table 3.
Total variance explained

Component	Initial eigen values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
	1	4.274	19.429	19.429	4.274	19.429	19.429	3.280	14.911
2	3.294	14.974	34.404	3.294	14.974	34.404	3.144	14.290	29.201
3	2.261	10.279	44.683	2.261	10.279	44.683	2.759	12.540	41.741
4	1.793	8.149	52.832	1.793	8.149	52.832	2.316	10.528	52.269
5	1.671	7.598	60.430	1.671	7.598	60.430	1.795	8.160	60.430

Note(s): Extraction method: principal component analysis

Using the 22 observed variables to maintain the reliability of the factors of five groups of independent variables, the researchers performed a factor analysis test, and the results are shown in [Table 4](#):

The EFA results for independent variables of the rotation factor matrix ([Table 4](#)) exhibit the satisfaction of significance (values exceeding 0.5) of all factor loadings of the observed variables. The factor analysis comprised five factors. This is logical with the introductory hypothesis of the corresponding measurement variables for each factor.

[Table 5](#) results showed that the adjusted R^2 coefficient was 60.9%, which is less than 50%. The F -test in the ANOVA results ([Table 6](#)) displayed that the valuation was statistically

Rotated component matrix^a

	Component				
	1	2	3	4	5
INF1	0.724				
INF2	0.861				
INF3	0.852				
INF4	0.831				
INF5	0.744				
STU1				0.685	
STU2				0.692	
STU3				0.731	
STU4				0.664	
STU5				0.574	
ASS1			0.697		
ASS2			0.863		
ASS3			0.815		
ASS4			0.761		
TIM1					0.755
TIM2					0.797
TIM3					0.746
COVI1		0.830			
COVI2		0.826			
COVI3		0.611			
COVI4		0.808			
COVI5		0.741			

Note(s): Extraction method: principal component analysis
Rotation method: varimax with Kaiser normalization

^aRotation converged in five iterations

Table 4.
Matrix of rotational factors

significant for Sig. < 0.05. This shows the appropriateness of the model and independent variables (BUS, MAN, INF, TEAM, SKILL, SIZE and ADMIN), which explained 60.9% of the change in the dependent variable Y (APP). The balance of 39.1% is explained by factors not mentioned in the model.

Based on the results in Table 7, the determination of regression equation should be expressed as follows:

$$DIGI = 0.438 * INF + 0.316 * COV + 0.287 * ASS + 0.182 * STU + 0.313 * TIM.$$

5. Discussion

The aforementioned results have implications. Firstly, in this study, infrastructure plays the most critical factor in impacting online digitizing education in accounting. The quality of online lectures critically depends on the quality of Internet service and computers. During class times, if the service is not good, it can cause challenges for both learners and instructors. The LMS is where lecturers and students interact, so the data volume and assessment method are essential during courses. Furthermore, one point that should be concerned about is the students' data privacy and security. [Helfaya \(2019\)](#) and [Mihret et al. \(2017\)](#) confirmed that the combination between the Internet and accounting learning is considered a beneficial option for lecturers to assess the student's performance electronically and provide e-feedback. That was why e-learning, in accounting education specifically, had boundless growth, together with investing in LMSs of most universities all around the world.

Secondly, COVID-19 has created many social distance waves in Vietnam. This forced Vietnamese universities to convert to remote teaching. As a result, digitizing education in accounting will become more reasonable in the coming future. After nearly two years, learners and instructors have become familiar with technical tools during class. Both could improve their skill in using high-tech access to search digital lectures and documents, interacting with others, building and presenting their lectures or assignments, etc.

Model summary^b

Model	R	R square	Adjusted R square	Std. error of the estimate	R square change	Change statistics				
						F change	df1	df2	Sig. F change	Durbin-Watson
1	0.711 ^a	0.505	0.496	0.70994149	0.505	56.895	5	279	0.000	1.337

Table 5. Summary of the regression model

Note(s): ^aPredictors: (Constant), REGR factor score 5 for analysis 2, REGR factor score 4 for analysis 2, REGR factor score 3 for analysis 2, REGR factor score 2 for analysis 2 and REGR factor score 1 for analysis 2
^bDependent variable: REGR factor score 1 for analysis 1

ANOVA^a

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	143.379	5	28.676	56.895	0.000 ^b
	Residual	140.621	279	0.504		
	Total	284.000	284			

Table 6. ANOVA results

Note(s): ^aDependent variable: REGR factor score 1 for analysis 1
^bPredictors: (Constant), REGR factor score 5 for analysis 2, REGR factor score 4 for analysis 2, REGR factor score 3 for analysis 2, REGR factor score 2 for analysis 2 and REGR factor score 1 for analysis 2

Model	Unstandardized coefficients		Standardized coefficients		t	Sig.	95.0% confidence interval for B		Correlations			Collinearity statistics		
	B	Std. error	Beta				Lower bound	Upper bound	Zero-order	Partial	Part	Tolerance	VIF	
1 (Constant)	3.227E-16	0.042			0.000	1.000	-0.083	0.083						
REGR factor score 1 for analysis 2	0.438	0.042	0.438		10.394	0.000	0.355	0.521	0.438	0.528	0.438	1.000	1.000	
REGR factor score 2 for analysis 2	0.316	0.042	0.316		7.490	0.000	0.233	0.398	0.316	0.409	0.316	1.000	1.000	
REGR factor score 3 for analysis 2	0.287	0.042	0.287		6.819	0.000	0.204	0.370	0.287	0.378	0.287	1.000	1.000	
REGR factor score 4 for analysis 2	0.182	0.042	0.182		4.319	0.000	0.099	0.265	0.182	0.250	0.182	1.000	1.000	
REGR factor score 5 for analysis 2	0.313	0.042	0.313		7.429	0.000	0.230	0.396	0.313	0.406	0.313	1.000	1.000	

Note(s): ^aDependent variable: REGR factor score 1 for analysis 1

Table 7.
Regression weighting

The instructors feel more confident in using such techniques as flipped classrooms, and students have become more proactive in preparing their lessons in advance. Other things that could indirectly impact online digitizing education in accounting are student and lecturer loans and financial assistance. Due to the overall unemployment status in Vietnam during COVID-19, students could not find suitable part-time jobs as before, and other members of their families may have the same problems, so it was quite difficult for them to spend more money to buy a laptop or other high-tech tools for their studying. Therefore, loans and financial support from banks and decreasing study fees from universities can help solve this kind of problem. It is consistent with the findings of [Haber and Mills \(2008\)](#), in which they declared that if e-learning and online education are a rising phenomenon in higher education, faculty will need support from their institutions. In the form of either policies or financial commitment, it can help them to address new development and dissemination about instructional models, training for faculty and so on.

Thirdly, the lecturing timing factor is a real problem for almost all Vietnamese lectures, especially old ones. For the traditional method, they were not required to apply technical skills in teaching, and during COVID-19, controlling the online class through LMSs was nightmarish. Moreover, more time was needed to prepare lectures, evaluate students' assignments, grade online, etc. It could have caused exhaustion and impacted the lecturers' teaching time quality. As a result, lecturers feel more reluctant when converting to digitizing process. If lecturers can select appropriate methods during online teaching time, they can enhance students' study. Similarly, in a prior survey by [Mihret et al. \(2017\)](#), their results pointed out that despite the separation between students and instructors, ePortfolio assessment helped instructors elicit students' behavior desirably in online auditing courses by getting student involvement in case discussions. On the other hand, faculty time and compensation are also critical issues to consider. Because lecturers spend much more time but are not compensated, it becomes a significant barrier when converting to online teaching. It depends on other issues like institution size, training, program complexity, etc ([Haber and Mills, 2008](#)).

Fourthly, the assessment process factors also impact online digitizing education in accounting. Traditionally, Vietnamese universities evaluate students' performance by the

summative method of midterm and final term exams (which accounted for more than 70 to 80% of grading). This method worked well because they could meet each other in person regardless of time. Therefore, by maintaining a direct discussion between students and lecturers, the student's needs and the lecturers' requirements can be completed. However, during COVID-19, almost all Vietnamese universities transitioned to the formative method by evaluating assignments and group and individual presentations. This method could help instructors to interact continuously with students and help them to precisely consider what students have learned from them. Through this feedback, instructors could improve the teaching method and adjust lectures to help students with catching up on lessons. This is also consistent with prior studies, such as those by [van der Kleij *et al.* \(2015\)](#) and [Lieberman *et al.* \(2020\)](#). Their findings also stated that continuous feedback from learners is the most powerful tool for assessment. In addition, during the COVID-19 pandemic, students could not be physically present. As a result, all modalities of learning assessment have changed enormously due to the change from administration or observing the learners' daily progress. This means that it is necessary to develop alternative methods to deliver the important feedback function of learning assessment. While all types of evaluation of student learning are considered equally essential, the formative assessment has become particularly acute because lecturers need to comprehend the level of absorbance of content by students, provided that they cannot discuss it in person in a regular class. So, learning needs to take place effectively outside of the physical classroom.

Lastly, the students' perceptions are also critical factors impacting the digitizing education in accounting. During the COVID-19 breakout, students understood that online learning was the mandatory solution for continuing the learning process. If they feel positive about online learning, they will try to get familiar with using IT in studying activities. Otherwise, they may feel bored and lazy. In addition, their lecturers cannot observe them like in traditional classes, so they have more chances to quit studying. It will cause severe problems for lazy and passive students. If students avoid searching for new knowledge and technology, they will face more trouble during this time of COVID-19. However, it is a good chance for them to get into a new era to control digitization worldwide for a bright future. In 2018, Helfaya ran his survey and found that applying e-assessment and online feedback in educating accounting issues was highly appreciated by students ([Helfaya, 2019](#)). Moreover, for comparison between the students' performance when applying online learning vs. traditional learning, [Gagne and Shepherd \(2001\)](#) and [Arbaugh and Stelzer \(2003\)](#) found no significant difference in the student's performance.

6. Conclusion

Apparently, the study has contributed practical knowledge about the implication of online education trends in higher education. Based on the findings, institutions should develop suitable approaches for both learners and faculty when applying online training. Online education should be developed with the care of investing in infrastructure, encouraging the self-study spirit of learners, improving lecturers' capability, adjusting the lecturing time and so on.

The study's findings disclosed the decisive role of COVID-19 in the shifting process of digitizing education in accounting. Besides, digitizing accounting education was also affected by the impacts of the infrastructure, students' perceptiveness, assessment process and lecturing timing. The study results stated that in Vietnam, the focus of digitizing accounting education in universities (both public and private) is on interactive LMSs such as Microsoft Teams, Zoom and Google Meet to support the e-learning process. Also, internal LMSs helped

staff interact better with students and meet their needs. This indicates the pandemic's impact on digitizing accounting education into the digitalizing stage. Almost all the interviewed people agreed that digitizing accounting education would be a stable trend. Universities should follow this trend by employing programs to support it. Accounting lecturers believe that accounting education will be morphed by the impact of the pandemic in the future, and we should accept these changes. We should get used to spending more time preparing lectures, scoring and giving feedback to our students. These changes come from not only educators but also learners. Most interviewed students know they should be used to the new way of studying and practising. They should also prepare for technical skills concerning remote learning and working in the coming future. A critical point in online digitizing accounting education is that the assessment method being honest and appropriate should be encouraged, but other monitoring tools and techniques should also be applied.

This research is not without limitations. The limitations are the limited time and resources, which did not allow for examining other factors that impact digitizing education in accounting. The forthcoming study should examine extended factors (not mentioned in the study) such as government sponsorship, lecturers' soft skills, national culture, qualifications and so on.

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Corresponding author

Hung Ngoc Tran can be contacted at: tranngochung@iuh.edu.vn

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