The Utilization of ICT in the Covid19 Pandemic:
Does It Optimize the Competences of Accounting Lecturers?

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ABSTRACT

The Covid19 pandemic is a condition experienced by all parts of the world. The Covid19 pandemic has drastically changed all human activities, including in the sphere of education. This study aims to analyze the utilization in optimizing the competence of accounting lecturers from the perspective of the phenomenon of ICT utilization during the Covid19 pandemic. Changes in the habits of accounting lecturers in teaching during the Covid 19 pandemic require accounting lecturers to use all ICT-based with all the obstacles and conveniences offered. This research is a qualitative research using a phenomenological approach involving accounting lecturers in East Java as informants. Data collection was carried out through observation, obtaining supporting documents, and interviews with accounting lecturers in East Java. The results of this study indicate that the meaning of ICT for accounting lecturers is something that must be mastered and used in any activity during the Covid19 pandemic. Accounting lecturers also argue that by utilizing ICT during the Covid19 pandemic, accounting lecturers, both junior and senior, can optimize all their competencies, namely pedagogical, personal, social and professional competencies. It is hoped that the results of this research can be used as a reference for accounting and other scientific lecturers so that they can continue to use ICT to optimize their competence during the Covid 19 pandemic and in the future.

Keywords: Covid 19 pandemic, accounting Education, phenomenology.

1. INTRODUCTION

The phenomenon of the use of ICT (Information, Communication and Technology) or commonly known as IT (Technology and Information) is what ruled the world of education during the Covid19 pandemic. During the Covid19 pandemic, all activities were physically limited in all aspects, including education. The Covid19 pandemic is a condition that is experienced by all parts of the world. Therefore, the educational process switches from face-to-face learning to online learning. Due to the increasing spread, the Ministry of Education and Culture decided to suspend all school activities and switch to online learning / distance learning at home [1].

The competence possessed by accounting educators is very important in the process of teaching and educating students both in school and college, as well as in advancing the world of education. The quality of accounting education depends on the competence of accounting educators. Therefore, accounting educators must have competencies in accordance with national education standards, so that they can carry out their duties and roles properly and successfully. In this study, the competencies referred to are pedagogical, professional, personal, and social competencies. With technology, accounting educators should also be close to technology. Accounting teachers consisting of the younger generation and the senior generation have also received education and hands-on experience for the competencies needed in teaching. Accounting lecturers are also like teachers, accounting lecturers consisting of senior lecturers and junior lecturers whose mindsets and perspectives are different about learning using ICT and the use of ICT to optimize their competence. This is in line with the research by [2] which states that the application of ICT has the advantage of providing broad, fast, and precise information, the ease of learning, academic administration, and financial administration as well as technology support to make it easier to access the information mentioned above. The application of ICT / ICT also has a distinctive advantage, namely that it is not limited by place and time.

From the diversity of characters of accounting educators, their level of competence is also different. How they improve their competence by using ICT will certainly be different. Therefore, researchers will review more deeply and discuss in detail how the use

of ICT to optimize the competence of accounting educators in the 21st century. Learning using ICT has indeed been the mainstay of accounting education during Covid19, and there was a crisis and a lack of guidance and training according to accounting educators [3].

1.1. Educator Competence

Competence is a set of knowledge, skills and behaviors that a teacher or lecturer must possess, appreciate, and master in carrying out professional duties. This job cannot be done by people who do not have the skills to do activities or work as a teacher. To become a teacher, special requirements are needed, especially as a professional teacher, one must fully master the ins and outs of education with various other sciences that need to be nurtured and developed through a certain period of education or pre-service education [4].

An accounting educator is obliged to optimize his competence. Optimizing the competence of accounting educators is one form of increasing human resources. This is in line with the statement [5] which argues that human resource development is a series of systematic and planned activities designed by organizations to provide opportunities for its members to learn the skills needed to meet current job requirements and which will come. So optimizing the competence of accounting educators is also one way to meet current and future work demands in the field of accounting education and accounting science. This is confirmed by [6] that the demand for continuous improvement of competence is due to the substance of the study and the context of learning that is always developing and changing according to the dimensions of space and time. In this study, the time in question is the present and the future, especially the 21st century. Guerriero [7] also believes that if you want to improve the competence of graduates, the quality of teachers in the teaching and learning process must be improved.

According to [8] concerning Teachers and Lecturers, there are several competencies that must be possessed by an educator, namely pedagogical competence, personality, social and professional competence.

1.2. Pedagogic Competence

Lecturer pedagogical competence is important to improve, because teacher pedagogical competence will increase teacher professional competence in teaching, because by having pedagogical competence, the teacher has the ability to organize learning material that will be conveyed properly to students with various techniques. Improving teacher pedagogical competence to improve school quality can be done in several ways, including through the MGMP (Subject Teacher Deliberation), educational courses, workshops, supervision and school meetings [9]. As in research conducted by [10] which states that including lecturers in various scientific activities, seminars, symposiums, workshops and scientific publications both nationally and internationally can improve lecturers' pedagogical competence. This can be seen from quality graduates with a high student achievement index and the work of lecturers in writing books has increased, lecturers have also become reliable in using multimedia in learning. In addition, the use of ICT can also improve pedagogical competence [11]. Increasing other pedagogical competencies can be done through mutual learning between teachers and conducting lesson studies [12].

1.3. Personality Competence

Lecturer personal competence according to [8] is competence related to the person of a lecturer who is solid, has a noble character, is wise and dignified and becomes a role model for students and has noble character. Personal stability affects the tasks they carry out, as well as the personal stability of accounting educators in carrying out the teaching and learning process will affect the teaching and learning situation they carry out.

1.4. Social Competence

Social competence is a support for success in the learning process and every educator is required to have social competence so that students get the desired results. In [8] it is stated that the social competence of teachers is the ability to communicate and interact effectively and efficiently with students, teachers, parents / guardians of students, and the community.

1.5. Professional Competence

Professional competence is the ability to master learning material broadly and deeply which allows guiding students to meet competency standards. Professional competences include sub competencies: (1) mastering the substance of the field of study and scientific methodology, (2) mastering the structure and material of the curriculum in the field of study, (3) mastering and utilizing information and communication technology in learning, (4) organizing curriculum material for the field of study,

(5) improving the quality of learning through classroom action research [13].

1.6. ICT (Information and Communication Technology)

Information and Communication technology or in Indonesian, Information and Communication Technology (ICT) covers two aspects, namely Information Technology and Communication Technology. Information technology includes all matters relating to the process, use as a tool, manipulation, and management of communication technology, including all matters relating to the use of tools to process and transfer data from one device to another. Therefore, mastery of ICT means the ability to understand and use ICT tools in general, including computers (computer literate) and understand information (information literate). Tinio defines ICT as a set of tools used to communicate and create, disseminate, store and manage information. The technology referred to includes computers, internet, broadcasting technology (radio and television) and telephone. UNESCO defines that ICT is a technology used to communicate and create, manage and distribute information. Common definitions of ICT are computer, internet, telephone, television, radio, and audiovisual equipment.

According to [14] for teachers / lecturers, the internet is useful in developing their profession, because the internet can: (a) increase knowledge, (b) share resources among peers, (c) collaborate with overseas teachers, (d) the opportunity to publish information directly, (e) organize regular communications, and (f) participate in local and international forums. In addition, teachers can also use the internet as a source of teaching materials by accessing learning plans or online syllabi with new methodologies, accessing subject matter or course materials suitable for their students, and being able to convey their ideas.

ICT has the ability to improve teaching and learning through increased cross-cultural interaction, between students, academics and between the two [15]. ICT according to a number of commentators, enhances teaching, learning, and research, from both constructivist and instructor learning theory. Behind the increasing trust in the role of technology. In higher education, however, lying implies acceptance of technology by various commentators, either as neutral and autonomous, neutral and human-controlled, autonomous and value-laden, or human-controlled and value-laden [16]. From some of the opinions above, how ICT can be related to education.

1.7. The Covid Pandemic 19

WHO (World Health Organization) announced the 2019 Corona Virus Disease Pandemic (COVID-19) on March 11, 2020. On January 31, 2020 it was first reported to the public in Wuhan The first Covid-19 incident was reported to the public in Wuhan, Hubei Province, PRC. Especially in Indonesia itself, the Government has issued a disaster emergency status starting from February 29, 2020 to May 29, 2020 related to this virus pandemic with a total time of 91 days. Steps have been taken by the government to solve this extraordinary case, one of which is by socializing the Social Distancing movement. This concept explains that in order to reduce or even break the chain of Covid-19 infection, one must maintain a safe distance from other humans of at least 2 meters, and not make direct contact with other people, avoiding mass gatherings. But many people do not respond to this well, for example The government has already closed students and students from studying or attending school or enforcing work at home, but this condition is even used by many people for vacation. The Covid19 pandemic can have an impact on the global economic sector in the short term [17]. In addition, it turns out that what we feel the Covid19 pandemic also has an impact on the world of education.

2. METHODS

This research is a qualitative research with a phenomenological approach that explains the phenomenon of the use of ICT during the Covid19 pandemic, especially to improve the competence of accounting lecturers. Transcendental phenomenology or often just called phenomenology or vision / phenomena is used to understand how these changes occur [18]. Understanding does not stop at what is seen but continues to mean changing the way of teaching from face-to-face to online by utilizing ICT. According to [19] awareness given directly to researchers or intuition plays an important role in shaping meaning. In this study, the meaning of ICT will also be explained based on information from informants who used ICT during the Covid19 pandemic.

The first informant of the study was Ms. Bunga (pseudonym) who is an accounting lecturer at a private university in East Java. Ms. Bunga is an accounting lecturer who has taught for a long time, namely 8 years. The next informant is Mr. Yudi (pseudonym) who is an accounting lecturer at a state university in East Java with a five-year teaching period. The author chose two lecturers from public

and private universities, so that the complexity of the use of ICT is clearly visible.

The stages in this research are the pre-field stage, the field stage, and the post-field stage. Literature review related to ICT was conducted in this pre-field stage. In addition, at this stage observations are also made to find suitable informants. Then for the field stage. The field stage is the stage of collecting data through interviews and observations. The language used in this interview is Indonesian. In addition to literature review, in the field stage, direct observation and observation was also carried out. Observation begins with looking directly at the use of ICT by the informants. To perpetuate research data, this research also uses electronic media with the consent of the informants.

The last stage is post field, which is analyzing the data. The post-field stage is data analysis with a phenomenological approach, namely epoche, phenomenological reduction, variation of imagination and synthesis of meaning and essence [20]. Epoche means that researchers have temporarily abandoned all knowledge of the use of ICT during the Covid-19 pandemic to gain new perspectives. Phenomenological reduction is done by identifying ICT utilization practices to improve the competence of accounting lecturers. At this stage, literature reviews and interactions with other parties are also carried out to obtain various points of view that are useful in clarifying the phenomenon. But at this stage, researchers also try to find pure phenomena apart from the results of literature reviews and the perceptions of others. The result of this phase is an understanding of what changes in the use of ICT by accounting lecturers might look like. Variations in the imagination are carried out to get the essence of changes in informants' accounting practices. Intuition is used in this study to achieve the meaning of changes in the use of ICT based on what has been obtained at the phenomenological reduction stage. In this case, the researcher moves from what is visible to consciousness. The synthesis of meaning and essence is the process of integrating understanding of what is seen from the changes in informants' use of ICT and the meaning contained in these changes. The combination of these two things was an answer about how the use of ICT during the Covid19 pandemic by accounting lecturers is carried out, in order to improve informant competence.
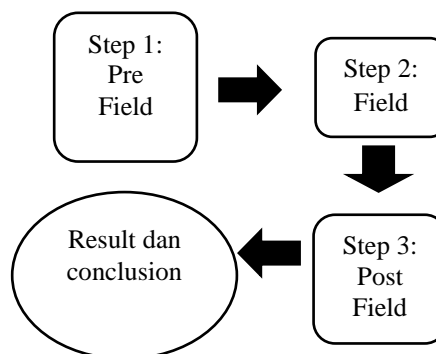

Figure. 1 Research Stages

3. RESULTS AND DISCUSSION

3.1. Utilization of ICT during the Covid19 pandemic for the competence of accounting lecturers

The Covid19 pandemic has changed all human activities, including in the world of higher education in the field of educational accounting. Currently all activities of accounting lecturers have changed from conventional to online. This makes accounting lecturers have to adapt to all things ICT. On the other hand, a lecturer must improve his competence with all the limitations that exist during this Covid19 pandemic. The hope is, by utilizing ICT properly, accounting lecturers can still improve their competence.

In this research, the lecturer pedagogical competence which must be continuously improved by a lecturer must also be carried out. This is in line with the statement [21] that accounting will later become digitization. By utilizing ICT, accounting lecturers can continue to develop and improve their pedagogical competences. This is according by statements of Bu Bunga and Pak Yudi as follows:

> *Bu Bunga: "...hmm gara-gara covid19 ini semua jadi berubah, biasanya bisa ngajar di kelas, sekarang ngajarnya harus di depan laptop. Terus pakai model pembelajarannya juga ga bisa macam- macam kayak pas di kelas, terbatas gitu. Tapi ya mau gak mau, jadi tantangan gitu kalau buat saya."*
> Translete:
> Mr. Bunga: "… because of Covid19 everything has changed, usually you can teach in class, now you have to teach in front of a laptop. Continue to use the learning model, it can't be as varied as it does in class, it's so limited. But whether I want it or not, it's a challenge for me. "
>
> *Pak Yudi: "… sejak covid19 sebenarnya gak terlalu kaget sih saya dengan apa-apa yang*

berbau pake media ICT, soalnya sejak sebelum covid19 ini ngajar saya mix pakai online sama offline. Tapi ya memang kalau sekarang kan semua online ya, dari pertemuan pertama sampai akhir jadi ya persiapan ngajar di kelas udah beda Bu. Sekarang benar-benar dituntut kreatif kan. Kalau cuma pakai video conference ya jebol paketannya mahasiswa. Dan pastinya bosan mereka."

Translete:

Mr. Yudi: "… since Covid19, I was actually not too surprised with anything that smelled of using ICT media, because since before Covid19 I taught me to mix online and offline. But yes, everything is online right now, from the first meeting to the end, so the preparation for teaching in class is different, ma'am. Now we really need to be creative, right? If you only use video conferencing, the package will be broken for students. And definitely bored of them. "

Peneliti: "Lalu bagaimana cara Bu Bunga mencari model pembelajaran yang cocok dipakai waktu mengajar online seperti saat ini Bu? Kan kadang itu juga tidak semua model juga cocok suatu materi, apalagi ngajarnya akuntansi."

Translete:

Researcher: "Then how does Ms. Bunga look for a suitable learning model to be used when teaching online like this, Mom? Sometimes, not all models also fit a particular subject, let alone teaching accounting. "

Bu Bunga: "..ya sebenarnya saya kadang cuma pake video conference gitu Bu kalau materi-materi hitungan gitu. Soalnya kalau pakai model yang aneh-aneh, mahasiswa kadang gak paham sama materinya. Tapi saya juga lagi baca-baca jurnal sih Bu, siapa tau nemu model yang OK buat ngajar online."

Translete:

Mrs. Bunga: ".. actually I sometimes only use video conferencing, ma'am, if the materials count like that. The problem is that if you use a strange model, students sometimes do not understand the material. But I am also reading journals, Ma'am, who knows what models are OK for online teaching."

Utilization of ICT for accounting lecturers is currently a necessity due to the COVID19 pandemic. Therefore, the development of pedagogic competencies and their application is very suitable when using ICT [22]. Accounting lecturers also feel that class management will be difficult if meetings are held online. According to [23] that communication between lecturers and students was a bit hard that conventional meeting. However, it must be done, because the rules are not allowed to do face-to-face in offline classes. This is implied by the informant's statement as follows:

Peneliti: "Gimana Pak biar mahasiswa tetap terkondisikan kalau full online gini ngajarnya? Ada cara khusus gak pak? Biasanya kan mahasiswa itu kalau tatap muka online bisa aja bohong sambil makan atau malah tiduran."

Translete:

Researcher: "How do you let the students stay conditioned if they are fully online teaching? Is there a special way or not, sir? Usually, if students face to face online, they can lie while eating or even lie down. "

Pak Yudi: "...biasanya kalau saya sih dalam menit tertentu kalau ngajar pakai google meet gitu ya tiba-tiba tak suruh on kan kameranya gitu Bu, biar kaget mereka, hehehe. Trus biasanya biar mereka ga ngantuk saya kasih ice breaking, tebak-tebakan atau kuis online pakai kahoot atau quizziz gitu. Kan kalau gitu mau gak mau mereka ya ngadep laptop atau hapenya buat ngerjain."

Trasnlete:

Mr. Yudi: "… usually for me, in a certain minute, when I teach using Google Meet, suddenly I don't tell them to turn on the camera, Mom, to surprise them, hehehe. Then usually so that they are not sleepy I give ice breaking, riddles or online quizzes using kahoot or quizziz. If that's the case, whether they want it or not, they have to use their laptop or cellphone to work on it. "

From the results of these statements, it can be seen that in fact by using ICT, accounting lecturers are actually challenged to continue to improve their pedagogical competence in various aspects. The pedagogical competence referred to is in terms of making teaching materials, seeking information about the curriculum, finding effective learning models, and using the right learning platform for the evaluation of learning. But on the other hand, there are still some accounting lecturers who do not use or rarely use ICT, because every educator has a different way to improve their competence [24].

Table 1. Summary of ways to use ICT for competency improvement

Competency Type	How to use ICT for competency improvement
Pedagogic	1. Making teaching materials in accordance with class conditions
	2. Easily search for information on the internet or connect in groups for curriculum updates 3. Update the latest learning models by reading e-journals 4. Using the online meeting room platform to condition online classes 5. Using an online quiz application for learning evaluation
Professional	1. Make use of the internet and other ICT media to communicate and develop themselves. 2. Using online meeting rooms to attend national and international seminars. 3. Latest scientific updates with e-journal access. 4. Writing scientific papers with sources from ojs-based journals
Social	1. Maintain communication with members of professional associations, students and colleagues through the WA group 2. Take advantage of social media to establish productive communication 3. Carry out online community service
Personality	1. Act according to lecturer ethics even though communicating indirectly or online 2. Uploading something on social media with good words

Source: Summary of interviews with informants

3.2. Problems and Solutions of ICT Ulitization in the Covid19 Pandemic

If the Covid 19 pandemic does not occur, it seems that accounting education will mostly continue to use traditional or conventional methods [25], [3]. This has also happened in the university where the informant has been teaching so far. Usually only using group discussions, tutorials or workshops and lectures [3]. In making use of ICT in learning in the Covid19 pandemic the same informant argues, the following:

Pak Yudi: "....ya emang susah-susah gampang kalau pakai media ICT pas ngajar, walaupun kampus kami kampus negeri, tetapi juga beberapa mahasiswa kami dari kalangan pra sejahtera, jadi ya kadang gadgetnya terbatas"
Terjemahan:

Mr. Yudi: ".... yes, it's easy to use ICT media while teaching, even though our campus is a state campus, but also some of our students are from underprivileged circles, so yes sometimes the gadgets are limited"

Bu Bunga:".... Kalau saya susah Bu, kampus kami kecil sehingga banyak mahasiswa itu dari daerah pinggiran, sinyalnya susah di sana."
Translete:
Mrs. Bunga: "…. If it's hard for me, Mom, our campus is small, so a lot of students come from the lower- middle family, the signal is difficult there. "

Peneliti: "Bagaimana Pak Yudi menanggapi keluhan mahasiswa Bapak terkait kuota internet?"
Translete:
Researcher: "How did Mr. Yudi respond to your students' complaints regarding internet quotas?"
Pak Yudi:"Saya ga bisa memberikan apa-apa, hanya saja saya memberikan arahan bahwa akan ada bantuan kuota belajar dari kementerian. Jadi mereka terlihat ada harapan besar akan itu, hehe.."
Mr. Yudi: "I can't give anything, it's just that I give instructions that there will be a study quota assistance from the ministry. So they seem to have high hopes for it, hehe .. "

The conditions of each university are different, from students to the availability of different facilities which greatly affect barriers to learning to use ICT, especially online learning in accounting. But currently, the ministry of education has provided a learning quota for students from early childhood to university students, so that objections to the high quota can be helped by this. But the problem is not resolved just like that, even though the internet quota is guaranteed, it turns out that the area of origin of students and lecturers sometimes does not support the signal area, so this obstacle becomes difficult to solve. This is supported by the following informant's statement:

Peneliti: "Berarti mahasiswa Bapak memang banyak yang merasa keberatan dengan kuota yang dikeluarkan ya Pak?"
Translete:
Researcher: "Dear student Means are many who feel for sustainability a tan with the quotas issued by yes sir?"

Pak Yudi: "Jelas itu Bu, bahkan beberapa dosen yang ga ada wifi di rumah juga merasa keberatan dengan kuota yang dikeluarkan. Jadi

sebenarnya ya ini yang saya khawatirkan kalau pakai pembelejaran online sinkron. Apalagi yang rumahnya di daerah pedalaman, walaupun ada kuota, tetapi signalnya tidak ada ya percuma. "

Translete:

Mr. Yudi: "Obviously it is Ma'am, even some lecturers who don't have wifi at home also object to the quota issued. So actually this is what I'm worried about when using synchronous online learning. Especially for those whose houses are in remote areas, even though there is a quota, but the signal is not there, it's useless. "

Peneliti: "Wah berati agak susah ya bu untuk mengkondisikan kelas online?"

Translete: Researcher: "Wow, that means it's a bit difficult, ma'am, to condition the online class?"

Bu Bunga: " Hemmm benar sekali, jadi bingung mau menegur. Juga tidak bisa melihat apa yang sedang dilakukan mahasiswa. Saya sendiri tidak bisa memaksa dinyalakan kameranya."

Mrs. Bunga: "Hemmm is absolutely right, so I'm confused about how to reprimand. Nor could they see what the students were doing. I myself can't force the camera to turn on. "

From the results of interviews with informants, it can be concluded that the obstacles to the use of ICT during the Covid19 Pandemic.

Table 2. Barriers and Solutions for Using ICT during the Covid Pandemic19

No.	Resistance	Solution
1	Internet fees are expensive for underprivileged students	● Learning quota assistance from the Ministry of Education and Culture ● Perform asynchronous learning so it doesn't take up a lot of quota
2	Amenities dimilik i each different students and professors	● Analyzing the availability of facilities owned by students and lecturers ● Lecturers seek facilities according to the needs of the subject being taught
3	Not all lecturers are ICT literate	● Lecturers who are more ICT literate provide literacy to lecturers who are not too ICT literate
4	Less than optimal classroom management	● When teaching synchronously using ICT, the lecturer must have a special strategy in class management, so that students can participate in class maximally

Source: Summary of interviews with informants

4. CONCLUSIONS

The Covid 19 pandemic is not something that should be a fear of practitioners in the world of education, but it can be taken on the positive side, namely that all those who initially were not ICT literate became ICT literate. When accounting educators are ICT literate, it turns out to greatly optimize their competence. The competencies referred to are pedagogical, professional, social and personal competences. In addition, by mastering ICT, accounting lecturers will find it easier to conduct online lectures with ICT, both synchronously and asynchronously during the Covid 19 pandemic. Although the obstacles that occur are many, starting from the cost of the internet, the availability of existing facilities, different ICT literacy, which also makes it difficult to manage classrooms, the existence of ICT really helps optimize the competence of accounting lecturers.

AUTHORS' CONTRIBUTIONS

Authors contributions of this research was separated in some parts. The first author as the person in charge and give the main idea for this research and wrote introduction dan literatures review. The second author was compiler parts of this article. The third author was transleting and smoothing this article. The fourth author was the evaluator and reviewer this article.

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