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NEW SCHOOL CULTURE IN POST COVID-19 ERA: VICE-PRINCIPALS PERSPECTIVE OF UTAUT MODEL IN THE CONTEXT OF ICT FOR LEARNING

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ABSTRACT

Information and Communication Technology [ICT] has affected many sectors during the Covid-19 pandemic. The education sector has also experienced significant changes, especially in the change in school culture in the post-covid-19 era in the use of ICT for learning. This study aims to explore changes in school culture in the use of ICT for learning, which is reviewed based on the Unified Theory of Acceptance and Use of Technology [UTAUT] model, from the point of view of Vice Principals [VP]. This research is qualitative research with a phenomenological approach to define the vice principals' response to the new school culture in the post-Covid-19 pandemic, due to the implementation of the distance learning policy during the Covid-19 pandemic by the Indonesian government. The informants of this study consisted of 260 vice-principals of Junior High Schools in Mojokerto Regency and City, East Java, Indonesia. The stages of data analysis are to do data reduction, determine themes, explore engagement between themes, and make conclusions. This study concludes that there is a new school culture in the post-Covid-19 pandemic where all school residents, teachers, students, and school leaders are accustomed to using technology to support learning in schools. The new culture created due to the Covid-19 pandemic is not fully implemented by all schools, but most schools have a new culture in the use of ICT for learning, especially the use of educational platforms that support the process of achieving competence by students. Schools with a high culture of innovation for all school members tend to have high acceptance and use of technology in every learning carried out by students. Furthermore, parents who have forward-thinking, and have a high tendency to accept and use technology, encourage their children to take part in learning on educational platforms. The new school culture positively impacts needs in schools and the need for learning loss if this new culture is widespread and has reached all levels of education in Indonesia.

Keywords: *School Culture, Post Covid-19 Era, UTAUT, Vice-Principals Perspective*

1. INTRODUCTION

The Covid-19 pandemic has brought about many major changes in Indonesia [1]. Especially on the use of technology in learning [2–4]. The pandemic has created a new culture of learning in schools [5], where previously it was only conducted with face-to-face learning, now it has been conducted by combining several strategies and learning methods [6,7]. Moreover, the world has the same problem, the problem of learning loss, due to the Covid-19 Pandemic [8,9], Indonesia is also experiencing the same problem. [8–12] explains that learning loss can be experienced by students because of the impact of students' loss of reading skills, decreased learning intensity, school culture of learning, and unfavorable school policies.

Learning during the Covid-19 Pandemic is carried out with various strategies and learning methods by utilizing technological developments in learning [2]. Significant changes in learning, which were previously carried out with face-to-face learning, forced teachers and students to quickly adapt to the restrictive policies adopted by the government [13]. As a result, schools encounter difficulties in adapting learning that is carried out using IT-based media [13–15], because these changes occur suddenly without good or thorough preparation in advance. Especially the problems that arise in students [1] who experience a lack of enthusiasm in the learning process carried out during the Covid-19 Pandemic, although this does not apply to all students [16,17]. In addition, the lack of IT ability, and lack of internet network distribution [15,18], in Indonesia, make the quality of online learning lacking [13].

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Changes in learning that occurred during the Covid-19 Pandemic had a significant impact on changes in school culture regarding learning that was carried out [19]. Moreover, the spirit that was spread was to deal with the problem of learning loss experienced by students due to the Covid-19 pandemic [8,9]. Changes in school culture, where teachers and students have adapted to the use of technology for learning in schools that were previously only done with face-to-face learning [7], make it easier to carry out the learning process between teachers and students. The use of technology to support learning has become a new habit for teachers and students, previously using smartphones and laptops at school was taboo in the eyes of some teachers and parents at several levels in Indonesia. Although, [20] stated that in some cases the use of smartphone and laptop media can be addictive for students who do not have good learning maturity. This significant change made the views of teachers and parents change drastically because changes in technology-based learning sooner or later will inevitably occur and be experienced by all levels of education, from a skeptical view and fear of the bad impact of technology to a positive and mature view for students in utilizing technology [1]

The new school culture of the post-Covid-19 pandemic, especially in Indonesia, has shown a very significant change in the assessment and awareness of teachers and students in utilizing technology in their learning [1,21]. Furthermore, currently schools, through their leaders, have the flexibility to choose the right learning media to be used in their learning process [21]. Researchers see the need for further review related to the entry of a new culture in learning in schools caused by the use of technology, where researchers review this with the Unified Theory of Acceptance and Use of Technology [UTAUT] [22] in the context for learning [23]. The aim is to find out and analyze how the use of Information and Communication Technology [ICT] in learning in schools is based on the UTAUT model, and what are the implications for education in Indonesia. This research places special attention on Vice Principals [VP] who are an important element in making decisions on policies implemented by schools [24], which directly or indirectly have an impact on the new school culture of post-Covid-19 pandemics. [25] stated that the position of VP in schools is unique, in that it has a role to 1] connect between levels of the organization, 2] translate between vision/direction and actualization, 3] link between middle managers, and 4] become intermediary and translation between ministries and schools. Thus, the role of the VP is unique and important in forming culture in schools, especially the new school culture in the post-Covid-19 pandemic. In addition, the researcher also analyzes the policies taken by the VP, which supports the creation of a new culture, related to the UTAUT model in ICT for learning in school, in each of the schools that he/she leads as a sequence or process that occurs due to changes in school culture in Indonesia.

2. THEORETICAL BACKGROUND

2.1 School Culture: Post Covid-19 Era

School culture is the adoption of organizational culture related to governing norms, dominant values in the organization, and basic assumptions and beliefs as outlined in the form of organizational rules [26,27]. School culture includes values, principles, traditions, and habits formed in schools, which have gone through a long process, and become the grip and belief of all school members [28]. Therefore, a strong school culture will determine the behavior of all school members by their duties and responsibilities.

School culture is a unique asset that every school has and can characterize a particular school by looking at the values, attitudes, habits displayed, and actions shown by all school members. [29] states that culture is behavior that is carried out continuously until the realization of work patterns that are carried out in social life. Furthermore, [28] said that in addition to behavioral values, school culture can also be seen in the management of learning, the selection of learning media, to the selection of learning resources used by teachers and students in schools.

There is a paradigm shift in education due to the Covid-19 pandemic where face-to-face learning must change towards online learning by utilizing technology-based learning media [4,7]. [15] added that education for the Covid-19 pandemic in this era tends to be carried out through discussions on social networks, exchanging content of teaching materials, and developing new learning strategies on social networks. [30] added that in the new normal era, the Covid-19 pandemic era, education in schools is managed with Massive Open Online Courses [MOOCs] to facilitate distance learning which is carried out when there are conditions of social restrictions. The changes that have occurred due to the Covid-19 pandemic are driving digital transformation in the education sector around the world [5,31], and these changes are happening so quickly that several problems arise in their implementation in schools [4,7,15,30].

The change in the educational paradigm during the Covid-19 pandemic era greatly affected post-

Covid-19 pandemic education where new habits were created that could be accepted and used in daily education [32]. Utilization of technology on several learning platforms with Learning Management System [LMS] such as MOOCs, Google Classroom, Google Meet, Zoom, or platforms developed by schools or universities [4]. The use of technology in learning is expected to have a positive impact in providing convenience in carrying out learning and can realize easy access to education.

2.2 UTAUT in the Context of ICT for Learning

The Unified Theory of Acceptance and Use of Technology [UTAUT], in general, is an advanced theory that was first proposed by [22] and a continuation of the Technology Acceptance Model [TAM] by defining it into two dimensions, namely Perceived Usefulness [PU] and Perceived Ease of Use [PEoU] [33]. In contrast to TAM, UTAUT discusses more the influence of technology in people's lives, and whether the technology used has become a new habit by individuals [34].

[Williams et al., 2015] stated that, since its introduction, UTAUT has been widely used in technology adoption and diffusion research as a theoretical lens by researchers conducting empirical studies on user intention and behavior. UTAUT consists of four core variables, 1] performance expectancy, 2] effort expectancy, 3] social influence, and 4] facilitating conditions [35], directly leading to behavioral intention and ultimately behavior by considering gender, age, experience, and voluntariness of use [22]. Thus, [35] argues that the discussion of the UTAUT model is at the level of the influence of technology in influencing the culture of individuals in society, according to the level of rationality of thinking and the characteristics of the culture that influence it. In addition, previous literature highlights several individual characteristics including attitude, computer self-efficacy, and personal innovativeness [22,36]. The UTAUT model [22,37] has four core variables, namely 1] performance expectancy, 2] effort expectancy, 3] social influence, and 4] facilitating conditions and use intention and use variables. behavior. The aim is to measure the extent to which technology affects the habits or culture of individuals in using technology. The explanation of the four core variables in UTAUT is as follows.

2.2.1 Performance Expectancy

Performance Expectancy is defined as the extent to which an individual believes that using the system will help him or her to achieve gains in work [38,39]. According to [40], the theoretical background of this variable comes from perceived usefulness [Technology Acceptance Model], extrinsic motivation [Motivation Model], job suitability [Model of PC Utilization], and relative advantage [Innovation Diffusion Theory], and expected outcomes [Social Cognition Theory]. Three factors that influence performance expectations are perceived usefulness, extrinsic motivation, and job fit [39]. In each of the individual models tested, the variables associated with performance expectations were the strongest predictors of intention to use the target technology. Performance Expectancy, social influence, facilitating conditions, and optimism bias all have a significant impact on electronic file intentions [41]. People who work at CHC show a high level of acceptance and use of IT which is influenced by performance expectations, effort expectations, social influence, and volunteerism [42].

[43] found that performance expectations, task technology suitability, social influence, and facilitation conditions had a significant influence on user adoption. In addition, we also found a significant effect of task technology suitability on performance expectations. The results showed that perceived benefits, perceived enjoyment, trust, cost, network influence, and trust had a significant influence on consumers' m-commerce adoption intentions. Online purchase intentions are positively influenced by 1] the level of performance and effort expected concerning the transaction; 2] the level of user innovation. In addition, innovation constructs have a moderating effect on the relationship between performance expectations and online purchase intentions [44].

2.2.2 Effort Expectancy

In UTAUT, effort expectation is defined as the level of ease associated with using the system according to [22], this factor is derived from the ease of use factor as proposed in the Technology Acceptance Model [TAM]. Apps that people find easier to use are more likely to be accepted. In a similar finding by [45], the effort-oriented construct is expected to be more prominent in the early stages of new behavior, when the process problem represents a hurdle to be overcome and is then overshadowed by the instrumentality problem. This is consistent with previous findings by [22,45,46] Both performance expectations and effort expectations are significant predictors of intention to use WBQAS [Web-Based Question and Answer Service] by [47] Performance expectations, effort expectations, facilitation conditions, and social influences influence overall usage intentions,

perceptions of these antecedents vary significantly between potential users versus early adopters [48].

2.2.3 Social Influence

Social Influence is the extent to which users feel that important people believe that the use of technology is important [46]. This is like the "subjective norm" factor as defined in the Technology of Acceptance Model [TAM] 2, an extension of TAM. [49] defines image as the extent to which the use of technological innovations is considered to improve the image or status of individuals in their social groups. While subjective norms and images have different labels, each of these factors contains the explicit or implicit notion that individuals' behavior is influenced by the way they believe others will see them because of using technology.

In TAM 2, subjective norms exert a significant direct effect on usage intentions over and above perceived usefulness and perceived ease of use for mandatory systems. However, there is no significant social influence construct in the voluntary context. Subjective norms were found to be partly mediated by attitudes toward technology use [50].

As explained by [22], subjective norms significantly influence perceived usefulness through internalization, where people incorporate social influence into their perception and identification of usefulness, where people use the system to gain status and influence. in work groups and thereby improve their job performance, especially in the early stages of experience [51].

[52] found that learning motivation and social influence had a positive effect on behavioral intentions, while facilitation conditions did not affect the use of e-learning portals. Similarly, [53] found that North American internal auditors are more likely to use continuous auditing because of the soft social coercion of Social Influence through coworkers and higher authority. On the other hand, Middle Eastern auditors are more likely to use technology if it is mandated by a higher authority. Social influences also affect IT acceptance [42]

People who work at CHC show a high level of acceptance and use of IT. The analysis of the research model shows that IT acceptance is influenced by performance expectations, business expectations, social influences, and volunteerism Health IT use is predicted by previous IT experience, intention to use the system, and facilitating conditions [42].

2.2.4 Facilitating Conditions

Facilitating Conditions are defined as the extent to which an individual believes that the organizational and technical infrastructure exists to support the use of the system. A similar discussion can be found in the personal computer utilization model by [54] The underlying constructs of facilitation conditions operated to include aspects of the technology and/or organizational environment designed to remove barriers to use [51]. The UTAUT construct consists of items of perceived behavioral control and is theorized to model the relationship between organizational efforts to overcome barriers to use and potential users' intentions to use. As with business expectations, the power of this variable predicts decreased use after initial acceptance. [55] found that performance and effort expectations, social influences, and facilitating conditions all had a positive impact on ICT use.

The four UTAUT constructs have a significant positive influence and impact on behavioral intentions to accept and use ICT by ADSU academic staff. [35] found that the impact of performance expectations on behavioral intentions was not significantly different between the US and Korea. This may indicate that performance is an important factor influencing technology adoption evenly across countries. Interestingly, business expectations have a greater impact on behavioral intentions in the US than in Korea. This implies that the US users' decision-making about technology adoption is more influenced than Korean users by how easy the technology is to use.

Behavioral intentions, along with facilitating intentions, significantly influenced actual WBQAS use. Social influence has no significant effect on the intention to use services. Moreover, behavioral intentions, along with facilitating intentions, significantly influenced actual WBQAS use. Social influence has no significant effect on service intention [47]. Trust on the internet and trust in e-file providers have been shown to significantly affect perceived risk. The implications for practice and research are discussed [41].

3. METHOD

This research is qualitative research with a phenomenological approach. This study examines everyday experiences as phenomena that can describe what research respondents [in this study are vice-principals] in responding to a phenomenon [56] about learning that occurred after the Covid-19 pandemic. This study defines the vice principal's response to the new school culture after the Covid-

19 pandemic, due to the implementation of the distance learning policy during the Covid-19 pandemic by the Indonesian government [13]. The research was conducted from January to March 2022, precisely when Indonesia had relaxed social restrictions by allowing schools to conduct face-to-face learning in Indonesia.

3.1 Participants and Research Data

The informants in this study were 260 vice principals of Junior High Schools in Mojokerto Regency and City, East Java, Indonesia. whereas the number of deputy principals in Junior High Schools varies, including public and private [n = 137, number of Junior High Schools in Mojokerto], with each school having a minimum of 1 to 4 vice principals. Therefore, this analysis was conducted to find out the new school culture from the point of view of the vice-principal. Participation in this study was optional and limited to vice principals who had worked with their principals. The author obtained permission from the principal to provide information, which meets the requirements, related to the phenomenon that occurred.

Data collection in this study was carried out by distributing open-ended questions via google forms and then confirming respondents who met the criteria to be interviewed personally to extract deeper information related to the new school culture phenomenon related to learning. Thus, it is hoped that the research will continue to produce large and in-depth data even though the data collection is based online.

3.2 Data Analysis Technique

The data presented in this study in the form of answers to open-ended questions and the results of follow-up interviews with participants, then, were analyzed using the model developed by [57]. The analysis step in this study starts from the data reduction stage, finding sub-themes, and looking for relationships between themes and conclusions. The presentation of this research data uses a matrix model, which was developed by Miles & Hubberman [58]

4. RESULT

The school culture that was created in the post-Covid-19 era began with the social restriction policy so that there was a change in learning during the Covid-19 pandemic. Learning that is usually done at school has turned into being done at home by utilizing a learning platform that is easy to use by both teachers and students. This study reveals the new school culture in the post-Covid-19 era from the point of view of vice principals, as one the policymakers in schools and as a bridge between teachers and students, who have a unique position in the school hierarchy. The descriptions of the informants who participated in this study were divided into three main components, 1] gender, 2] field of office as deputy principal, and 3] length of service as deputy principal. As a result, the gender difference component shows that there are 130 male and 130 female vice-principals involved. The components in the field of office as vice-principals consist of 100 academics, 67 students, 49 public relations, and 44 facilities and infrastructure. Furthermore, the details of vice-principals as many as 252 people served for 1-10 years, 7 people served for 11-20 years, and 1 person served for >21 years as vice-principal.

The results of documentation and interviews showed that, in the early stages of the Covid-19 pandemic, the acceptance of teachers, students, and parents of students for changing learning from face-to-face learning to online learning was very low. Very fast changes have resulted in many parties having to quickly adjust, especially in aspects of learning, technological developments, and the ICT era. Gradually, these changes can be accepted by students, teachers, and school leaders. Their acceptance of the change in ICT for learning is illustrated in table 1 below.

Table 1. Acceptance of the ICT for Learning

Data Reduction	Theme	Link between Theme
Some students find learning easier	Students, teachers, and school leaders feel that ICT for learning makes a job easier	Students, teachers, and school leaders have perceived usefulness
Some teachers find teaching easier		
Some school leaders feel work can be done more easily		
All students get teaching materials for students' learning needs to be faster	Students, teachers, and school leaders	

Some teachers find it easier to find teaching materials for the teaching needs of students	feel that ICT for learning makes a quick work	values in ICT for learning
Some school leaders feel that decision-making is faster		
Some teachers feel more productive by being able to do other things needed in their work	Students, teachers, and school leaders feel that ICT for learning is increasing a productivity	
Some students feel they can improve their knowledge more by accessing and studying several learning resources		
Some school leaders feel more productive in doing schoolwork		
Some teachers feel that using technology for online learning is more effective	Students, teachers, and school leaders feel that ICT for learning is more effective	
Some students feel that using technology for online learning is more effective		
Some school leaders feel that the use of technology for learning is more effective in improving students' abilities		
Student learning outcomes are getting better	Students, teachers, and school leaders feel that ICT for learning is Improving a job performance	
Some teachers feel that their work is more optimal than		
Some school leaders feel the use of technology can facilitate quick and precise decision making		
All students feel that using technology can improve their learning outcomes	Students, teachers, and school leaders find ICT for learning more useful	
Some teachers feel the use of technology is very useful to facilitate learning		
All school leaders agree that technology is very useful to improve the progress of Education in Indonesia		
All students tend to choose technology-based learning media that are easy to learn	Students, teachers, and school leaders feel that ICT for learning is easy to learn	Students, teachers, and school leaders have values of perceived ease of use in ICT for learning
All teachers choose technology-based learning media that are easy to learn		
All school leaders choose learning technologies that are easiest to learn to use		
Some students choose ICT for learning which is easy to control its use	Students, teachers, and school leaders feel that ICT for learning is more controllable	
All teachers provide an understanding of the limitations of using learning technology		
All school leaders choose ICT for learning that is easy to control its use		
Some students clearly understand related to the use of ICT for learning	Students, teachers, and school leaders feel that ICT for learning is clearer and more understandable	
All teachers explain to students related to the use of ICT for learning that is carried out		
Some school leaders provide explanations and understanding to students and parents regarding the chosen ICT for learning		
Some students choose flexible ICT for learning	Students, teachers, and school leaders feel that ICT for learning is more flexible	
Some teachers provide flexible options for students in choosing which ICT for learning to use		
Some school leaders provide policies to use flexible ICT for learning for students		
Some students feel comfortable using ICT for learning which can improve their abilities	Students, teachers, and school leaders feel that ICT for learning is easier	
Some teachers choose easy learning technology to train students' abilities		

Some leaders recommend the use of ICT for learning which can improve students' abilities	to make skillful students	
All students choose ICT for learning which is easy to use close to everyday life	Students, teachers, and school leaders find ICT for learning easy to use	
All teachers choose ICT for learning that is easy to use and close to everyday life		
All school leaders suggest learning the easiest to use and close to everyday life		

Students, teachers, and school leaders gradually accept the changes in learning implemented during the Covid-19 pandemic era, ICT for learning. These changes slowly affect the learning culture in schools. In-depth, the vice principals stated that the Covid-19 pandemic had changed the habits of students, teachers, and school leaders in seeing the learning needs in schools and the opportunities that schools could take in overcoming unresolved problems during the Covid-19 pandemic.

> "... the learning that was carried out during the pandemic was fully online, even though at the beginning we were stumbling and we had a lot of things to prepare to make it run as it is now." [VP-112]

> "…we have had a lot of failures in providing online learning. We are always improving the learning we do…" [VP-056]

> "Alhamdulillah, our online learning has been smooth so far, although the results have not fully met our expectations… there are learning losses in some students who have not been able to take part in online learning smoothly…" [VP-005]

> "... yes, it's not always smooth, bro, sometimes there are problems, sometimes it's smooth. Especially if we use LMS like Edmodo or Google Classroom, in the past complex problems often occurred so we decided to choose light learning…" [VP-202]

> "... yes, it's not always smooth, sometimes there are problems, sometimes it's smooth. Moreover, if we use LMS, complex problems used to occur in the past so we decided to choose light learning…" [VP-202]

Furthermore, when the Covid-19 pandemic gradually improved, the vice principal revealed that new habits were emerging in schools. Students, teachers, and school leaders are getting used to and giving the intention to use technology for learning, meetings, and publication of important information about the school. The intention to use technology is increasing. This is reflected in table 2 below.

Table 2. Behavioral Intention of ICT for Learning

Data Reduction	Theme	Link between Theme
Students, teachers, and school leaders believe that the use of ICT for learning increases the perceived usefulness of learning	Students, teachers, and school leaders have a good intention of ICT for learning in the performance expectancy variable	Students, teachers, and school leaders have a good intention have behavioral intention of ICT for learning in the school
Students, teachers, and school leaders have an extrinsic motivation to learn some materials for the certain topic of their job or responsible		
Students, teachers, and school leaders have a relative advantage over work or responsibilities that must be completed at school		
Students, teachers, and school leaders believe that by using technology their work or responsibilities can be completed quickly and accurately		
Students, teachers, and school leaders believe that they have outcome expectations for the good performance of their job or responsible		
Students, teachers, and school leaders believe that they can use ICT	Students, teachers, and school leaders have a	

Students, teachers, and school leaders believe that the use of ICT can improve students' abilities	good intention of ICT for learning in effort expectancy variable	
Students, teachers, and school leaders believe that ICT is easy for anyone to learn		
Students, teachers, and school leaders believe that everyone must be willing and able to learn the new technologies that develop in learning	Students, teachers, and school leaders have a good intention of ICT for learning in the social influence variable	
Students, teachers, and school leaders believe that social factors in the technology era make everyone must change to ICT for learning		
Students, teachers, and school leaders believe that ICT images are so good for the learning context		
Students, teachers, and school leaders believe that the conditions of the technology era make perceived behavioral control change to technology intentions	Students, teachers, and school leaders have a good intention of ICT for learning in the facilitating condition variable	
Students, teachers, and school leaders believe that current conditions facilitate technology to enter each education sector		
Students, teachers, and school leaders believe that the compatibility of the use of technology makes everyone give intentions for it		

In addition, the vice principals provide a clearer picture of the behavioral intention of ICT for learning in the education sector by stating that students, teachers, and school leaders are starting to feel comfortable using ICT for learning. Teachers are starting to open by opening up opportunities for learning using LMS, online learning, and online quizzes. Students, in addition to learning with teachers with several selected online learning methods, try to take part in learning outside of school through the Education platform. School leaders began to enjoy holding online meetings to discuss some problems and make policies for the school. Vice principals implicitly and explicitly state the following.

> "Restrictions during COVID-19 have changed the teaching culture towards the use of digital technology. Teaching culture that tends to be conventional is changing to the digitalization of learning..." [VP-111]

> "...there are some students who try to take additional learning outside of school, for example, try the free Ruang Guru platform.…" [VP-256]

> "Schools are starting to encourage students to actively take advantage of the "belajar.id" platform launched by the Ministry of Education and Culture and this is free..." [VP-050]

> "...schools consider learning platforms outside of school not as competitors, but as partners to enrich each other's knowledge treasures. Schools are more encouraged to take advantage of the learning platform launched by the government. For example, the "belajar.id" platform. In addition to cost-effective reasons, but also alignment with curriculum content…" [VP-022]

> "...during distance learning [online], full IT-based learning. We encourage the use of various LMS platforms… rap meetings with leaders often use the zoom or google meet… our assignment collection often uses Google classroom… we often use quizzes to manage quizzes in learning." [VP-242]

After the intention was formed on the use of ICT for learning for teachers, students, and school leaders, a further review showed that the new school culture in the post-Covid-19 era has entered the habit of using technology for learning in schools. This culture is strongly influenced by new habits formed because of policies taken by schools in carrying out learning, and the motivational encouragement of all school members to be able to master the use of ICT for learning. Furthermore, these new habits are shown in table 3 below.

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Table 3. Use Behaviour of ICT for Learning

Data Reduction	Theme	Link between Theme
Students, teachers, and school leaders have felt that the use of ICT for learning increases the perceived usefulness of learning	Students, teachers, and school leaders have a new behavioral use of ICT for learning in the performance expectancy variable	Students, teachers, and school leaders have behavioral use of ICT for learning in the school
Students, teachers, and school leaders have had the extrinsic motivation to learn some materials for the certain topic of their job or responsible		
Students, teachers, and school leaders already have a relative advantage over work or responsibilities that must be completed at school		
Students, teachers, and school leaders have felt that by using technology their work or responsibilities can be completed quickly and accurately		
Students, teachers, and school leaders have felt that they have outcome expectations for the good performance of their job or responsible		
Students, teachers, and school leaders have felt that they have the ability to use ICT	Students, teachers, and school leaders have a new behavioral use of ICT for learning in the effort expectancy variable	
Students, teachers, and school leaders have felt that the use of ICT can improve students' abilities		
Students, teachers, and school leaders have felt that ICT is easy for anyone to learn		
Students, teachers, and school leaders have felt that everyone must be willing and able to learn the new technologies that develop in learning	Students, teachers, and school leaders have a new behavioral use of ICT for learning in the social influence variable	
Students, teachers, and school leaders have felt that social factors in the technology era make everyone must change to ICT for learning		
Students, teachers, and school leaders have felt that ICT images are so good for the learning context		
Students, teachers, and school leaders have felt that the conditions of the technology era make perceived behavioral control change to technology intentions	Students, teachers, and school leaders have a new behavioral use of ICT for learning in the facilitating condition variable	
Students, teachers, and school leaders have felt that the current conditions facilitate technology to enter each education sector		
Students, teachers, and school leaders have felt that the compatibility of the use of technology makes everyone give intentions for it		

The habits shown in the table above imply that students, teachers, and school leaders have felt a positive impact on the use of ICT for learning. The behavior that is formed in students, teachers, and school leaders is a behavior that tends to have great motivation to use ICT in every learning need and the needs of leaders in policymaking for schools. However, these new habits are still in line with traditional habits at school [i.e. blended learning, hybrid meetings]. Students, teachers, and school leaders believe that some things cannot be reached by ICT for learning, such as implanting affective and psychomotor aspects for students. The vice-principals stated several things which were disclosed as follows.

> "…schools feel the positive impact of some students who follow the learning platform and the school even encourages them to use the learning platform as an effective learning medium to use…" [VP-021]

"...many students are classified as capable of taking lessons on the "Ruang Guru" platform to increase their knowledge...." [VP-126]

"Currently learning is more towards blended learning… a combination and synergy between face-to-face learning and IT-based learning...." [VP-007]

"...using IT-based learning technology. This has collaborated with face-to-face learning. In other words, using blended learning…" [VP-024]

5. DISCUSSION

This study reveals that there is a change in the behavior of school residents [59] – teachers, students, and school leaders – who were initially more comfortable carrying out learning and office assignments with traditional patterns, starting to shift towards behavioral intentions to use ICT for learning, and some of them have entered the behavioral use of ICT for learning. The use of ICT for learning in schools, in the Covid-19 pandemic era, learning is carried out using various LMS platforms such as Google Classroom and Quiziz, carried out intensively by requiring school members to use learning media by utilizing ICT that is easily accessible and used [23,59,60]. In addition, learning that requires face-to-face learning is carried out by utilizing online meeting platforms such as Google Meetings or Zoom meetings [4], as well as school leadership meetings using the online method. This massive change in pattern increased the use of all school members using ICT in schools. Then, these changes in school residents slowly have the use behavior of ICT for learning in the school. [36,60–64] state that the process of transforming the use of technology occurs through several stages – acceptance of technology, technology intentions, and use behavior of technology. After technology enters social life, in the learning case in schools, then the use of technology becomes a very influential thing in society [23,33,60].

The process of entering ICT for learning in schools can be analogized to several previous processes that occurred in Indonesia, such as 1] the transformation of digital transportation, 2] the transformation of the online shop, and 3] the transformation of digital payment [65–67]. In the first stage, the UTAUT model in the context of ICT for learning in Indonesia has entered the transformation process in the Covid-19 pandemic era. This change is strongly influenced by the intensity of the use of ICT for learning in the school agenda [60]. [59] said that the acceptance of ICT for learning is strongly influenced by schools that have a high culture of innovation, students who have a high desire to advance, and push forward from parents. Furthermore, in the pot Covid-19 era, school culture in Indonesia began to enter the stage of use behavior of ICT for learning [23,37], where this is marked by the tendency of schools to implement blended learning for students, and hybrid meetings for meetings between school leaders, parents, and teachers. Especially to the needs of schools in dealing with learning loss experienced by some students in Indonesia.

Learning loss is experienced by most students in schools, especially students who tend to be in less-educated homes [9]. Most of the impacts experienced by students are the cumulative impact of knowledge learned, where the impact is highly dependent on certain demographics of students [8]. Furthermore, [10–12] added that learning loss is the impact of students' loss of reading skills, decreased learning intensity, school culture of learning, and unfavorable school policies for improving learning and student abilities. Moreover, the existence of social restrictions due to the Covid-19 pandemic has made students from underprivileged groups [11] or schools that do not have a good school culture experience little or no progress while learning from home [9]. The existence of these problems makes most of the vice principals design and make policies by utilizing the new school culture in using ICT for learning, and [10,11,68] stated that the policies that can be taken to overcome learning loss are: to rearrange learning plans and processes by arranging learning schedules that can include learning loss during the Covid-19 pandemic era.

Opportunities that can be taken in post-Covid-19 education are to maximize the role of ICT [18,69] to increase the learning gain needed by students, as an effort to deal with the learning loss experienced by students [12]. [70] added that post-Covid-19 pandemic education is closer to the use of online learning in the regular part of teaching and learning in the school agenda, and students can use the available educational platform [69,71] in their respective countries. In addition, [72] stated that the new curriculum must be arranged in the new normal curriculum that is emphasized in the ICT for learning.

Thus, the problems experienced by school residents during the Covid-19 pandemic can be overcome by using the right ICT for learning in education which is designed to reduce learning loss

gradually. Furthermore, changes in the behavior of school residents toward a culture of using ICT for learning [23,60]s, supported by training students in using learning technology gradually become good potential for educational progress in developing countries. This new culture creates a big enough opportunity for equal distribution of education in certain regions or countries, with easy access for school residents, especially in elementary or middle school. However, a new school culture cannot have a widespread and significant impact if it is not supported by school, education, or learning policies that are in line with the process of shaping the behaviour of each student, teacher, or school leader. Therefore, all elements, both government, school leaders, and practitioners, must give full attention to supporting the UTAUT model in the context of ICT for learning in schools.

5.1 Implication for Theory

In theory, this UTAUT model has been able to coherently answer the phenomenon of changes in a person's behavior due to technological developments. This study reviews the UTAUT model in the context of ICT for learning and shows that a person's willingness to advance has a major influence on the acceptance and use of technology. This tendency is owned by schools that have a high culture of innovation, and students who have a high desire to progress. In addition, the tendency to push forward from parents also has a big influence on the UTAUT model in the context of ICT for learning. Furthermore, parents who have a high tendency to accept their technology are more likely to encourage their children to learn ICT for learning, and most parents are from the rich group. The success rate of UTAUT in the context of ICT learning is highly dependent on school innovation, students who think ahead, and the acceptance rate of students' parents. Thus, if the implementation of UTAUT is in the context of ICT learning, then we need to increase school innovation, students who think ahead, and the acceptance rate of students' parents towards technological advances for learning.

5.2 Implication for Practice

This research implies that, based on the UTAUT model, students, teachers, and school leaders already have a new habit or culture in the post-Covid-19 Era which is a good first step in ICT for learning. This new culture, if carried out massively and continuously, will expand and be able to advance education in Indonesia along with many students, teachers, and school leaders who are aware of the importance of using technology to support student learning in schools. Practically speaking, the new culture makes students, teachers, and school leaders more skilled in using ICT for learning, and this will linearly improve students' abilities in responding to the needs of education in Indonesia. Especially the need to fulfill the learning loss of students, in elementary and middle schools in Indonesia. Furthermore, if this new culture is widespread and has reached all levels of education in Indonesia, however, if this new culture does not continue and expand, the recipients of the impact of this new culture will not be broad. The impact will only be felt by schools with certain segments and may only be felt by schools in urban areas, or schools with facilities and infrastructure that support the creation of this new culture.

6. CONCLUSION

This study concludes that there is a new school culture in the post-Covid-19 pandemic where all school residents, teachers, students, and school leaders are accustomed to using technology to support learning in schools. The new culture created due to the Covid-19 pandemic is not fully implemented by all schools, but most schools have a new culture in the use of ICT for learning, especially the use of educational platforms that support the process of achieving competence by students. Schools that have a high culture of innovation for all school members tend to have high acceptance and use of technology in every learning conducted by students at school. Furthermore, parents who have forward-thinking, and have a high tendency to accept and use technology, encourage their children to take part in learning on educational platforms. UTAUT in the context of ICT learning model will bring Indonesia's education through advanced learning to reach something that is a loss since the Covid-19 pandemic era. The new school culture that is formed can have a positive impact on meeting educational needs in schools, and the need for learning loss, if this new culture is widespread and has reached all levels of education in Indonesia. Thus, the implementation of UTAUT in the context of ICT learning, the new culture in education, needs to spread to students, teachers, and school leaders in Indonesia.

This research is limited to the disclosure of the UTAUT model in the context of ICT for learning in exploring the viewpoint of vice principals, who are seen as having a role as a bridge between leaders [school policy makers], teachers, and students, so the point of view used is still small and needs to be

proven further based on the point of view of other school structures. Exploring information from every school member is very important to see from the point of view of each role that they have. Secondly, the data collection in this research was done with open-ended questions online, before conducting in-depth interviews, so that researchers could not fully reveal in-depth the phenomena that occurred in the field. Thus, future research can dig deeper into each role each school member has and explore the adoption of Social Media Apps [SMA] in the context of learning in the post-Covid-19 pandemic era.

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