The Impact of the COVID-19 Pandemic in Indonesia (Face to face versus Online Learning)

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***Abstract*— Covid-19 pandemic is an international disaster that is experienced by almost all countries in the world. This has an impact on all lines of the life of each country. Among them is the education sector. Aside from efforts to solve this co-19 problem, the state must continue to maintain the stability and sustainability of the learning process that is the right of all citizens. Indonesia experienced the same thing. face to face learning "shock" and immediately take the fastest action by utilizing existing technology, but not all of them are ready. Using survey methods and adopting the theories of Delon and McLean, this study aims to determine the readiness of organizers, lectures, and students for current conditions, their readiness in undergoing the learning process while maintaining the quality of education and user satisfaction (instructors and students) towards learning. The results of this study prove that we all tend to be unprepared but strangely, on the other hand, the fact is that the positive things from this pandemic prove that education practitioners in Indonesia are better prepared by online learning because they are more comfortable and satisfied with online learning while supported by the government and a good system (96% of respondents) compared to face to face (4% of respondents).**

Keywords—pandemic Covid-19, face to face learning, online learning, student profile.

I. INTRODUCTION

The COVID-19 pandemic polemic grows like a fungus not only in Indonesia but also throughout the world. All lines of life are affected and are affected by the spread of this virus. Recent data as of June 19, 2020, shows a significant increase in the distribution of COVID-19 (Fig.1).

The same thing is experienced in Indonesia with a growing distribution every day with distribution as shown in Fig. 2. The new normal concept adopted by the government shows a greater impact on the distribution of COVID-19. Various actions were taken by each country to save the country from greater impacts such as the impact on mental health [1], socio-economic [2], school, skills, and learning [3] to behavior [4]. As a result of the COVID-19 pandemic, various policies were implemented to break the chain of the spread of the COVID-19 virus in Indonesia. One of the efforts made by the government in Indonesia is to implement an appeal to the community to carry out physical distancing, namely an appeal to keep a distance between the people, avoid activities in all forms of crowds, gatherings, and avoid meetings that involve many people up to the lockdown stage [5]. On the industry side, the government applies the rule of Work From Home (WFH).

Education in Indonesia has also become one of the areas affected by the co-19 pandemic [6]. The existence of this limitation, of course, has an impact on the learning process in Indonesia, especially for the regular mode of learning, namely face to face.

Fig. 1. Distribution of COVID-19 in the world [8]

Fig. 2. Distribution of COVID-19 in Indonesia [14]

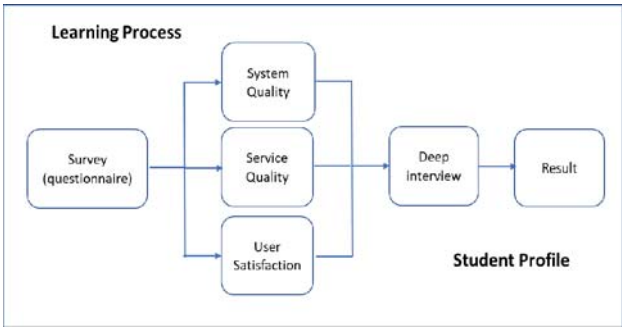

Fig. 3. Research framework

With the restrictions on interaction, the Ministry of Education in Indonesia also issued a policy that is to dismantle schools and replace the Teaching and Learning process by using online systems. And, in a state ready or not, all institutions prepare themselves quickly related to online learning modes.

New polemics have also developed about the readiness of education providers, resources related to the ability of lectures, and also the readiness of students. Lectures who are "shocked" by their unpreparedness, so as if competing to complete their assignments by way of assigning lots of tasks and exceeding the standardization of assignments under normal conditions. Because of what? because they have prepared themselves well for onsite learning with models that have been packaged to adapt the previous learning model, but they are not ready when the learning model is changed because they have to migrate in a relatively short time, very short.

Various distance learning media were tried and used. The facilities used as online learning media include e-learning, zoom applications, google classroom, youtube, and WhatsApp social media. These facilities are used optimally, as a medium for conducting learning such as in the classroom. By using this online media, lectures are indirectly demanded their ability to use and access technology. The students were shocked and unprepared, besides being bored because they could not meet with friends then could not interact directly with the lectures resulting in them not being happy. The question is whether the quality of learning can be maintained? ready educational institutions in Indonesia to deal with it?

Citing from kompas.com, education observer Mohammad Abduhzen considers education in Indonesia to be too rigid, bureaucratic, and like nothing. Because the application of the learning system used is considered highly fixed on the standards, the target curriculum content, meaninglessness, and possibly less pragmatic. He also said the academic process of education in Indonesia was contaminated by bureaucratic behavior. "Lectures experience bureaucratization so that it is narrow, rigid, and formalistic," he said again. Meanwhile, Education and career consultant, CEO of Jurusanku.com, Ina Liem assessed that education in Indonesia has not improved in terms of infrastructure in disadvantaged areas, there are still many buildings and facilities that are inadequate. "For the current condition of

home learning, for example, not all areas are covered by the internet. Citing the Need for a Pivot to Learning report: New Data on Adult Skills, Jakarta youths aged 25-26 years, he added, have lower literacy abilities than junior high school graduates. in Denmark.

Based on this, this study was conducted to know the real impact of learning in Indonesia especially among higher education with onsite learning mode and comparing the results with online learning. How can the learning process go well by changing existing learning modes, to what extent can online learning help institutions to maintain the quality of learning?

II. Related Work

A. Face to Face Learning

This model is general learning and becomes a standard in the learning process of students. This learning model takes place face to face, lectures and students can interact directly so that the learning process is more easily monitored and measured.

B. Online Learning

Online learning is a technology-based learning model and is currently increasingly in demand by various groups of students. Online learning is done by 2 methods, namely synchronous and asynchronous. the online learning model is no longer a learning model offered by institutions but has become a necessity for various groups. Current pandemic conditions are one of the reasons for increasing online learning. and this study was inspired to find out further significant changes to the learning process.

Various researches, including surveys related to teaching style [16], student satisfaction [17] based on their perceptions of online learning and as consumers in higher education have been carried out by various researchers and synergized with efforts related to improving the online learning system.

In our previous research, it was found that online learning is no longer limited to the desires of various parties with various objectives. But it is a necessity [7]. The rapid progress of technology spread to remote areas to the region's needs for good quality education. This is because one of the related conditions is that the quality of education in the city is still concentrated compared to the regions. Covid-19 data distribution in the world is updated in real-time [8] Various other studies have been conducted to help provide solutions according to their respective fields such as [9-11]. Such as the construction of a question generator machine that helps lecturers in producing questions according to learning material and refers to a taxonomy bloom [15], Lenobot on Learning Management System [18], learning style chatbot [19] improving online learning performance [20]. Various concerns occur and citizens of the world unite to find the best solution.

III. Method

This study uses a survey method using questionnaires and deep interviews with several education practitioners in Indonesia, especially students, instructors, and providers of higher education. This study also adopted the concept [12] for just a few indicators, namely system quality, service quality, and user satisfaction. In previous research, we know that the 3 indicators are added to the 4th indicator related to the quality of the information system which has a very big impact on student satisfaction [13].

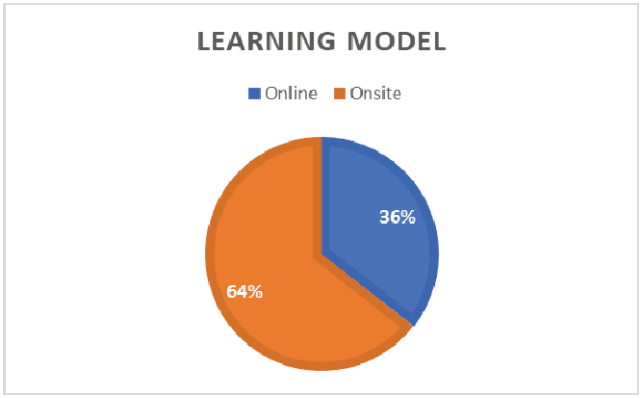

Fig. 4. Learning Model

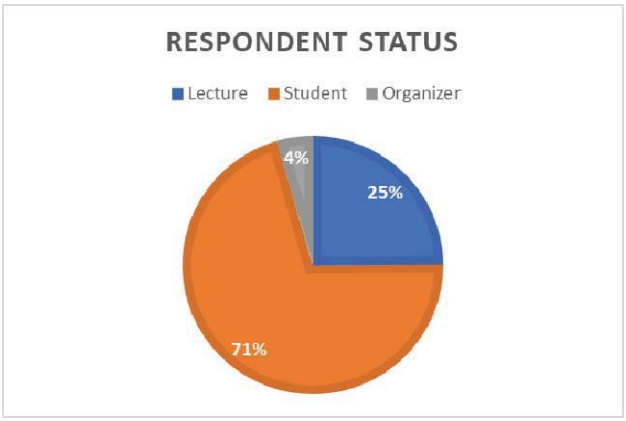

Fig. 5. Respondent Status

IV. Result and Discussion

A. *Respondent*

Of the 250 targeted respondents, 225 questionnaires were filled with respondent profiles spread across 5 provinces in Indonesia but dominated by Jakarta (fig 2-4).

Fig 2 shows information related to the profile of respondents consisting of 36% online learners and 64% face to face learners.

Fig 3 informs that 25% of respondents are lectures, 71% of respondents are students and 4% of respondents are education providers.

This research also reaches to several regions in Indonesia and gets respondents from 5 cities with the distribution of respondents based on areas dominated by the cities of Jakarta, Padang, Jambi, Bandung, and Semarang.

Based on the purpose of this study, the focus of the survey was conducted related to the impact of the co-19 pandemic on the learning process, the questions we prepared to adopt the theory [7]. All questions refer to the three indicators prepared and respondents simply choose 1 of the 3 choices we have prepared (Good, standard, need improvement). The

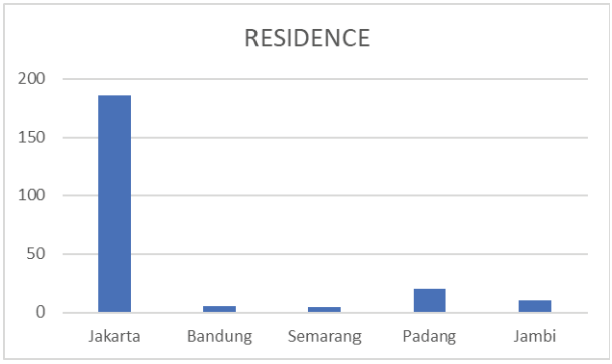

Fig. 6. Residence of respondent

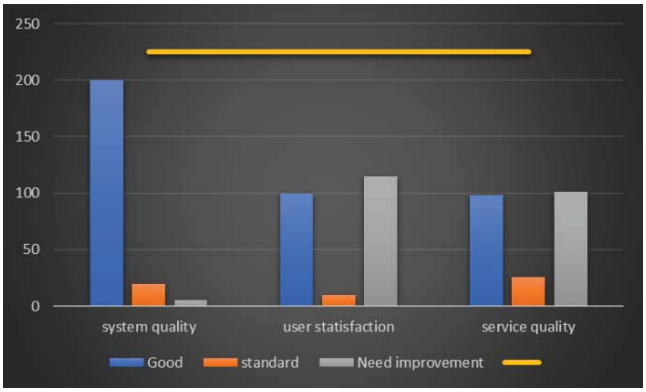

Fig. 7. The results of the questionnaire

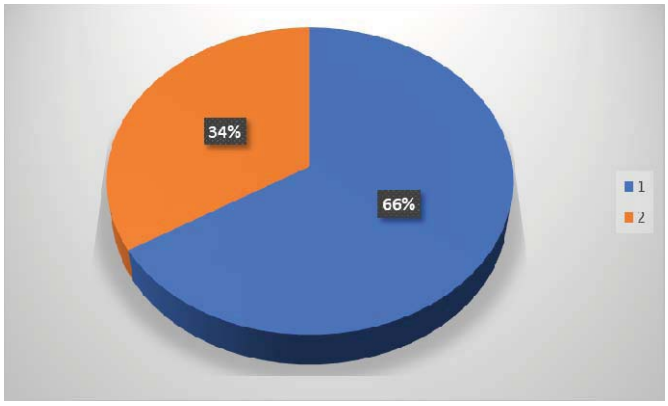

Fig. 8. Deep interview

results of the questionnaire data processing can be seen in Figure 4.

Based on fig 4, it is known that most respondents strongly agree with the quality of the online learning system, but with a relatively low level of satisfaction, as well as service quality. This creates a gap that needs to be explored further. The next step is to conduct deep interviews with several representative respondents in each category. The questions we ask are related to two choices between online learning or face to face learning. 66% of respondents want online

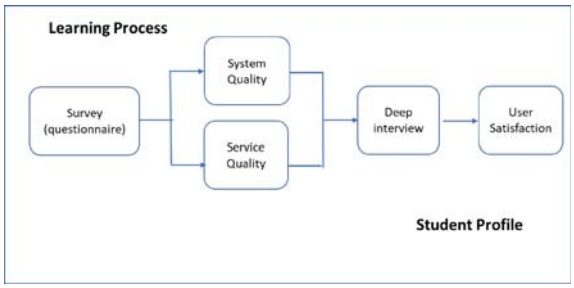

Fig. 9. Impact of Covid for user statisfaction base on system quality and services quality

learning and 34% prefer to stick with face to face learning (fig.5).

Based on these discussions, and referring to several existing online learning models, this study recommends a minimum standardization related to online learning models (fig 10). The interaction of lecturers (1) and student (2) is not sufficient if it is not supported by the availability of good infrastructure (3) from online learning media. For students and lecturers. Facilitate communication and interaction during the learning process. And, of course, this is also supported by good learning material (4) that is delivered according to the needs of students.

V. Conclusion

Various distance learning media were tried and used. Facilities that can be used as online learning media include e-learning, zoom applications, google classroom, youtube, as well as WhatsApp social media. These facilities can be used optimally, as a medium for carrying out learning such as in the classroom. By using the online media, indirectly the ability to use and access technology is increasingly mastered by lectures and at the same time for learners.

After the lecture can master a variety of online learning tools, it will create thoughts about more varied learning methods and models that have not been done by the instructor. the lecture creates creative video content as teaching material. In this case, the lecture is more persuasive because it makes the learner more interested in the material provided by the lecture through the creative video. Learners will certainly be able to understand what is explained by the lecture through creative videos made by the lecture. So, with the application of learning models at home, making students do not feel bored in participating in online learning.

So, as long as the quality and service of the system can be maintained, user satisfaction (learners) is increasing. In the next research, we will see opportunities related to better online learning media by utilizing the Fourth Industrial Revolution technology. Conduct joint research related to the use of technology that supports the application of smart LMS for online learning.

Acknowledgment

This work is supported by Bina Nusantara University through the Office of Research and Technology Transfer, as part of the Bina Nusantara University (BINUS) International Research Grant with Universiti Kebangsaan Malaysia (UKM) entitled "New Technology in Education Towards Fourth Industrial Revolution: Case Study Indonesia & Malaysia "contract number: No.026 / VR.RTT / IV / 2020 and contract date: April 6, 2020.

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