Learning Challenges During New Normal Era Using a Combination of SWOT-PESTEL Analysis

Eltom Ishaq Osman Musa*, Yoyon Suryono

Department of Educational Management, School of Postgraduate Studies, Universitas Negeri Yogyakarta, Indonesia
*Corresponding author. Email: eltomishaq.2018@student.uny.ac.id

ABSTRACT

COVID-19 has become a new problem in education worldwide. This paper aims to examine the challenges faced by schools during the new normal era, particularly in Central Java. The issue is related to the teaching and learning strategies during the pandemic by adopting an educational risk management model during the new normal scenarios. This study uses both mixed-method and a descriptive analysis based on a purposive sampling method using questionnaires, surveys, and interviews. The main samples are taken in secondary schools with a total number of 30 schools. This paper uses a combination of SWOT-PESTEL derived from the Business Model Canvas, where SWOT focuses on the internal factors while PESTEL focuses on the external factors. We use the structural equation modeling-partial least square method (SEM-PLS), which tests the reliability and validity of the model. Four aspects were selected as scales: risk management, sustainable teaching, emergency preparedness plans, and educational quality. The findings show that all three indicators related to education quality aspects were significant. Three of the four indicators on sustainable teaching were significant, two in three indicators in the emergency preparedness aspect were significant, and all four indicators in the risk management segment were tested positive. This research showed a consistent significance level of a square value of 0.2 and p-value of 0.4 (<0.05). It is perceived that some limitations were noticed since only a few variables were considered.

Keywords: new normal era, covid-19, educational sustainability, risk management

1. INTRODUCTION

COVID-19 coronavirus has become a new problem found in Wuhan city, China, in 2019 [1]. It has spread worldwide and caused a global pandemic up today. COVID-19 has also impacted education worldwide, where many institutions are closed, including in Indonesia. As reported by UNESCO, around 1,575,270,054 students are affected by this COVID-19 pandemic [2]. As a result, a new normal era prevails where policies were taken to address such issues guided in dealing with the education unit level [3]. These measures are social distancing, mask obligation, hand washing, and others. Online education has been performed concerning school closure to keep the learning process using different methods.

In Indonesia, one of the universities that open distance learning facilities are a blend of postgraduate science education programs in Central Java [4]. However, online learning also has barriers including effective learning such as disruption of households and unreliable technology, inadequate interactions between students and teachers, and the need for more experience required to prevent barriers [5]. In order to create a sustainable education, we need to implement a creative modelling instrument. Those previous studies show such online chat through WhatsApp, video conferences during the pandemic learning; [6] had different ways to fix them by adopting various approaches and analyses, theoretical, and conceptual frameworks. Among those previous papers are researches that focus on online teaching using Zoom, Google Classroom, Schoology, and Edmodo applications. The constraints in the implementation of online learning are internet connection problems that are less supportive; [7].
This paper proposes the Risk Management Strategy Model as a practical tool that combines the socio-economic and environmental issues into a holistic view of sustainable education management. It aims to reach an agreement between the main internal and external decision-makers regarding the entire strategic planning process. This study finds out to improve the learning challenges during COVID-19 in Central Java institutions in Indonesia.

2. LITERATURE REVIEW

In this section, a few points are discussed, namely, 1) risk management, 2) educational sustainability, 3) COVID-19, and 4) the new normal era.

2.1 Risk Management

Sustainable development drafted by the Brundtland Commission has been the main theme in governmental policies, social groups, and organizations [8]. The issues related to education sustainability attainment remain on its ambiguous measurement [9], which has always thwarted the effort in decision making on better management [10]. This approach tries to create an interdisciplinary proposal meant to shape a model that meets and fixes the issues related to educational emergencies [11]. Strategic management experts understand the concept of product innovation, according to V. Turkulainen [12]. Education strategic management has a fundamental logic and framework that can help measure the sector [13].

2.2. Educational Sustainability

Educational sustainability requires feasibility measures ensuring adequate support for the most vulnerable students and families while improving the collaboration between students to enhance mutual wellbeing and learning [14]. Besides, a sustainable education provides the greatest opportunity for interaction by using technology, connectivity, and partnerships with the private sector as well as encouraging smooth communication between teachers, students, and their parents [15].

2.3. COVID-19

There are groups of people thought to have serious risks, including the elderly aged > 65 years old and who are more likely to develop severe symptoms, males and especially adults between 20 to 44 years old representing 20% of those admitted to the hospital whereas 12% in ICU admissions [16]. According to a case report from John Hopkins University, on the date of March 30, 2020, the number of cases worldwide reached More than 5.9 million cases with at least 365,000 deaths [17].

2.4. New Normal Concept

The term new normal is defined as an era resulting to adapt and process the restriction role after the COVID-19 pandemic is going down, which has completely changed education purpose and community life to maintain productivity [18]. However, the social restrictions and framework in Central Java in schools were stated larger challenges which dismissing schools students from the classes; [19] it is hoped that this new habit must become a collective awareness so that it can work well. The new normal principle encourages people to adjust themselves to life patterns [20], this transformation is to organize life and new behaviour, when the pandemic, which will then be carried forward in the future until the discovery of this vaccine for COVID-19.

3. METHOD

This research was conducted in Central Java, Indonesia from mid-November to late December 2020. The method used in this study is a combination method that combined qualitative and quantitative descriptive methods. The This research was conducted in Central Java, Indonesia, from mid-November to late December 2020. This study uses a mixed-method strategy. The Data were collected using field observations, and interviews were elaborated with quantitative data. The Primary data collection was obtained by using questionnaires. The questionnaire has been distributed to the students and teachers groups with a minimum of 35 institutions as samples. The primary sample is institutions in secondary school with a total number of 30 schools, mainly in Central Java.

The relation connected between these nine aspects and the four aspects in the sentence above is to be made a combination based on previous studies online learning in each of four contexts above it has been related with nine aspects based on authors implementation and analysis model used on behalf of risk management, sustainable teaching, emergency preparedness, and educational quality aspects. However, these nine aspects, as mentioned its part of the research characteristics in the secondary data overview discovered.

4. RESULTS

According to the study method based on data taken during the research, as many as 65% of respondents
were under 25 years, 24% aged between 26 to 35 years, and 11% of respondents aged over 35 years where 57% of whom are single, 68% of respondents are students while 38% have worked and 9% are housewives. 42% of the respondents are city dwellers, 4% from Yogyakarta, and 54% from Central Java.

According to our results, it indicated that as many as 69% of the respondents claim to have a strong preparedness plan whereas 27% admitted to being in the average percentage of such preparedness plan on risk management and the remaining 4% were not prepared at all. This claim could be interpreted as some respondents emphasized that Covid-19 does not exist, a simple conspiracy theory meant to exterminate the human being. Also, according to the findings obtained from the regression analysis made by the author to support, such a level of preparedness was due to strong measures adopted by the local government and also having a strong influence on educational level and human development indicators. Besides, the survey results showed that 84% of respondents preferred going on-campus learning, and 78% expressed their negative feeling on online learning is inefficient.

Moreover, despite a boost in sophisticated and innovative tools, 56% of respondents claim to have the ability to adapt to new normality measures where the increase in lack of resources in the capacity building seems to be palpable indicating 45% among the respondents. It is perceived that educational sustainability seems to be threatened due to Covid-19 explaining that the key to the success of competitive education will be largely determined by the combination of information technology, intelligence, and management vision. This result is in line with previous findings that 89% of respondents approve of the efficiency of technology and its advantages.

Besides, such results need further validation to see whether they truly show consistency, reliability, and validity. Thus, a second step is needed, appealing to the use of statistical analysis where the methodology used requires a clear step of who such a result can be considered as valid. The structural equation model has been used based on guidance. The sample size remains the same where both the observable and non-observable variables are described here below:

1) Exogenous latent variables on Education Quality aspects represented by X1 have three indicators based on Likert scale 5, namely infrastructure and learning resources expressed by X1.1; research and development by X1.2; curriculum design and transactions stated by X1.3.

2) Exogenous latent variables on Sustainable Teaching represented by X2 having four indicators based on Likert scale five, namely, socio-economic indicators expressed by X2.1; environmental parameters expressed by X2.2; training and satisfaction stated by X2.3 and promotion stated by X2.4.

3) Exogenous latent variables on Emergencies Preparedness aspects (X3) with four indicators based on Likert scale 5, namely, psychological aspects stated by X3.1; social support segment stated by X3.2; anxiety reduction stated by X3.3 and family outreach declared by X3.4.

4) Exogenous latent variables on Risk Management (X4) with four indicators based on the Likert scale 5, namely occurrence frequency expressed by X4.3; which support facilities stated by the management impact in innovative and hard skills for the learners declared by X4.4

5) Endogenous X5 is considered variables (Y) has indicators based on Likert scale 5, namely occurrence and frequency expressed by Y1.1; facilities stated by Y1.2; impacts indicator stated by Y1.3 and management stated by Y1.4. When evaluating the measurement model for risk management and its sustainability, some indicators were not significantly positive despite the vast majority showing a higher significance level. As a result, the following figure shows the structural model suitable for this research.

![Figure 1 PLS Constructs Images](Sarstedt, Marko, Jr, Joseph F Hair Jun-Hwa, [24]).

5. DISCUSSION

This study investigates whether a critical discussion has explained on behalf of the tactical use of social media platforms allows getting feedback that is useful for organizations. It also explained the inevitability of the use of information communication technology in everyday life. The teaching and learning activities were originally carried out at school and continue being studied online at home. Online
learning is done by adjusting the ability of each school. Online learning can use digital technology such as google classroom, home learning, zoom, video conference, telephone, or live chat. According to [25], it can produce the level of risk experienced varies depending on the ability of universities to respond to the risks that occur. Besides, there are internal factors in a school that can create various risks so that the use of e-learning affects the relationship between lecturers and students. Each lecturer's level of knowledge and experience as a party teaching and delivery of lecture material to students can lead to misunderstandings of the delivery of information to students.

An effective and efficient approach to risk management for measuring the level of security in an organization through a process of risk assessment, risk mitigation, and evaluation actions [26]. In risk management, there is a level consideration of information security that results from the use of information systems and technology so that the continuity of daily activities can run smoothly both within companies and universities. Therefore, it is necessary to evaluate the resources used to implement systems and information technology. This study is limited to the educational risk management strategy, which is necessary to adapt during the new normal era. The mechanism of learning challenges is limited to normal learning, expanding on the study issue of Central Java is situations which been different from framework other provinces.

6. Conclusion

This study examines the risk management strategy in education conducted in Central Java. This research adopts an educational risk management model during the new normal era. Unlike some previous research, this paper uses a combination of SWOT-PESTEL derived from the Business Model Canvas, where SWOT focuses primarily on the internal factors while PESTEL focuses on the external factors. We used the Structural Equation Modeling-Partial Least Square Method (SEM-PLS), which tries to test the reliability and validity of the model. This research selected four aspects as scales, namely risk management, sustainable teaching, emergency preparedness plans, and educational quality.

The findings show that all three indicators related to education quality aspects were significant, three of the four indicators on sustainable teaching were significant, two in three indicators in the emergency preparedness aspect were significant, and all four indicators in the risk management segment were tested positive. This research shows a consistent significance level of the f-square value of 0.2 and p-value 0.4 (<0.05). It was perceived that some limitations were noticed since only a few variables were considered. It is suggested that further details are needed to address such issues to obtain a better wide range of data at a macro level. It is acknowledged that this study unveils a research novelty that has not been done before, which deals with the learning strategy model during a grave pandemic that disrupts education.

Acknowledgments

This study was made possible thanks to the research grants received from the Yogyakarta State University

References


