

## THE IMPLICATIONS OF UTAUT MODEL FOR STUDENTS WITH SPECIAL NEEDS IN INCLUSIVE SCHOOL (A CASE STUDY AT INCLUSIVE SCHOOLS IN SURABAYA)

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**Abstract-** To fight Covid-19 the Government the government, through the Ministry of Education and Culture, requires the learning process from home, so that the paradigm of an independent online learning system based on e-learning becomes a policy for all education providers in Indonesia. This research used UTAUT model and intends to; (1) obtain an overview of online learning for students with special needs during the Covid-19 Pandemic. (2) Describe how to implement an online learning system as a pragmatic solution for students with special needs during the Covid-19 Pandemic. This research is expected to make contribution to stakeholders regarding online learning for students with special needs. This research is also expected to provide novelty by adding a construct to the UTAUT model in accordance with e-learning technology for students with special needs. This type of research is qualitative research with a phenomenological approach. The research subjects were students with special needs who carried out online learning and those who got the duplication of the curriculum, namely students with visual impairments, hearing impairments, speech impairments and physically disabled. Data collection was carried out through interviews via video calls. Analysis of research data was carried out using the model of analysis by Miles & Huberman (1994) which consists of three stages, namely data reduction, data display, and conclusion drawing and verification.

**Keywords:** UTAUT, e learning, students with special needs, inclusive school

### INTRODUCTION

Indonesia is currently under the biggest test in history, almost all regions have not escaped exposure to the spread of the virus. As of September 21, 2020, there were 248,852 positive, 9,677 dead, 180,797 recovered, and the number continues to grow all the time. The corona virus (Covid-19) outbreak that has hit 215 countries in the world, presents its own challenges for educational institutions. To fight Covid-19 the Government has prohibited crowding, social distancing and physical distancing, wearing masks and always washing hands. The government, through the Ministry of Education and Culture, requires the learning process from home, so that the paradigm of an independent online learning system based on e-learning becomes a policy for all education providers in Indonesia.

Zaharah (2020: 270) states that Teaching and Learning Activities are moved at home by means of E-Learning by using various technological tools, such as smartphones, computers and notebooks. One of the government's instructions about activities at home is learning activities. Learning should not stop even if the government instructs 14 days off for schools and campuses in Indonesia. Teaching and learning activities

(KBM) are moved at home, but must still be controlled by the teacher or lecturer and parents, using distance learning. With this condition, it shows that the government has issued a policy to the community not to have any activity outside the home, all work is carried out from home, including teaching and learning activities (KBM). The Covid-19 pandemic has a serious social impact on all sectors of life, such as the economic, social, cultural and educational sectors.

According to Moore, Dickson-Deane, & Galyen (2011) Online learning is learning that uses internet networks with accessibility, connectivity, flexibility, and the ability to generate various types of learning interactions. Research conducted by Zhang et al., (2004) shows that the use of the internet and multimedia technology is able to change the way of conveying knowledge and can be an alternative to learning carried out in traditional classrooms. Online learning is learning that is able to bring together students and lecturers to carry out learning interactions with the help of the internet (Kuntarto, 2017). At the implementation level, online learning requires the support of mobile devices such as smartphones or android phones, laptops, computers, tablets, and iPhones which can be used to access information anytime and anywhere (Gikas & Grant, 2013). Online learning has become a demand in the world of education since the last few years (He, Xu, & Kruck, 2014). Online learning is needed in learning in the era of the industrial revolution 4.0 (Pangondian, Santosa & Nugroho, 2019). The use of mobile technology has a major contribution in educational institutions, including the achievement of distance learning goals (Korucu & Alkan, 2011). Various media can also be used to support the implementation of online learning. For example, virtual classes use Google Classroom, Edmodo, and Schoology services (Enriquez, 2014; Sicat, 2015; Iftakhar, 2016), and instant messaging applications such as WhatsApp (So, 2016). Online learning can even be done through social media such as Facebook and Instagram (Kumar & Nanda, 2018). Online learning connects students with learning resources (databases, experts / instructors, libraries) that are physically separated or even far apart but can communicate, interact or collaborate (directly / synchronously and indirectly / asynchronously).

This research used UTAUT model. In 2003, Venkatesh, Morris, Davis and Davis created the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT model identifies the key factors in acceptance of Information and Communication Technology (ICT) as measured by behavioral intention to use the technology and actual usage.

This research intends to; (1) obtain an overview of online learning for students with special needs during the Covid-19 Pandemic. (2) Describe how to implement an online learning

system as a pragmatic solution for students with special needs during the Covid-19 Pandemic.

This research is expected to contribute to stakeholders regarding online learning for students with special needs. This research is also expected to provide novelty by adding a construct to the UTAUT model in accordance with e-learning technology for students with special needs.

### LITERATURE REVIEW

The UTAUT model is based on previous technology acceptance models such as Theory of Reason Action (TRA), Theory of Planned Behavior, Task-Technology Fit Theory, and especially the Technology Acceptance Model (TAM). TAM, introduced by Fred D. Davis in 1986, is an adaptation of TRA specially designed for modeling user acceptance of information systems. According to Davis (1989), the main purpose of TAM is to provide a basis for tracing the influence of external factors on user beliefs, attitudes, and goals. UTAUT is one of the latest technology acceptance models developed by Venkatesh, V, Morris, MG., Davis, G.B., Davis, F.D., (2003). UTAUT combines the successful features of eight leading technology acceptance theories into one theory. The eight leading theories put together in UTAUT are the theory of reasoned action (TRA), technology acceptance model (TAM), motivational model (MM), theory of planned behavior (TPB), combined TAM and TPB, model of PC utilization (MPTU), innovation diffusion theory (IDT) and social cognitive theory (SCI). UTAUT proved more successful than the other eight theories in explaining up to 70 percent of the user variants. After evaluating the eight models, Venkatesh, et al. found seven constructs that appear to be a significant direct determinant of behavioral intention or use behavior in one or more of each model. These constructs are performance expectancy, effort expectancy, social influence, facilitating conditions, attitude toward using technology, and self-efficacy. After further testing, they found four main constructs that play an important role as direct determinants of behavioral intention and use behavior, namely, performance expectancy, effort expectancy, social influence, and facilitating conditions. While others are not significant as a direct determinant of behavioral intention. Besides that, there are also four moderators: gender, age, voluntariness, and experience which are positioned to moderate the impact of the four main constructs on behavioral intention and use behavior. Figure 1 shows the relationship between these determinants and moderators.

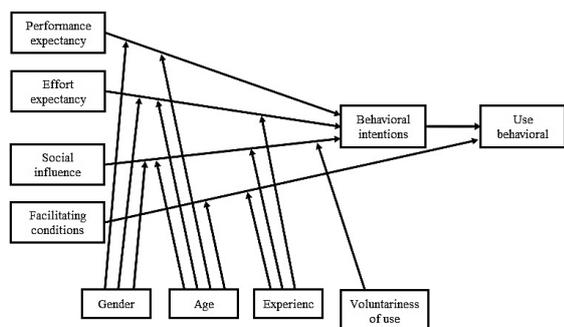


Figure 1 Model UTAUT (Venkatesh, Morris, Davis, Davis, 1986)

Tabel 1. Hasil Literature Review

No	Researcher	Variables used and added	Significant external variables
1	Prasetyo & Anubhakti, (2011)	Performance expectancy, Effort expectancy, social influence, facilitating conditions	Still limited to a conceptual model that requires testing
2	Nasir, (2013)	Performance expectancy, Effort expectancy, social influence	Effort Expectancy
3	Pamugar et al., (2014)	Performance expectancy, Effort expectancy, facilitating conditions, partners influence, top management support, organization support	Still limited to a conceptual model that requires testing
4	E-learning Center – University “Goce Delcev”, Stip, 2000, R.Macedonia et al., (2015)	Performance expectancy, Effort expectancy, social influence, self-efficacy, attitude, self confidence, facilitating conditions	Effort expectancy, facilitating conditions
5	Ngampornchai & Adams (2016)	Performance expectancy, Effort expectancy, attitude, image, social influence, compatibility	Performance expectancy, Effort expectancy
6	Handayani and Sudiana, (2017)	Performance expectancy, Effort expectancy, social influence, facilitating conditions	Performance expectancy, social influence, facilitating conditions

Table 1 shows that the UTAUT model has been widely used to track the acceptance of information systems / technology, in particular evaluating the acceptance of e-learning in several countries including Indonesia. However, the construct development of the UTAUT model varies according to the research context. This research also shows that the evaluation of e-learning acceptance through the UTAUT model approach at several universities in Indonesia has been carried out. However, the results of the literature review conducted confirm that the use of the UTAUT model as an evaluation research approach in tertiary institutions, especially the Postgraduate Program, has not received attention or it can be said that it has never been done. Thus, this study will use the UTAUT model approach as an appropriate approach in

evaluating user acceptance of e-learning that has been implemented so far.

## METHODOLOGY

This type of research is qualitative research with a phenomenological approach. Sources of data obtained from various accesses include direct experience data from e-learning activities for nearly six months, journal articles, mass media and official online media of the Covid-19 response task force and other references that are analyzed and reflected in the data reflection process. This research method is structured as follows: (1) type of research and methodological approach, (2) time and place of research, (3) data sources, (4) data collection techniques and instruments used, (5) data analysis and representation (6) criteria for trustworthiness and authenticity, and (7) researcher reflectivity. Data collected from various events, participant data, field findings, literacy, coding processes, analysis and representation, criteria for trust and authenticity, and researchers' reflections with several perspectives.

The research subjects were students with special needs who carried out online learning and those who got the duplication of the curriculum, namely students with visual impairments, hearing impairments, speech impairments and physically disabled. there are 12 research subjects. Data collection was carried out through interviews via video calls. The aspects that were asked in the interview were: (1) the facilities and infrastructure owned by the students to carry out online learning; (2) Student responses regarding the effectiveness of online learning; (3) Implementation of online learning in breaking the chain of spreading Covid-19 for students with special needs. Analysis of research data was carried out using the model of analysis by Miles & Huberman (1994) which consists of three stages, namely data reduction, data display, and conclusion drawing and verification.

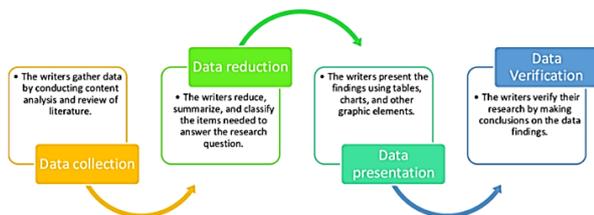


Figure 2: Qualitative Data Analysis Model (Miles & Huberman, 1994)

Analysis of research data, the data reduction stage is the stage of collecting all the information needed from the interview results and then grouping the data. The data display stage is the exposure of data that is needed in research and that does not need to be discarded. The withdrawal and conclusion verification stage is the stage of interpreting research data to draw conclusions based on the phenomena obtained (Miles, M. B., & Huberman, M., 1994).

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