

## Technological Acceptance Model among Indonesians between Utility and Productive: Evidence from Field Experience

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**Abstract:** The trend is visible in front of the eye that technology is increasing among Indonesian users. Once Indonesian users appear to be in a period of prosperity because they can obtain high-speed technological tools. However, the acceptance of this technology needs to be studied whether because of utility or productivity or consumption or for other purposes. For this reason, this study aims to seek evidence from the views and studies of experts from field experience. First, we continue to collect literature in-depth with a descriptive qualitative approach until we find valid and reliable answers. Our data analysis method followed qualitative research experts' direction, including the review approach, coding, and concluding. The finding is that most Indonesians are proven that the acceptance of technology is still at the lifestyle or consumptive level, not yet on the principle of benefit compared to the facilities and uses provided by technological tools. Thus, these findings become meaningful input for the awareness and learning of Indonesian users

**Keywords:** Technological Acceptance, Tools Consumption, Productive User, Field Study Evidences.

### 1. Introduction

In this modern era, technological advances are proliferating from day to day, month to month, to the following years. (Best & Kellner, 2020). Implicitly, the use of this technology has increased significantly. However, not many people understand and are aware of what and what technology was created for. In this day and age, technology is essential, especially with digital technology proliferating every day. Technology is a method or tool for solving problems. Technology is a facility and infrastructure which provides the survival and convenience of human life with an item or component required. Typically, humanity's use of science continues with the development of natural capital into diverse types of devices. Its importance has grown along with the advancement of technology, being an intangible entity such as apps, learning methods, business meetings. There are many examples of real technology in this modern era, starting from the technology used, such as computers, tablets, cellphones, machines, motorbikes, and others. Of course, further innovations will emerge along with increasingly sophisticated vehicles, such as airplanes, autonomous cars, or self-driving cars with teleportation systems. (Lindroos et al., 2017; Marchi et al., 2018; Müller et al., 2019).

According to Friedman et al., (2008) to promoting human life in the present era, information systems and networks are very valuable. The use of technology by society makes the technology field more sophisticated. Communication used to take a long time to arrive very fast with technology and seemingly without distance. The adage that "the world is not as wide as moringa leaves" should be shifted to "a world as large as moringa leaves" with such rapid technological progress. It is due to faster access in everyday life to knowledge. Moreover, in Indonesia, we will find out what activities are taking place in other regions or even on other continents, even though in outer space.

Su et al., (2020) said that young people chose the TikTok application because of fan engagement, even though only 15 seconds had become athlete's relationship marketing during the pandemic via TikTok. This makes TikTok a fun application from the Bamboo Curtain country, China, which looks more effective in attracting the younger generation's attention. Unique application website for ByteDance business, especially for videos, music, and images. From the brief explanation above, we will not discuss the features in the Tiktok application itself. However, we will discuss the effect of the TikTok application on dominant teenage users, especially the impact of information and communication technology from an upbeat and positive perspective. Side perspective. Negative. On the positive side, the TikTok application has several benefits for teenagers, one of which is an application that can encourage one's creativity in creating (García et al., 2020; Rinarta et al., 2018).

Likewise, Wu & Wang, (2005) examined the causes that drive cellular commerce. This study evaluated how the technology acceptance model among users continues to grow from year to year. So, based on the evidence, each technology user's behaviors definitely have their motives. The explanation why individuals are accustomed to the rapid growth of the times is that they are still served with the latest technical developments every year. The effects of creativity and outstanding facilities are rapidly mushrooming in the world of technology. In reality, often, public euphoria over previous innovations has not gone away, and other innovations have also arisen. The implications of these scientific discoveries would have a positive influence on human life. If we know this or not, technical advances have altered certain facets of our lives. E.g., the phone used to take people days. Tik Tok also offers several background music videos so that users can create more fun videos. This TikTok program is also video-based and music-based and can be used by teens or children to develop video editing abilities to make content more useful.

Apart from the communication side, Cusumano & Selby, (1998) said that technology in the information sector is also very helpful for users in many ways. (Bass et al., 2003; Price et al., 2006). The most popular example is the Smartphone, which is the latest breakthrough that makes information seem in the hands of the owner of the technology device. Because smartphones provide lots of features and sophistication that can bring great benefits to its users. In the past, technology receivers had to go to the library first to look for a reference, then now just type in the keywords, so in seconds, what you are looking for can be presented with various information at once related to the desired topic.

Not surprisingly, Gong & Janssen, (2012) findings state that from the implementation of many policies to the management of business processes, it has been influenced by the principles of technology that allow flexibility and agility every technology provides. So now many people can access any information, anywhere and anytime. Unfortunately, not everyone can use the latest technology; not all technology users have the same motives and needs. There are still those who do not understand and are lazy to learn it. So that their mind and understanding are only on the principle of fun and entertainment purposes. For example, there are those who reason because they are old, have manual traditions, village children, cannot afford it and other reasons. It should be precisely because of that ignorance that the user must come to know. Studying technology also doesn't cost a fortune either (Linares et al., 2021; Widana et al., 2020). On the other hand, technology actually provides many conveniences at a relatively affordable cost. Not being able to master the latest technology actually leaves users far behind. However, every moment the world will continue to change. That is why in the opportunity of this article, we will examine and explain some of the reasons why technology users must be literate with technology that continues to evolve over time. (Karr-Wisniewski & Lu, 2010; Lee et al., 2016; Christofides et al., 2009; Bravo et al., 2020; Nolan, 2009).

The act of accepting technology must follow the principles of function and benefits of the election because the emergence of technology is undoubtedly based on the principle of its benefits for the user's survival. One example of technology that is useful today is the google application. This application has an obvious principle of benefit, especially among students and professional sector workers. In general, technology makes it easier for users to do all things faster and shorter, making the resulting work better. Meanwhile, the benefits of technology specifically help educate children so that they are no longer tech-savvy and can make it easier to adapt to their surroundings. Besides, technology can also be used as a means of exploration to add insight and knowledge in completing work.

Different users of technology have different goals for accepting technology. This principle is the same as Alomary & Woollard, (2015) view, which states how its users accept easy technology. The reason for evaluating and reviewing the understanding and acceptance of the concept of technology in human life. for example, some users have reasons for this. For example, they want to live a different life from other people. Then this will be a plus if the user can distinguish himself from the surrounding environment. The difference in following and anticipating technological developments is significant (Yuliara et al., 2020). So, in this case, they will not doubt if they will be able to carry out and carry out various activities more independently and confidently. People who are not familiar with technological advances are usually considered old-fashioned and labeled clueless for this group. As bright as someone is today, their intelligence is still doubtful if they do not follow technology. The technology they think will make stupid people smart. On the other hand, a person who is an expert can look stupid because he lacks knowledge and acceptance of the most up-to-date app technology.

M. Lee et al., (2018) added that every professional has a particular way of dealing with the fourth industrial revolution or the second information technology revolution? How to combine reasons for accepting dynamic technology between technology, business, and the public through open innovation. Some people will accept technology based on initiative, innovation, and creativity that lead to a productive life. Such people have very wise reasons in determining the acceptance and selection of every technology that should be pursued. They believe that

with technology, they will be able to take the initiative to do something. Likewise, they feel more creative and innovative if they have sophisticated tools to be productive in all their life activities. On the other hand, before advanced technology like now, many people were innovative and creative. However, to do research and come up with a discovery take a very long time because of the lack of technological support. Today, according to Humble & Kim, (2018) the world is all accelerating. The development of lean software science and its innovation in building and scaling technology companies has gone to great lengths to make technology a borderless revolution. Thus, innovation and creation are getting more intense in various fields because technology is critical in accelerating research results and discoveries. Then the attitude and style of a person will determine to accept technology in everyday life.

Another reason may be due to the effectiveness and efficiency principles that have contributed to why technology acceptance will differ from person to person. It must be admitted that technology has saved most of the cost, effort, and time in human activities, especially those of professionals. This concern is following Susskind & Susskind, (2015) views where technology and the professions' future are interrelated, namely how technology will do change the work of human life and the expertise. We still remember sending news with letters sent via the post office, and it took days. Now once type and click, the message will be delivered, and in a matter of seconds, we will find the reply. Likewise, going abroad in the past could only be done by a handful of people because of the high cost; now, technological advances make even lower-class people go abroad with cheap airlines. Regarding work, there are currently people who do not come to work from morning to evening. Just sitting at home in front of the computer, but the income continues to flow. People who do not know see them as unemployed, but they are smarter by using technology. Of course, for reasons of the effectiveness and efficiency factors mentioned above. (Karwowski, 2005; Intriago & Posligua, 2020).

The problem is that technological advances have entered almost all aspects of our lives. However, there are still many of us who are still wrong about why they should accept technology. In other words, what motivation has driven them to accept technology. If we count how many elements are useful or productive or just without clear reasons, technology in their hands has a state or consumptive effect. Based on this rationality, we intend to listen to technology experts for this balance.

## 2. Method

As we mentioned above, this research study has a specific objective: to prove the real reasons and categories of acceptance of technology for the people in Indonesia scientifically. As it is claimed, are there among them that technology users in third countries are still at the level of consumptive user categories because of their inability to use technology to produce something useful. Alternatively, do they accept technology with the ease with which technology has been shown to make their lives more productive regardless of what they do at work? For that, we have collected a variety of related literature and also searched several scientific publications as evidence from experts who have tested any arguments they can support or refute our assumption and study questions.

The next step is to analyze using a qualitative approach under the phenomenological approach to ensure that our findings have answered the study problems with high standards of validity and reliability. As for the in-depth analysis of this data, we started by searching for publications according to our theme. Then in-depth analysis through the coding system, criticism, and evaluation, so that we find answers by following the direction of research experts, qualitative design research, social and technology, and innovation sections Tolley et al., (2016) in their study "Qualitative methods in public health: a field guide for applied research" published in John Wiley & Sons. Another expert that we make in this data analysis guide is Willig & Rogers, (2017) in the opening "The SAGE handbook of qualitative research in psychology" published in Sage.

## 3. Result

Fatmawati, (2015) examined that the adoption of technology in work can be characterized as consumers' ability to use technology for the goals to be achieved through technology. Davis developed the Technology Adoption Model (TAM) 86. TAM finds users' understanding of ease of use and utility to be critical factors influencing any technology's adoption rate. TAM is a model to describe and forecast the use of library information systems. In line with that, Nasir, (2013) evaluated the acceptance model of information technology by students in Palembang using the UTAUT model. Information technology is one of the tools in solving problems that makes it easy for humans to solve problems. The unified theory of the adoption and use of the application paradigm is one of today's body of knowledge principles. Successful colleges usually understand the benefits and uses of technology. Information and technology that supports higher education activities are assets related to all academic activities and the lecture system and evaluate student learning outcomes.

Sani et al., (2020) researched is preliminary to implementing a new model that incorporates and integrates an existing model, introducing an information management model with a technology acceptance model. This model's development is based on the IPO's logic (input-process-output) and the causal model by integrating, implementing, and modifying the previous model. The result of the path formed consists of 16 ties and produced 11 variables. Present variables will be made up of 55 indicators, each of which will produce five indicators. Developing this model will allow researchers to test the model of introduction of information technology and the model of acceptance of technology to impact all models. This thesis will also lead to future research, particularly in information systems, which will provide a theoretical foundation for modeling. The production and proposed models' openness may be considered in the further study's conduct, particularly in the instruments used. The results indicated that the perceived usefulness influences the use of a Financial Information System for Local Government, while perceived ease of use does not influence.

Perri et al., (2020) argue that smart grid technology can solve various environmental, social and technological problems. However, the adoption of smart networks requires changing user behavior. However, the introduction of smart networks involved shifting consumer behavior. This study examines individual motivational factors that influence decisions to follow "smart consumption and production behavior." Understanding these causes is critical for introducing successful behavior improvement interventions that will promote smart network technologies, say the authors. The study showed that the most significant belief in attitude was energy-saving, and an additional exogenous variable, unwillingness to change, harmed intention.

Davis et al., (1989) compared two models of user acceptance of computer technology. Managerial and professional resistance to end-user systems is a widespread problem. We need to better understand why computers are accepted or rejected by people. Discusses the ability to predict the computer acceptance of a person based on the measure of their intent. In evaluating systems and guiding management interventions, these studies may have practical value.. These other results suggest a more straightforward but more effective method of user acceptance factors, with practical value for evaluating systems and guiding managerial interventions intended to reduce underutilized digital technology problems.

Chin & Lin, (2015) the factors that influence user perspectives on energy management systems were investigated. To test the operation of the Building Energy Management System (BEMS) in the Indonesian manufacturing sector, the Technology Adoption Model (TAM) expansion model was developed with two external considerations, consistency (C) and technological sophistication (TC). Two hundred and fifty-eight questionnaires were analyzed using structural equation modeling, and the results showed that C and TC influenced user intention to use BEMS through user attitudes, perceived usefulness, and perceived ease of use. These results can be used as guidelines for improving the quality of comparable energy management.

Muthmainnah, (2020) examines the effect of WhatsApp social media on motivation to learn Indonesian at Islamic Junior High School Jakarta. WhatsApp social media and student motivation were carried out using 30 statements in the form of a questionnaire. The findings were that students agreed to use the WhatsApp social media to discuss lesson problems (73.4%). The total percentage of these students strongly agreed because they were motivated to learn by having discussions, followed by the teachers with a total percentage of 84.06%. Furthermore, the influence of WhatsApp social media on students' motivation to learn Indonesian is 25.2%. In comparison, 74.8% is determined by other factors, such as learning environment factors, family factors, student intelligence factors, and several other factors both from within students and from outside.

Hanafi et al., (2020) analyzed the influence of Facebook, which is a social networking site that is now increasingly popular, and the number of members has increased sharply in a short time. Students' main task is to study and study because adolescence is a transitional period that wants to be noticed; Facebook is a website that can make adolescents more expressive to highlight themselves, their desires, and their profiles. Students will try to play Facebook, which has interfered with their homework, and spent much time playing this page. FISIP Riau University, FISip Riaa University, Iasi University, Romania, and researchers used simple regression, also known as simple regression, to measure the strength between two variables.

Soimah, (2018) examines the significant difference between student learning outcomes taught using computer-based media and conventional methods in student motivation in Gringsing Batang in 2017. Two of the four classes were taken as the sample group. By analyzing the One-Way ANOVA test data, this study shows that the average score of students taught using computer-based media is 23,429, and those taught using conventional methods in terms of student learning motivation are 17,517. In conclusion, there is a significant difference between student learning outcomes taught using computer-based media and conventional methods in student learning motivation.

The finding of Sherlyanita & Rakhmawati, (2016) the development of worldwide social media, which indirectly has a significant impact on adolescents' use of the Internet, was examined. 44 students and two teachers conducted the survey at SMPN 52 Surabaya. The findings show that the use of the Internet for learning and entertainment purposes can generally be determined by the majority of students in these schools. Students are conscious of the fundamentals that need to be applied to security, such as restricting privacy and sharing with strangers only.

#### 4. Discussion

Our study departs from the Technology Acceptance Model (TAM) theory developed Davis et al., (1989) as in Colvin & Goh, (2005) in their study "Validation of the technology acceptance model for police." This TAM model is the most widespread acceptance of technology devices that are most widely known, through the main factors that enable a person to use whatever convenience the technology is available: starting from understanding the ease of use and the principle of benefits obtained.

Thus, our findings on the acceptance of technology in Indonesians between utility and productive benefits through evidence from expert experience have provided a new understanding of the widespread acceptance of computer and smartphone-based technology devices and other devices. Our findings are generally data from the education sector that indicate the generous use of technology so that it is increasingly accepted, especially in learning spaces that are innovated in learning activities. Another use of this study results is the benefits of computer technology in education, namely a practical way to increase the learning ability and absorption of students. This is none other than because this technology can attract students' interest and attention to increase student motivation in doing assignments and exercises effectively through computer technology, tablets, iPad, and smartphone. These technologies can display audio, visuals, color, motion, sound, images, and other applications. The widespread acceptance of computers in education and professional work is following a study conducted by Legris et al., (2003) in their study "Why do people use information technology?" and Teo, (2012) in their work paper "Examining the intention to use technology among pre-service teachers: An integration of the technology acceptance model and theory of planned behavior."

This study's positive impact is that the acceptance of technology by many circles in Indonesia is inseparable from the importance of these tools in a productive life. Everything has implemented technology to facilitate various activities from education and other businesses. One of the widespread acceptance of technology is information and communication technology. The advancement of communication technology innovation has been felt in many productive activities. The current digital era is indeed beautiful for Indonesians to accept technology as the only means of communication and information that provides benefits like never before. However, we cannot cover up that uncontrolled acceptance of technology also impacts technology recipients who are sometimes not aware of the negative side of excessive acceptance. The same findings were also discussed about the negative side of technological development in education. (Musa & Ishak, 2020). In their study "The Identification of Student's Behaviors of Digital Amnesia Syndromes and Google Effect in the Department of Library Sciences, State Islamic University of Ar-Raniry- Indonesia."

However, from the research findings, the acceptance of technology among Indonesians is also related to other studies that we cannot relate to more and more depth to affect the results. For this limitation, as Harris, (2017) said, we want to build cooperation in discussing things that we have not explained related to the context of the discussion, incomplete locations, and approaches and perceptions in understanding this study's findings. So for that, we invite many parties to provide a re-correction and expand the concepts and theories, models of acceptance and rejection of technology among Indonesians, which we have mentioned in the research with the theme "Technological Acceptance Among Indonesians Between Utility and Productive Users: Evidence from Field Experience."

#### 5. Conclusion

Finally, we can conclude our study to understand the technology acceptance model for Indonesia between utility and productivity from the analysis of journal paper publications. Considering the data from the literature and the sound of thoughts of several publications we visited, we can conclude that the result is that the Indonesian Kalangan technology acceptance model has been very positive with an average indication that they accept necessary upon technology, the usefulness, and productivity that is given along with the application of education and education circles. Other work. Thus, this finding is intended to be a meaningful input for interested parties interested in the theme of technology acceptance models in any activity.

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