



**TECHNOLOGY ACCEPTANCE MODEL (TAM) ANALYSIS  
IN ELEMENTARY SHCOOL: A CASE STUDY OF SDN 2 TAJI JABUNG  
MALANG REGENCY**

<sup>1</sup> Ari Kusuma Sulyandari, <sup>2</sup> Ayu Putri Rizki

<sup>1,2</sup> Universitas Islam Malang

<sup>1</sup> [ari.kusuma@unisma.ac.id](mailto:ari.kusuma@unisma.ac.id), <sup>2</sup> [arsedo46@gmail.com](mailto:arsedo46@gmail.com)

**Abstract**

The purpose of this study was to determine the acceptance of internet usefulness technology using TAM. TAM is the acceptance of the use of information systems based on the ease of use and usefulness. This research method uses qualitative. The research subjects were 45 children. The research location is at SDN 2 Taji Jabung. The data was obtained using observations to students and interviews with students and teachers. the result of this study is, students can receive android phone technology because of the ovid pandemic. After the pandemic, students continue to use their cellphones after school. The ease of using technology and internet access, makes them continue to use cellphones. This is not based on good digital knowledge, so some students access porn sites. Students are proficient in operating various applications such as whatsapp, youtube, tiktok, but during the assessment using an android phone they cannot operate the application. Digital literacy is still low, so it is necessary to conduct further research such as TPACK at SDN 2 Taji jabung.

**Key words:** TAM, elementary school, internet

**INTRODUCTION**

Technology is a system that makes it easier for humans in everyday life. Without technology, we will find it difficult to do anything. In the current era, technology is very easy to find and even becomes a basic thing in everyday life, including education. A few years ago face-to-face education had to be discontinued due to corona. Schools strive for online learning which of course uses technology for smooth learning and teaching.

SDN 2 Taji is one of the schools that was affected by the covid-19 so that learning was carried out online for approximately 2 years (interview results). With the online presence, schools install wifi and local residents also install wifi for the smooth teaching and learning process. Many parents buy android phones for their children because at affordable prices they have gotten android phones for school purposes instead of having to buy laptops that are less affordable.

The covid pandemic has passed, but students of SDN 2 Taji often use gaged. They use gaged after school, because at school, the teacher forbids them to bring gaged. Easy internet access in the village makes students often play gaged and watch various kinds of films. The use of other applications such as

whatsapp is also often used to contact peers. Taji's geographical location is on the slopes of a mountain. The demographics of the Taji population are also homogeneous. The average job of the Taji people is farming. The mobility of the population is also not so high to Malang City, due to the distance of travel. In terms of education, the average parent in the Taji area is educated up to elementary school level, but in the current era many children continue their education to high school or continue in Islamic boarding schools.

From this, it can be seen that after the pandemic, the Taji people still use wifi. SDN 2 Taji students also still need wifi to operate their android phones. Easy access on Android makes it easy for children to contact fellow friends, relatives and even play games and access sites only from Android phones. Technology acceptance model (TAM) in SDN 2 Taji students is also influenced by ease of use, so that even though schools have implemented face-to-face learning, many students still use gadgeted after school. Moreover, SDN 2 Taji was caught by the Campus Teaching program from the Ministry of Education, so that more or less the use of gadgeted in schools helped carry out assessments and digital literacy. The ease of using technology also encourages students to always use the technology (Fitriana, 2009). Student acceptance of technology and its usefulness can also affect student behavior which is supported by external factors as well.

TAM is acceptance of the use of information systems based on the ease of use and usefulness (Lee, 2020), with TAM we can see the extent to which technology is used, its convenience, its usefulness that can encourage humans to use and the impact of using technology. In this study, TAM was focused on students of SDN 2 Taji.

## **METHOD**

Based on the main problems and research subjects studied, this research uses descriptive qualitative research. According to Moleong (2014) qualitative research is research that is intended to understand phenomena about what is experienced by research subjects such as behavior, motivation, action, etc. Holistically and descriptively in the form of words and language, in a special natural context and by utilizing various scientific methods.

The research approach used is a case study approach, namely researching only in one place. The subjects of this study were students of SDN 2 Taji, Jabung District, Malang Regency. Data were obtained through both pre-research observations, as well as during field research, observations were made during assessment learning and the use of android phones outside the school

environment. The things that were observed were a) perceived internet use, b) internet convenience, c) attitudes when using the internet, d) behavioral intentions when using the internet, e) complexity of internet use, f) experience when using the internet, g) volunteering when using the internet. use the internet.

## RESULT AND DISCUSSION

The students of SDN 2 Taji have homogeneous demographics. The average educational background in Taji is elementary school, but this year there has been a change in the pattern of education. Many children continue their education to a higher level or prefer to enter pesantren. The livelihood of the Taji people is farming because the geographical condition is located on the slopes of a mountain. Teachers at SDN 2 Taji put more emphasis on reading literacy and numeracy, because they think there are only two provisions for life, namely reading and arithmetic. From the observations, it was found that the characteristics of the students of SDN 2 Taji are active, have high curiosity, want to practice directly, like to be noticed, but they can't be orderly.

The use of android phones began in a pandemic that required children to learn online. Internet use has grown rapidly in the last 10 years, one of which is due to the pandemic (Fitriana, 2009). After the pandemic and offline school begin, the children still use an android phone for play. An android phone still accept because ease the children for communication (Rizky, 2022). Moreover they still use an android phone because so many people install a wifi, so they can keep connect to the internet even in the top of the mountain. Technology did help people ease their job or complete a task, so that keep use because it's easy. Taji people also start accept the technology. It's support by Nurtantiono's opinion (2014) that ease of access the internet and needs simultaneously have a significant effect to user.

TAM is a model design for predict computer application output and directly related factors (Widyarini, 2005).

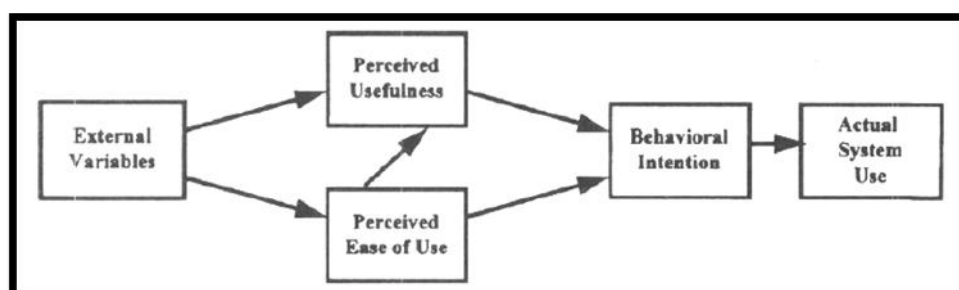


Figure 1. TAM' Chart Picture

From the chart above can be described that external factor stimulate us to use a technology. External factor in SDN Taji is the covid pandemic that effect the children study form phone. Existence of digital literation in Kampus Mengajar program, require them to do assesment form android.

Urge for use technology also because conveience factor. Davis' opinion (1989) TAM present a strong and simple explanation in reciving technology and user behavior. The conveience made students ease to access the web, watch youtube, play game, dan send message to fellow friends without trouble. External stimulate also cause the use of technology is increase because it's easy to use. An android phone is a easy to use, even for children. Children is fast learning from what they saw. For children, it's easy to operate an android phone applications, because that ease the technology can be accepted.

From explanation above, there must be a positif and negative impact for SDN 2 Taji Students when use the internet. According to Cardullo (2021), perceived usability and ease of use cause cognitif respon for use the technology. The congnitif respon cause user behavior to technology. The impact cause the the childern behavior. From interview test dan observation, found that some children can access porn site, they knew the site from close related person. Android user without guidance made children easily accessed porn site and impact to undisciplined and annoyed friends behavior.

External factor, the ease of use technology and easy to operate the phone application also impact to intens user, as if childern very needed the android phone. On average SDN 2 Taji studens have an android phone, if doesn't, they will borrow from their parent to play game even opperate other application.

TAM have an indicator among them is a) percieved internet use, b) the ease of the internet, c) the behavior when using the internet, d) the user intension when using the internet, e) the complexity of using the internet, f) the experience when using the internet, g) voluntary when using the internet.

---

**Komponen dan Indikator**

---

***A. Perceived Usefulness of the Internet***

---

1. Using the Internet can enable to accomplish tasks more quickly
  2. Using the Internet can improve my performance
  3. PU3 Using the Internet can make it easier to do my tasks
  4. Using the Internet in my job/school can increase my productivity
  5. Using the Internet can enhance my effectiveness
  6. I find the Internet useful in my job/school
-

<b>B. Perceived Ease of Use</b>
1. Learning to use the Internet is easy for me
2. I find it easy to get what I need from the Internet
3. My interaction with the Internet is clear and understandable
4. I find the Internet to be flexible to interact with
5. It is easy for me to become skillful at using the Internet
6. I find the Internet easy to use
<b>C. Attitude Toward Using the Internet</b>
1. I have fun interacting with the Internet
2. Using the Web provides me with a lot of enjoyment
3. I enjoy using the Web
4. Using the Web bores me
<b>D. Behavioral Intention to use the internet</b>
1. I always try to use the Internet to do a task whenever it has a feature to help me perform
2. I always try to use the Internet in as many cases/occassions as possible
3. I plan to use the Internet in the future
4. I intend to continue using the Web in the future
5. I expect my use of the Web to continue in the future
<b>E. Perceived Complexity Using the Internet</b>
1. Using the Internet can take up too much of my time when performing many tasks
2. When I use the Internet, I find it difficult to integrate the results into my existing work
3. Using the Internet exposes me to the vulnerability of computer breakdowns and loss of d
<b>F. Experience</b>
1. I have a great deal of experience using the Internet
2. Number of years using the Internet
<b>G. Voluntariness Using the Internet</b>
1. Using the Internet is voluntary as far as work/school is concerned
2. I am not required to use the Internet for work/school
3. While the Internet enhances effectiveness in completing tasks, it is not required that I us

**Table 1. Indicator TAM**

From the table above, the researcher will discuss the TAM profile of the students of SDN 2 Taji Jabung, Malang. In terms of perceived usefulness of the internet, students of SDN 2 Taji find it helpful when using the internet. The implementation of AKM (Minimum Competency Assessment) and assessment is easily facilitated by the use of the internet, because they have to download the questions first, but during the assessment they have difficulty using phones, it can be concluded that SDN 2 Taji students have difficulty operating phones when do the assessment, but they can operating other things on android phone. Digital literacy in SDN 2 Taji students is also low because most of them have not been able

to use android phones, digital technology and the internet with maximum, especially in learning access.

TAM explains the use of technology used by SDN 2 Taji students about the function of the ease of using the internet and how useful it is to use certain technologies. This perception is influenced by external factors that is, subjective norms and facilitating conditions (Ranellucci et al., 2020).

The students of SDN 2 Taji are easily to use the internet, in an instant they learn how to use the internet. The ease of using the internet makes them use the internet in their daily activities, when they go to school they will use the internet from an android phone. Students of SDN 2 Taji will use the WhatsApp application to contact their friends, watch movies through the Youtube application and play online or offline games through their android phones. The internet can make it easier for them to access anything. Hariyo (2013) TAM model, perceived usefulness is used to measure how much a person feels that a technology can be useful for him. It's just that the easy use of the internet is not accompanied by a balanced knowledge. Some children who memorize porn site websites write the site on the blackboard, with the ease of use of the internet, SDN 2 Taji students can be more skilled in many things such as art learning, because there are many applications that make it easier for us to draw, photos editing and videos that can used for their benefit. In addition, with this convenience, students of SDN 2 Taji can also access online learning sites such as Ruang Guru, Online Learning Media (MBO), Icando, Brainly Indonesia, Quipper etc.

The behavior when using the internet students of SDN 2 Taji are fairly good, can accept the use of the internet well. They send messages to friends, call relatives and call someone if needed. Students are not send frontal messages that are not polite to adults, it's just that there is no guidance from adults is what makes them always use cell phones indefinitely, play games that end up viewing porn sites. The level of using a computer technology on a person can be predicted from the behavior of the attention to the technology (Wibowo, 2006), from this opinion, can be concluded that the more intense of internet usage, the more higher the internet usage, because the students of SDN 2 Taji are intense in using the internet and driven by unguidance factors, in the end they access porn sites easily.

Behavior intentions when using the internet are driven from external factors is during the pandemic. Online learning requires students to have cellphones to do assignments, but after online learning ends because the pandemic is over, they still use the internet not for learning. Their intention is to fill the spare time and can't stop watching youtube. They only leave their phones when go

to school because they are prohibited from bringing a phones. Students of SDN 2 Taji still can't use the internet optimally and don't understand the benefits of the internet for their good, but without guidance the bad effects of the internet will affect student behavior. The more technology that is considered easy to use, the more bigger it is to be used (Antonietti, 2022).

SDN 2 Taji has a pleasant experience when using the internet, especially when playing games that are useful for lessons. They asked for it to be done the next day. Their digital literacy is very low, so they can't operate the assessment application and AKM (Minimum Competency Assessment) without the help from the sophomore year students. Students can easily use the internet, operate the applications on android phones such as whatsapp, youtube but don't understand what email is, and have difficulty using assessment applications. From the above, it can be concluded that the ease of using the internet doesn't really support students' digital literacy. In fact, if explored more deeply, students of SDN 2 Taji can use the internet to learn and increase knowledge.

SDN 2 Taji students voluntarily use the internet and do it without coercion especially for school purposes. Students of SDN 2 Taji think that they don't have to use the internet at school. They just entertain themselves with the internet and android phones, even though with the internet, they can create educational video content and upload them to the youtube application, so they don't just watch from youtube, but can create useful content, especially accessing porn videos. If someone believes that the information system is easy to use then they will use it. Conversely, if someone believes that the system isn't easy to use then they will not use it (Jogiyanto, 2007).

## **CONCLUSION**

SDN 2 Taji is an elementary school that is geographically far from the crowds. This does not make it difficult for students to use the internet. TAM analysis shows that students at SDN 2 Taji can use the internet easily. This is not accompanied by digital literacy and learning projects from schools, so some of them do not use the internet for access to education. Some children use the internet to access porn videos. Some are for the use of social media such as you tube, Instagram, online games, Facebook, Tik-Tok etc. Even though during the AKM implementation, students really enjoyed learning using Android phones, so learning projects using Android and the internet should be carried out for their benefit.

The use of mobile phones should be accompanied by positive things. the

use of gadgets can be beneficial for learning. Schools and parents should pay more attention to the use of cell phones in children. Suggestions for further research are to examine TPACK (Technological Pedagogical Content Knowledge).

## REFERENCES

- Antonietti, C., Cattaneo, A., & Amenduni, F. (2022). Can teachers' digital competence influence technology acceptance in vocational education? *Computers in Human Behavior*, 132(October 2021). <https://doi.org/10.1016/j.chb.2022.107266>
- Cardullo, V., Wang, C., Burton, M., & Dong, J. (2021). K-12 teachers' remote teaching self-efficacy during the pandemic. *Journal of Research in Innovative Teaching & Learning*. 14(1), 32–45. <https://doi.org/10.1108/jrit-10-2020-0055>
- Davis, F.D. 1993. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*. Vol.13, No.3, pp. 319-340.
- Fitriana, M. 2009. *Perkembangan dan Jumlah Pengguna Internet di Dunia*. Available:<http://mayafitriana07.wordpress.com/2009/03/17/perkembangan-danjumlahpengguna-internet-di-dunia.html>.
- Hariyo, Sri. 2013. *Analisis Penggunaan Elena untuk Meningkatkan Efektifitas Belajar Berdasarkan Pendekatan Technology Acceptance Model pada Mahasiswa Fakultas Ekonomi Universitas Negeri Semarang*. Skripsi. Semarang: FE Universitas Negeri Semarang.
- Jogiyanto. 2007. *Sistem Informasi Keperilakuan*. Yogyakarta: Andi. Kristyanto, Dian. 2013. *Analisis Technology Acceptance Model Terhadap Faktor-Faktor yang Mempengaruhi Penerimaan Digital Library di Perpustakaan IAIN Sunan Ampel Surabaya*. Skripsi. Surabaya: Fisipol UNAIR.
- Lee, J. Y. and Panteli, N. 2010. Business Strategic Conflict in Computer-mediated Communication. *European Journal of Information Systems*. Vol. 19, No. 2, pp. 196<sup>2</sup>208.
- Moleong, Lexy J. 2014. *Metodologi penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya
- Montesori, Maria. 2013. *Metode Montessori*. (Gutex, Gerald Lee: Ed). Yogyakarta: Pustaka Pelajar.
- Nurtantiono, A., Kurnianingsih, H., & Mutmainah, H. (2014). *Analisis Penerimaan Teknologi Perpustakaan Digital pada Perpustakaan Perguruan Tinggi Swasta di Sukoharjo*. (Online)



<https://www.neliti.com/publications/115706/analisis-penerimaan-teknologi-perpustakaan-digital-pada-perpustakaan-perguruan-t> diakses tanggal 24 September 2022

Ranellucci, J., Rosenberg, J. M., & Poitras, E. G. (2020). Exploring pre-service teachers' use of technology: The technology acceptance model and expectancy-value theory. *Journal of Computer Assisted Learning*, 36(6), 810–824. <https://doi.org/10.1111/jcal.12459>

Rizki, Ayu Putri. 2022. Analisis Technology Acceptance Model (Tam) Pada Guru Ra Kota Malang. *Jurnal Dewantara*. (online) <http://riset.unisma.ac.id/index.php/jd/article/view/16750> diakses tanggal 24 september 2022

Wibowo, Arief. 2006. Kajian tentang Perilaku Pengguna Sistem Informasi dengan Pendekatan Technology Acceptance Model (TAM). *Konferensi Nasional Academia*. Online [https://d1wqtxts1xzle7.cloudfront.net/30907586/arif\\_wibowo-with-cover-page-v2.pdf?Expires=1663988024&Signature=aHJtbsRgsnuMLKAtLNbr-NLU8hLV1VX0ofyVyVuehr3HtcH1sRz1TMioWlJqBUgnNL27RDIGt8ZfhYUIMBHfvKsJgi5efd86sE1Lk4yh~aSxRXkEOfda-KwSNzlv5uguj5bpHo9OQm6fY1H97jYRPn3sVlxNf0Rv8~KUAhBd-k4njq3WAgY5Fzrj-GE6hzyBQmHInk7uvUPHLTJC3mQ4rUrFBZfU-DG1O6USolKezsreFUo98PvzlmMdg2qRdpoOC6wEERpnobt5KGG8YTPkBjflq6nO61Iv14SefCO9FrBd3pBmqAQwXFB6jtnHefel3QeRVB2Z1YN0ML3FR-pijw\\_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA](https://d1wqtxts1xzle7.cloudfront.net/30907586/arif_wibowo-with-cover-page-v2.pdf?Expires=1663988024&Signature=aHJtbsRgsnuMLKAtLNbr-NLU8hLV1VX0ofyVyVuehr3HtcH1sRz1TMioWlJqBUgnNL27RDIGt8ZfhYUIMBHfvKsJgi5efd86sE1Lk4yh~aSxRXkEOfda-KwSNzlv5uguj5bpHo9OQm6fY1H97jYRPn3sVlxNf0Rv8~KUAhBd-k4njq3WAgY5Fzrj-GE6hzyBQmHInk7uvUPHLTJC3mQ4rUrFBZfU-DG1O6USolKezsreFUo98PvzlmMdg2qRdpoOC6wEERpnobt5KGG8YTPkBjflq6nO61Iv14SefCO9FrBd3pBmqAQwXFB6jtnHefel3QeRVB2Z1YN0ML3FR-pijw_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA).

Widyarini, LA. 2005. Analisis Niat Perilaku Menggunakan Internet Banking di Kalangan Pengguna Internet di Surabaya. *Jurnal Widya Mana-jemen dan Akuntansi*. Volume: 5 (1): 101–123