

The Phenomenon of Digital Transformation of Technology and Communication in School Environments

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Abstract. The existence of digital technology tools in today's society is no longer standard, because every society starting from the environment of children's lives, the environment of adolescents and even adults has made technological tools a necessity so that of course it cannot be separated from human life. Many people as individuals in their daily lives and their lives in the organizational environment, digital technology tools play an important role, because all sources of information can be obtained using the help of these technological tools, so that work that has been difficult to complete will become easy and does not take a long time to complete. For students, technological tools are used as a source to find information about science in completing learning tasks that are needed at a certain time. In this community service activity, socialization and training were given to students on how students' behavioral actions in responding to the phenomenon of the transformation of digital technology tools that are used as sources and media for learning. So that digital tools have problems with attacks from technological transformation activities from students' digital tools, they can overcome them. This activity was carried out at the Karalat digitala Private Vocational School in Pematangsiantar City, North Sumatra, with a socialization method provided by the team, and a demonstration of students' work as basic skills training for students in the field of technology by giving several questions at the end of the activity. This was done to measure the level of success in the PkM activity, that the value obtained from several students who answered correctly reached 95.2% who could answer directly from several questions that could be answered by participants (students) of Karalat digital Private Vocational School.

Keywords: Communication, ICT, Phenomenon

1 Introduction

According Aisyah[1] The role of digital in everyday life is used as a tool to collect data with the aim of using technology that functions to search for information. Digital technology tools provide many conveniences for users to communicate, various sources of information can be searched with digital technology and communication tools at the desired time. The process of searching for data and information is faster and easier so that the process of collecting data and information is faster and more efficient. This allows users to obtain the information they need more easily, and supports daily activities. The role of social media such as online technology has also proven to be the right media for interactive, flexible, and presenting features that support the teaching and learning process. Access to Information is an important point in digital because it allows students to access various sources of information widely and up to date, such as e-books and learning videos. Students can communicate and collaborate with teachers and friends in real-time, using applications such as Google Classroom, Zoom, and Microsoft Teams applications [2]. Digital usage helps students develop digital tool skills that are important in the modern era, such as digital tool literacy, programming, and data analysis. Technology-based learning is carried out so that students are accustomed to the development of sophisticated, stable, and unreal digital tool technology and are accustomed to presenting new challenges[3].

The transformation of digital tools changes every era always changes and develops, so users do not want to be left behind in technological changes, they are always updated in technological changes, the speed of change in digital transformation of technology and communication makes people more sensitive to things they want. With the change in digital transformation, it will have an impact on users, this is one of the mental phenomena that can be seen from cyberspace. The phenomenon that affects the attitude of each person.

The digital technology transformation event that occurs in everyday life, especially in the school environment, has experienced significant changes, even the use of technology for students today has no limits, so that many phenomena and events occur in psychology, a student's attitude towards their environment such as an attitude of not caring about the surrounding environment, not responding, experiencing a lack of focus, being easily offended and quick to anger. Moreover, some software applications such as applications on smartphones provide many interesting applications as a place to search for data and information faster and easier, making students increasingly lulled by their own world [4]. As if not needing people around them. To avoid these things, so that students do not experience some of the changes from the increasingly sophisticated digital transformation, it is necessary to make socialization to schools to avoid the negative impacts of using this communication technology.

The phenomenon of the development of communication technology has experienced many changes that have an impact on user morality. It can be seen in the virtual world that technological devices such as smartphones have an influence on each person's attitude, and it can be seen in software applications on social media that carry out the most cyberbullying via the internet. This cyberbullying phenomenon can be traced to software applications, one example of which is the Instagram application. The form of bullying that often occurs in this application is in the form of video and text content.

Digital tools are media tools used to search for information, disseminate information, however, it requires the ability to create information and critical evaluation, the accuracy of the application used and a deep understanding of the content of the information contained in the content of the digital tool. On the other hand, digital tool literacy includes the responsibility of every dissemination of information that is carried out because it concerns its impact on society [5]. The problem of digital tools is not only in the real world, but also in cyberspace. Understanding cyber ethics has become a necessity amidst the massive negative impacts of internet use. Internet digital tools examine behavior that is in accordance with morals, laws, and social issues by using computers and internet networks as a means of interaction between humans [6].

Current technological changes and developments require that every activity cannot be separated from digital tools. In the school environment, Information and Communication Technology can be used to help the E-Learning process or online learning[7]. Where online learning is carried out with the support of technological services such as telephone, audio, video, satellite transmission or computers [2]. In other words, e-learning is a learning model using communication and information technology media, especially the internet. The use of learning media is an inseparable part and is already an integration of the learning methods used. The position of learning media has an important role because it can help the learning process[8].

From the digital transformation of technology tools that occur in everyday life, especially in the school environment, there have been significant changes, even the use of technology for students today has no limits, so that many phenomena and events occur in psychology, a student's attitude towards their environment such as an attitude of not caring about the surrounding environment, not responding, experiencing lack of focus, being easily offended and getting angry quickly. Moreover, some software applications such as applications on smartphones provide many interesting applications as a place to search for data and information faster and easier, so that students are increasingly lulled by their own world. As if they don't need people around them. To avoid these things, so that students do not experience some of the changes from the increasingly sophisticated digital transformation, it is necessary to socialize schools to avoid the negative impacts of using this communication technology.

The purpose of community service activities in the Kartika High School environment is to broaden understanding and update the insights of students at the Kartika Private High School in Pematangsiantar about the impact of technological developments in everyday life that have shifted to digital tool systems. Changing students' mindsets to positive behavior, social spirit, and sensitivity to the environment in facing developments in the era of increasingly modern information technology globalization [9]. Based on the description above, efforts to overcome the negative impacts of technological development and progress, community service is carried out by PkM which functions to improve future generations to be wiser, the theme of the PkM service carried out is about the "Phenomenon of Transformation of Digital Communication Technology Tools" in the school environment.

2 Methodology

This Community Service Activity was carried out at the Kartika Pematangsiantar Private High School in September 2024. The activity was carried out after the preparation for the community service activity was carried out. Before the activity was carried out, the following preparations were made:

- a. Conducting a literature study on the phenomenon of transformation from the development of technology and communication in order to motivate students.
- b. Preparing tools and materials for training on the Transformation of digital communication technology

tools in the era of technological development in the school environment for all students.

- c. Determining the implementation time and duration of the community service activity together with the implementing team.
- d. Determining and preparing the material to be delivered in the community service activity.

This activity was carried out in class IX which was attended by 20 participants consisting of students of the Kartika Pematangsiantar Private High School. The activity was carried out to deliver material directly to students, using information and communication technology tools such as smartphones. Each participant practiced directly how to use information and communication technology tools to obtain information, how to overcome the phenomenon of digital transformation that has a negative impact on daily activities [10].

3 Result and Discussion

The results of motivation with socialization to students to overcome the digital transformation phenomenon of technology and communication experienced, carried out by providing direct training and conducting a question and answer session as a real observation, the results of this community service activity provide:

- a. Providing examples as objects of the occurrence of the digital transformation phenomenon of technology and communication as negative factors experienced by a technology user.
- b. Providing training to students on how the learning model uses information and communication technology as a supporting tool to find information about science properly.
- c. Providing motivation to students not to be complacent and avoid the negative influence of the increasingly rapid transformation of information and communication technology.

Thus, community service activities have run smoothly and effectively, as seen in the picture below:



Figure 1. Presentation of Material by Lecturer at STIKOM Tunas Bangsa



Figure 2. Question and Answer Session Given by Lecturers at STIKOM Tunas Bangsa

Activities carried out with lectures and demonstrations, then continued with a question and answer session. This community service program provides socialization to all members of the Kartika Pematangsiantar Private High School. With the hope of increasing information, knowledge, and members of the Kartika Pematangsiantar Private High School and equivalent so that they understand what is being conveyed and can transfer the knowledge gained to other communities. The results of this service and presentation will be useful for the community, in order to increase information about the impact of the development of information technology for

those who do not respond to events from technological transformation. In addition, this service will increase and provide insight to participants of the Kartika Pematangsiantar Private High School, especially teenagers and children to understand the benefits of Information Technology and positive things.



Figure 3. PkM Team and students of Kartika Private High School, Pematangsiantar

4 Conclusion

Community Partnership (PkM) service activities have been carried out in the form of service on the phenomenon of digital transformation of technology and communication in the era of digitalization tools. The training began by introducing the events and roles of technological developments in the era of digitalization tools, the impact of technology and the roles that must be played in the development of modern technology. Participants were very enthusiastic in this training because it greatly supported the learning achievements. The results of the training after the quiz questions were given, 98% had understood the material given.

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