



# Effectiveness and Efficiency of Maya Applications for Introducing Archipelago Culture and Realizing a Generation of Culture Preservations

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ARTICLE INFO	ABSTRACT
<p><b>Published Online:</b> 07 February 2024</p> <p><b>Corresponding Author:</b> Anik Yuesti</p>	<p>Maya is one of the creative ideas for introducing Indonesian culture to school students. The benefits that will be obtained from the Getting to Know Archipelago Culture (MAYA) application are: Increasing insight into knowledge about how to solve current problems, especially regarding understanding culture in children, as well as knowing the solutions to these problems. This research is research into the expression of ideas that must be tested. Therefore theoretical assumptions are used to ensure that this idea is very useful. Several theories underlie these ideas in the hope of getting maximum results. The theory used to analyze this research is <i>Technology Acceptance Model (TAM)</i>. With this learning application, all parties will be greatly helped, including teachers who can use this application-based digital learning media in class, making it easier for parents to introduce culture to their children only through cellphones, and children can learn practically through the available features that are Measurable, Acceptable, Realistic, Time-bound.</p>

## 1. INTRODUCTION

The Indonesian nation is a large nation consisting of more than 300 ethnic groups spread from Sabang to Merauke. The tribes spread across Indonesia of course have their own characteristics, which can be seen from the use of regional languages, traditional clothing, traditional houses, traditional weapons and culture which of course differs for each tribe. Each region has different artistic and cultural riches with their own characteristics (Hadi and Utama, 2017). Similar to Java and Bali, these islands have a long history and rich cultural heritage to explore. One of them is traditional musical instruments which have their own attraction for foreign tourists (Peter and Simatupang (2022); Prabhawati, (2019)). Apart from that, traditional traditional clothing is also highly praised in other countries because it is one of Indonesia's unique cultural values which has different traditional clothing according to the characteristics of each province in Indonesia. There are so many ethnic groups, people, especially children in Indonesia, find it difficult to recognize the culture of each ethnic group.

Currently, the majority of elementary school students only use books to study the arts of each region, while on the other hand, the existence of learning books for children about the traditional culture of the archipelago is considered to still be very few which contain updates, it is not uncommon for books to be available in schools only displays certain types of regional culture which does not represent the culture

of all customs in Indonesia. Even in schools, the only media used are textbooks. The lack of student interest in Arts and Culture subjects requires the skills of teachers as companions to make learning as interesting as possible, so that students' boredom can be minimized. Students' boredom can be felt from the teacher's boring teaching style when teaching in front of the class. As a result, students become unable to concentrate, then feel bored, especially as there are students who throw tantrums and make noise. If students appear to be listening, it could be due to other factors such as fear. As a result, the teaching and learning process cannot run optimally as desired (Abdulghani, & Sati, 2020).

According to Umar, Suryan, and Prasetyo (2015), the use of information technology in the world of Indonesian history and geography is really needed by teachers in learning and receiving the material and information needed, namely the use of computers as an interactive learning tool. Therefore, technology-based digital learning media is needed to increase enthusiasm for learning. With the attractive appearance, audio and animation presented, it is hoped that knowledge about Indonesian culture will increase and the level of boredom will decrease, making the learning process more enjoyable.

Currently, the flow of globalization cannot be denied, entering and changing all levels of society. Changes are felt in almost all aspects of people's lives, both in the technological, economic, educational and social fields

(Hidayat, et al, 2021). However, what is developing most rapidly and significantly is the field of technology. According to Kurniawan, et al (2019), this technology appears with various features and types that can make it easier for people to carry out their daily activities.

The problems faced by the children of Tojan Village in studying Indonesian culture are: 1. With so many cultures, it will make the community, especially children, find it difficult to recognize the culture of each tribe. 2. Learning

media that is not innovative and seems boring. 3. Lack of role of parents and teacher creativity in introducing Indonesian culture. The problems that occur as in the explanation above are proven by the results of interviews and filling out questionnaires by 15 people from Tojan Learning Center children (TLC). The data from the temporary questionnaire results from the author's preliminary survey are presented in the table below:

**Table 1.1 Questionnaire Results**

No	Statement	Yes	No
1	The quality of learning in schools about culture is adequate		9
2	Media for learning about culture has varied		11
3	Know the entire culture that exists in Indonesia		15
4	The role of parents is maximal in introducing culture		7
5	Utilization of technology in cultural introduction	5	10
6	Interested in getting to know Indonesian culture and customs	13	2

**Source:** 2023 Questionnaire Data

From the results of the questionnaire that the author obtained from a sample of children in Gianyar, it shows the need to realize this idea, namely the formation of digital-based Indonesian cultural learning media, namely by creating applications that will help overcome students' lack of interest in learning about culture, which will help teachers in the teaching and learning process. to be more varied, to help children have high enthusiasm for getting to know Indonesian customs in order to preserve Indonesian culture.

Economically, the introduction of culture must also consider its effectiveness and efficiency. The application must be right on target and effective (Pujiani and Astuti, 2022). The application must be easy to understand and use (Perdanawati, Rasmini, and Wirama, 2014). If these two things cannot be achieved, then the application is considered ineffective and inefficient. Efficiently, costs are affordable, effectively indicating that the application can be used optimally. The benefits that will be obtained from the Getting to Know Archipelago Culture (MAYA) application are: Increasing knowledge about how to solve current problems, especially regarding understanding culture in children, as well as knowing the solutions to these problems. Students can experience learning culture easily and interestingly. Get a new and fun learning sensation. With attractive images and animations in the application, it can increase children's enthusiasm for learning. Meanwhile, for teachers, this application can improve the learning process to make it more interesting, more interactive, and can increase children's interest in learning. Games are easier to hold people's attention for the long term. The teaching and learning system

becomes more interactive and less boring. For parents, with this MAYA application project, parents can teach their children easily through their respective gadgets from home. Parents can easily monitor their child's cultural learning progress.

Based on the problems above, the author has an idea for innovation in the field of technology. In this creative idea, the author created an application as a digital learning medium for children, namely the Getting to Know Archipelago (Maya) Culture Application to create a generation of cultural preservationists in Gianyar Regency. This application is useful for increasing children's enthusiasm when learning about culture effectively and efficiently, with complete learning options, including material regarding traditional clothes, traditional houses, typical dances and regional songs that are available in the MAYA application. It is hoped that this application can reduce the number of children who are less interested in studying culture, and parents and teachers can be helped by this application as a medium to support learning at school and at home.

## 2. THEORETICAL BASIS

### *Understanding Culture*

According to Koentjaraningrat's opinion (in Sitokdana & Tanaamah., 2016) it is said that this culture has its origins in Sanskrit, namely the word "buddhayah" which is a plural form of the word buddhi which means "mind" or "reason". Meanwhile, it can be said to be a culture in the opinion of Melville J. Herskovits (in Dan, P, DDSP, 2017),

he believes that this culture is a part of the living environment created by humans.

### **Technology Acceptance Model(TAM)**

*Technology Acceptance Model(TAM)* is a model proposed by Davis (1989) which aims to explain and estimate technology acceptance by technology users. The TAM model is a theory adopted from the Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975: 105), namely a theory of action based on the premise that a person's reaction and perception of something will determine that person's attitudes and behavior. TAM provides a powerful and simple explanation for technology acceptance and usage behavior (Venkatesh and Morish, 2000). TAM was developed from a psychological theory which explains computer user behavior based on belief, attitude, intention and user behavior relationship.

The TAM model aims to explain the factors related to user behavior towards technology acceptance. Comfort and ease in operating an information system is one of the factors in the success of an information system in a company, where if the accounting information system in a company is understood and implemented well, a comfortable work environment will be created which can improve the performance of information system users in data processing. to the information system so as to produce a good and effective information system (Davis et al, 1989).

According to Davis in Jogiyanto (2007) the TAM research model was developed from various theoretical perspectives. Initially, diffusion innovation theory was the theory that most dominated acceptance and various models of technology acceptance. Diffusion is the process of information being communicated through certain channels continuously to members in a social system. Meanwhile, innovation is an idea, practice, or object that is perceived as something new by another individual or unit of adoption. TAM has the aim of explaining and predicting user acceptance of a technology. TAM is a development of TRA and predicts user acceptance of technology. According to Davis in Jogiyanto (2007) TAM is a theory designed to explain how users understand and use information technology. TAM uses TRA from Fishbein and Ajzen which is used to see the level of adoption of respondents in receiving information technology. This research uses TAM theory as the main theory because TAM theory is able to explain the causal relationship between beliefs about the benefits of information systems. In addition, the use of TAM is intended to analyze the influence of information technology sophistication, top management support, organizational culture, personal technical abilities, training and education on the performance of accounting information systems in accordance with TAM theory.

### **Understanding Digital Learning Media**

Media is a component of learning resources or physical vehicles that contain instructional material in the student environment that can stimulate students to learn (Arsyad, 2010). According to Arsyad (2002) the word media comes from the Latin *medius* which literally means middle, intermediary, or introduction. Media is everything that people use to convey messages. Media can be interpreted as a tool to provide stimulation for students so that the learning process occurs because media is one of the components of communication, namely as a messenger from the communicator to the communicant, but communication will not work without the help of a means of conveying the message or media. The message to be communicated is the content of the learning in the curriculum as outlined by the teacher or facilitator or other sources into the communication media.

Learning facilities that are complete and aligned with effective learning methods can build and increase student learning motivation. These two points can be said to motivate student learning. The development of interactive media which is part of information delivery devices in this era is a modern alternative method that can be used as a means of conveying information. Simply put, multimedia can be interpreted as more than one media. Generally, the commonly known multimedia is various combinations of graphics, sound, video, animation and text. By combining these combinations, they can form a single unit that simultaneously presents information, messages, or lesson content. Therefore, if we can use interactive animation applications as information media, Indonesian culture can be conveyed using easy and interesting methods.

Based on the definition above, it can be concluded that media is a tool used as an intermediary in the teaching and learning process, which makes it easier for someone to convey learning material and attracts people's interest in learning.

### **Definition of Effectiveness**

According to Arlan (2013) effectiveness is the relationship between output and objectives, the greater the contribution of the output produced to achieving the specified goals or targets, the more effective the work process of an organizational unit. Effectiveness focuses on results, programs or activities that are considered effective if the output produced can meet the expected goals. According to Rahmah (2014), effectiveness is effectiveness, useful results, supporting goals. Based on the definitions above, it can be concluded that effectiveness is the appropriateness of a program to achieve the desired goals.

### **Measures of Effectiveness**

According to (Campbell, 1989) in Muharsono (2021) there are ways to measure effectiveness in general and the most prominent ones are as follows:

1. Program success Program effectiveness can be carried out with operational capabilities in implementing work programs in accordance with previously determined objectives. The success of the program can be seen from the processes and mechanisms of activities carried out in the field.
2. Effectiveness target success is viewed from the point of view of achieving goals by focusing on the output aspect, meaning that effectiveness can be measured by how far the level of output in the organization's policies and procedures is to achieve the stated goals.
3. Satisfaction with the program Satisfaction is an effectiveness criterion that refers to the success of the program in meeting user needs. Users feel satisfaction with the quality of the products or services produced. The higher the quality of the products and services provided, the higher the satisfaction felt by users, which can lead to profits for the institution.
4. Input and output levels The effectiveness of input and output levels can be seen from the comparison between input and output. If the output is greater than the input then it can be said to be effective and conversely if the input is greater than the output then it can be said to be ineffective.

#### Definition of Efficiency

Astuti (2019) defines efficiency as the ability to minimize the use of resources in achieving organizational goals. Efficiency is interpreted as Vol. 2 No. 3 September 2022 602 ability to carry out tasks well without wasting time, energy or money. A job can be said to be efficient when it meets these requirements. Efficiency is related to the use of limited resources, but can produce something that is expected or planned. An activity can be said to be efficient if the process runs well, for example the process runs faster or is cheaper.

#### Efficient Measures Measurement of the level of efficiency can be viewed from two aspects, namely (Syam, 2020):

1. Effort An activity can be said to be efficient if a certain result can be achieved with little or little effort. If viewed from the perspective of sacrifice, first the sacrifice is determined (energy, thoughts, time, steps, etc.), after that the minimum results that must be achieved are determined. If the results achieved are below the minimum results, then the way it works is inefficient. The normal maximum sacrifice limits include the following:

- 1) Maximum time
  - 2) Maximum power
  - 3) Maximum mind;
2. Results

An activity can be called efficient if a particular effort produces a lot of results.

#### Identification of Environmental Potential and Needs

Culture is defined as a way of life that is developed and shared by a group of people and passed down from generation to generation. Indonesia has many cultures that we know around us, starting from traditional food, traditional houses, traditional weapons, traditional dances, traditional songs, cultural heritage and many more. Which is a long-standing ancestral heritage that we should preserve. With so many ethnic groups, people, especially children, will find it difficult to recognize the culture of each ethnic group. It cannot be denied that the more time develops, the more local culture in an area is forgotten. We can see and analyze that there is still a low level of awareness of a society in maintaining and preserving its culture, because most elementary school students tend to have a pleasure or interest in foreign cultures where these cultures have entered their local area. Most children, especially elementary school students, think that foreign culture that has entered their region or country is considered cool and in accordance with current developments, so they think that if they follow this foreign culture, someone can be said to be following the trends that exist and are developing at that time.

#### 3. RESEARCH METHODS

This research was conducted in the Goamyar area, namely at the Santani Taruna Jaya Foundation or commonly known as TLC (Tojan Learning Center) which is located in Tojan Blahbatuh Village. Most of them do not really understand the diverse culture of the archipelago, due to the many ethnic groups that have their own characteristics. each of them and learning methods that only come from books make children bored and not interested in learning more deeply about Indonesian arts and culture. This research is research into the expression of ideas that must be tested. Therefore theoretical assumptions are used to ensure that this idea is very useful. Several theories underlie these ideas in the hope of getting maximum results. The theory used to analyze this research is *Technology Acceptance Model (TAM)*

#### 4. RESULTS AND DISCUSSION

##### 4.1 Target application

One effort to face sustainable development goals (SDGs) based on the problem of children's lack of interest in learning about Indonesian culture is through the "MAYA" application. "MAYA" is an innovation introducing Indonesian culture which displays various customs, typical dances, regional songs, traditional clothes and traditional houses in all provinces in Indonesia which are displayed in an attractive way which will help increase children's enthusiasm and understanding of Indonesian culture in order to realize generation of cultural preservers.

It is hoped that by creating this application, it can help various parties concerned and have a positive impact on the country. It is hoped that the SDGs goal in point 4

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regarding "Ensuring Inclusive and Equitable Quality of Education and Increasing Lifelong Learning Opportunities for All" can be achieved

The targets to be achieved by creating the MAYA application are:

1. Knowing the child's level of interest and understanding of culture
2. Provide solutions that can alleviate these problems
3. Introducing children to the use of technology

The formulation of MAYA development targets based on SMART Analysis is:

- a. *Specific*. Regarding the problem of students' low interest in studying Indonesian culture, which is due to the lack of adequate and less varied learning media. So with the MAYA application it can increase children's enthusiasm in learning about Indonesia's diverse culture and customs, which of course has complete and interesting features. With this learning application, all parties will be greatly helped, including teachers who can use this application-based digital learning media in class, making it easier for parents to introduce culture to their children just via cellphone, and children can learn practically through the available features.
- b. *Measurable*. In an effort to measure the success of the MAYA application, indicators that determine the success of this project namely by measuring the success of creating applications, satisfaction of application users, including teachers, parents and students and increasing students' knowledge about Indonesian culture.
- c. *Acceptable*. In an effort to maximize the achievements of the MAYA application, it is supported by a team related to knowledge of culture, application creation and the school concerned. Where when there is a problem you can ask for advice and information from the

specialist team and manager.

- d. *Realistic*. The aim of the MAYA Application is in line with the Sustainable Development Goals (SDGs) 2030 in point 4 regarding Ensuring Inclusive and Equitable Quality of Education and Increasing Lifelong Learning Opportunities for All.
- e. *Time-bound*. The application for getting to know Indonesian culture (MAYA) is planned for completion in December 2024, and in January 2025 this application will be officially operational.

### 4.2 Target Achievement Analysis

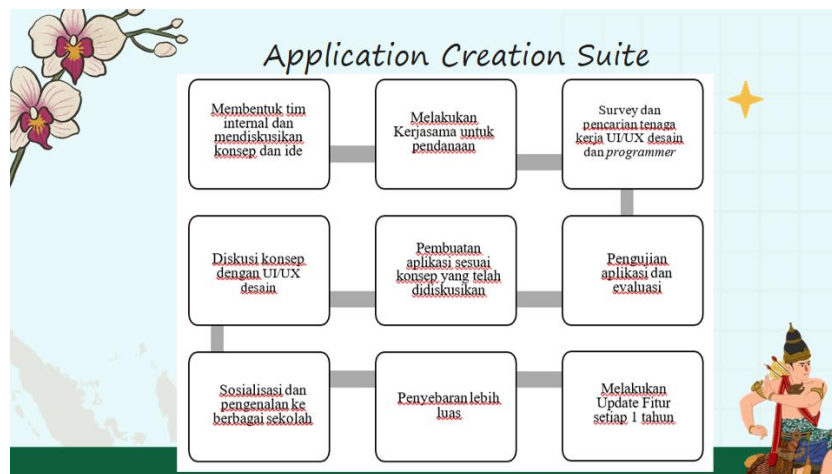
In the process of achieving the MAYA application target, several technical strategies were implemented: Collaboration with UI/UX designers and programmers in creating the application, collaboration with schools that will implement this project, and outreach regarding the advantages of this project.

The level of difficulty in achieving the Bijak UMKM target is collaborating with UI/UX designers and programmers to support the development of the Bijak UMKM application. The process of developing this application takes quite a long time. And some things that will become obstacles are:

- There are many other applications that have almost the same concept as MAYA
- Lack of public awareness regarding this problem
- The public, teachers, parents and children do not understand how to use technology

The advantage that can be obtained from the MAYA application is that it can help increase enthusiasm and increase children's understanding of Indonesia's diverse cultural customs, starting from traditional clothing, typical food, traditional houses, regional songs. And it can help teachers or parents to provide lessons about culture easily, innovatively and interestingly.

4.3 The series for creating a MAYA application include the following:



MAYA application planning steps

1. First, form an internal team to create and develop these ideas, as well as planning the MAYA application concept
2. Collaborating with various related parties ranging from government or investors who are related to this idea, to support funding for the MAYA application
3. Conduct surveys and search for UI/UX design and programmer workers
4. Conduct discussions with UI/UX designers to agree on the design of the MAYA application itself.
5. After consultation, proceed with making an application in accordance with the agreement.
6. After the MAYA application is complete, the author will carry out application testing and evaluation regarding the performance of the application that has been created.
7. Once it is felt that the application is ready, then socialization and introduction will be carried out to the government, schools and the general public
8. Conduct trials in several schools first
9. When the project is declared successful and has a good impact on several schools, it will be distributed more widely
10. Periodically, once every 1 year. From the author's side, both UI/UX designers and programmers will provide regular updates regarding the features in the MAYA application.

Discussion

The problem with elementary school children in Tojan Village is that they lack interest in studying Indonesian culture. The target of this application is specific: increasing children's enthusiasm in learning about Indonesia's diverse culture and customs, which of course has complete and interesting features. Measurable: satisfaction of application users, be it teachers, parents and students and increased student knowledge about Indonesian culture. Acceptable: supported by a team related to knowledge of culture, application creation and the school concerned. Where when there is a problem you can ask for advice and information from the specialist team and manager. Realistic: The idea of using digital media, namely applications, will increase children's interest in getting to know culture. Time Bound: MAYA is planned for completion in December 2024, and in January 2025 this application will be officially operational.

The obstacles faced are the many other applications that have almost the same concept as MAYA, the lack of public awareness regarding this problem. The public, teachers, parents and children do not understand how to use technology. The assistance needed is that the party concerned agrees and plays a role in spreading the word about this project, there are parties who are willing to become investors. Application creation from truly expert parties

The actions required to apply are forming an internal team to create and develop these ideas, as well as planning the MAYA application concept. Collaborating with various related parties ranging from government to investors. Conduct surveys and search for UI/UX design and programmer workers. Conduct discussions with UI/UX designers to agree on the design of the MAYA application itself. Making applications in accordance with the agreement. Carry out application trials and evaluate the performance of the applications that have been created. Socialization and introduction to the government, schools and the general

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public. Conduct trials in several schools. When the project is declared successful and has a good impact on several schools, it will be distributed more widely. Conduct regular updates regarding the features in the MAYA application.

The role of the application in the Getting to Know Archipelago Culture (MAYA) application includes the features available, namely.

a. Archipelago Culture. In this feature, when you click on it, a sub-selection will appear, namely provinces in Indonesia. Users can select the material they want to view. For example, if the user chooses the province of Bali, complete information will be listed regarding the culture and customs in Bali, starting from traditional clothing, traditional houses, typical dances and more areas in the

province of Bali. Which has an attractive appearance and concept and is easy to learn.

b. MAYA Quiz Game/ In this first game, users will be invited to answer questions that will be given, starting from guessing pictures or answering questions about Indonesian culture.

c. Puzzle. In this option, users will be invited to create puzzles which will certainly increase children's interest in using this application, and of course the puzzles available are part of several pictures of traditional clothing typical of the region, traditional houses and typical dances.

Appearance of the Getting to Know Archipelago Culture (MAYA) application

a. Initial display b. Next view





## 5. CONCLUSION

With this learning application, all parties will be greatly helped, including teachers who can use this application-based digital learning media in class, making it easier for parents to introduce culture to their children just via cellphone, and children can learn practically through the available features.

*Measurable:* In an effort to measure the success of the MAYA application, indicators that determine the success of this project namely by measuring the success of creating applications, satisfaction of application users, including teachers, parents and students and increasing students' knowledge about Indonesian culture. Acceptable. In an effort to maximize the achievements of the MAYA application, it is supported by a team related to knowledge of culture, application creation and the school concerned. Where when there is a problem you can ask for advice and information from the specialist team and manager. Realistic. The aim of the MAYA Application is in line with the Sustainable Development Goals (SDGs) 2030 in point 4 regarding Ensuring Inclusive and Equitable Quality of Education and Increasing Lifelong Learning Opportunities for All. Time-bound. The application for getting to know Indonesian culture (MAYA) is planned for completion in December 2024, and in January 2025 this application will be officially operational.

## REFERENCES

1. Abdulghani, T., & Sati, B. P. (2020). Introduction to Indonesian Traditional Houses Using Augmented Reality Technology with the Marker Based Tracking Method as a Learning Media. *Media Journal of Informatics*, 11(1), 43-50.
2. Atmojo, WT, Dazki, E., & Fitri, F. (2019, November). Learning Media for Introduction to Indonesian Cultural Diversity Using the Multimedia Development Life Cycle Method. In *National Seminar on Aptikom (Semnastics) 2019* (pp. 126-134).
3. Falani, AZ, & Ekawati, PL (2015). Using Game Technology to Learn About Various Indonesian Cultures Based on Android. *Scientific Journal: Across Information and Computer Systems (LINK)*, 22(1).
4. Hadi, DW, & Utama, B. (2017). Analysis of the richness and cultural diversity of West Sumatra Province: report.
5. Pane, B., & Najooan, X. B. (2017). Design and Build Educational Game Applications for Various Indonesian Cultures. *Journal of Informatics Engineering*, 12(1).
6. Perdanawati, LPVI, Rasmini, NK, & Wirama, DG (2014). The influence of user satisfaction elements on the work efficiency and effectiveness of users of agency accounting system applications in higher education work units in the province of Bali. *Udayana University Economics and Business E-Journal*, 3(8), 478-493.
7. Peter, R., & Simatupang, MS (2022). Language and



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- Cultural Diversity as the Wealth of the Indonesian Nation. *Dialectics: Journal of Language, Literature and Culture*, 9(1), 96-105.
8. Prabhawati, A. (2019). Indonesia's Efforts to Improve the Quality of Cultural Tourism Through Cultural Diplomacy. *Journal of Tourism and Creativity*, 2(2).
  9. Pujiani, ES, & Astuti, W. (2022). Analysis of the Effectiveness and Efficiency of Implementing the Village Financial System Application (Siskeudes) in Village Financial Management (Case Study in Jerowaru Village, Jerowaru District, East Lombok Regency). *Accounting Student Research Journal*, 2(3), 598-607.
  10. Putra, LV, & Rini, ZR (2023). Introduction to Indonesian Culture Assisted by Augmented Reality Technology for Elementary School Students. *Ngudi Waluyo Empowerment: Journal of Community Service*, 2(1), 1-5.
  11. Rachman, F., & Widowati, YS (2017). Design of Digital Comic Learning Media for the Rumah Arca History Laboratory as an Effort to Introduction to Local History. *Journal of Educational Communication*, 1(2).
  12. Ramdhani, R. (2018). Design and Development of a Multimedia Application for Introduction to Indonesian Culture Based on Android for Elementary School Children (Doctoral dissertation, Siliwangi University).
  13. Renavitasari, IRD, Irawati, DA, & Prasetyo, A. (2016, November). Development of Android-Based Educational Game Introduction to Indonesian Culture "Jelajah". In *Polinema Applicative Informatics Seminar*.
  14. Rohmawati, I., Sudargo, S., & Menarianti, I. (2019). Development of an educational game about Indonesian culture "Tanara" using Android-based Unity 3D. *SITECH Journal: Information Systems and Technology*, 2(2), 173-184.
  15. Salman, AG, Chandra, N., & Norman, N. (2013). Educational Game Introduction to Indonesian Culture Based on Android. *ComTech: Computer, Mathematics and Engineering Applications*, 4(2), 1138-1154.
  16. Umar, NA, Suryan, A., & Prasetyo, HN (2015). Multimedia-Based Learning Application and Introduction to Indonesian Culture (Case study: Class III of Athirah Islamic Elementary School). *eProceedings of Applied Science*, 1(3).
  17. Wulandari, AM, & Purba, R. (2021). Designing an educational board game about Indonesian culture for elementary school children. *Faculty of Art and Design Student Journal*, 2(1), 163-176.