

DEVELOPMENT OF NFT ARTWORK BASED ON LOCAL CULTURAL ASSETS IN PAGELARAN VILLAGE

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Abstract

Blockchain technology offers archiving of cultural asset through integrated asset records with strong data encryption features. This technology development opportunity is supported by the traditional cultural archiving model of Pagelaran Village. This opportunity will also be integrated through the development of non-fungible token (NFT) digital artwork as a future edusiopreneurship-based asset. This community service uses the ABCD (Asset Based Community Development) approach by building partnerships to identify the main assets in the form of community potential as community empowerment. At the trial stage, the validity of the media was tested by material and media experts, then the match pair test and practicality tests were carried out. The match pair test was used to analyze the effectiveness of media in developing local cultural archives and asset. Data analysis and hypothesis decision making refers to the guidelines if the significance level (Sig) <0.05 then Ha is accepted, and vice versa if the significance level (Sig) is 0.05 then Ha is rejected and H0 is accepted. The practicality of the media is measured through a practicality test by dividing the acquisition value by the maximum score and multiplied by 100 percent (%). Maximizing the opportunities above, NFT digital artwork designs can be used to support edusiopreneurship in developing local cultural archives and asset in Pagelaran Village.

Keywords: Assets, Archives, NFT, Edusosiopreneurship, Pagelaran Village

1. Introduction

Pagelaran village has pottery craft potential which can become an educational tourism object based on edusosiopreneurship. The Pagelaran community combines the history and potential of crafts into an archive of cultural assets as knowledge in tracing the heritage of a nation [1], very relevant to the role and position of the archive as a source of information that can be used both in learning and developing a resource that can increase the profit of people's income [2]. Thus, the empowerment and protection of cultural asset archives are indispensable in every organization in the context of planning, analyzing, developing, formulating policies, making decisions, making accountability reports, assessing and controlling proper.

However, the archive community has been positioned as something that is static and dead, as if it were an archive of unused documents [3]. The community is more focused on developing income economically without looking at historical assets as potential that can be developed [4]. This can be seen from how Pakisjajar maintains written village history with poor quality both in terms of relations and scientific capacity. As a result, archives are managed not based on adequate archival scholarship.

The existence of Government Regulation no. 28 of 2012 concerning the Implementation of Law no. 43 of 2009 concerning Archives which until now has not been carried out thoroughly. Julianto (2021) describes that this problem will make the value of knowledge stored in archival documents not used and known by today's young generation. As a result, the generation forgets the cultural heritage, the values of the generations of their ancestors, Julianto (2021). The Indonesian nation has become independent culturally, politically, and economically. The condition of cultural asset archives tends to adopt almost everything that comes from outside without adequate

filtering (Khairunnisa, 2021). In this context, the issue of Re-Actualization and Contextualization of the position of archives as a source of knowledge becomes very important to be studied, and translated concretely into personality by the community and through policies by the government.

Technological developments, archives can be in the form of audio, video, and virtual digital. Considering the increasing number of archives being created and accepted by institutions, body organizations and individuals, it is necessary to manage archives through several stages consisting of the creator, receipt, recording, and storage (Sepriyadi, 2021). The process of organizing or managing archives is called an archive that uses a certain system in the preparation and maintenance.

Based on the results of a survey conducted by the implementing team, the index value for the development of the Pottery Industrial Village, Pagelaran Village through the supply side approach was 87.31% with a feasibility index in the category of feasible to be developed in the archive management process. Through a SWOT analysis, the Pottery Industry Village, Pagelaran Village is in a steady position. The strategy that needs to be applied in dealing with this situation is to penetrate the digital infrastructure of Incubation through the human resources of the community of the Pottery Industry Village, Pagelaran Village in an effort to preserve historical, cultural, and local content archives based on interactive audio-visual patterns as non-fungible token digital art assets (NFT) which is ready to be auctioned in the international marketplace as income generating and edusosiopreneurship based.

2. Method

This activity program uses the ABCD (Asset Based Community Development) method which is suitable for use in the process of developing community assets [5]. There are five important steps in the asset-based community development method to carry out the initial stage of activities to completion which become the roadmap, starting with define, discovery, dream, design, destiny [6]. The flow of media development using ABCD is as follows:

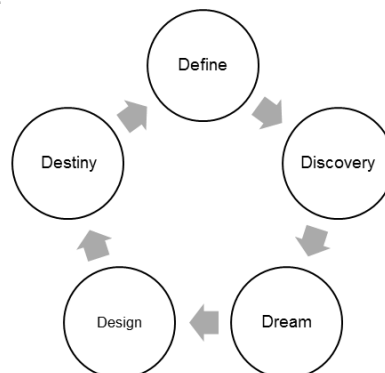


Figure 1. Media development using ABCD method

The media development process implements the ADDIE Model (Rosset, 1987) in [7]; (Sugiono, 2019). In this regard, to support a structured process [8]. Structured processes support opportunities for implementers in detailed exploration [9], can be viewed sistematically [10]. The stages of this development model have the following flow:

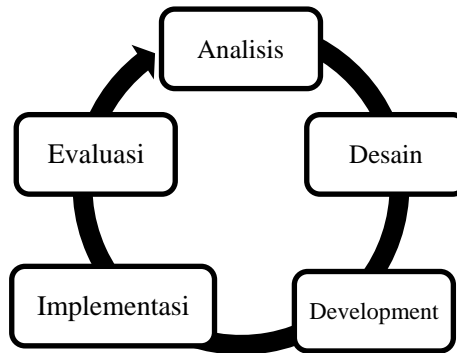


Figure 2. ADDIE Model research flow (Sugiono, 2019)

For the final measurement of the validation level using the following formula:

$$V.ah = \frac{TSe}{TSh} \times 100\%$$

Description:

V.ah. : Expert validation
TSe : Total Empirical Score
TSh : Total Expected Score

The value data from the pre-test and post-test were analyzed through a prerequisite test using Kolmogorov Smirnov with the basis of decision making if the value (Sig.) > 0.05 then the data distribution was normal and if (Sig.) < 0.05 then the data distribution was not normal. The proposed hypothesis is H_0 there is no significant increase between pre-test and post-test and H_a there is a significant increase between pre-test and post-test. Then data analysis and hypothesis decision making use the match pair test which refers to the guidelines if the significance level (Sig) < 0.05 then H_a is accepted, and vice versa if the significance level (Sig) is 0.05 then H_a is rejected and H_0 is accepted.

Then the product practicality test was carried out which was measured by five indicators, namely the ease of user interface in using the media, time efficiency, can be used as a tool, durability of the tool, development and maintenance costs. Measurement of practicality test uses the following formula:

$$Practicality = \frac{Acquisition\ Score}{Maximum\ Score} \times 100\%$$

The assessment of the practicality test is based on the level of achievement if 81% - 100% are classified as very practical, 61% - 80% practical, 41% - 60% quite practical, 21% - 40% less practical and 0% impractical.

3. Finding and Discussion

3.1 Software Workflow

Non-Fungible Token (NFT) works of art consist of 8 (eight) main cultural and social values which consist of mutual cooperation, traditional pottery industry, srudinan art, ludruk surge of mass, ludruk jenggan, jaranan braid, religious with Islamic culture, Javanese kinship system . These 8 (eight) core values of culture are contained in the development flow as follows:



Figure 3. Development flow

3.2 Data Analysis, Measurement and Test

Based on the scores obtained from the material expert validators related to all aspects of the non-fungible token (NFT) digital art design material for edusosiopreneurship content, a score of 228 was obtained from an expected score of 250 or 91.2%. Then the media validation obtained a score of 233 from an expected score of 250 with a percentage level of 93.2%. Based on the results of the material validation test and media validation, the design of a non-fungible token digital artwork (NFT) with edusosiopreneurship content is very feasible in every aspect of the media validation test. Based on the results of the Kolmogorov Smirnov prerequisite test, the significance value of 0.006 is less than 0.05 or $0.006 < 0.05$, so it can be concluded that the pre-test and post-test data are not normally distributed.

Table 1. Kolmogorov Smirnov Prerequisite Test

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.108	100	.006	.936	100	.000

a. Lilliefors Significance Correction

The results of the statistics test on the match pair test show that the significance value (Sig.) is 0.000, meaning less than 0.05 or $0.000 < 0.05$, then H_a is accepted and H_0 is rejected. It can be concluded that there is a significant increase between the results of the pretest and posttest after the implementation of the non-fungible token (NFT) digital artwork design with edusosiopreneurship content.

Table 2. Statics Test

Test Statistics ^a	
Post Test - Pre Test	
Z	-8.640 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Based on the results of the analysis of the results of filling out the media practicality questionnaire by the community, the overall results obtained are 92.26%.

4. Conclusions and Suggestions

Design of Non-Fungible Token (NFT) digital artwork with educational content for development of archives and local cultural assets in the Pagelaran village can contribute to the development of archives and cultural assets with modern local values based on edusosiopreneurship.

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