

“Wisata Budaya Jawa Tengah” Game as a Means of Preserving the Culture of Central Java

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Abstract –Indonesia has a cultural diversity in each area; some existing traditions in Central Java are Dugderan, Semarang and Ruwatan Rambut Gimbal, Wonosobo. The growing globalization era affecting society mindset can create an impact such as forgetting Indonesia culture or ignoring the cultural heritage asset. As a result of neglecting the asset, Reog Ponorogo and Wayang Kulit, some Indonesia legacy, were ever claimed by another country. Seeing the importance of the efforts in heritage preservation, a way can be introduced and performed as a medium of instruction i.e. a mobile game of Central Java cultural heritage with the theme of cultural traditions. Game is not always negative, but can be used as an interesting learning media called Educational Games.

Keywords: Educational Game, Cultural Tradition, Central Java

I. INTRODUCTION

Indonesia is an archipelago which has 34 provinces[1], where each island has its own provincial cultural diversity. Indonesia cultures are dance, clothing, custom homes, traditions or rites of the region. Central Java is a province on the island of Java which has a fascination of the natural and cultural tourist attractions, one of which is a cultural tradition. As an example of the existing tradition in Central Java from the city of Semarang is Dugderan tradition. It is a unique tradition to welcome the coming of Ramadan with the characteristic of Warak Ngendog[2]. There is also a tradition of

“Ruwatan Cukur Rambut Gembel (cutting dreadlocks off)” located in the Dieng as the tradition which is hereditary until now. “Rambut gimbal (dreadlocks)” is the unique physical form of hair which is believed to have the mystery of which “rambut gembel” child has a distinct personality. Thus, the required ritual for hair cutting off is believed to restore the child's personality [3].

Intensified technological development, including the use of *smartphones*, is increasingly sophisticated. According to Nielsen Mobile Insights Informance [4], it reveals that the growth of smartphone users in Indonesia from the year 2013 to 2017 on 33% CAGR is driven by population aged under 30 years or about 61% as its users. Those activities include 19% gaming enthusiasts spending 1.5 hours playing on the device where the older students also get involved in it.

II. LITERATURE REVIEW

A. Cultural Tradition

The tradition is hereditary customs that are still handed down by the community or the presumption that the ways in which there have been most ways are good and true[5]. The word of culture comes from the word “buddayah” meaning the favor or sense[6], according to the system as the whole Culture Koentjaraningrat ideas, actions, and results of the work of the man in the life of society, which provide the belonging to the individual with a means of learning[7][8].

B. Cultural Tourism

Cultural tourism is a great way to see activities, researching, learning, and understanding the culture (traditions, behaviors, crafts, art, etc.) community in a certain place in a certain time[9].

C. Education Game

Education Game is a game with aspects of aspects related to the purpose of education[10].

III.DISCUSSION

A. Designing The Flow of“Wisata Budaya Jawa Tengah”Game

Before designing the game concept of “Wisata Budaya Jawa Tengah (Central Java Cultural Tour)”, data collection was done in advance as finding literature, books and traditions of the event survey. In addition, the survey to establish the concept was also conducted by observations on Google trends to see the level of popularity of a keyword search event traditions. i.e. *Dugderan* (beginning the Ramadan/Fasting month), *Pengambilan Api Abadi* (Picking out eternal flame), *Kirab Kebo Bule* (albino buffalo parade), *Apeman* (celebrating food festival), *Lopisan* (celebrating another food festival), *Baritan* (Offerings to sea), and *Ruwatan Rambut Gimbal* (Treating dreadlock hair). Observations on Google trends showed that the level of popularity on the 7 traditions was very less sought, but at any given time the popularity was the most high escalated with a value of 100. There was even 1 tradition that did not have the value graph due to less popular. In the Google trend, value of 100 shows the value of the highest mount in popularity, while the 50 value indicates the value is quite popular. Below are the figures of the search graph of 7 event traditions at Google trend:

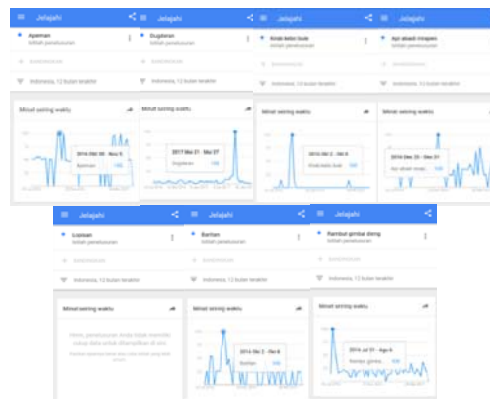


Figure 1. Popularity Charts 7 Central Java Traditions in Google Trend

The design of the gameflow was made in advance with the creation of *flowcharts* to ease the programmer in making the programming. In Figure 2, the system design of flowchart “Wisata Budaya Jawa Tengah” tells about the flow system on the application.

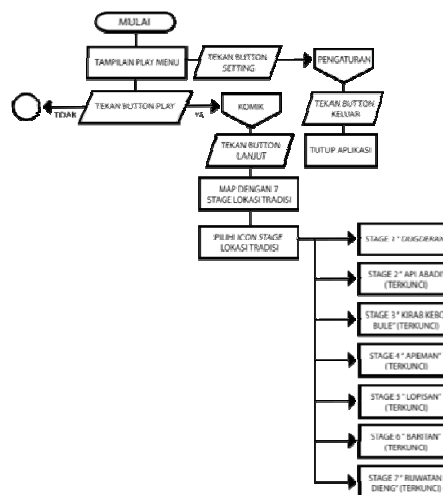


Figure 2. Flowchart Game "Wisata Budaya Jawa Tengah"

B. The Gameplay of 7 Tradition Events in “Wisata Budaya Jawa Tengah” Game

Before starting the game, the player will be presented with the comic storyline the start of tour itineraries of cultural traditions of Central Java. After that the player will be presented in a Central Java map menu with 7 icons where 6 of the 7 City icons are locked while open location 1 is in Semarang City. In this game, it provides 7 different mini games among the traditions. Before starting the

game from each mini-game, the player will be presented an animated icon tradition of the information that will be the location of the selected player. Here is a concept of the gameplay of each stage of cultural tourism city of Central Java is as follows:

Table1 Gameplay 7 Mini Game Event Traditions

Stage
<p>Dugderan</p> <ul style="list-style-type: none"> • Location : Semarang City • The Main Character : Warak Ngendhog • Gameplay : Atthis stage, players are introduced Warak Ngendog character or icon. In Dugderan game, this player must take the coins in the form of eggs and coins, as well as to avoid the road if the player does not want game over and succeeds at the finish line. The player must get a score above 700 to open the next stage.
<p>Pengambilan Api Abadi Mrapen</p> <ul style="list-style-type: none"> • Location : Grobogan Regency • The Main Character : a monk • Gameplay : At this stage, an overview of the flame-takingevent which is presented to players to use tells where a Vesak Buddhist monk is assigned to pick out flame. In the game, the player must tilt the phone to the left or to the right to drive the monks to take the coins and avoid the obstacles in the form of rocks, holes and wood. The player must get a score above 200 coins to unlock the next stage.
<p>Kirab Kebo Bule</p> <ul style="list-style-type: none"> • Location : Surakarta • The Main Character : BuffalòAlbino & Buffalò • Gameplay : On this stage, it describes a simple form of albino buffalo. Players must remember the pictures between two buffaloes. Play with the swipe to the right or the left, characteristics of the corresponding ordinary images that correspond to fast until time runs out. The player must answer correctly 8 points to unlock the next stage.
<p>Apeman</p> <ul style="list-style-type: none"> • Location : Klaten City • The Main Character : Young Women. • Gameplay : At this stage, a procession of visitors is crowded in getting Apem cake. In the game, the player must drive the player character to the right or to the left, and catch 3 types of apem to get the score. When the character player is affected, grapes score will be reduced.And when exposed to an egg, lives will be reduced in 1 of 3 lives. The player must get a score above 110 to unlock the next stage.
<p>Lopisan</p> <ul style="list-style-type: none"> • Location : Pekalongan City • The Main Character : 2 Colors Giant Lopis • Gameplay : This stage gives an overview with arranging a simple ceremony on stage game where players have to cut giant lopis by pressing the Red or Green button in accordance with lopis appearance before time runs out. Players will be able to continue the next tradition if correct answers are above 8.
<p>Baritan(Sedekah Laut)</p> <ul style="list-style-type: none"> • Location : Pemaslang City • The Main Character: Boat / Ship that contains crops.Gameplay : At this stage, a picture of how the procession casts or drowns offerings in the sea. In the

game, the player will be washed away by way of offerings control to the right, left, top for carrying of offerings – passing ships and whales so as not to get hit where the player must also take the coins to be able to add to the score that can be used to open the stage tradition of the next with a score above 600.

Ruwatan Rambut Gimbal

- Location : Dieng, Wonosobo Regency
- The Main Character : Rambut Gimbal Childwith type Pari, Jatha/Jatah, Wedhus
- Gameplay : This stage gives an idea as to what kinds oframbut gimbal type are usually in the procession. Players must remember the types of rambut gimbal with both already introduced in the animation as well as the information reviewed back in tutorial. Players just click on the correct imageof rambut gimbal child as ordered quickly before time out.

C. GameView “Wisata Budaya Jawa Tengah”

In Figure 3, itshows an early game menu display play after loading the game. When users first install applications games "cultural tourism Central Java", then the comic lookappears. Comics can also be read back in a comic play on the display button menu.



Figure3. Play Menu Display

In Figure 4, it is the menu map with the location where the 6-7 cityicons are locked and display when the mission trip has completed.



Figure 4. Display the Menu Map Is Locked and Open

In picture 5, there is a mini game displaying 7 traditions: *Dugderan* (beginning the

Ramadan/Fasting month), *Pengambilan Api Abadi* (Picking out eternal flame), *Kirab Kebo Bule* (albino buffalo parade), *Apeman* (celebrating food festival), *Lopisan* (celebrating another food festival), *Baritan* (Offerings to sea), and *Ruwatan Rambut Gimbal* (Treating dreadlock hair).

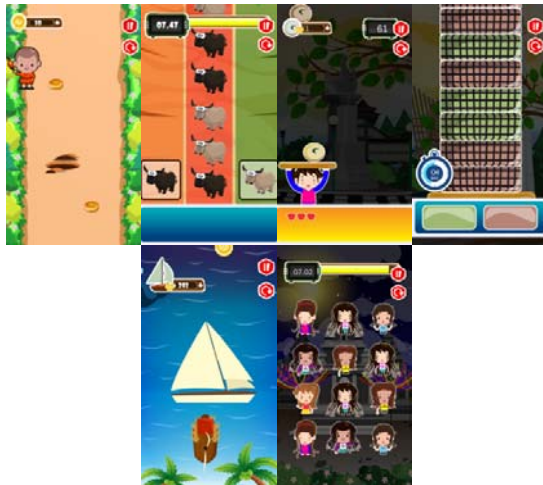


Figure 5 Display Mini Game 7 Traditions

D. Research Results

Once the design and process are finished, the game is ready. Game trials are conducted with post-test survey to 34 respondents who had previously also been in doing the survey pre-test. To know that the game "Tour of Central Java Culture" can make learning more fun and interesting, the result shows the surveys in the picture below:



Figure 6 Diagrams Opinion Game "Wisata Budaya Jawa Tengah" Can Make Learning Fun

In Figure 6, it shows that 30 respondents agreed that the games can make learning more interesting and enjoyable, especially in the introduction of the cultural traditions of

the region of Central Java. Two children answered the mediocre/simply to make study interesting. While the two children responded to less agree, they were lazy to read animation information and prefer to hear voice.

In Figure 7, it shows 30 of 34 older students replied that after playing a game of "cultural tourism Central Java", they got a new insight of a tradition that was not yet known.



Figure 7 Diagram Opinion Adds Insight after Game Play

Figure 8 shows that 29 children agreed and strongly agreed. Three children responded quite possible to know the information of historical and cultural traditions of Central Java.

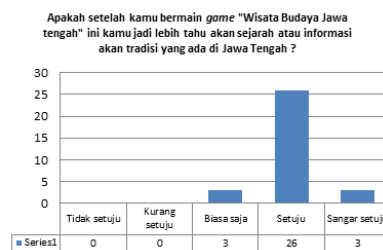


Figure 8. The Diagram after Playing Games about History, Cultural Traditions of the Known Information

Figure 9 shows after playing a game of "Wisata Budaya Jawa Tengah", they gain knowledge and become familiar with the new tradition of Central Java in addition to the previously known from the tradition in which as many as 10 children answered to 7

traditions and as many as 24 children answered a few selections from the 7 tradition.



Figure9 Evaluation Diagram after Playing Game "Wisata Budaya Jawa Tengah"

Figure 10 shows 73% or 25 children agreed that the game "Tour of Central Java Culture" could be used as the preservation efforts, 21% or 7% said very much agree, while 6% or 2 children chose the common or neutral options because they did not know whether games could deliver information that would be the introduction of traditions in the preservation of traditions of the region.



Figure10 Opinion diagram Respondents Will Game "Wisata Budaya Jawa Tengah" As an example of Conservation Efforts

Figure 11 shows the result of 62% or 21 children agreed and 26% or 9 very agreed with the opinion that the game "Wisata Budaya Jawa Tengah" could be used as media promotion of regional traditions and the introduction of Central Java, while 12% or 4 children argued that was mediocrity or neutral.

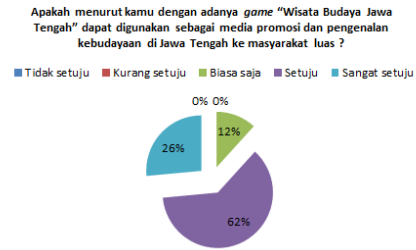


Figure11 Opinion diagram existence of Game "Wisata Budaya Jawa Tengah" Used as Media Promotion and Introduction Central Java Regional Tradition

IV. CONCLUSION

Games do not always give a negative impact for the players when managed correctly such as educational games. The game "Wisata Budaya Jawa Tengah" is a game with the aim to educate by providing insight into the cultural tradition of introducing knowledge area of Central Java. From the survey results, it can be concluded that the game "Wisata Budaya Jawa Tengah" could provide a positive impact in the increase of knowledge of Central Java traditions that were previously not known. In addition, the game created an interesting way of learning about the tradition in the province of Central Java. The introduction of the Central Java regional traditions in the game was delivered without removing the elements of information from tradition such as background, character related on the tradition. This game could help parents to introduce the Central Java tradition with a medium of instruction for children or students. The public could be involved to participate in the game in order to stimulate the preservation of Central Java tradition and Indonesia culture in general.

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VI. BIBLIOGRAPHY

- [1] D. Jenderal, O. Daerah, K. Dalam, N. Republik, and D. O. D. I. Indonesia,

- “Daerah-Daerah Otonom Di Indonesia Sampai Dengan Tahun 2014,” 2014.
- [2] M. Ahmad, “Hello Semarang/ Dugderan, Tradisi Unik Sambut Ramadan,” 2016. [Online]. Available: hellosemarang.com.
- [3] M. C. Arif and A. Fathurrahman, “Makna Simbolik Ruwatan Cukur Rambut Gembel Di Desa Dieng Kejajar Wonosobo,” 2013.
- [4] Vserv, “Pengguna Smartphone Indonesia,” *ArenaLTE.com*, 2015. [Online]. Available: <http://arenalte.com/berita/industri/pengguna-smartphone-indonesia>.
- [5] K. B. B. I. (KKBI), “Tradisi,” 2016. [Online]. Available: <http://kkbi.web.id>.
- [6] Lahiya.com, “Definisi dan Pengertian Kebudayaan Menurut Para Ahli,” 2016. [Online]. Available: <http://www.lahiya.com/pengertian-kebudayaan-definisi-menurut-para-ahli/>.
- [7] A. Yosanny, Y. L. Prasetio, A. Halim, and Y. O. S. A, “Aplikasi Perangkat Ajar Kebudayaan Indonesia Berbasis Multimedia,” no. 9, pp. 595–603, 2012.
- [8] Artikelsiana, “Pengertian Kebudayaan Menurut Para Ahli|Artikelsiana,” 2015. [Online]. Available: www.artikelsiana.com/2015/08/pengertian-kebudayaan-menurut-para-ahli.html?m=1.
- [9] R. Ardiwidjaja, “Pariwisata Budaya : ‘Salah Satu Alat Pelestari Kesenian Tradisional .’” 2015.
- [10] V. F. Insanittaqwa, I. Kuswardayan, and D. Sunaryono, “Game Edukasi ‘Simulasi Haji’ Menggunakan Ren’Py pada Perangkat Android untuk Simulasi Perjalanan Ibadah Haji,” *Inst. Teknol. Sepuluh Nop. Surabaya*, vol. 3, no. 1, 2014.