

# Utilization of Games as a Media of Introduction to Indonesian Attractions for Tourists (Comparative Study of Games: Papon, Probo and Dorang)

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## ABSTRACT

A country usually has a charming tourist attraction, but in each region is not fully known by the public, especially the less exposed areas. Along with the rapid development of technology plus changes inhabits during the Covid-19 pandemic requires a lot of activities to be done from home. This makes the game one of the most accessible entertainment activities. In addition, the game can certainly be a medium of conveying information and knowledge to its users. Thus, it can be known that beside through websites, advertisements, brochures, or other media, games can be one of the media introduction of tourist attractions. This study aims to identify the relevance of tourism content into games so that researchers and game developers can innovate in promoting tourist attractions through game media with receding views and uniqueness of their respective regions. The method used in this article review is a method of comparing 3 similar games that are tourism-charged Adventure genres, namely Papon, Probo, and Dorang games. This attraction recognition game is certainly designed to increase tourists' knowledge of tourist attractions scattered in Indonesia. In the presented game, players can complete missions by earning points. In addition, they will get notifications or information regarding the attraction they are playing. Based on the research, the conclusions showed the effectiveness and innovation in the introduction of tourist attractions through the use of gaming media. This is seen from the increasing percentage of user satisfaction and knowledge because each game offers a clear interface and information of regional attractions.

**Keywords:** *Games, Urban Tourism, Comparative Studies, Mobile Games*

## 1. INTRODUCTION

Pandemic that occurs since the beginning of 2020 in the country also has an impact on the tourism sector with a decrease in the number of tourists is very rapid. Based on the katadata survey[1], it was found that the condition of the tourism sector deteriorated before the pandemic by 1.25% to negative 1.08% during the pandemic. This tourism sector is different from other sectors that can still be overcome through technology, such as education that can switch from offline to online.

An increasingly modern and advanced age, as if forcing us to be technologically literate. Realizing how great the role of the digital world in modern life as it is now also applied to the world of tourism. Along

with the time, Indonesia's tourism industry must be more digital-savvy in order to be ready to face the transformation of the digital era 4.0. even 5.0.[2] Which era demands creativity as the main fuel in today's life. With the advancement of technology, various digital media can play a role in the promotion of tourism, one of them is through game media.

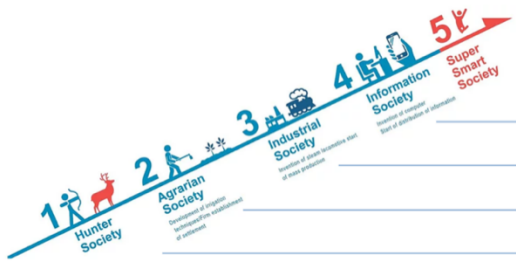


Figure 1 the evolution of human society

As we know with android-based mobile games are widely liked in almost all circles. As a form of complying with government regulations in reducing the spread of the Covid-19 virus, people are encouraged to move from home. This can be seen from the emergence of a new entertainment trend, namely gaming that reached 16.5% based on data released by the Association of Indonesian Internet Service Providers (APJII) on November 9, 2020. Even based on data obtained from the Newzoo Global Games Market Report 2020 the number of gamers will exceed 3 billion players by 2023. (Mia Citra Dinisari, 2020). Al. Tridhonanto and Beranda Agency (2011)[4], said that if reviewed by nature, the game can make its fans addicted to a certain level. The addiction will arise when the player is faced with challenges, so he continues to pursue them. Moreover, if in playing this game is also designed a "reward" such as the collection of points then the player will be encouraged to exceed the target. This condition encourages the player to always improve his game performance so as to obtain the highest score. It does not close the possibility of players spending a long duration of time or just simply filling free time and refreshing. From this game, it is certain that the mindset and absorption of the player will change. So there is a thought that the game design is not only fun and challenging to play but can educate and inform the player on something. In this case, tourist games can be used as a representation that is not only entertaining but can foster the knowledge and interest of players in Indonesian tourism.

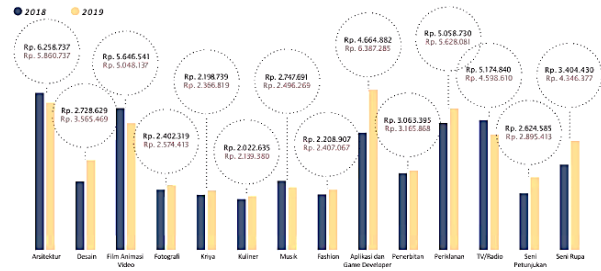


Figure 2 Development of Creative Economy Sector 2018-2019

According to data from Badan Pusat Statistik, there are interesting developments in the wages of the creative economy sector from 2018 to 2019. Apps and game developers in 2018 ranked 4th soaring to first place in 2019. This shows the improvement of the application and gaming industries at that time. Even this data can be a reference that year after year the two media will continue to soar in production.

## 2. METHOD

Often the authors find studies that have certain similarities and differences. So to find relationships between them, the authors can compare and analyze based on the relationships between the studies. According to Collier (1993) [5], that the comparison can sharpen the results of research by including the focus of the equation or the difference. So in this paper using qualitative type with comparative study method.

Comparative studies tend to look more at the variables of the phenomenon and look at the complexity of the content as a whole. As the subject of analysis, comparative studies can be a tool used to explain the relationship between studies by looking at certain variables. The result of the study is a limited systematic explanation because it can not necessarily be applied to other cases. In addition, this method can give broader and more general results.

Comparative Research has a procedure that is not much different from other research, the following procedures must be carried out:

1. Determine the problem. At the stage of formulating a research problem or research question, the researcher speculates on what is the cause of the phenomenon based on the results of previous research, theory, or direct observation.
2. Determination of groups that have the characteristics to be studied. Researchers must determine what kind of group will be studied according to the issue or problem to be raised.

3. Selection of the comparison group. After obtaining the group to be studied, the next step is to choose a comparison group by considering the characteristics that distinguish it from the research group. Do not forget to control for extra variables to help ensure the similarity of the two groups.
4. Data collection. In the data collection stage, it is carried out using research instruments that must meet the validity and reliability requirements.
5. Data analysis. In the last stage, namely data analysis, data analysis begins with the analysis of each of the games that have been determined

This comparative study focuses on the use of tourist games as a promotional media of tourist attractions in Indonesia. This can be described in five elements, namely as follows [6].



**Figure 3** Motivation to Play Tourism Games

***Curiosity***

New games will certainly cause curiosity for the players. No exception with games that raise about tourism. As we know that tourist games are still classified as a bit of marketing to the public. This curiosity should be the first foundation in the idea of designing a travel game.

***Explore the Destination***

This part is a popular thing often conveyed by many people is exploration. It is mentioned that the main motivation in the utilization of this travel game is to be able to see the world represented virtually. Especially in certain spots and tourist areas. In the creation of games that aim for the introduction of

tourism in addition to displaying information and the appearance of the region, there is no denying that the game must be interesting, entertaining, and fun.

***Socialize***

It is important to know who the target will use in this game. Socializing can certainly explore the needs and problems that want to be solved through games. Considering this tourist game needs to be made according to the habits and behaviors of people who like to adventure to tourist attractions. Extracting this information can include player demographic segmentation, commonly used game platform types, and game genres.

***Fun and fantasy experiences***

Similar to the previous point, that in designing a game in addition to paying attention to the original purpose for the introduction of information should still pay attention to a much more important factor that the game must be interesting, entertaining, and can be a representation of the real world.

***Challenge and achievement***

In addition to entertainment, the game will be more interesting with a variety of challenges. When the player can complete the challenge that has been given. Another important step and always be the goal of the player is the acquisition of achievements, be it in the form of scores, rewards, and the addition of playing lives.

***Comparative Studies of Games***

There are many games that we can find on different types of devices, but in this case, the games that will be discussed include about the introduction of Indonesian tourism. The game includes Papon Game to introduce Pontianak City tourism by Apriyandi, et al (2019), Android-based Probo Game as the introduction of Probolinggo Regency tourism by Ninda (2020), and Game Solution introduction of Semarang City tourism named Dorang (Dolan Semarang) by Oktorina and Chandrawati (2016). These three types of games were chosen as a representation of the many games because the design aims for the introduction of city tourism in Indonesia. In addition, all three games use the adventure genre and bring up information related to their natural attractions. The brief exposure of these three games is as follows:

*Game I (Papon – Pontianak)*

In the first adventure game, designed by Apriyandi, Anra, and Pratiwi (2019)[7]. This game is designed to introduce Pontianak tourism. There are many types of games that can be applied but this game using the endless runner game model. This game is a type of game that is endless, and the goal is for the player to get the highest score. The game's rules require players to run as far as possible, get scores, and avoid obstacles. This type of game can provide an interesting game experience and can train the player's reflexes by interacting with interactive jump or dodge buttons. In the study, players will play with the background of Pontianak City and get information about the tourism and culture of Pontianak City, including tribes, tourist attractions, and food. So that players will know the picture of Pontianak City and also information about the culture and tourism of Pontianak City. To hone the information provided, when players do the game, there will be some questions about the tourism and culture of Pontianak City. If successful in answering, the player will get a reward or award. Testing this game was conducted to 20 respondents, with the criteria of Indonesians and other than Indonesians, ages 20 - 30 years, and have traveled.

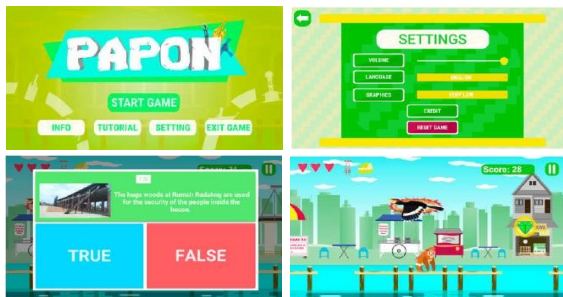


Figure 4 Papon Game Display

*Game II (Probo - Probolinggo)*

The second adventure game is the result of research and design by Ninda Yulia Ulfa (2020)[8] in introducing Probolinggo tourism through Probo game based on android. The design in this game tells about the journey of Probo the adventurer. Probo is a boy who will visit various tours in Probolinggo Regency. Each tourist attraction has a different information display and there are challenges to be solved. When the game page has opened, Probo as an in-game character must be directed by the player to complete the challenge and avoid the enemy. The challenge in this game is collecting objects at each tourist spot

while paying attention to the instructions, which should be taken or should not be taken. When completing the challenge, Probo will find an information board that will provide information about the tour. Probo will get additional lives every time he reads the information because there will always be enemies that make Probo's life reduced until Probo will lose if he lacks life.



Figure 5 Probo Game Display

*Game III (Dorang – Semarang)*

The third adventure game is the result of research by Oktarina and Chandrawati (2016)[9] by designing a game solution to introduce Semarang tourism through Dorang (Dolan Semarang). In this game, players can choose the character they want to use when playing: a female character in a pink jacket and a male character in a blue jacket. Then the player will be directed to follow the travel map that starts at the first attraction. Along the way, players must avoid obstacles in the form of rotten soybeans or puddles. Players also have to collect a certain number of points to unlock new stages and continue their journey. In the running of the game, players will occasionally get information related to Semarang city tourism. The study was tested by 30 respondents of domestic tourists with the age of 15 - 30 years who initially did not know the attractions of Semarang City.



Figure 6 Dorang Game Display

From the methods used, the three games have some similarities and differences. Briefly, the three games are described in the table below.

3. RESULTS AND DISCUSSIONS.

Table 1 Summary of Similar Tourism Games

Game Structure	Papon Game	Probo Game	Dorang Game
<b>Region</b>	Pontianak	Probolinggo	Semarang
<b>Type game/genre</b>	Mobile –Adventure	Mobile –Adventure	Mobile –Adventure
<b>Platform</b>	Android	Android	Android
<b>Target age</b>	20 – 30 years old	10 – 25 years old	15 – 30 years old
<b>Instructions</b>	There are instructions on how to play at the beginning of the game	There are instructions on how to play at the beginning of the game	There are instructions on how to play at the beginning of the game
<b>Achievement</b>	Available	Unavailable	Available
<b>Advantages</b>	Players can choose the play mode which is story mode, free mode, or quiz mode. Players can choose the language	In addition to adventure, there is an additional feature that is quizzes in this game	Players can choose a character to play. Players can choose the region they want to play in first.
<b>Weakness</b>	Players must complete the journey on a map to pass on other attractions	No game plot story in gameplay	No game plot story in gameplay
<b>Percentage of achievements</b>	38.5% to 76.5%	60% to 83%	64% to 80%

Based on the table above, the three travel recognition games are designed for different ages of players, so the results obtained are those three games can improve the knowledge, insights, and information of players. As Collier said (1993)[10], comparing games can indeed sharpen the results of research by including the focus of similarities or differences. In this case, the equation of the three games can improve the user's insights so that the game can be used as a medium for the introduction of tourist attractions.

In addition, the three games meet the elements that need to be considered in relation to the introduction of regional tourism, as explained below.

*Curiosity*

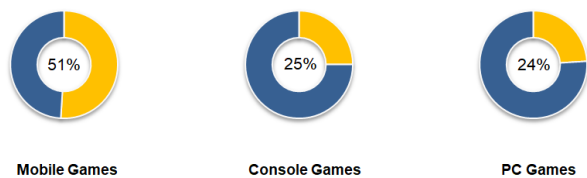
The three games raise about tourism in cities/districts in Indonesia. Specifically in Pontianak City, Semarang City, and Probolinggo Regency. Players will be curious and curious about playing-related tourist locations that must be played because before completing the mission, the player can not continue the game and know the tourist information presented next. Through curiosity approach, the adventure game model implemented to introduce Pontianak, Semarang, and Probolinggo area tourism becomes recognized by the players.

*Explore the Destination*

Furthermore, with the game that contains charm into different tourist attractions, it enriches the introduction of tourist locations in Pontianak, Semarang, and Probolinggo. In Papon game will show the tourism in Pontianak city such as Equator Monument and Kapuas Square Park. In the game, Probo will appear tours in Probolinggo Regency such as Bromo National Park and Jabung Temple. While in the game Dorang displays the city of Semarang such as Lawang Sewu.

**Socialize**

All three games are designed with the type of mobile games because of the large percentage of users who use the device. This is in line with infographic data related to mobile game market trends 2020[11], that mobile games outperform 51% of the use of console games and PC games. The target age of players in all three games varies, namely Papon games for 20-30 years old, Probo games for 10-25 years old, and Dorang games for 15-30 years old.



**Figure 7** Statistics and trends of game type

**Fun and fantasy experiences**

In addition to displaying information about the tour during the game, this type of game must have a pleasant impression and can represent the attractions in the area. This is important because the purpose of the game is a promotion of tourism to the community. So the player must have a fantasy and a picture of the tour he is playing.

**Challenge and achievement**

The challenges in all three games vary considerably. In Papon games players have to collect points while moving forward and have to dodge while the bird is flying. If exposed, it will result in a decrease in the player's life. Another thing in Probo games. The challenge in Probo is collecting objects at tourist sites. If Probo takes the wrong item, it can result in reduced scores and lives. While in the game Dorang, during play players must avoid rotten soybeans and puddles. If you have gone through the challenges, the player will get the achievement of both the addition of the score and the life of the play.

**4. CONCLUSIONS**

Based on the above analysis, a travel game needs to pay attention to the motivational element of its players to

play the game. These elements are taken from the bottom foundation to the top of curiosity, explore the destination, socialize, fun and fantasy experiences, and challenge and achievement. The five elements are related to each other to build a good game plan for the players.

From the results of comparative analysis of the games that have been described before and their relationship with Indonesian tourism, it can be concluded that the media of travel-themed games can be used to improve the insight of player information. This is in keeping with exploring the destination. Not only that, but this media also becomes entertainment in between their activities by playing games following fun and fantasy experiences. The increase in respondents' knowledge is seen from the calculations made in the research between before and after the game trials. With curiosity and challenge and achievement players will try more so that the chances of stage game will bring more information in the game. It has an impact on users who are increasingly aware of the attractions in Indonesia, especially in areas they have never visited. In addition, the implementation of socialize elements can be reviewed from the demographic segmentation of players, the use of platforms and game types are very important to be considered both in terms of trends and the level of use in the community.

Hopefully, in the future, this review can be relevant for other researchers and game creation developers. Especially for those who continue to try to innovate in promoting the wealth of Indonesian attractions through game media. Of course, with the receding view and uniqueness of each region.

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