Revitalization of dadong dauh balinese children's illustrated song into 2-dimensional animation as an educational tourism strategy

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Abstract. This study produced animated video clips revived from Balinese children's song as an alternative media, by promoting brand equity in the form of characters and popular tourist attractions as an effort to promote cultural tourism in Bali, Indonesia. The strategy in reviving children's songs was done through revitalizing the visualization of Balinese children's illustrated songs. The visualization was done by turning the previous appearance of live action appearance into an animated form that proved to be preferred by children. The design of the Dadong Dauh character was constructed by manga matrix system model approach introduced by Tsukamoto. The data collection about song variation of Dadong Dauh and theory to develop imagery character and to design the character by using the manga matrix system was used by conducting a literature study. Reference collection of the visual of Dadong Dauh was used by conducting a literature study and observation. The result showed that the visualized video clip of local Balinese children songs in a two-dimensional form was able to revitalize the character branding of Dadong Dauh as a cultural symbol, with Tenganan village as its culture environment. It also gained a great appreciation from children and has potential to popularize Dadong Dauh song.

1. Introduction

Many countries have begun to recognize that tourism is one of the main foreign exchange earners in addition to natural and human resources [1]. A number of published studies have developed strategies to promote tourism industry, but less explored the strategies that examine the needs of children as a target market. Educational tourism is one of the sub-types of tourism that can facilitate the needs of children in terms of education and recreation in one activity. Its popularity and demands in the tourism market are increasing day by day [2]. The term educational tourism refers to "a program in which participants travel to a location as a group with the main goal to be involved in learning experiences that are directly related to the location" [3]. Books and research articles also revealed tourism strategies that explore children's needs include family tourism [4], ecological tourism for children, and creative tourism.
The most important thing in a tourism strategy to build engagement with children is to prioritize aspects of communication. One of the media that is close to children's communication is audio-visual media with cartoon-style (non-realist - semi-realist) narrative. The terminology refers to the form of animated film [5]. The communication strategy with the animated media has advantages in the proximity of communication [6]. Moreover, the communication includes other marketing communication strategy approaches such as including popular places and characters to be displayed in the animation [7].

This study was aimed at producing animated video clips that are revived from Balinese children's songs as an alternative media. In summary, this study embarked the following objectives: (1) We produced animated video clips song as an alternative media; (2) We revitalize the visualization of Balinese children's illustrated songs; (3) We changed the traditional live action appearance into an animated form; (4) We constructed the Dadong Dauh character by manga matrix system model approach; (5) We conducted literature study and observation as data collection about Dadong Dauh variation song; (6) We showed that the developed video clip can be used to revitalize the character branding of Dadong Dauh as a cultural symbol; (7) Finally, we utilized the clips song in promoting brand equity in the form of characters and popular tourist attractions as an effort to promote educational tourism in Bali, Indonesia. The rest of this paper is organized as follow: Section 2 presents related existing works. Section 3 presents the material used and our proposed method. Section 4 presents obtained results and following by discussion. Finally, Section 5 concludes this work.

2. Related Works

There are few existing researches specifically about the revitalization of children's song illustrations into animated video forms. It is also known that few works on tourism strategies utilized animated media in the form of music video clips. This article refers to the important things about animation production such as the application of the animation principle and the animation work pipeline [8][9][10]. In the previous study, we found an aesthetic potential of animation that could influence observer appreciation. Animation aesthetic potential refers to an aspect of the expression of animated characters. This aspect of character expression was implemented in the animated character of children's song illustrations in the present study.

There are several studies investigated about the design of video clips with animation-based such as the studies from Chen, et al. [11], Gurvitch and lund [12] and Grahita [13]. Chen’s study aimed to propose and demonstrate a case study of a novel animated music video production based on the implementation of the user centred rationale and, in turn, to recommend the standard operation procedure (SOP) and design guidelines for future study [11]. The difference between Chen et al.'s research and the present work were on motivation and design goals and on the basis of animation. A research conducted by Grahita has a strong technical exploration dimension [13]. Grahita’s motivation was similar to motivation in this study, however the object of its preservation was different [13]. Grahita focused on Indonesian traditional theatre art preservation, meanwhile the present study focused on revitalizing Balinese traditional children song [13].

The interesting findings toward the design found in Lagomarsino’s work [14] were used as the reference to this research in the aspect of child preference approach toward visualization. The difference relied on the object being analyzed in the previous work was the child’s preferences towards the use of animation and video in learning knowledge (science). In addition to conducting a literature review on the revitalization of music video clips into animation, a literature review was also conducted on brand equity material. Choi, et al. in [15] revealed that Branded content is a fusion of advertising and entertainment into one marketing communications product that is integrated into an organization's overall brand strategy intended to be distributed as entertainment content with a highly branded quality. Thelen, et al. in [16] reported a survey of tourism business operators on Mull which provided evidence of the nature and scope of the impact of television-induced tourism on tourism business performance and activity indicated that the effects were concentrated spatially and temporally. The most relevant and powerful literature that discussed brand equity was delivered by
Aaker and Biel [17] in his book entitled “Brand equity & advertising: advertising's role in building strong brands”.

3. Material and Methodology

3.1 Data
From the analysis of related works, like Gurvitch [12], Morton and Trehub [18], Intani [19], and Schwartzberg and Silverman [20], it can be found that ideal children’s songs are the song that can convey moral value, cultural communication, and are easy to remember. Children songs have a positive effect on children. Some of them are to stimulate the social ability of the children, increase the musical intelligence and early childhood kinesthetics development, and build positive characters and happiness [21].

3.2 Method
Revitalization is an important keyword in this research because it illustrates the activity done in this research. Revitalization was done through reviving the character of Dadong Dauh in the form that is acceptable to children, with a visualization that is easy to remember. Cartoon visualization is the simplified visualization of a realistic form from a live-action capture that is shown in the song illustration nowadays. According to Schwartzberg and Silverman, the simplified image is a good step to make the image easy to remember [20].

Revitalization was centered on the character construction and the image of Dadong Dauh because it was the point of interest as the main character in the song. In developing the character, the initial step used was composing every part of the body of main character using the Manga Matrix System model, introduced by Tsukamoto [22]. After the characters were created, the next step was creating the Balinese traditional atmosphere which is shown in the song illustration. One way to create the Balinese traditional atmosphere was by showing it in the background of the video clip. The revitalized video clip was the video clip from the song arrangement of Dadong Dauh by Verna, produced by Maharani Record as depicted in Figure 1.

![Video Clip intro screen capture](https://www.youtube.com/watch?v=eXq-zWg4hAQ)

This video clip was chosen because it completely shows the character of Dadong Dauh, the white-feathered chicken and three naughty kids aimed to steal its eggs. This video clip also shows the storytelling in sequences, based on the lyric sang. However, some weaknesses were identified such as the character of Dadong Dauh and the song illustration have not really shown a suitable visual persuasion for children. The children in this case are in the age of 5-11, according to age category based in Health Department of Indonesia (2009). Another weakness was the unfocused concept of the story where in one video shows another story, not only the story of Dadong Dauh.

The intended goals of tourism strategy is to develop brand equity from Dadong Dauh and Tenganan Village to provide values to the audience / customers by enhancing the customer's insight about Balinese local wisdom (see Figure 2). Dadong Dauh as an entity rooted from Balinese Folklore contains the value of Balinese locality and the value of distinctiveness that can be categorized as Intellectual Property (IP) Asset. Tenganan village which is displayed as a background scene in
animation is a cultural heritage that also functions as an educational tourism area. The concept of education refers to education about the visual insights of traditional buildings and procedures for community life in Bali.

![Diagram](image)

**Figure 2.** Educational Tourism Strategy developed.

The song *Dadong Dauh* is also used as an accompaniment song in traditional children's games in Bali. As can be seen in Figure 3, there is a group of children who act as bad boys who steal eggs from *Dadong Dauh*'s white chickens. The others play the role of *Dadong Dauh* which prevents bad boys from stealing their eggs. Visitors also can join in this game, or just enjoy the show.

![Image](image)

**Figure 3.** *Dadong Dauh* song as accompaniment of traditional Balinese children's games. Source: Documentation of Made Taro’s Sanggar Kukuruyuk. Photographer: I.G.A.S. Anggara.

3.3 **Manga Matrix System Construction of the Character of Dadong Dauh**

Manga Matrix System is a method developed by Tsukamoto to design new characters with mathematic method [22]. The system of creating character was parsed from its elements which then simplified into a diagram which later become guidance in the process of creating a character. Three variables were used as the foundation of creating the character in the method of designing character in the theory of Matrix System, those are: (1) Form Matrix; (2) Costume Matrix; and (3) Personality Matrix.

3.4 **2D Animation Background Concept Art**

The background shown on the scene give visualization nuance of Balinese traditional with background timeframe of Bali in 1920s. The visual reference used was the visualization of Tenganan village.
Tenganan Pegringsingan is a village in the regency of Karangasem in Bali, Indonesia. It is known by anthropologists to be one of the most secluded societies of the archipelago before the 1970s [23]. Tenganan village was chosen because the setting of place was the same with the place where Dadong Dauh was born, in the Karangasem regency. Another consideration is that Tenganan village still shows visual marks that present the vernacular identity of traditional Bali which can be seen from the use of natural material in building without finishing processes. Picture documentation of the ambience in Tenganan village were collected in a mood board, then the color scheme was formulated (see Figure 4).

![Mood board for 2D animation background asset](image)

**Figure 4.** Mood board for 2D animation background asset.

### 4. Result and Discussion

This section presents the obtained results and following by discussion.

#### 4.1 Revitalized Illustrated Song Result

This research has produced reproduction of song illustration or video clip of song entitled *Dadong Dauh* in the form of two-dimensional animation. The details of the video clip can be seen in Table 4.

| Scene | Visualization |
|-------|---------------|
| 01    | ![Image](image) |
| 02    | ![Image](image) |

**Details**

- **Scene 01**
  - After Introduction that reveals title and credit (the creator), the main video start in scene 01. Its duration is 35 seconds.
  - **Lyrics**
    - Dadong Dauh, Ngelah Siap Putih.

- **Scene 02**
  - This scene shows the place where the Siap Putih's lays eggs. Screen viewing zoom in. Its duration is 5 seconds.
  - **Lyrics**
    - suba metaluh reka, minah ada limolas taluhne,

| Scene | Visualization |
|-------|---------------|
|       |               |

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Table 1. Visualization of final animation.

| Scene | Visualization |
|-------|---------------|
| 01    | ![Image](image) |
| 02    | ![Image](image) |

**Details**

- **Scene 01**
  - After Introduction that reveals title and credit (the creator), the main video start in scene 01. Its duration is 35 seconds.
  - **Lyrics**
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- **Scene 02**
  - This scene shows the place where the Siap Putih's lays eggs. Screen viewing zoom in. Its duration is 5 seconds.
  - **Lyrics**
    - suba metaluh reka, minah ada limolas taluhne,
4.2 Discussion
From the result of the survey, it can be concluded that in general, the animated video produced has fulfilled the research purpose. The result showed that the revitalized video clip of local Balinese children song in the form of two-dimensional was able to: (1) revitalize the character branding of Dadong Dauh, (2) get great appreciation from kids, and (3) potentially popularize Dadong Dauh song, (4) promote the branding of the Tenganan tourist area, and (5) popularize the traditional children's game accompanied by the song Dadong Dauh. The background design aspect became one thing that need to be fixed to be more suitable with the design concept that shown the situation of Bali in 1920s and suitable with the style preferred by the children. The principle of staging [24] also needed to be synchronized with the gestalt design principle, the figure-ground that reveals how the separation between the figure, and ground can also be applied to animated shows. The implementation of the figure-ground was able to improve the aesthetic quality of animation shows. The aspect that became the most successful is the character design. The success of character design depended on the application of manga matrix construction found by Tsukamoto that build the character from the detail parts [22]. To design a good character, we need to pay attention to every part of character because it is part of the characteristic or identity of a character. By realizing a character with distinctive characteristics, the character will be more easily recognized. An easily recognizable character has high Intellectual Property (IP) potential. As expressed by Horrigan [25], animated figures with high IP potential also have high economic value and are able to last long in the world of animation industry. Dadong Dauh figures designed with the manga matrix construction approach also have the potential to be easy to remember and everlasting. This is an important aspect in the revitalization of traditional
Balinese children's songs. Showing animation scene that suitable with the story of the song was also very important in creating video clip that put forward the storytelling model. As expressed by Gurvitch [12], the message in a content (text) should be adjusted to the user segmentation. Children's songs are created to be enjoyed and sung by children. Therefore, children's song illustrations should be made according to the needs of the child, both in visual aspects and in audial aspects.

5. Conclusion
From the process on creating a two-dimensional animation of the song illustration of Dadong Dauh, it can be concluded that the revitalization of the character embodiment is very important to make the story alive about Dadong Dauh, which is developed in Karangasem regency, Bali. A good character construction – designed with detail in every part of its body, specific art style and concept, and supported by suitable animation background, will build visual image which is suitable with the taste and visual need of children (age 5-11 years old). Several weaknesses in this research which could be improved in further study were: (1) Animation basis was still in the form of two-dimensional, according to the concept and the need of character simplifying. Animation basis of three-dimensional has other advantages in the animation asset efficiency and photorealistic render; (2) Song arrangement used for song illustration was still from the arrangement from the web. If there is enough time, it will be better to make a new arrangement, thus the quality of the recording will be more maintained; (3) Animation testing included limited number of respondents, thus there were only preliminary data. If there is additional time, it will be better if there are variation of respondents and involvement of the target audience which are more specific with the suitable method. From this research, our team then realized that there are many folklores in Bali – that has popular main characters which can be developed into contemporer thing, according to viewers’ taste. For example, Juru Pencar, Cai Tarka, Siap Selem, and even non-locomotion organic character like Bungan Sandat. The important findings of this research that can be analyzed further was how wide the opportunities of character development do exist in Balinese folklore. The development can be explored in visual, audial, and movement aspects. Even, if it is possible, the characters in the story can be ‘modified’ in the cultural industry that becomes popular icon through popular media like games and comics. This can be utilized by the next researchers to enrich the communication of Balinese culture, as the root of national culture of Indonesia.

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