

The Last Blood of Unduk Ngadau: Development of a 2D Animation in Culture and Heritage for UTHM Sarawakian Students

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Abstract

This study explores the role of the Unduk Ngadau, a cultural beauty pageant in Sabah, Malaysia, which celebrates Sabahan women's grace, intellect, and heritage. The pageant, part of the Kaamatan Festival, honours Hominodun, a fertility symbol who sacrificed herself to ensure her people's survival. However, concerns over the preservation of Borneo's rich cultural heritage in the modern era are growing, as traditional stories and customs face the risk of being forgotten. To address this, the study develops a 2D animation titled *The Last Blood of Unduk Ngadau* to promote Bornean folklore and traditions among young audiences, particularly Borneo students at Universiti Tun Hussein Onn Malaysia (UTHM). The research involves interviews, surveys, online research, and secondary data analysis to understand how cultural storytelling can raise awareness and foster cultural appreciation. The animation project aims to engage students and attract a broader audience to Borneo's unique heritage. Positive feedback from students shows that cultural animations can effectively increase cultural awareness, bridging traditional narratives with modern media. This study highlights the potential of 2D animation as a tool for cultural preservation and education, showing how digital storytelling can foster a deeper connection to cultural roots among younger generations.

1. Introduction

Unduk Ngadau is a cultural beauty pageant and a significant cultural event originally among the Kadazan-Dusun people of Sabah, Malaysia but these days most Sabahan women can join no matter what ethnicity. The term Unduk Ngadau translates to Harvest Queen in the Kadazan-Dusun language. It is a unique showcase of the grace, talent, and intellect of young Kadazan-Dusun women, as they compete for the title of Unduk Ngadau. The Unduk Ngadau story of Hominodun is at the heart of the festival's significance and rituals. Hominodun was a beautiful and kind-hearted woman who was known for her generosity and her close connection to the land. She was a daughter of Kinoingan, the god of the Kadazan-Dusun people and his wife Suminundu who was a mortal woman. Hominodun was a symbol of fertility and abundance, and she was considered the source of life for the community. In the story, a great famine struck the land, threatening the survival of the people. Hominodun out of deep love and concern for her people decided to sacrifice herself to save them. She allowed herself to be buried in a sacred field.

Hominodun's sacrifice saved the plants, ensuring food security for the community. The Kadazan-Dusun people celebrate the Kaamatan Festival to honour Hominodun's sacrifice and to express gratitude for the bountiful harvest.

2. Literature Review

2.1 The Rise of Feminism

Regarding the research, the Unduk Ngadau pageant is a traditional state-level beauty pageant to celebrate the Harvest Festival. Corresponding to the legend, the winner of the beauty pageant is the embodiment of the Hominodun, a beautiful maiden sacrificed to end a great famine that struck the earth [1]. However, even though the story of Hominodun might have some differences in each district in Sabah, the core of the story symbolises loyalty, willingness and sacrifice to save her people from disaster. Moreover, it has a hidden message that delivers about the empowerment of women and becomes the inspiration to achieve outstanding contributions to the community even a woman.

Today, women still face various challenging obstacles like gender discrimination, family responsibilities, workplace bias and more. As Unduk Ngadau Committee chairman Joanna Kitingan perceptively states, Unduk Ngadau empowers our women, giving them the confidence to speak about their culture, heritage and life in their mother tongue, while simultaneously showcasing their heritage and culture to the broader society across the country and even the world" [2]. This statement reminds us that women can stand at the forefront for their dreams and the future but are not manacled by discrimination.

The opinion of Institute for Development Studies Sabah chief executive officer Associate Professor Datuk Dr Ramzah Dambul is that "We do not want a Barbie Doll look-alike. We want a role model. So, we must transcend the physical aspects of the formulated 'beauty' criteria. Primarily, we are seeking an intellectual ambassador to dignify our nation's image" [3]. Obviously, the Unduk Ngadau contest is a platform that could encourage and motivate women to be confident and intelligent with the objective of showcasing leadership as a role model that able to represent Sabah and its people. In consequence, the young generation will influence by the spirit of Hominodun and handed down their heritage and culture.

2.2 Cultural Significance

The Last Blood of Unduk Ngadau is a significant literary work that explores the rich cultural heritage and traditions of the Kadazan-Dusun people of Sabah, Malaysia. This novel delves into themes of identity, cultural preservation, and the challenges faced by indigenous communities in maintaining their heritage in a rapidly changing world. This literature review aims to analyse the cultural and heritage themes presented in the novel, supported by relevant academic sources [4]. One of the central themes in *The Last Blood of Unduk Ngadau* is the preservation of cultural identity. The protagonist's journey reflects the struggle to maintain cultural practices and beliefs in the face of modernization and external influences. According to Zainal and Zawawi, indigenous literature often emphasizes the importance of cultural preservation as a means of sustaining community identity and resilience [5]. The novel portrays traditional rituals, customs, and the significance of the Unduk Ngadau beauty pageant, which is more than a mere contest; it is a celebration of heritage and a means to honour the harvest festival, Kaamatan. This aligns with Appadurai's concept of cultural reproduction, where traditions are continuously enacted to keep cultural identity alive [6]. The clash between heritage and modernity is another prominent theme in the novel. The characters navigate the tension between adhering to traditional values and adapting to contemporary societal changes. This theme is echoed in the works of Anderson, who discusses how globalization and modernity pose threats to indigenous cultures, leading to a cultural dichotomy [7]. Preserving cultural heritage in the face of external pressures and internal challenges is a recurrent theme in *The Last Blood of Unduk Ngadau*. The novel portrays the erosion of traditional practices due to urbanization, economic development, and changing lifestyles. This is consistent with the findings of Smith, who discusses the impact of economic and social changes on the preservation of cultural heritage sites and practices.

3. Methodology

This research project aims to investigate the factors of the culture and heritage depicted in *The Last Blood of Unduk Ngadau* and the appreciation level among the Sarawak students in UTHM. The methodology includes conducting interviews, administering surveys, researching online, and utilizing secondary data sources such as journal articles and internal records. The objective is to gain a comprehensive understanding of the issue and promote positive development in the issue while raising preserve and promote the cultural heritage of Sarawak.

3.1 Questionnaire

As part of the process of gathering data for this study, a questionnaire was created and given out to students from 18 to 22 years old from Universiti Tun Hussien Onn Malaysia (UTM). The questionnaire was conducted by using Google Forms targeting approximately 30 respondents. Its aims were to obtain information relevant to research objectives. The purpose of the questionnaire is to engage the target audience and assess the effectiveness and usefulness of the final product.

3.2 Animation Development Process

3.2.1 Pre-Production

Pre-production in animation is the critical planning phase where the foundation of the project is laid out. It begins with idea generation and developing a story, followed by writing the script that outlines dialogue and action. Next, a storyboard is done to visualize each scene, providing a rough of the flow of the animation. Character design and environment concept art are created to visual style and aesthetic. Animatic storyboard is produced to fine-tune timing and movement. Technical planning involves selecting animation software, organizing the production pipeline, and assigning team roles. A well-designed storyboard panel is shown in Figure 1 which leads the flow of the storyboard has been approved. Meticulous pre-production preparation streamlines the production process, minimizes errors and ensures a cohesive and engaging final animation.

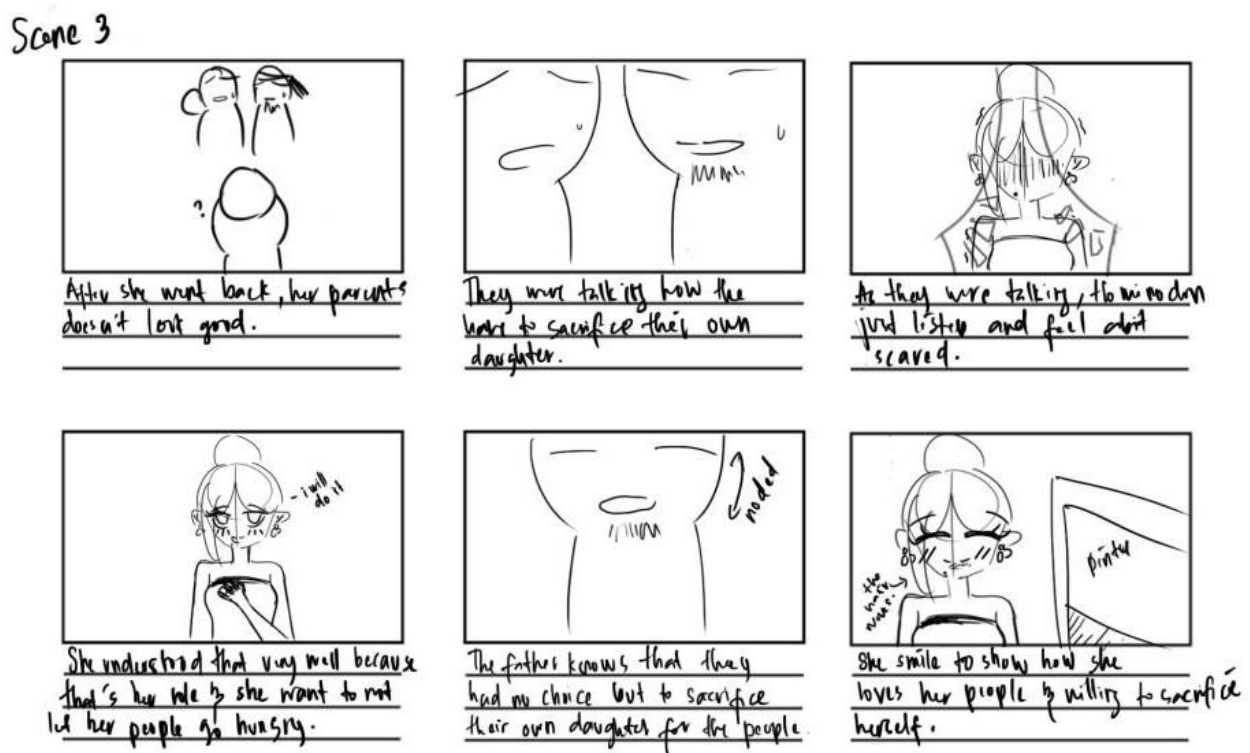


Fig. 1 Storyboard for the animation

3.2.2 Production

The production phase in animation is where the actual creation of the animated content takes place, translating pre-production plans into visual reality. This phase involves several key steps that collectively bring the animation to life. In the making of 2D animation, this project used Adobe Animate to make a rough sketch animation. Next, the rough sketch animation continues in Adobe Photoshop to have it clean up and colouring session. The pre-production materials serve as guide for the animators to bring the best of their skills for the animation. Adobe Photoshop also helps as a medium to make background for this project. Additionally, sound effects and music are integrated to support the on-screen action and add depth to the narrative. Throughout the production phase, continually review and refine the animation to maintain quality and consistency. In conclusion, by combining meticulous attention to detail with creative artistry, this phase brings animated stories to life, engaging and captivating audiences.



Fig. 2 Background asset

3.2.3 Post-production

Post-Production is the essential final phase in the animation process where all components are meticulously integrated and polished to create the finished product. To ensure that the animation smooth flow and continuity, the various 2D animation and 2D background are first assembled and edited. This stage may involve trimming or rearranging scenes, adjusting the timing of sequences, and aligning the overall structure with the initial vision of animation. To bring out most of the animation potential the ideal visual ambience, colour grading and correction are done. To give the audience the best audio experience, edited and mixed sound design that includes dialogue, music and sound effects are used. Rendering follows, involving the generation of final high -resolution images and sequences from the animation software. Rendered frames are thoroughly reviewed to detect and resolve any technical issues or visual inconsistencies.

4. Results and Discussion

4.1 Results

As part of the data collection for this study, a questionnaire was designed and distributed to students aged 18 to 22 at UTHM. This questionnaire was conducted using Google Forms, targeting around 30 respondents. The main goals were to collect information pertinent to the research objectives and evaluate the final product's effectiveness and usefulness.

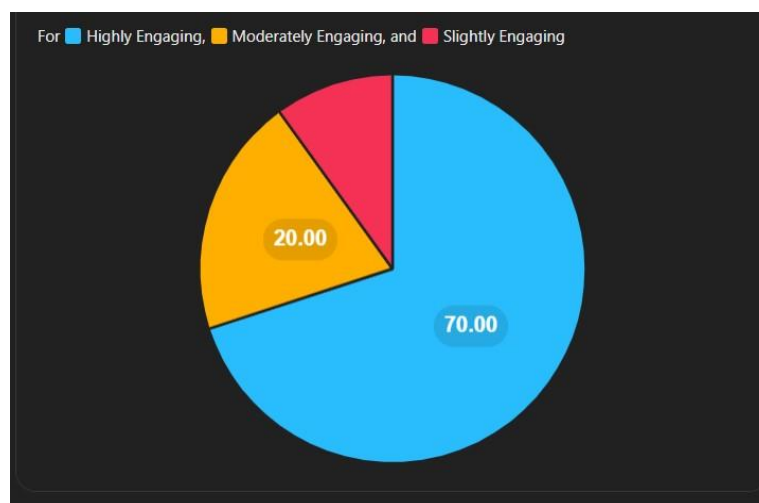


Fig. 3 Engagement level of content

The respondents comprised 30 students, all within the age range of 18 to 22 years. This demographic was chosen to align with the target audience of the study. The questionnaire revealed that 70% of the respondents found the content highly engaging. A further 20% rated the content as moderately engaging, while the remaining 10% found it slightly engaging. These results suggest that most of the target audience was well-engaged with the content presented.

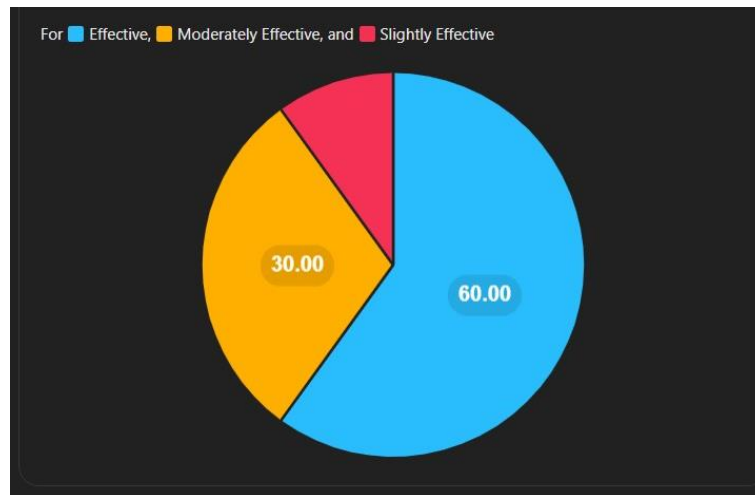


Fig. 4 Effectiveness of the final product

In terms of effectiveness, 60% of the participants believed that the final product effectively met its objectives. Another 30% rated the product as moderately effective, and 10% considered it to be slightly effective. These findings indicate a generally positive reception, with most respondents acknowledging the product's success in achieving its intended goals.

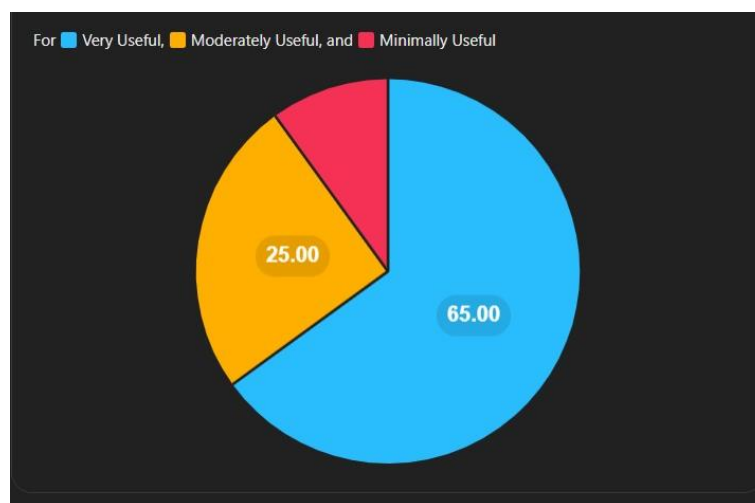


Fig. 5 Usefulness of the final product

Regarding the usefulness of the final product, 65% of the students found it to be especially useful in achieving its intended purpose. An additional 25% rated it as moderately useful, while 10% felt it had minimal usefulness. This feedback highlights the perceived value of the product among the target audience.

Several respondents provided constructive feedback for improvement. Key suggestions included incorporating more interactive elements to increase engagement and enhancing the visual design to make it more appealing. These recommendations offer valuable insights for future iterations of the product.

Overall, the data collected from the questionnaire indicates a positive reception among many respondents. The findings suggest that the final product was well-received in terms of engagement, effectiveness, and usefulness. Additionally, the constructive feedback provided by the respondents offers clear directions for further enhancements. The study's objectives were met, providing a sturdy foundation for future improvements and developments.

4.2 Discussion

Overall, the study of *The Last Blood of Unduk Ngadau* through the creation of a cultural animation and the evaluation of its reception among Sarawak students in UTHM presents a comprehensive approach to cultural preservation and education. By meticulously researching and accurately portraying cultural heritage in animation and by assessing its impact on young audiences, this research contributes to the broader efforts of cultural preservation and education through modern media.

This animated work is rooted in rich cultural narratives, reflecting the traditions, beliefs, and historical contexts of indigenous communities. By studying this animation, the audience can gain insights into the intricate cultural elements and the ways they are represented through animation. This understanding is crucial as it not only preserves cultural heritage but also educates viewers about the importance and richness of indigenous traditions.

The result of this study underscores the importance of integrating cultural heritage into modern educational tools such as animation. By doing so, it is possible to preserve and promote cultural narratives in a manner that resonates with contemporary audiences. The positive reception among students further validates the effectiveness of cultural animations in enhancing cultural awareness and appreciation. These findings contribute to the broader discourse on cultural preservation and the role of digital media in promoting cultural education.

5. Conclusion

The integration of cultural heritage and folklore into educational content through 2D animation proves to be a highly effective approach for preserving and promoting Indigenous narratives. This study demonstrates how 2D animation can serve as dynamic and engaging medium to convey complex cultural stories and traditions to contemporary audiences. The meticulous portrayal of cultural heritage in the animation not only enhances the visual appeal but also ensures the authenticity and accuracy of the cultural elements depicted.

Authors findings indicate that students, particularly those at UTHM, show an elevated level of appreciation and engagement with cultural content presented through 2D animation. The educational purpose of such animations is well-served, as they combine the storytelling power of folklore with the accessibility and appeal of animated media. This combination effectively bridges the gap between traditional cultural narratives and modern educational methods, making cultural education more impactful and memorable for students.

In conclusion, the use of 2D animation to portray cultural heritage and folklore offers a promising avenue for educational purposes. It not only preserves cultural narratives for future generations but also enhances students' understanding and appreciation of their cultural roots. The positive reception among students underscores the potential of 2D animation as a valuable tool in cultural education, fostering a deeper connection between young audiences and their heritage. This study highlights the need for continued exploration and investment in digital media to promote cultural education and preservation.

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