

Documentary Film Production Management of the Baduy Community Based on Audio Spatialization Using BandLab

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The increasing need for innovative approaches in cultural preservation has encouraged the use of documentary films as effective media for communicating indigenous knowledge and traditions. This study aims to examine the production management of the cultural documentary film *Belajar dari Tanah Adat Baduy* and evaluate the implementation of audio spatialization techniques using BandLab in enhancing audience experience. Employing a qualitative approach, data were collected through observation, interviews, documentation, and literature review during the pre-production, production, and post-production stages conducted in Kanekes Village, Lebak Regency, Banten. Production management was analyzed using the POAC framework (Planning, Organizing, Actuating, and Controlling), while production performance was evaluated using the VRIO framework (Value, Rarity, Imitability, and Organization). The findings indicate that documentary production was characterized by dynamic managerial adjustments, including schedule changes, role overlap, and field adaptations resulting from technical limitations and cultural considerations. The application of audio spatialization through stereo panning manipulation in BandLab successfully enhanced the sense of spatial depth and immersion despite resource constraints. VRIO analysis demonstrates that the documentary possesses educational and cultural value, a distinctive audio-production approach, and effective resource organization, although its technical features remain relatively easy to replicate. The study concludes that accessible digital platforms such as BandLab can support innovative audio production in cultural documentary filmmaking while enabling effective management of limited resources in indigenous cultural documentation.

Keywords: Audio Spatialization, Baduy Culture, Documentary Film.

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1. Introduction

Culture is a national identity that encompasses values, norms, and belief systems that shape the way of life of its people [1]. Indonesia is widely recognized as an archipelagic country with extraordinary cultural diversity, consisting of more than 300 ethnic groups and 700 regional languages spread across the archipelago [2]. This cultural richness is not merely a legacy of the past, but also a living asset that continues to develop and must be preserved amidst the era of modernization. Cultural preservation is not only about maintaining traditions, but also an active effort to pass down noble values to future generations so that they are not eroded by the changing times.

The Baduy community is one of the indigenous communities in Indonesia. The Baduy tribe is known for its consistency in maintaining a traditional way of life amidst the pressures of modernization [3]. The Baduy community resides in Kanekes Village, Leuwidamar District, Lebak Regency, Banten Province, and is divided into two main groups: the Inner Baduy and the Outer Baduy. The Inner Baduy strictly adhere to customary rules, such as rejecting the use of modern technology, electricity, and motorized vehicles, while the Outer Baduy live somewhat more openly toward the outside world, although they still uphold the customary values inherited from their ancestors from generation to generation. The life of the Baduy people is governed by customary law implemented by the Pu'un, their traditional leader [4]. These customary rules

regulate every aspect of daily life, from learning methods, clothing, farming, to house construction. Their simple lifestyle, harmonious relationship with nature, and obedience to customary law are distinctive characteristics that differentiate the Baduy community from modern societies in general.

The existence of the Baduy community holds significant cultural value for national culture; however, their traditional cultural identity faces increasing pressure due to the rapid flow of globalization and modernization [5]. Information regarding the life of the Baduy people and their educational value system is still not fully understood by the broader public. This limitation is largely caused by the lack of media capable of portraying the reality of Baduy life comprehensively and authentically. The Baduy customary rules themselves restrict certain forms of documentation, so not all aspects of their lives can be freely recorded and disseminated. These limitations make media representations of the Baduy community tend to be shallow and repetitive, focusing primarily on visual traditions or tourism appeal without exploring deeper aspects such as their knowledge system and intergenerational transmission of values.

The delivery of cultural information without proper context has the potential to reduce younger generations' interest in local culture [6]. Audio-visual media have proven to be effective tools for conveying cultural information because they engage both hearing and visual senses simultaneously. These senses can enhance audience comprehension and understanding more deeply. Documentary films are a form of audio-visual media inherently designed to present reality based on facts and real events [7]. Documentary film production is based on actual events in society, and its presentation reflects objective facts that hold important social and cultural values. Documentary films present facts and real conditions without manipulation or reconstruction [8].

Documentary films are capable of generating deeper perspectives and insights into reality, making them useful media for observing and understanding real life more comprehensively [9]. The presentation of documentary films enables audiences to gain a more authentic depiction of events, environments, and the socio-cultural life of a community. Cultural documentary films in Indonesia have developed rapidly over the last two decades, yet this development has mostly occurred in visual aspects such as image quality, cinematographic techniques, and color aesthetics. Audio aspects are still often treated merely as supporting elements that receive little serious attention during production. In fact, audio quality in cultural documentary films plays a crucial role in building atmosphere and emotional engagement for audiences [10].

Documentary film production consists of several stages, namely pre-production, production, and post-production. Each stage is interconnected and requires proper coordination to ensure that the production process runs smoothly and produces work aligned with the intended objectives. Production management plays a highly crucial role in ensuring that the production process is carried out optimally, efficiently, effectively, and according to established quality standards [11]. The involvement of various roles such as the director, producer, director of photography (DOP), cameraman, and editor in the production team of the documentary film *Learning from the Indigenous Land of the Baduy* makes team coordination a determining factor for the overall success of the documentary production.

The producer holds a central role as the first-line manager in the documentary film production process [12]. The producer is not only responsible for administrative and financial aspects but also ensures that planning, organizing, implementation, and supervision are carried out according to the designed concept. The producer's responsibilities encompass the entire range of activities, from pre-production involving concept planning, production as the implementation phase in the field, to post-production as the finalization stage of the work. Teamwork effectiveness greatly influences the achievement of production goals, both technically and in terms of delivering messages to the audience [13].

The POAC framework (Planning, Organizing, Actuating, and Controlling) is a managerial system developed by George R. Terry and has been widely used as an analytical approach in various organizational contexts [14]. The application of this framework enables systematic identification of managerial functions carried out at each production stage, from planning objectives to supervising implementation in the field [15]. The use of the POAC framework helps the production team understand how management functions are applied throughout the production process while identifying obstacles that need improvement in future productions.

The development of media technology has opened opportunities for creative practitioners to present innovations in documentary film production, not only in visual aspects but also in audio aspects. Audio spatialization techniques are one form of innovation in audio processing capable of creating a three-dimensional spatial impression for listeners [16]. This system works through the processing and manipulation of sound elements to simulate listening spaces, allowing listeners to perceive sounds as if they originate from specific directions and positions within a space. The use of this technique in cultural documentary films is considered capable of providing a deeper listening experience, particularly in portraying the natural atmosphere and daily activities of the Baduy community, which are rich in environmental sound elements.

BandLab is a cloud-computing-based digital audio processing platform that can be accessed for free and supports flexible team collaboration [17]. The BandLab platform is equipped with features that support audio production, including virtual instruments, audio samples, a looper system, sound effects, self-recording facilities, and audio mastering features. The availability of panning and mixing features in BandLab allows production teams to implement the basic principles of audio spatialization without requiring expensive professional software. The utilization of BandLab in cultural documentary production represents a relevant approach, particularly in productions with limited resources while still prioritizing high-quality audio experiences for audiences.

Several previous studies have discussed documentary film production management from various perspectives. [18] Febrianti and Yutanti examined cultural documentary production management focusing on the effectiveness of team coordination. [19] Suhadi and Hanafy investigated role dynamics within small-scale documentary production teams and their impact on the quality of the resulting work. These studies provide an overview of common challenges in documentary production; however, none have specifically integrated the producer's role in cultural documentary production management with the application of audio spatialization techniques based on digital platforms. This gap forms the basis for the novelty of this final project.

The assessment of documentary production performance should not only be viewed from the smoothness of the process but also from the excellence of the resulting work. The VRIO framework (Value, Rarity, Imitability, Organization), developed by Jay Barney (1991), is a strategic analysis tool used to evaluate the internal resources and capabilities of an organization in identifying its competitive advantages [20]. The application of the VRIO framework to documentary production outcomes enables a more comprehensive evaluation of team performance, beyond merely technical assessments of image and sound quality.

Based on the explanation above, there are two main issues that become the focus of this study. First, how the production management of the documentary film *Learning from the Indigenous Land of the Baduy* based on audio spatialization using BandLab is carried out by the producer. Second, how the production performance is evaluated based on the results produced. This paper aims to explain the implementation of production management using the POAC framework and to describe production performance based on the VRIO framework.

2. Literature Review

Documentary films play an important role in preserving cultural heritage, educating audiences, and representing social realities through audiovisual storytelling. Unlike fictional productions, documentaries emphasize authenticity by presenting factual events, cultural practices, and lived experiences of communities [7]. The effectiveness of documentary production is influenced not only by the quality of the narrative but also by the management process that coordinates planning, organizing, implementation, and supervision activities. The POAC framework (Planning, Organizing, Actuating, and Controlling) provides a systematic approach to analyzing managerial functions in media production and has been widely applied to evaluate organizational performance and project effectiveness [14], [15]. Previous studies have highlighted that successful documentary production depends on effective team coordination, clear role allocation, adaptive decision-making, and the ability to address technical and operational constraints encountered during production [11], [18], [19]. These findings suggest that production management constitutes a critical factor in determining both the efficiency of the production process and the quality of the final audiovisual product.

Recent developments in digital media technology have expanded opportunities for innovation in documentary filmmaking, particularly through the application of audio spatialization techniques. Audio spatialization enables listeners to perceive sound direction, movement, and spatial depth, thereby creating a more immersive viewing experience [16]. In parallel, cloud-based platforms such as BandLab provide accessible and collaborative tools that allow small production teams to implement advanced audio processing without relying on expensive professional software [17]. However, existing studies tend to examine documentary production management and audio technology as separate topics, while limited research has explored their integration within cultural documentary production, especially in indigenous community settings. This gap is significant because cultural documentary projects often face resource limitations, technical challenges, and cultural restrictions that require adaptive management strategies. Therefore, this study aims to examine how the POAC framework was implemented in the production of the documentary film *Belajar dari Tanah Adat Baduy*, how audio spatialization was applied using BandLab, and how the resulting production performance can be evaluated through the VRIO framework.

3. Methods

The final documentary film project *Learning from the Indigenous Land of the Baduy* was conducted in Kanekes Village, Leuwidamar District, Lebak Regency, Banten, the residential area of the indigenous Baduy community. This location was selected because the Baduy people consistently maintain their traditional way of life. This characteristic makes the Baduy tribe an authentic and culturally valuable subject for documentation. The implementation of this final project took place from March to May 2026, covering the stages of pre-production, production, and post-production. The production process in the field was carried out while observing and respecting the customary values and norms upheld by the Baduy community, including documentation restrictions established by local traditional leaders.

The final project focused on the implementation of production management for a cultural documentary film entitled *Learning from the Indigenous Land of the Baduy*, with a duration of 15 minutes and 47 seconds. The documentary production process covered pre-production, production, and post-production stages. The documentary film was managed by the Pancaruna production team, consisting of five members with divided roles: producer, director, cinematographer/director of photography (DOP), cameraman, and editor. The producer acted as the main person responsible for teamwork management as well as the integration of audio spatialization techniques using BandLab into the production process.

Data collection in this final project was conducted through four complementary techniques: observation, interviews, documentation, and literature study. Observation was carried out directly at the production site to observe the daily life, social activities, natural environment, and cultural practices of the Baduy community. The observation results became the basis for developing the narrative concept and determining filming techniques appropriate to field conditions.

Interviews were conducted with informants who possessed in-depth knowledge of the life and customary values of the Baduy community. The interviews used structured question guidelines developed based on the documentary objectives, and the results were used as the main narrative material of the film. Documentation included the collection of materials in the form of photographs, video recordings, and audio recordings produced during field production. These materials became the primary raw materials for the video editing and audio processing stages. Literature study was conducted by reviewing scientific journals, books, and references related to film production management, audio spatialization techniques, Baduy culture, and the use of BandLab. The literature study strengthened the theoretical foundation and analytical framework used in this project.

The equipment used in this project was divided into field production equipment and post-production software. Field production equipment included a camera as the primary visual recording device, a tripod for shot stabilization, audio recording equipment for field sound documentation, and portable lighting as an additional light source. The use of lighting became crucial considering the field conditions in the Baduy area, which lacks access to electricity, causing the interiors of traditional houses to remain dark even during the daytime. The software used included BandLab as the main audio processing platform and implementation tool for spatialization techniques, CapCut as the video editing software, and Canva for designing promotional materials for the film. Project materials consisted of primary data in the form of observations, interviews, and field recordings, as well as secondary data in the form of scientific literature, audio technical references, and previous documentation related to Baduy culture.

The project workflow followed the three main stages of film production managed by the producer using the POAC framework. Pre-production included the development of the film idea and concept, scriptwriting, budget planning, division of team responsibilities, location surveys, storyboard and shot list creation, and callsheet preparation. At this stage, the script underwent two complete revisions due to adjustments in the narrative concept based on preliminary field findings, resulting in a production schedule shift of approximately two to three weeks from the initial plan.

Production was carried out in Kanekes Village and included filming, field sound recording, and lighting arrangement. Production was conducted under significant technical limitations. The absence of electricity access at the shooting location prevented lighting equipment from operating optimally indoors, leading the team to increase the camera ISO settings to compensate for insufficient lighting. This decision significantly contributed to the appearance of visual noise in several indoor footage recordings. Field production was conducted over three days and two nights in Kanekes Village. The terrain conditions faced by the team were quite challenging, with rocky and slippery paths, and there were changes in shooting locations from the initial survey results due to field condition adjustments that could not be fully predicted during pre-production.

The two scenes most affected by lighting constraints were the cooking scene and the interview scene with the informant (Lina). Both scenes were located inside traditional houses, but the traditional Baduy house structures, which have minimal light openings, caused the interior conditions to remain dark despite sufficient outdoor lighting. The lack of electricity access at the location prevented lighting equipment from

functioning, so the team decided to increase the camera ISO settings as compensation. This decision resulted in visible visual noise (grain) in both scenes in the final output.

Post-production included offline editing (rough footage arrangement), online editing (addition of visual effects and graphics), color grading, color correction, sound design, and audio processing using BandLab. The distribution process was carried out through digital platforms and a gala premiere as a form of public release of the work.

The audio spatialization technique in this project was implemented through the manipulation of sound positioning in stereo channels using the panning feature available in BandLab. The basic principle applied was the distribution of audio signals between the left and right channels alternately and systematically, following the pattern of center position (full signal on both channels) → shift left (right channel reduced) → return to center → shift right (left channel reduced). This distribution pattern was applied to narration background audio and ambient sounds to create the perception of movement and spatial depth for listeners.

This approach represents the implementation of basic audio spatialization principles within the limitations of the BandLab platform, which does not support full binaural processing or Head-Related Transfer Function (HRTF). The use of BandLab was chosen based on considerations of platform accessibility, ease of team collaboration, and technical feasibility in the context of small-scale production.

The analysis in this project used two frameworks applied sequentially: the POAC and VRIO frameworks. The POAC framework (Planning, Organizing, Actuating, and Controlling) was used to analyze and evaluate the production management process carried out by the producer at every stage from pre-production to post-production. POAC was applied as a descriptive-analytical tool to identify how managerial functions were implemented, including in addressing technical and non-technical obstacles that emerged during production. The VRIO framework (Value, Rarity, Imitability, and Organization) was used to evaluate production performance from the perspective of resource advantages. The VRIO analysis was applied to the documentary film output by referring to the dimensions of educational and cultural value produced, the uniqueness of the audio approach used, the level of ease or difficulty of imitation by similar productions, and the team's ability to optimally organize available resources.

4. Result And Discussion

Documentary Film Production Management Based on the POAC Framework

a. Planning

Based on the findings in the field, the planning stage of the documentary film *Learning from the Indigenous Land of the Baduy* included concept development, scriptwriting, team task distribution, budget planning, location surveys, and production scheduling. The initial plan scheduled filming for April 13–15, 2026. However, the actual production was carried out on April 27–29, 2026, resulting in a two-week delay from the original schedule.

This schedule shift was caused by two factors identified directly in the field. First, the replacement of the cooperation partner. Based on the producer's analysis, the initial partner was unable to fulfill the agreements established during the survey stage. The producer then consulted the issue with the academic supervisor, communicated it to all team members, and opened space for input before making the final decision to replace the partner. Second, the occurrence of the Kawalu traditional ceremony, a Baduy religious ritual held for three months annually. The Kawalu ceremony restricts activities involving outside visitors during the ritual period. This condition demonstrates that the planning function had not fully accommodated external risks of a cultural nature, an aspect that should have become a major consideration

when the production object was an indigenous community with its own ritual calendar. This finding aligns with the statement of Manisya [12], who emphasized that thorough planning during the pre-production stage forms the foundation for the success of all subsequent production stages.

The script underwent two revisions during the production process. The first revision was conducted as a direct response to the change of shooting location from Gajeboh Village to Ciwaringin Village. This change was triggered by the replacement of the cooperation partner as well as adjustments to the activity schedules of the Baduy community, which could not be fully predicted remotely. The second revision was a narrative adjustment decided by the director based on creative findings during production. The frequency of these revisions indicates that the pre-script development process required a more systematic exploration, particularly in anticipating dynamic field variables. This finding is consistent with the study by Febrianti and Yutanti, which demonstrated that documentary production in indigenous community locations is highly vulnerable to scheduling shifts caused by cultural factors that are difficult to predict remotely [18].

b. Organizing

Based on observations during the production process, the Pancaruna team consisted of five members with role divisions including director, producer, cinematographer, cameraman, and editor. Structurally, this role distribution already reflected the standard structure of a small-scale documentary film production team.

During the documentary production process, there was an unplanned overlap of roles. The absence of a dedicated scriptwriter caused scriptwriting responsibilities to be handled collectively. In the process, the producer prepared the main framework and storyline of the documentary, while the director and cameraman assisted in developing the narrative aspects. This condition reflected team flexibility; however, on the other hand, it had the potential to blur the boundaries of responsibility and reduce each member's focus on their primary role, particularly for the producer, who ideally should have concentrated on managerial functions. The role overlap occurring in this documentary production reflects the general characteristics of small-scale productions as identified by Suhadi and Hanafy, where limitations in human resources encourage role flexibility but risk reducing specialization and work focus [19].

Organizational challenges also emerged significantly in the physical aspects of field production. The journey to the shooting location required approximately three hours of walking in heavy rain through uphill and slippery paths. At one point, the cameraman experienced significant physical exhaustion, forcing other team members to carry the camera equipment. This situation indicates that logistical mobility planning should become a separate component within the organizing function for productions in remote indigenous locations, including the distribution of physical equipment loads from the preparation stage onward. This finding is consistent with the statement of Auziah et al. (2025) that human resource management in documentary production directly affects the smoothness and quality of production outcomes [11].

c. Actuating

Based on field observations, the production process implemented a competency-based decision-making system, meaning that each decision was made by the team member who was technically most relevant and responsible for their respective field. Technical decisions regarding cinematography were made by the Director of Photography (DOP), decisions concerning budget changes and cross-subsidy management were made by the producer, and script revisions were decided by the director.

One of the most critical moments in the field occurred when the main informant, namely the *jaro* or Baduy traditional leader who had previously confirmed participation, suddenly became unavailable due to urgent matters. This situation threatened the continuity of the shooting schedule because if the issue was not immediately resolved, operational production costs would increase and the schedule would face further

delays. The producer had to make an immediate decision to replace the informant with an *Olot* or Baduy elder who possessed equivalent authority and knowledge. This decision was made quickly without waiting for full team consensus. The decision-making process proved effective in maintaining the continuity of the production schedule. This competency-based decision-making system aligns with the principle of functional delegation in production management, where decision-making authority is granted to individuals with the most relevant expertise [13].

The change of shooting location from Gajeboh Village to Waringin Village also required rapid adaptation in the field. The initial location could not be used due to the impact of the cooperation partner replacement, forcing the entire team to suddenly adjust the technical shooting plan. The team's adaptability under these conditions reflected responsive actuating capacity, although ideally such changes should have been anticipated through backup location surveys during the pre-production stage.

d. Controlling

Based on field findings, the controlling function was carried out by the producer through two main approaches: monitoring work progress through direct meetings and regular collective evaluations, and conducting group discussions whenever problems were identified. During post-production, the monitoring mechanism was conducted through face-to-face meetings and chat-based communication, where each team member presented the progress of their work while the producer led evaluations of the achieved outcomes.

During field production, supervision was conducted directly and in real time. The team identified lighting problems inside traditional houses, particularly in the cooking scene and the interview scene with the informant Lina. The producer immediately discussed possible solutions with the cameraman. The team initially attempted to use ring lights and headlamps as additional lighting sources due to the absence of electricity access at the location. However, even after both devices were used, the interior of the traditional house still appeared too dark and insufficient for technical filming requirements. Based on a joint consideration between the producer and cameraman, the final decision was to increase the camera ISO settings as the only remaining option, despite full awareness that the consequence would be the appearance of visual noise (grain) in the resulting footage.

The discussions and evaluations conducted regularly helped the team resolve problems more quickly so that field obstacles did not persist for extended periods. This supervisory pattern aligns with the findings of Auziah, who stated that in small-scale documentary productions with limited teams, supervision mechanisms based on direct communication effectively prevent technical obstacles from escalating into overall production failure [11]. Nevertheless, this approach remained reactive, meaning that problems were addressed only after they emerged rather than prevented during the planning stage. Future supervisory mechanisms should become more proactive, such as through the preparation of a risk register during pre-production, which would significantly strengthen this function.

The results of the POAC analysis indicate that the documentary production management process was characterized by a high degree of change, marked by schedule shifts, overlapping roles, field adaptation, and response-based supervision. These overall processes directly shaped the quality and characteristics of the resulting production. The following section analyzes the performance of the production outcomes using the VRIO framework.

Production Performance Based on the VRIO Framework

a. Value

Based on the resulting production outcomes, the documentary film *Learning from the Indigenous Land of the Baduy* possesses value that can be analyzed from two perspectives: the value of the content and the value of the technical production aspects. From the content perspective, the documentary highlights the non-formal learning system of the Baduy community, specifically how knowledge and customary values are transmitted orally and through life experiences without formal education or written media, as the primary narrative focus. This focus differs from most previous Baduy documentary productions, which have primarily emphasized visual aspects of tradition, traditional clothing, or tourism appeal. The choice of perspective in this documentary provides deeper educational value that has rarely been explored in previous audiovisual productions. Documentary films play an important role in educating society and preserving local cultural values threatened by the flow of modernization [17].

From the technical perspective, the implementation of audio spatialization using BandLab introduced an additional layer of audio experience beyond the standards of conventional cultural documentary production. The manipulation of sound signal positions within stereo channels — using the pattern center → left → center → right — created a perception of spatial depth and movement that helped audiences experience the atmosphere of the Baduy environment more immersively. Justitio stated that audio spatialization, which is designed to simulate a three-dimensional listening space, has been proven to increase listeners' emotional engagement with the presented content, even though the implementation in this project was limited to stereo panning manipulation within the technical constraints of the BandLab platform [16].

b. Rarity

The uniqueness of the documentary film *Learning from the Indigenous Land of the Baduy* lies in a combination that has not previously been found simultaneously in existing Baduy documentary productions, namely a narrative focused on the non-formal learning system as the primary subject and the application of audio spatialization techniques in its presentation. The literature review conducted did not identify any Baduy documentary production that explicitly integrated spatial audio manipulation as an intentional and structured production element.

The use of BandLab as a cloud-based audio platform, which is generally intended for music production, is also an unusual approach within the context of cultural documentary film post-production. Putra noted that BandLab was designed primarily for collaboration convenience and accessibility rather than full-scale professional audio production [17]. Its utilization in this context demonstrates creative adaptation to resource limitations while simultaneously establishing a precedent for the use of affordable collaborative platforms in cultural audiovisual production.

c. Imitability

From a purely technical perspective, the documentary *Learning from the Indigenous Land of the Baduy* employs stereo panning techniques using BandLab that can be replicated by other production teams because the platform is freely accessible and its interface is relatively easy to learn. In this sense, the technical imitability is relatively high. This indicates that technical advantages alone are insufficient to become a long-term differentiating factor.

The aspects that are difficult to imitate are the combination of access to the Baduy community, the trust established with customary partners, and the deep contextual understanding of the culture. Access to the Baduy area involves barriers in the form of customary permit procedures that cannot be accelerated unilaterally, as well as the necessity of building trust-based relationships with traditional leaders, which

requires considerable time. This combination of contextual factors places the overall project in a position where the technical aspects are replicable, but the contextual dimensions require significant investment in relationships and time.

d. Organization

The team's ability to utilize limited resources became the primary indicator of the organization dimension within the VRIO framework. Despite having a limited budget, a five-member team, and equipment limitations — including the absence of optimally functioning lighting equipment at the location — the team successfully completed the production of a 15-minute and 47-second documentary film that fully encompassed the concept established from the beginning.

The decision to use BandLab as a substitute for professional paid audio software represented an effective form of resource optimization in this context. The competency-based decision-making mechanism implemented throughout production also reflected effective organization of human resources, even within a team structure that was not entirely specialized. This finding confirms the view of Jay Barney (1991) in the VRIO framework that an organization's ability to effectively utilize available resources is a determining factor in achieving competitive advantage, regardless of the scale of resources possessed.

5. Conclusion

Based on the production process and the analysis results that have been conducted, the documentary film *Learning from the Indigenous Land of the Baduy* demonstrates that production management plays an important role in supporting the smooth implementation of cultural documentary production. During the production process, the team faced various obstacles, including changes in the production schedule, technical limitations in the field, and adjustments to the cultural conditions of the Baduy community. Nevertheless, all production stages were successfully completed through team coordination, flexible task distribution, and decision-making processes carried out according to field requirements. The implementation of the POAC framework assisted the producer in managing the production process from the planning stage to supervision. During the planning stage, the team still encountered several constraints that could not be fully predicted, particularly those related to changes in cooperation partners and the customary schedule of the Baduy community. During production implementation, the team also experienced overlapping roles and limited resources; however, these conditions were managed through teamwork and continuous communication among team members throughout the production process. Production supervision was carried out through periodic evaluations and direct discussions to ensure that every obstacle could be addressed immediately.

In terms of production outcomes, this documentary possesses educational value because it highlights the non-formal learning system of the Baduy community, a topic that has rarely been discussed in previous cultural documentaries. The use of audio spatialization techniques based on BandLab provided a more immersive audio experience for audiences, despite being implemented with limited equipment and production resources. This approach also became one of the distinguishing elements in small-scale cultural documentary production. The documentary production process also retained aspects that are not easily imitated, particularly in building access, communication, and trust with the indigenous Baduy community. The team's ability to utilize limited resources further demonstrates that cultural documentary production can still be carried out optimally through effective teamwork management and the use of accessible digital technology.

Based on the results of this project, several recommendations may be considered for future cultural documentary productions. Productions conducted within indigenous communities should take customary

calendars and permit procedures into account from the earliest planning stages in order to minimize scheduling changes. Preparation of production equipment, particularly independent lighting systems for locations without electricity access, should also receive more thorough attention. Furthermore, the development of audio spatialization techniques using software that supports binaural systems may provide opportunities to improve the quality of audio experiences in future cultural documentary research or productions.

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