

## Production management of Indonesian-Malaysian animation: Les’Copaque and Visinema case study

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### ABSTRACT

**Background:** Animation in Southeast Asia has developed rapidly, as evidenced by certain Indonesian and Malaysian animated films. However, many research that have been conducted focused mainly on animation production management within specific industries, such as film or television, without considering differences in studio size, asset lifespan, and workflow structure across productions. **Purpose:** This research aims to address this gap by comparing animation production management of film *Jumbo* at Visinema Pictures (Indonesia) with the series *Upin & Ipin* at Les’Copaque Production (Malaysia). More specifically, it examines production processes in terms of originality, efficiency, and scalability. **Methods:** Using a qualitative case study approach, data were collected through in-depth interviews with key stakeholders, such as directors and composers from both studios. The research was organized into three phases: pre-production, production, and post-production. **Results:** The results indicate that each production management puts more emphasis on content format and organizational strategy. Visinema Pictures prioritizes pre-production, emphasizing creativity in building the original story and visual elements for *Jumbo*. In contrast, Les’Copaque Production utilizes existing asset collections and standardized workflows for more efficient production of *Upin & Ipin* series. Both studios use organized processes for production and post-production; however, Visinema prioritizes creative exploration while Les’Copaque prioritizes long-term operational efficiency. **Conclusion:** This research concludes that animation production management in Southeast Asia relies on a strategic interplay between originality, efficiency, and scalability, rather than a single ideal model. **Implications:** The findings would contribute to comparative research on animation production management in Indonesia and Malaysia. Also, this research provides practical insights for animation studios’ productions regarding content format, target markets, and long-term sustainability.

**Keywords:** Animation management; comparative production studies; Les’Copaque; production pipeline; Visinema Pictures

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## INTRODUCTION

The animated film industry in Malaysia and Indonesia has been growing over the last decade. This growth can be observed from the increasing numbers of animated films and series that gain popularity both in local and international markets. In Indonesia, the movie *Jumbo*, which was released on March 31, 2025, has become an important milestone for Indonesian animation. In only seven days after its release, the film was watched by one million viewers. It reached 10.12 million views by June 2025, and raise the domestic revenue up to USD23.7 million, or around IDR252.8 billion (Purwanto, 2025). The *Jumbo*'s success is not only about ticket sales but also its strong quality in story and animation. The film offers humor and adventure, and gives moral messages that are easy to understand. As a result, diverse audiences can enjoy the film. The animation quality is also impressive as filmmakers use

cutting-edge technology to create detailed and eye-catching visuals. New technology also increase the visual styles and the animators' creativity is growing over time (Hastuti et al., 2022).

Figure 1 shows the official poster of *Jumbo*, which was released on March 31, 2025. The poster, which is in English language and the messages that it will be shown in many cinemas, indicate the rising international attention toward the Indonesian animation industry.

In fact, the *Jumbo* has been screened in many countries Kazakhstan, Brunei, Malaysia, Singapore, and Russia. Actually, the film was also to be released in 17 countries. The size of the market might indicate the strong intention of the producers to share Indonesian values in stories to global audiences. *Jumbo* has successfully helped Indonesian animated films gain more visibility at international level. It would open further collaborations with



Source: Visinema, 2025

**Figure 1** Poster of the *Jumbo* film

foreign creators. As the industry emphasizes on intellectual property and global market, good production management becomes very important (Sasongko, 2022). This is actually important to stay competitive and to support long-term growth.

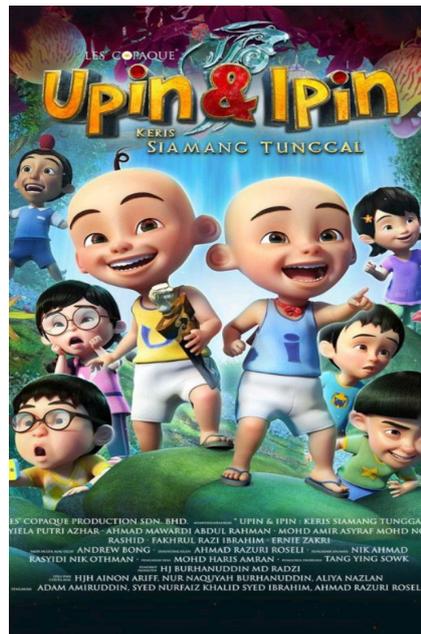
*Jumbo* complements previous successes in local animation, following the famous educational series like *Nussa*, in engaging children and parents with entertaining yet educational content. Also, *Jumbo* follows another popular animation, *Kiko*, a series aimed at younger viewers, with its fun adventures and bright characters. In addition, *Si Juki the Movie* also received good receptions. The film proves that local characters can compete in the national film market. These animations display a variety of themes and styles. They also demonstrate the industry's constant experimentation with new concepts. Overall, these illustrations demonstrate the growing variety and inventiveness in the Indonesian animation sector (Al Farabi et al., 2022).

The Indonesian animation industry grew at an average annual rate of approximately 26% between 2015 and 2019 (AINAKI, 2020). Meanwhile, the revenue from the films rose from IDR 238 billion to IDR 602 billion, despite the decline due to the COVID-19 pandemic. Even though there are approximately 600 animation studios across 23 cities in Indonesia, the industry continues to face structural challenges related to funding, production efficiency, and technological mastery. In other words,

the challenges could mean that production management is the key strategic factor in enhancing industrial resilience and long-term competitiveness.

The Malaysian film industry, on the other hand, presents a contrasting yet complementary case in the Southeast Asian animation industry. A case could be observed from the famous *Upin & Ipin* series. This series portrays children in Malaysian culture clearly and concisely, thus accepted by diverse audiences from many countries (Abdullah et al., 2023). *Upin & Ipin* is funny entertainment and helps viewers learn about Malaysian values, traditions, and daily life. Since it first appeared in 2007, it has attracted audiences around the world. *Upin & Ipin* has characters that are amusing and easy to remember, and stories that are simple but still interesting. The series include many cultural elements such as like *Hari Raya* celebrations, food festivals, and local customs.

As shown in Figure 2, the official poster of *Upin & Ipin* shows that the series has strong performance in the global market. The series is distributed in many countries. In Malaysia, the country of origin, the series is broadcast on TV9, Astro Ceria, Astro Prima, and TV2. In Indonesia, *Upin & Ipin* is broadcast on MNCTV. It is also available on streaming platforms such as Netflix and RCTI+. In Singapore, the series is shown on MediaCorp Suria and Disney Channel Asia. In Brunei Darussalam, audiences can watch the series on Disney Channel Asia. The series is also broadcast in India on Disney



Source: Les' Copaque, 2019

**Figure 2** Poster of the film *Upin & Ipin Keris Siamang Tunggal*

Channel Asia. It is available in Japan through selected platforms (Nursyafir, 2025). This extensive distribution coverage demonstrates that *Upin & Ipin* appeals to people from diverse countries and cultures, having a beneficial impact on character education among global audiences (Deistyarini et al., 2022).

Malaysia's *Upin & Ipin* is just one of many animated shows that people from all over the world have watched. The Malaysian animation is not just for fun, and two good examples are *BoBoiBoy* and *Ejen Ali*. They also spread good messages, and the stories are easy to relate to. The problems depicted are similar to those that occur in real life, which helps people in the US and other countries connect emotionally. To put it another way, the shows help Malaysia connect with people from all over the world as well (Abdullah et al., 2023).

The rise of the animation and digital content industries in Malaysia is also very important

from a business perspective. Gobind Singh Deo, the Minister of Digital Communications, stated that in 2022 Malaysia had more than 300 digital content companies operating in animation, games, and film production, alongside more than 180 original intellectual properties (IPs) in the animation and gaming sectors. In addition, the revenue generated from the industry exceeded RM6.3 billion. It also sent over 1 billion RM worth of content to over 120 markets worldwide. This growth led to the creation of more than 11,000 jobs (Bernama, 2024). These figures indicate the rapid growth of Malaysia's creative digital ecosystem.

Accordingly, the Government policy and institutional support play a big role in this development. The animation industry in Malaysia has developed relatively steadily due to clear regulatory frameworks and targeted government support programs. One example is the *Animation Shorts Challenge*

organized by the *Malaysia Digital Economy Corporation (MDEC)*, a *competition-based initiative* designed to strengthen the national animation industry by encouraging the production of *high-quality animated short content*. Through *structured competition and industry mentorship*, the program supports local creators in developing animated shorts with strong *Intellectual Property (IP)* potential. The initiative also provides *expert guidance from industry professionals* to bridge local talent with industry leaders, enhancing skills, creativity, and readiness for the global market. A total fund of *RMI.2 million* is allocated to support *12 selected participants* and the development of *12 new animation short IPs* (Malaysia Digital Economy Corporation, 2025). Also, other programs such as the Digital Content Ecosystem (DICE) also shows similar effort. In comparison, this environment is quite different in Indonesia. The Indonesia's animation industry relies on independent production companies and creative communities. So, creative networks at the

grassroots level would be the one to create a big impact on how the industry grows in the nation (Kurnianto, 2015).

The Indonesian and Malaysian animation industries have a well-established relationship in which they support each other. The form of mutual support is not only for movie promotion, but also for working together. For instance, when *Ejen Ali 2* was released, around the same time with *Jumbo's*, the creators outwardly praised each other on public media. The message was more than just a congratulations, because it also showed respect for the high quality of work done by both animators and filmmakers. The collaboration between animation companies from different countries can enhance mutual understanding, strengthen industry relations, and foster cross-cultural understanding among the next generation of animators (Gyssens & Wertheim, 2020).

Figure 3 shows that posters of the two films from both Indonesia and Malaysia use the hashtag #AnimaSEA. This hashtag is made up



Source: Instagram Ejen\_ali dan Jumbofilm\_id, 2025

**Figure 3 Support posters for the film from both countries**

of the words “Animasi” (animation) and “SEA,” which stands for Southeast Asia. The hashtag shows that animated works from Southeast Asia, such as Indonesia and Malaysia, is part of a single regional identity. So, #AnimaSEA is not just for advertising, as it would demonstrate the mutual support and cultural affinity of animators. In fact, both posters show the shared culture of Southeast Asian. This would lead to increasing number of accesses to both films in the global animation industry.

The support, represented in posters, also helps cultural exchange between the two countries. When Indonesian creators support Malaysian animated films through public messages, social media promotion, and recognition by animation communities, the audience would become wider. Indonesian viewers are also introduced to Malaysian cultural elements. Similarly, Malaysian viewers gain a deeper understanding of Indonesia through the movie. This mutualism helps improving culturally meaningful content and strengthens the creative economy in the region (Manaf et al., 2021).

This research would highlight two animation studios in Southeast Asia that stand out from the rest when it comes to managing production: Les’ Copaque Production from Malaysia and Visinema Pictures from Indonesia. The two studios have distinct approaches to working, organizing, and planning for the future to help them stay in the business.

Visinema Pictures have been producing

noteworthy animated movies such as *Nussa* (collaboration with *The Little Giantz*) and *Jumbo*. Meanwhile, *Les’ Copaque Production* was the creator of animated movies such as *Upin & Ipin*, *Pada Zaman Dahulu*, *Puteri*, and *Dongeng Sang Kancil*. These works are referenced not as the primary objects of this research analysis, but solely the as outcomes of the studios’ production management systems and organizational practices. In fact, both Visinema and Les’ Copaque are well-known for their high-quality animation, including in the production, distribution, and public relation. The selection of these two production companies is derived from the notion that strong management capabilities across all stages of production are essential for achieving optimal results. Animation studios would be able to compete better with production companies and value chain management in the animation industry when the animation studios have well-organized production management (Dayu et al., 2021).

Visinema Pictures and Les’ Copaque Production offers two distinct yet significant approaches to managing animation production in Southeast Asia. Visinema follows a clear and organized production process while also emphasizes digital distribution. Therefore, their animated content is available on platforms like YouTube, Instagram, and video-on-demand services. This strategy is deemed pivotal since nowadays people prefer this digital platforms to watch films (Anwar et al., 2022). In contrast,

Les' Copaque Production demonstrates remarkable production qualities with the long-running *Upin & Ipin* series. The series in fact is very consistent in storytelling with superb visual quality. The distribution of *Upin & Ipin* so far include national TV channels, digital platforms, and global streaming services, including Netflix, Disney+, and Prime Video. Interestingly, the series also gains from merchandise sales. These qualities indicates that effective production and distribution is crucial to broaden the series visibility and sustain the global market of animation.

In previous literature, many have explored various dimensions of animation including in Southeast Asia. The dimensions include the story structure, transmedia development, audience engagement, cultural representation, and industrial growth. However, most of these studies examined each aspect separately and did not clearly explain the role of production management as the main foundation. Research by Sarjiati (2023) on transmedia practices in Indonesian animation through *Battle of Surabaya* and *Nussa*, for example, focused on intellectual property development as part of broader industry strategies. Similarly, Nasir et al. (2022) analyze narrative and content structures in some Malaysian series such as *Upin & Ipin*, *BoBoiBoy*, and *Omar & Hana*. Their studies highlighted that storytelling was an important tool to maintain audience engagement and cultural communication. A narrative-oriented analysis can also be found

in the study conducted by (Setiadi et al., 2025) which examines the identity crisis of the main character in *Kung Fu Panda 3*. The study demonstrates how character construction, internal conflict, and narrative development shape the meaning-making process in animated films.

Teh (2018) explains the development of Malaysia's film industry from a historical and industry perspective. The study highlighted the need for flexible strategies to face the foreign productions. Furthermore, research by Zainal and Desa (2023) found that emotional connection and good production management are crucial in the successful animated movies like *Agent Ali*, which has certain relevance to the audiences. Moreover, Ghani et al. (2023) also added that Malaysian animation studios must be creative with having new ideas to stay competitive in the global animation market.

As no comparative cross-country analyses between major animation studios in Indonesia and Malaysia was found, this research offers to highlight a critical gap in understanding production management as a strategic backbone of the regional animation industry. In other words, this research would present the analysis in a more integrated and comparative analytical approach. In short, this study explicitly aims to analyze and compare the production management practices of Visinema Pictures (Indonesia) and Les' Copaque Production (Malaysia) in order to identify how different managerial strategies influence the organization

of production processes, production workflows, asset management, distribution mechanisms, audience relations, and long-term sustainability within the Southeast Asian animation industry.

By positioning these two studios as comparative case studies, this research would fill the critical aforementioned gap, and as a strategic and organizational foundation of the animation industry. Ultimately, this study would contribute to the development of discourse on production management studies, especially in Southeast Asia by providing an in-depth understanding of effective managerial practices which can enable animated works to achieve domestic success and sustained regional and international standing.

## RESEARCH METHOD

This study adopts a qualitative multiple-case study approach grounded in an interpretative research paradigm. This method is suitable for examining how production management practices are perceived and utilized in various animation studios. It helps the researcher understand the meanings, decision-making processes, and management reasons from the perspective of people directly involved in animation production. The case study method is appropriate to answer “how” and “why” questions related to complex real-world situations (Yin, 2018), such as animation production management in Southeast Asia.

The objects of this research are two animation studios in Southeast Asia, namely

Visinema Pictures in Indonesia and Les’ Copaque Production in Malaysia. These studios were chosen using purposive sampling. Three main criteria were used. The first criterion is long-term involvement in large-scale animation production. The second criterion is proven success in domestic and regional markets. The third criterion is the difference in production systems. Visinema operates in a digital and project-based production environment. Les’ Copaque operates in a more institutional and series-based production system. By comparing these two studios, the study aims to gain insights into different models of animation production management.

The subjects of the study are two key informants. Each informant represents one studio. The first informant, Ryan Adriandhy the director of *Jumbo* at Visinema Pictures. The second informant is Jehan Fuad, a compositor at Les’ Copaque Production. The number of informants is limited. However, this choice is intentional. Both informants were directly involved in important stages of the production process. They also have strong knowledge of management decisions, workflow coordination, and production execution in their studios. In qualitative case study research, depth of information is more important than the number of participants, especially when informants hold key roles in the organization (Yin, 2018).

Data were obtained via semi-structured in-depth interviews. This technique enables the researcher to pose analogous inquiries in both

scenarios while still permitting the examination of studio-specific methodologies. The interview guide was created based on earlier research on how to manage the production of animation. The main topics were planning the production, organizing the team, workflows before production, making assets, animation processes, using software and technology, supervision systems, managing post-production, and distribution strategies. The interview was conducted online which last approximately 60 to 90 minutes. It was performed online due to the geographical constrain. The ethical consideration in this research was cleared by collecting informed consent from all interviewees to ensure voluntary participation, confidentiality, and the right to withdraw at any stage of the research process.

This study uses cross-case analysis in combination with pattern matching, adhering to the framework established by (Yin, 2018). The interview was analyzed using coding in three stages. First, recurring concepts and practices related to production management was identified and coded. Second, these codes were grouped into broader thematic categories. This includes managerial coordination, workflow efficiency, technology integration, and distribution strategies. Third, these themes were compared across studios in order to identify similarities, differences, and explanatory patterns. Then, the empirical findings were subsequently compared to the existing theoretical frameworks of animation production management, based on

existing literature review, to clarify the impact of various managerial approaches on production quality, efficiency, and scalability.

In this research, the researchers acknowledge certain research limitation. First of all, observation to the studio or production process was not performed because of geographical distance and restricted access to production facilities. So, the data was collected through interviews with key personnel who were actively working in production management. However, to enhance the research trustworthiness, data triangulation is performed by examining the interview, comparing them with relevant documents such as industry reports and earlier academic studies.

## RESULTS AND DISCUSSION

The three main stages of animation production consist of pre-production, production, and post-production. The three are in fact a standard animation pipeline to enable comparative examination of organizational, managerial, and creative strategies of Visinema Pictures in Indonesia and Les' Copaque Production in Malaysia. Earlier studies have shown that, in actual production, these stages are not always clearly visible. Nonetheless, using this structure to analyze for research is helpful as it eases the view of strengths, weaknesses, and strategic focus in each stage (Mulyani, 2019).

This research did not view production stages merely as technical, but they are also seen

as management and cultural spaces. In these spaces, creative ideas, resource utilization, team organization, and technology options might occur simultaneously. With this perspective, production management would influence the final result of animated work.

Pre-production is regarded as the most decisive stage in making an animation. This stage determines the narrative, visual, and managerial blueprint. The pre-production process for *Jumbo* at Visinema Pictures was very thorough. The core team would consist of executive producer, the producer, and the co-writing director. To just write the script, the process might take up to eight months. It might seem long because the main goal during this time was to make the story deeper and more emotionally consistent. Indeed Saputra et al. (2023) assert that scriptwriting plays a key role in shaping characters, emotional flow, and

visual rhythm in animated films.

Storyboarding was accomplished in parallel with visual development. This project involved both lead artists and assistant artists. The voice recording was completed early, as it would assist animators in aligning the dialogue with the characters' expressions right from the start. A pre-production editor then created an animatic, which served both as a technical reference and as a management tool. As Song et al. (2017) claims, this animatic would help lessen the need for revisions in the later stages of production.

The next stage is the visual development stage, led by production designers, which plays a crucial role in guiding the overall visual direction (Figure 4). The designers manage a group of art directors and concept artists to create detailed visual designs, starting with large components like building shapes and surroundings, and then



Source: Les'Copaque Instagram, 2023 and Cinema.21 tiktok, 2025

**Figure 4 Animatic dan Final Animation *Upin & Ipin and Jumbo***

progressing to finer details, such as roof colors. This process is important to create a convincing and engaging world in the film.

Once the design is approved, the task is handed over to the 3D assets team. This team transforms the visual ideas into three-dimensional models. The assets supervisor ensures that the models align with the approved designs. 3D artists create characters, environments, and props, ensuring they align with the vision established by the production designer. For example, when building Oma's house, the team paid close attention to proportions, surface textures, and lighting to ensure the final model looked realistic and aligned with the original design.

We built them piece by piece...the storybook, Norman's bike, Norman's goat design, and so on. It took a year and a half to complete all the assets for that huge world, from 2020 to early 2022. (Ryan Ardiansyah, personal communication, July 3, 2025)

Therefore, Visinema's pre-production phase ran from 2020 to 2022. This extensive process is commonly found from a production model that focuses on asset creation. After all, this approach emphasizes originality and cinematic uniqueness (Liu, 2024).

On the other hand, Les' Copaque Production was founded by the long-running *Upin & Ipin* series. There were three main departments involved in the creation of the series, including story, animation, and art. First, story department is responsible for scriptwriting, storyboarding, and audio production. To achieve good

production, they would require direct input from the studio owner and director. Second, the art department is responsible for art of the animation, thus they rely heavily on the asset library. This means they would reuse or adapt the existing animation model rather than creating assets from scratch. New assets are only produced when the series presents new characters or locations, such as *Bang Zul or Cik Bidadari*.

The 3D modelers are also divided into two groups: background and character. So, for backgrounds, if there is a new set, like someone's house in an episode, they will model it. But if it already exists, they just take it, like Grandpa's house, which is in every episode. (Jeihan Fuad, personal communication, June 18, 2025)

This production approach reflects the pre-production model which focuses on asset reuse so that they can achieve efficiency, consistency, and scalability. Hagler and Rauscher (2022) separated into direction (or artistic direction explains that asset libraries are essential in a long-running animated series to erase repetitive work and help maintain a stable production pipeline. However, this research finding would also stress that that asset reuse does not necessarily erase all production challenges. For example, for a feature film like *Upin & Ipin: Keris Siamang Tunggal* (2019), Les' Copaque took up to five years to complete as for higher visual quality standards for theatrical release require many assets to be rebuilt or enhanced, even though they were already available.

This comparison highlights that asset

libraries are most effective in serial animation production but become less significant when higher cinematic quality is required. In comparison, Jumbo was developed as a feature film from the outset. The film relied on no previous television content. Therefore, all assets had to be designed and modeled from scratch.

So yesterday, when we watched the premiere, the assets team was really moved. Like, ‘Oh my God, that is the flowerpot I made, oh my God, that is the asphalt road I made.’ They were all so happy because their world was complete, and they had created everything down to the smallest detail. (Ryan Ardiansyah, personal communication July 3, 2025).

This shows that pre-production is not only a managerial process but also a place for the formation of creative identity and professional satisfaction. The pre-production stage includes developing the concept and script. Liu (2024), storyboarding as a tool for visual planning and storyline (Song et al., 2017), character design that supports connection with the audience (Safagi et al., 2021) and structured workflow planning to manage production complexity (Werner, 2022). Together, these elements make pre-production a key phase for ensuring story clarity, visual consistency, and an efficient production process.

Based on this theoretical foundation, both Visinema Pictures and Les’ Copaque Production implement what could theoretically be described as an “ideal” pre-production process, but they use different strategies. Visinema Pictures strongly emphasize concept development and scriptwriting that took about

eight months in the process. Les’ Copaque Production also follows a structured pre-production process including annual script development, storyboard preparation, and audio recording. However, while both studios use a structured workflow (Werner, 2022), Les’ Copaque Production focused more on asset reuse and standardization, whereas Visinema focused on creating original assets and world building.

This research also ultimately asserting that there is no single ideal “pre-production” model. Pre-production should be understood as a strategy that depends on production goals, output formats, and industry context, not as a fixed preparation stage as identified in previous studies such as (Liu, 2024; Werner, 2022). Therefore, this study offers a different perspective, stating that pre-production is strategic space where asset choices, organizational structure, and production objectives influence creative and management decisions. In this regard, Visinema’s pre-production prioritizes originality and narrative depth, while Les’s Copaque prioritizes efficiency, continuity, and asset optimization. This comparison helps explain pre-production as a flexible and context-based practice, rather than a single technical process.

Following pre-production approaches, this section further discusses the production phase. This phase is considered as the most resource-intensive part of animated filmmaking. It also requires many digital technologies, efficient

rigging systems, and collaborative work methods. Several notable elements include game engines for increasing flexibility and reducing production costs (Zhang, 2023) the dynamic skeletal system for better facial animation (Barrielle et al., 2016), real-time rendering for faster revisions and feedback (Jasau et al., 2024), and well-designed rigging system to increase efficiency and focus more on storytelling and creative work (Song et al., 2017). In general, actually Visinema Pictures and Les' Copaque Production apply this principle but organize it differently. Visinema Pictures and Les' Copaque Production. In the case of *Jumbo*, Visinema's production process was based on a pre-determined blueprint. This included complete storyboards and animatics with fixed shooting durations. As a result, production resources were primarily focused on execution rather than ongoing revisions.

Animation is different from regular movies. In regular movies, we record events in the real world, with actors in front of the camera. I say 'action,' they act, and I record it on camera. Then it is played back as a video at 24 frames per second, which becomes a movie. Well, animation also uses 24 frames per second, but since I am not recording, to create one second of animation, those 24 frames have to be made, so it takes longer to create them that way. (Ryan Ardiansyah, personal communication, July 3, 2025).

*Jumbo's* production took two years, from early 2022 to early 2024, with a focus on fully animating the scenes, like "June meets June" 13 for two full years just for animation. Such an extensive period indicates that the production process was not only technical, but it was also

shaped by artistic and conceptual considerations. The studio emphasizes how the audience would experience and interpret the animated story. These phenomenological aspects influenced decisions throughout the production process (Parry, 2024).

Regarding the production software, Visinema uses Blender for allowing flexible collaboration. Visinema also used software such as ZBrush for character sculpting, Substance Painter for texturing, DaVinci Resolve for color editing, and Pro Tools for audio production. *Jumbo* production was in fact completed in nine studios from different cities. There is a studio for only asset creation, four studios for animation, and two studios for only rendering and compositing. Also, there is separate studio focused only on audio, and a studio handled color grading. In addition to these studios, the productions also hired freelance artists, who were selected through open recruitment, recommendations, and direct searches. The freelancers were grouped into dedicated production teams. Ryan described this process as similar to assembling an "Avengers" team. This working method is demonstrated in the concept of "Chain Animation," where a large group of animators work collaboratively on various tasks and levels, rather than following a strict linear sequence (Hagler & Rauscher, 2022).

The *Jumbo* director also stressed that communication is very essential throughout production since it was performed remotely

in several cities, including Jakarta, Bandung, Malang, and Yogyakarta. The director prepared detailed Standard Operating Procedures (SOPs) for this regard. These SOPs outlined animation style, character acting, and movement. The SOPs even mention specific instructions, for instance, how *Nurman and Don* should run or how *Mary* should fly. One animation studio was designated as the main or central studio and an animation supervisor in this studio reviewed the work from the other three studios. After being reviewed, the work was submitted to Visinema for final approval.

In comparison, Les' Copaque Production has a highly structured production pipeline that has been developed over many years. Its production process is overlapping, for example, while the script team is preparing content for the next season, the animation team for the current season may already be working on rendering and compositing. For the *Upin & Ipin* series, production usually takes around one year per season. However, for feature films such as *Keris Siamang Tunggal*, the production process can take up to five years.

Our production schedules overlap. For example, the script comes first. Yes, there will be some waiting around. But we've been doing this for years. So, for example, in December, the compositor is the last one. We're busiest in December. But the animation is already relaxed. The script is busy again for next year. So it keeps overlapping for the series. (Jeihan Fuad, personal communication, June 18, 2025)

At Les' Copaque Production, the production process begins with the animators creating

acting videos. These videos can be recorded by the animators themselves or taken from YouTube for reference. This step helps to make sure that the acting and character movements look natural before moving on to positioning and final animation.

In production, Les' Copaque uses different animation techniques and software during production, such as Maya for modeling, texturing, and animation, Photoshop for concept art, and After Effects for the compositing stage. The animation workflow also follows several steps, including acting, blocking, animating, and pose-by-pose refinement. All these processes continue until the scene is ready for rendering. Also, the studio relies much on asset library, from which they can reuse the characters and environments across episodes. As a result, visual consistency is maintained throughout the series. In addition, all stages of production are handled in-house, so that control over quality and efficient production workflow can be assured.

Thus, the main difference in the production stage of the two studios lies in the organizational approach. Visinema prioritizes originality through spread out collaboration, while Les' Copaque prioritizes efficiency, asset reuse, and standardized workflows. This implies that animation quality and production efficiency is actually determined by strategic asset management and industrial context, not just by software or technical workflows.

Moving on to post-production, which is

the final stage in animation production, the visuals, audios, and storylines are combined into a single, final film. The process would enable knowing the final quality and emotional feel of the animation. Many studies have shown that post-production is complex and requires careful control. Editing is the most crucial part. It requires strong technical skills, as errors can slow down the process and reduce efficiency (Sun, 2024). The editing, rendering, and publishing processes must work seamlessly together for the final film to meet both creative goals and audience expectations (Thifala et al., 2021).

According to interviews, Visinema Pictures implemented a structured post-production process for *Jumbo*. After the animation was completed, editors made final edits and adjusted scene lengths to enhance the storyline. VFX artists added effects, such as the sparkle in Mary's scenes, to enhance the visuals. Previous research has shown that VFX can enhance the emotional impact of animation (Mahardika & Utami, 2025). Ryan Ardiansyah (Personal communication, July 3, 2025) said the color editing was done using DaVinci Resolve to maintain visual tone consistency. The composer combined all elements into the final frame. Sound and music are also crucial at this stage. Music is composed to match scene emotion. Sound designers add details like ambience, footsteps, and doors. These sounds help make the film feel more immersive. Visinema uses an audio-first approach, where sound and acting

are recorded earlier, so post-production can focus more on syncing animation with final sound and music.

So, there are footsteps, doors open with a sound, Don sits on the sofa with a sound, that also goes into the sound design at the back. Then of course color grading, making the color more even throughout the film, we can manipulate or make it so that it supports the needs of the story. Whether for example the scene is cheerful, the color can be brighter, or for example the scene is more tense, scarier, it can be a little darker, and so on. (Ryan Ardiansyah, personal communication, July 3, 2025)

Les' Copaque Production follows post-production stages that are similar in structure. The process begins with compositing. This stage focuses on shaping the visual mood and color of each scene. Figure 5 shows how the compositing process is carried out. After compositing, the team moves to final rendering. At this stage, all visual elements are processed and combined into a single, complete frame. Audio finishing is also an important part of post-production. During this stage, the team checks that sound, dialogue, and animation are well synchronized before release. In an interview, Jeihan Fuad explained that the compositor is responsible for adding lighting and visual effects. The compositing team also combines all visual elements into a single, final shot. The goal is to create the right atmosphere for each scene. This process demonstrates how even small details can significantly impact the overall quality and emotional impact of a film.

The compositor works after the rendering process, bringing in lighting and effects. Then we put it all together. We create a scene with atmosphere, add effects, and



Source: Youtube Les' Copaque Production, 2012

**Figure 5 Compositing process in Les' Copaque studio**

give it atmosphere and color (Jeihan Fuad, personal communication, June 18, 2025)

To summarize, the comparative analysis of the two studios reveals that they employ different management approaches. These differences can be seen from how they manage assets, organize their workflows, and distribute content. Also, this research found that there is no standard production model followed by either studio. Instead, each studio chooses the work flow that would be appropriate with its specific situation, production goals, and future needs.

This research also underlines that there is no universal or ideal pre-production model, because everything needs to fit the context. Even though some previous studies often describe pre-production as a standard preparation stage (Liu, 2024; Werner, 2022), this research shows that pre-production also works as a strategic space. In this space, studios should be able to balance creativity, efficiency, and sustainability. In this research, Visinema focuses more on originality and making new assets while Les'

Copaque focuses more on continuity and asset reuse. As a result, the production logic and final results also differ. These differences can be seen more clearly in Table 1 which compares asset strategy, workflow organization, and distribution orientation between the two studios.

Table 1 tells that asset libraries do not always speed up production in every situation. In fact, asset library can be effective depending on factors such as the type of output, visual goals, and distribution strategy. In a serial production, such as one that is done by Les' Copaque Production, asset reuse plays an important role in maintaining production speed and visual consistency. Contrary, in Visinema Pictures, as they worked film, originality and custom-made assets would take longer production times, but they make stronger storytelling and higher cinematic quality.

Overall, these findings challenge the notion that animation production management follows a simple linear process or a set of universal best

**Table 1 Comparative Production Management Logics of Visinema Pictures and Les' Copaque Production**

No	Category	Visinema Pictures	Les' Copaque Production
1	Production Orientation	Project-Based, feature film-oriented	Serial-based, episodic production
2	Asset Strategy	Customized asset creation from scratch; minimal asset reuse	Asset libraries and reuse across episodes and seasons
3	Pre-Production Role	Extended strategic phase emphasizing originality, narrative depth, and visual exploration	Planning and optimization phase focused on efficiency, consistency, and scalability
4	Workflow Organization	Flexible and adaptive workflow allowing creative experimentation	Standardized and institutionalized workflow to ensure production continuity
5	Production Efficiency	Lower speed but higher creative control	High efficiency and faster turnaround time
6	Distribution Orientation	Cinematic release and premium storytelling	Television broadcasting and multi-platform distribution
7	Sustainability Logic	Sustainability achieved through distinctiveness and project-based success	Sustainability achieved through long-term franchising and continuous output

Source: Author, 2025

practices. This research argues that production management should be understood as a strategic system shaped by asset selection, organizational design, and industry conditions. In fact, the comparison of Visinema Pictures and Les' Copaque Production shows that different management approaches result in trade-offs between originality, efficiency, and long-term sustainability.

Finally, this study adds insight into the field of animation production by presenting a Southeast Asian perspective, which is still limited in a field that largely focuses on Western and East Asian studios. Rather than claiming that one production model is superior to another, the findings of this study show how studios in the region adapt global animation production principles to local industry conditions, cultural

narrative traditions, and market demand. This highlights the dynamic and evolving nature of the animation ecosystem in Southeast Asia.

## CONCLUSION

From the theoretical perspective, this research offers contribution to the studies of animation production, mainly by proposing a comparative framework between asset-creation and asset-reuse production model. So, this research disregard asset libraries as universally beneficial tools, but argues the effectiveness of the asset would depend on production format, aesthetic targets, and distribution strategies. In other words, this research would consider asset management as a strategic and organizational choice. Thus, sustainability and scalability in animation production can be achieved. This

research concludes that animation production in Southeast Asia does not follow a single “ideal” or universal production model but is shaped by context-specific configurations of industrial history, organizational structure, and strategic priorities. Through a comparative analysis of Visinema Pictures (Indonesia) and Les’ Copaque Production (Malaysia), the findings demonstrate that asset philosophy, workflow organization, and distribution orientation fundamentally shape how animation production is planned, executed, and sustained. In the pre-production stage, commonly described preparatory processes function as strategic decision-making arenas. Visinema Pictures adopts an asset-creation-oriented model in which extended script development and bespoke asset design support cinematic originality, narrative depth, and world-building ambitions. In contrast, Les’ Copaque Production implements an asset-reuse model that prioritizes efficiency, continuity, and scalability through long-established asset libraries. During the production stage, the research further shows that efficiency and creative control are shaped not only by technology but also by organizational design and labor coordination. Visinema implements a decentralized, multi-studio collaboration model that enables large-scale creative experimentation but requires intensive supervision and coordination, while Les’ Copaque operates a centralized in-house pipeline to ensure consistent production quality and turnaround time for its animated series.

In the post-production stage, both studios utilize this phase not only as a technical finishing process but also as a strategic site for narrative and aesthetic alignment. Differences in audio-first workflows, compositing practices, and internal standardization illustrate how post-production decisions reinforce broader production logics and audience engagement strategies. Overall, this research conceptualizes production management as an integrated strategic system rather than a linear sequence of technical stages. Theoretically, the study contributes to animation production research by proposing a comparative framework between asset-creation and asset-reuse production models, arguing that the effectiveness of asset libraries depends on production format, aesthetic objectives, and distribution strategies. Practically, the findings suggest that studios and policymakers should avoid adopting universal “best practices” and instead develop production strategies that align with specific industrial contexts, creative goals, and organizational capacities. By focusing on studios in Southeast Asia, this research also expands the empirical scope of animation studies and provides a foundation for future research on comparative production management, cross-cultural creative work, and regional animation ecosystems.

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Conceptualization, R.Z.R. and F.G.S.; Methodology, R.Z.R. and F.G.S.; Validation, R.Z.R. and F.G.S.; Formal Analysis, R.Z.R.; Investigation, R.Z.R.; Resources, R.Z.R.; Data Curation, R.Z.R. and F.G.S.; Writing Original Draft Preparation, R.Z.R. and F.G.S.; Writing Review and Editing, R.Z.R. and F.G.S.; Visualization,

R.Z.R.; Supervision, F.G.S. All authors have read and agreed to the published version of the manuscript.

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