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INTEGRATING 2D AND 3D ANIMATION FOR BAND BRANDING: A CREATIVE PRACTICE IN MUSIC VIDEO PRODUCTION FOR THE RANG-RANGS

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ABSTRACT

This paper discusses the development of two animated music videos, “*Engkau Dalam Semua Perjalanan*” and “*Caballero*”, created as part of a Final Year Project at the School of Creative Industry Management and Performing Arts (SCIMPA), Universiti Utara Malaysia, in collaboration with the independent band, The Rang-Rangs. In recent years, music videos have become a crucial platform for artists to communicate identity and connect with audiences, yet independent bands often struggle to access high-quality production that combines strong visuals with compelling narratives. Addressing this gap, the project explores animation as an alternative medium to enhance storytelling and strengthen artistic branding. The main objective of this project was to integrate animation as a medium to enhance musical storytelling while simultaneously strengthening the visual and artistic identity of the band. A structured three-phase methodology was employed, consisting of pre-production, production, and post-production. The pre-production stage involved conceptual planning, storyboarding, and character design to align with both the narrative and client expectations. The production stage emphasized animation processes, visual aesthetics, and synchronization with the rhythm and mood of the music. Post-production focused on refinement through editing, visual effects, and audience testing to ensure cohesion and quality. The findings indicate that the use of animation in music videos increases audience engagement by offering stronger emotional resonance and improved narrative clarity, with preliminary feedback showing a notable improvement in viewer recall and positive reception compared to conventional live-action approaches. In addition, the project demonstrates how animation can contribute to branding by providing a distinctive and memorable artistic identity for the band. Overall, this project highlights the potential of combining animation and music to advance creative expression and industry practice, particularly in offering independent artists an innovative and cost-effective tool for audience connection and brand development.

Keywords: Animation, Character design, Creative industries, Music video, Storyboarding.

INTRODUCTION

Animation in music videos is far more than a decorative element. In fact, it is a powerful storytelling device capable of conveying narrative, evoking emotion, and reinforcing brand identity. When sound and visuals are integrated skilfully, animated music videos can captivate audiences and offer musicians a memorable and distinct artistic voice (Yellowbrick, 2025). Visual storytelling through animation allows artists to convey abstract themes, emotional undercurrents, and symbolic meaning in ways that static visuals cannot, thereby increasing viewer engagement.

From a branding standpoint, animation strengthens visual identity by ensuring consistency in style, colour, and motion design. Recurrent motifs such as animated logos or mascots can enhance memorability and leave a lasting impression (Hatch Studios, 2025; Pixel Studios Inc., 2024). There are two prevalent animation approaches which are 2D and 3D. Two-dimensional (2D) animation is appreciated for its stylistic flexibility, expressive quality, and handcrafted aesthetic that often evokes nostalgia and emotional warmth (Whizzy Studios, 2024; Prolific Studio, 2024; VMG Studios, 2024). On the other hand, three-dimensional (3D) animation offers immersive realism, dynamic camera movements, and richly textured environments that can deeply draw viewers into the story (Whizzy Studios, 2024; Prolific Studio, 2024; F-Learning Studio, 2024). By combining both, creators can leverage the expressive charm of 2D with the immersive depth of 3D, producing a more layered and engaging viewing experience (Whizzy Studios, 2024).

The Rang-Rangs (Figure 1) is a punk rock band based in Jakarta, formed in 2016, consisting of *Mika Tobing* (bass and vocals), *Miko Tobing* (guitar and background vocals), and *Bagas Raka* (drums). Despite having over 22,700 monthly Spotify listeners, one released album, and four singles, their visual media presence remains limited to a single live-action music video.

Figure 1

The Rang- Rangs Logo

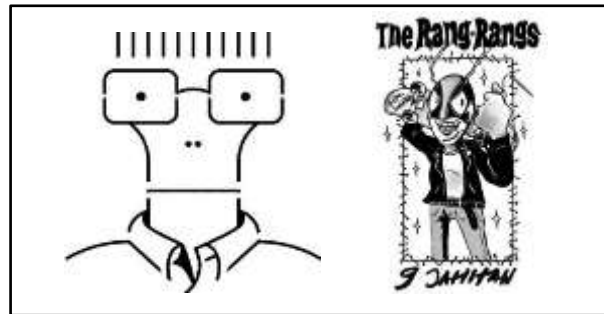


Their mascot, “Johnny” inspired by another punk-rock band known as Descendents (see Figure 2), appears regularly in posters and promotional materials but has never been developed as a fully animated character. The absence of animated representations particularly in both 2D and 3D formats that restricts the potential to strengthen the band’s visual branding and reduces the depth of narrative engagement with their audience. Previous studies have shown that integrating animation with music can enhance audience emotional response, strengthen brand recall, and create a more immersive user experience (Thaiwong & Fukumoto, 2025; Farzinnejad et al., 2024). Without such visual storytelling tools, The Rang-Rangs risk underutilising

a distinctive brand asset and missing opportunities to expand their reach, particularly on digital platforms where music videos are a primary driver of fan interaction and community building.

Figure 2

Character Illustration of Milo Aukerman (singer of Decendents Band) and Johnny (the mascot) of The Rang-Rangs



To address this gap, the primary aim of this project is to create two animated music videos: one in 2D animation and one in 3D animation. These videos aim to enrich the band's visual storytelling, provide engaging background visuals for live performances, maintain consistency with their brand identity, and embody their motto "Fun the Mentals". The target audience for this project primarily includes teenagers and young adults aged between 13 and 30 years old who are passionate about punk rock music and have an appreciation for animated visual content. This group consists of both male and female fans, often from middle to upper-middle-income backgrounds, who are active participants in music festivals, online music communities, and social media engagement with their favourite bands. Psychographically, they tend to value creativity, authenticity, and energetic self-expression, aligning closely with The Rang-Rangs' ethos.

The scope of the project includes concept development, animation production, and final editing of two music videos: "*Engkau dalam Semua Perjalanan*", a 2D hand-drawn black-and-white animation that evolves into fluid motion, and "*Caballero*", a 3D animated video set in a skatepark with a gaming-inspired aesthetic. With a combined runtime of 7 minutes and 32 seconds, the outputs were developed using industry-standard creative tools such as Blender, Adobe Premiere Pro, Adobe After Effects, Adobe Illustrator, Procreate, Sketchbook, Canva, and Figma. Beyond providing immediate creative outputs for the band, the project demonstrates how animation can function as both a branding strategy and an industry-relevant practice, offering independent musicians a scalable and innovative means of enhancing audience connection.

LITERATURE REVIEW

Music Videos as a Medium for Audience Engagement

Music videos have long been recognised as a powerful medium for enhancing audience engagement, allowing artists to communicate their identity, brand values, and creative vision beyond the auditory experience (Vernallis, 2013). Through the integration of moving images, colour palettes, and visual symbolism, music videos enable artists to build narratives that resonate with audiences on an emotional

and cognitive level. This visual storytelling not only strengthens the listener's emotional connection to the music but also provides an additional sensory layer that can influence interpretation and meaning.

Empirical research has demonstrated that combining compelling visual elements with music can significantly improve memory recall, emotional impact, and long-term audience loyalty (Jäncke, 2008; Thaiwong & Fukumoto, 2025). The synchronization of visual rhythm with auditory tempo has been shown to enhance immersion and emotional engagement; in effect, when imagery and music share mood congruence, viewers report stronger narrative involvement and a deeper sense of absorption (Zhang & Asano, 2024). This synergy between sound and image transforms a musical piece into a multi-dimensional artistic product, offering more opportunities for audience interaction.

Furthermore, in the current digital media landscape, music videos have evolved from being supplementary promotional tools to becoming central elements of music marketing strategies. Platforms such as YouTube, Instagram, and TikTok have fundamentally transformed how audiences discover music, with visual content often serving as the primary entry point for new listeners (Auxier & Rawat, 2024). In short, bite-sized video clips which often extracted from music videos have become viral marketing tools that significantly increase discoverability and audience reach (TikTok Music Impact Report, 2023).

For emerging bands with niche or developing audiences, such as The Rang-Rangs, music videos offer a critical opportunity to establish a distinctive visual identity and expand brand visibility. By crafting a cohesive aesthetic across different productions, bands can reinforce their brand narrative, maintain consistency in audience perception, and cultivate a loyal fan base. Moreover, music videos allow for experimentation in style and storytelling, enabling artists to appeal to diverse audience segments without compromising their core identity. This makes them not just artistic expressions but also strategic tools for positioning and differentiation within a competitive music industry.

Animation in Music Promotion

Animation offers unique and compelling advantages for music videos that traditional live-action approaches simply cannot match. It provides artists with the creative freedom to explore environments, characters, and narratives that may be impossible or cost-prohibitive to produce in live formats. This creative flexibility empowers musicians to translate their emotional and thematic vision directly onto the screen, regardless of physical or logistical constraints (Yellowbrick, 2024).

Moreover, animated videos have a remarkable ability to offer aesthetic consistency over time and across different platforms. Whether rendered on a stage backdrop for live performances or formatted for quick social media consumption, animations maintain their visual style without the variability inherent in live-action production. This consistency strengthens brand recognition and can help reinforce the artist's identity across varied contexts (Robert DeVico, 2024).

Besides, animated mascots developed over time can evolve into powerful brand symbols, functioning not only as visual identifiers but also as emotional touchpoints for audiences. A prime example of this is Gorillaz, a British virtual band created by Damon Albarn and Jamie Hewlett in 1998. The band is portrayed entirely through four animated characters like 2-D, Murdoc Niccals, Noodle, and Russel Hobbs which each with their own fictional backstory. These personas were not merely stylistic embellishments; they became core to the band's identity and have evolved into cultural icons in their own right (Hey, 2005). Therefore, fully animating a mascot like "Johnny" may similarly enhance The Rang-Rangs' brand recognition and engagement, helping fans form deeper, more personal connections with the band.

Animation lends itself to creative communication beyond literal representation. It enables the expression of abstract emotions, internal experiences, or conceptual ideas through visual metaphors that resonate more profoundly than conventional imagery. This form of storytelling can elevate a music video into an emotionally immersive journey, enabling artists to engage audiences in imaginative and emotionally layered ways (Cai, 2024)

Branding and Mascot Development in the Music Industry

Generally, mascots in music are not merely decorative but serve as symbolic embodiments of a band's identity, values, and attitude (Lury, 2004). They function as narrative devices, offering audiences a tangible way to connect with an otherwise abstract musical persona. Studies in marketing and entertainment media have consistently shown that visual characters associated with a brand can enhance recognition, strengthen emotional attachment, and increase merchandise potential by providing a consistent and memorable visual cue (Martínez & Olivares, 2019).

In music culture, mascots have often transcended their initial purpose to become cultural touchstones. For instance, Iron Maiden's mascot "Eddie" is not only featured on album covers and stage sets but has evolved into a central storytelling element for the band, appearing in comic books, video games, and even collectible figurines. Similarly, in the domain of virtual music acts, the British band Gorillaz relies entirely on animated characters such as 2-D, Murdoc Niccals, Noodle, and Russel Hobbs—as its public face. These personas, each with their own backstory, not only act as creative avatars but also facilitate a unique form of multimedia storytelling that spans music, video, web, and live performance. Their fictional identity drives fandom by bridging the gap between fantasy and audience interaction (Melvin, 2009).

Moreover, mascots in music also act as strategic branding tools in an increasingly visual and digital entertainment landscape. With the rise of social media, streaming platforms, and virtual concerts, a well-developed mascot can easily be adapted for digital avatars, augmented reality (AR) experiences, and branded merchandise collaborations. This multi-platform adaptability allows for continuous audience interaction beyond the music itself, fostering brand loyalty.

For The Rang-Rangs, the lack of a fully animated "Johnny" represents a missed opportunity to unify their brand identity across live performances, music videos, and merchandise. A well-developed, consistently used mascot could serve as a bridge between the band's artistic narrative and its commercial potential, positioning "Johnny" not just as a logo but as an active participant in the band's storytelling and fan engagement strategy.

2D and 3D Animation Techniques in Music Video Production

The choice between 2D and 3D animation plays a critical role in shaping the aesthetics, narrative tone, and emotional impact of a music video. Each medium carries its own visual language and cultural associations, which influence how audiences interpret the work.

2D animation, often rooted in traditional hand-drawn methods or contemporary vector-based techniques, is closely associated with warmth, nostalgia, and expressive charm. Its flatness and stylization lend themselves well to playful, humorous, and emotionally light-hearted themes. For instance, bands such as Gorillaz have demonstrated how 2D animated personas can sustain a long-term visual identity while remaining flexible for experimentation across music videos, merchandise, and live projections. The simplicity of 2D visuals can also amplify the symbolic and metaphorical qualities of a song, making it easier for audiences to connect with abstract or surreal concepts, a strength also noted in discussions of hybrid animation practices (Rosita, 2025).

On the other hand, 3D animation provides greater visual depth, realism, and cinematic dynamism. With advanced rendering techniques and motion-capture integration, 3D animation allows music videos to simulate immersive environments, dynamic camera movements, and lifelike character performances (Kerlow, 2009). This makes it particularly effective for high-energy, action-driven sequences or narratives that rely on world-building and spectacle. An example is Daft Punk's visual collaborations that integrate futuristic 3D-inspired aesthetics, reinforcing their brand as technologically forward and otherworldly.

Increasingly, hybrid approaches combine both 2D and 3D techniques, reflecting broader trends in multimedia production. Such integration allows creators to harness the nostalgic and illustrative appeal of 2D alongside the immersive possibilities of 3D. Rall (2017) notes that the blending of these techniques enables a more versatile and layered storytelling strategy, appealing simultaneously to audiences drawn to stylized artistry and those seeking cinematic realism. For music groups like The Rang-Rangs, producing both 2D and 3D animated videos strategically expands their creative bandwidth. While 2D may enhance their playful and quirky identity, 3D can elevate their production value for audiences who expect more dynamic, visually rich experiences. This dual approach strengthens cross-audience appeal and reinforces the band's versatility within an increasingly competitive and digitally mediated music landscape.

Music Videos as Live Performance Assets

Music videos, particularly animated ones, extend beyond digital platforms; they become dynamic elements within live performances that significantly enhance audience immersion and emotional impact. Visuals projected during concerts help create a multi-sensory experience where sight, sound, and movement converge to deepen the audience's engagement with the music. LED screens, commonly used in modern concert design, allow artists to synchronize vivid visuals with live music, reinforcing thematic elements and emotional cues embedded in the performance (LED Craft Team, 2024).

Beyond LED screens, projection mapping transforms static surfaces, such as stage sets, backdrops, or even architectural elements, into dynamic canvases. This technique enables audiovisual storytelling: visuals can respond precisely to musical tempo, melodies, or lyrics, creating a real-time narrative layer that immersive shows demand. Interactive technologies play a pivotal role as well; for example, augmented reality (AR) elements have been implemented at major festivals like Coachella, allowing both in-person and at-home viewers to experience immersive visuals that extend the concert experience virtually (R. Chow, 2022).

These stagings advance the concept of Gesamtkunstwerk, the modern "total artwork," by blending live music with integrated visual elements in real time. High-tech presentations, such as those seen in arenas or the Las Vegas Sphere, blur the lines between the performer and the environment, fostering a communal experience that transcends traditional concert boundaries Financial Times Architectural Digest.

For independent bands like The Rang-Rangs, animated music videos can serve as flexible, multi-platform assets: they can be projected during live shows, used in promotional campaigns, and adapted for social media teasers or behind-the-scenes content. By integrating visuals into live performance and digital marketing, the band maximizes their creative investment and reinforces their brand identity in both physical and virtual spaces.

The Gap and Project Significance

Despite the established value of animated music videos and mascots in strengthening brand identity, The Rang Rangs have yet to pursue these strategies. They currently have only one live-action music video and have not animated their mascot, "Johnny." This is a missed opportunity. Research indicates that animated videos enhance brand visibility and recognition by combining visual storytelling, motion design, and narrative cohesion, which fosters emotional engagement and memorability. Without this, the band's

promotional materials remain visually static, reducing their ability to connect emotionally with fans or stand out in today's competitive digital space.

Moreover, leveraging multiple formats such as both 2D and 3D animations aligns with broader audience expectations. 2D brings charm and expressive warmth, while 3D provides richness, depth, and modernity. Marketing analyses confirm that both styles serve distinct engagement goals: 2D is accessible and emotionally resonant, whereas 3D appeals with immersive and realistic storytelling. Creating one video in each medium opens creative and strategic versatility.

The proposed production of two animated music videos, one in 2D and another in 3D, for The Rang Rangs addresses this gap directly. This project aligns with best practices in marketing and contemporary audience engagement. Animated content creates a consistent visual identity, usable across platforms: streaming services, social media, live stage backdrops, and merchandise. It also helps build narrative continuity through the band's mascot, making "Johnny" a unifying visual ambassador. Taken together, this dual-format initiative promises to significantly strengthen the band's brand presence, foster audience emotional connection, and offer flexible assets for performance, promotion, and fan interaction.

METHODOLOGY

This study adopts a practice-based research design (Candy & Edmonds, 2018) where the creation of two animated music videos—one in 2D and another in 3D—functions as both the process and the outcome of inquiry. The methodology combines creative production practices with qualitative feedback to evaluate the effectiveness of animation in strengthening the brand identity of The Rang-Rangs and expanding audience engagement.

Sampling and Data Collection

Qualitative data was collected through purposive sampling involving 15 participants: ten fans of The Rang-Rangs aged between 18 and 30, and five creative industry practitioners with expertise in animation and music production. This mix of participants provided both audience-based and professional perspectives. Data were gathered through two focus group discussions (one with fans and one with practitioners) and five semi-structured interviews, conducted immediately after the first screening of both videos. This approach allowed for both interactive group dynamics and deeper individual insights.

Creative Development Stages

The animation production followed three main stages:

- I. Pre- Production (storyboarding, character and environment design)
- II. Production (2D and 3D animation pipelines including layout, modelling, rigging, animation, compositing, camera, lighting, and rendering)
- III. Postproduction (editing, audio design, visual effects, and final output)

The pre-production phase established visual direction and narrative alignment with the client, while the production and post-production phases emphasized technical execution and refinement.

Pre-production Stage

Storyboarding

Storyboarding entails creating a visual outline of the sequence of events in a story. It consists of drawings or images arranged in order to pre-visualize the animation or film, facilitating the planning of shots, scenes, and transitions. For both the studio and the client, storyboards are essential for visualizing the movie. The storyboard for “*Engkau Dalam Semua Perjalanan*” opens with an ambulance rushing down the road, setting a tone of urgency and emotional depth. It transitions to The Rang-Rangs’ logo before focusing on twins Mika and Miko, grieving their mother’s loss. Bagas appears, offering comfort, while the twins visit their mother’s grave in a poignant scene of remembrance. The narrative then shifts to the band playing music as a coping mechanism, intercut with Mika and Miko symbolically connecting with their mother through a tree. As the twins rise and run, the story returns to the band’s unity and passion, culminating in an image of their mother pregnant which signifying the cycle of life and enduring presence of maternal love.

Figure 3

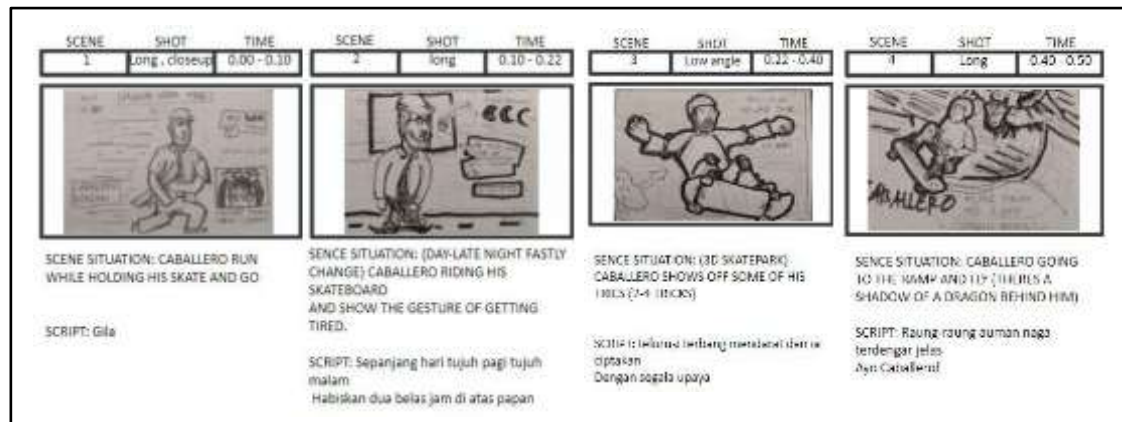
Example of Storyboarding Sequence (Engkau Dalam Semua Perjalanan)

SCENE	SHOT	TIME	SCENE	SHOT	TIME	SCENE	SHOT	TIME	SCENE	SHOT	TIME
1	Long	0.00 - 0.15	2		0.15 - 0.22	3	Medium	0.20 - 0.32	4	Full	0.32 - 0.44
											
SCENE SITUATION: THE AMBULANCE RUNNING (MIKA, MIKO AND BAGAS INSIDE)			SCENE SITUATION: (ENTERING FROM THE TOP) THE RANG-RANGS (FLICKERING)			SCENE SITUATION: MIKO & MIKA ENTERING FROM LEFT & RIGHT SIDE WITH SAD FACE AND BAGAS EMBRACING THEM. THEY REMEMBERING MIKA & MIKO'S MOM			SCENE SITUATION: MIKA & MIKO ACCOMPANIED BY BAGAS ARE WORNING TO THE MOTHER'S GRAVE		
SCRIPT: -			SCRIPT: -			SCRIPT: kileuan air mataku, Berhutang permit padamu Oh Ibu, selalu			SCRIPT: Sekarang sudah waktuku Merawat rumah barumu, Sirami semua semua		

Meanwhile, the storyboard for "Caballero" opens with Caballero running, setting an energetic tone and highlighting his determination. Scenes of him skateboarding from morning to night showcase his passion, skills, and dedication. The skatepark becomes a central space for his practice, while the narrative blends with Mika and the band performing, linking skateboarding and music as shared expressions of creativity. The animation closes with a close-up of Caballero, emphasizing his personal journey and achievements.

Figure 4

Example of Storyboarding Sequence (Caballero)



Design

This process centres on crafting the visual style and aesthetic of the project. It encompasses character design, environment design, and the creation of various visual elements to be used in the animation or film. Each modelling sheet features an illustration of the character's final appearance, including a full-body image, a turnaround showcasing different angles, several drawings depicting various expressions to convey the character's personality, and sketches estimating how the character might act or move in different situations. So, detailed and visually engaging designs were created for the main characters to meet the client's requirements for the music videos “*Engkau Dalam Semua Perjalanan*” and “*Caballero*”. This process ensures that the characters are not only appealing but also accurately represent the story and its themes.

Figure 5

Character Design for The Band Rang- Rangs Member and Caballero



Production Stage (2D Animation)

Layout and Background

In this step, scenes are set up with detailed drawings of the backgrounds and environments. The layout artist positions characters and props within these settings, ensuring consistency and perspective throughout the animation. A layout is essentially a rough to clean drawing, or a black and white version of the final background, with marked bleed edges of the frame showing camera positions and rough indications of the characters' positions to outline their movements. This serves as a map for the animators to follow. Background painting takes this layout and adds colour, often separating it into different depth levels or layers, ready to be sent to the compositing department for the final film.

Figure 6

Layout in College (left) and Background in the Train (right)

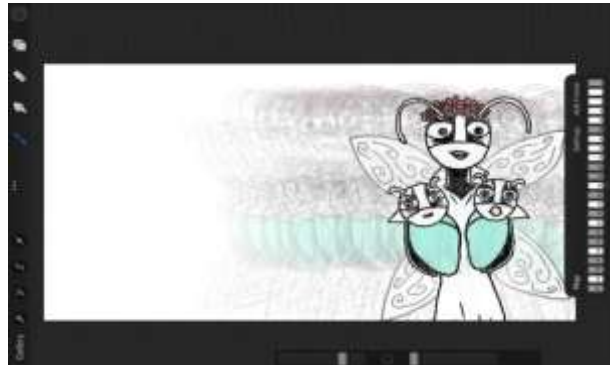


Animation

This is where the actual movement is created. Animators draw frame-by-frame or use software to create sequences of images that give the illusion of movement. Animation typically begins a little later than layout design. Once some layout designs are available, animators can use them as "rough backgrounds" for their characters to act on. By leveraging their drawing skills, acting abilities, proficiency with animation software, and knowledge of the 12 principles of animation, animators can make their characters "perform" within their assigned scenes, similar to how actors perform in live-action films. Currently, the two most popular 2D animation techniques are cut-out and hand-drawn animation.

Figure 7

Frame by Frame Animation



Compositing

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Figure 8

Rain Effects are Drawn in Three Different Layers



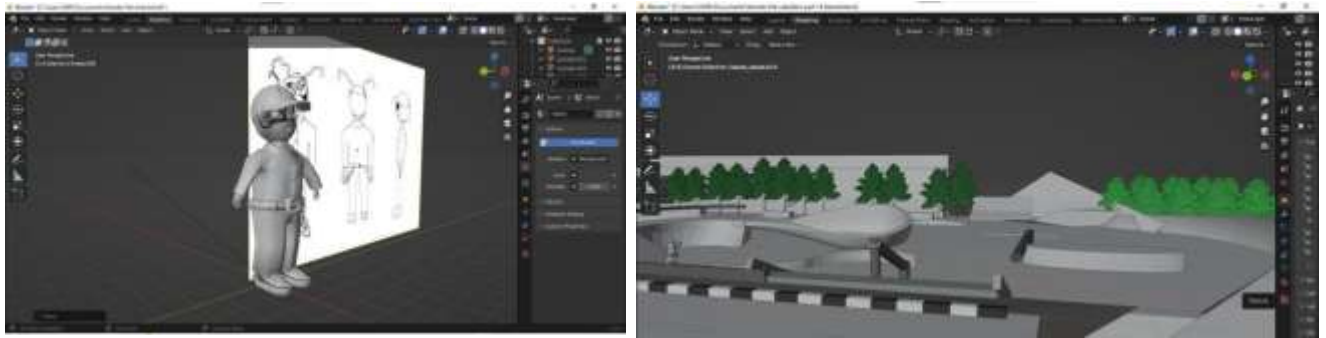
Production Stage (3D Animation)

Modelling

In this process, 3D models of characters, props, and environments are created using Blender. These models are constructed from a mesh of polygons to form the intended shapes. An essential aspect of developing 3D character models, particularly humans and creatures, is the careful consideration of circular muscles, such as those surrounding the mouth and eyes. Modelling represents a crucial stage in the 3D animation pipeline, where the geometric surfaces are built to provide realistic detailing for characters and objects through 3D modelling techniques. This process ensures that the models possess the necessary complexity and detail to appear lifelike and convincing. Discussions on 3D modelling also highlight cost and time considerations, which play an important role in project planning and execution.

Figure 9

The 3D Modelling was Guided by the Character Design Miko (left) and The 3D Modelling Environment Skatepark

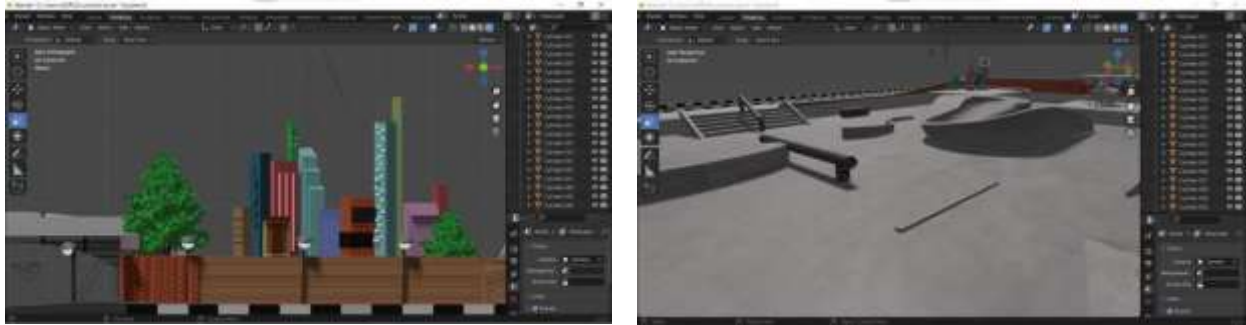


Texturing

3D Texturing involves taking a 2D image and "wrapping" it around a 3D object. Here, the artist applies realistic textures such as colour, clothing, hair, and surface properties to make characters and environments look smoother and more visually appealing. After finalizing textures on colour keys, these textures are used in 3D environments and models. The key to successful 3D texturing is effectively applying 2D images onto 3D objects. Texturing adds colours, patterns, and surface details to the models, enhancing their realism or achieving a specific stylized look as required by the project.

Figure 10

The 3D Texturing in City (left) and The 3D Texturing in Skatepark (right)

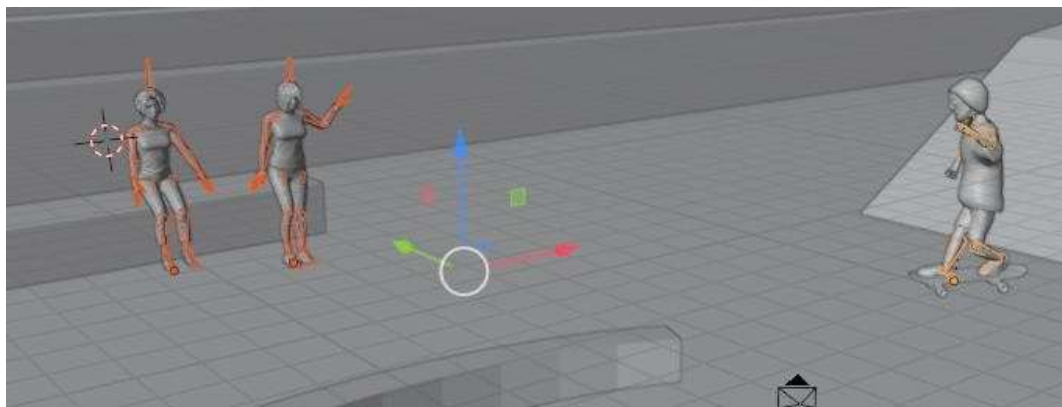


Rigging

During the rigging process, a skeleton structure is integrated into the 3D character or object, allowing animators to move different parts of the geometric object or character quickly and efficiently. Each character has a unique way of rigging, tailored to its specific movements. For example, your characters do not need as many bones as real people or creatures. While humans have 32 backbones, your characters only require as many bones as necessary for their movements. Rigging involves creating this skeleton, enabling the models to be animated by defining how they move and interact with each other.

Figure 11

Control Rig Character in Skatepark



Animation

This stage is the most critical but time-consuming. It is where movements, positioning, rotating, and scaling are created to mimic different poses, giving the animation its sense of motion. In some 3D animations, characters need accessories like hats, shoes, glasses, and backpacks. Artists design these objects so that animators can easily switch between different states using animation techniques. Similar to 2D animation, this step involves creating the movement of characters and objects. In 3D, animators manipulate the rigged models to produce lifelike or stylized animations.

Figure 12

3D Animation using Keyframe in Mika

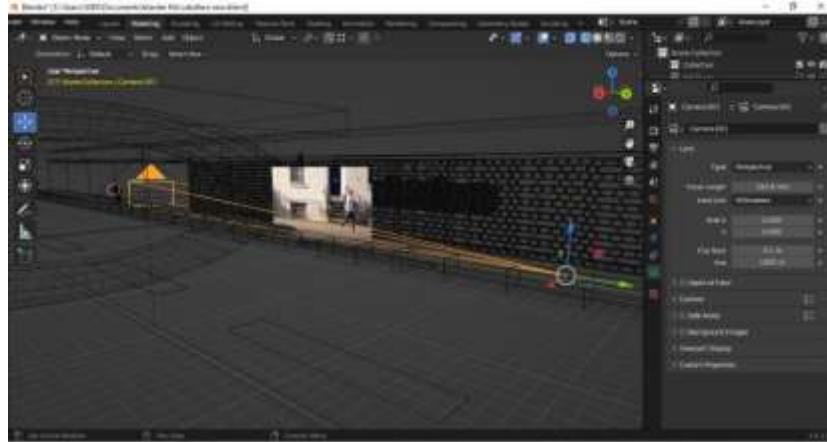


Camera Movement

This step involves setting up and animating virtual cameras within the 3D scene. Camera movement plays a crucial role in adding dynamism and depth to the animation, significantly enhancing the storytelling. By simulating real-world cinematography techniques, such as panning, zooming, and tracking shots, virtual cameras help convey emotion, focus the viewer's attention, and create a more immersive experience. Effective camera movement can transform a static scene into a dynamic and engaging visual narrative, guiding the audience's perspective and amplifying the overall impact of the animation.

Figure 13

Camera Movement follow Caballero Movement



Lighting and Rendering

In 3D animation, lighting is crucial for supporting the story, conveying the mood of a shot, and visually depicting the location, time of day, and even the weather. Proper lighting enhances realism by setting the tone and atmosphere, making the scene feel authentic and immersive. Combining various lighting techniques helps make the set or the models appear realistic. Rendering, the final stage of the 3D animation pipeline, involves generating the final images or frames from the 3D models and scenes. This process is computationally intensive and includes rendering each scene in multiple layers such as background, colours, foreground, highlights, shadows, and objects to achieve a polished 3D look.

Figure 14

Lighting Lamp during Night in Rendering Process



Post-production Stage

Video Sequence Compiling

Video sequence compiling is the process of taking all the individual rendered or animated sequences and assembling them into a coherent video timeline. This step is crucial for ensuring that the narrative flows smoothly and that all scenes are in their proper order. The compiled sequence acts as a blueprint for the final video, enabling the production team to verify that the story is told effectively and logically.

Figure 15

Video Sequence Compiling in Caballero Music Video



Video Editing

Video editing involves a detailed refinement of the compiled sequences. Editors trim excess footage, cut and splice scenes, and add transitions to create a polished, seamless final product. This stage may also include adjusting the pacing and rhythm of the video to enhance storytelling, ensuring that the video is engaging and maintains the viewer's interest. Editors work closely with directors and producers to align the final edit with the creative vision of the project.

Figure 16

Video Editing using Adobe After Effects



Audio

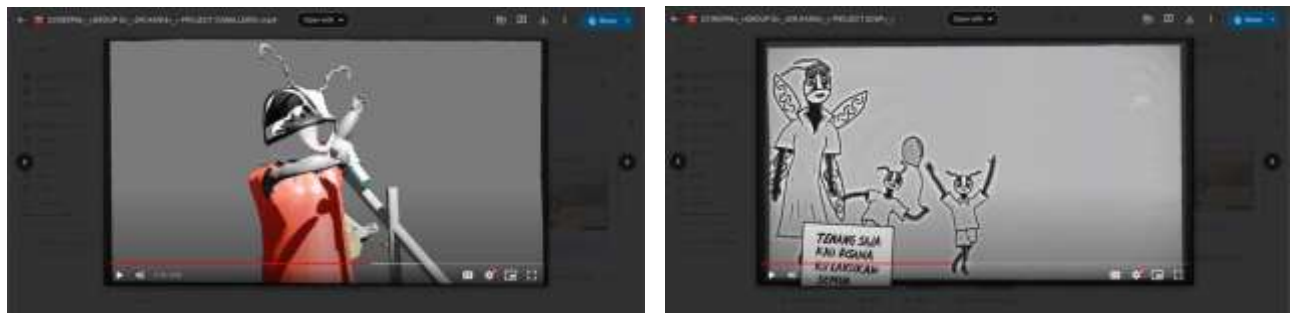
Audio post-production is where sound effects, dialogue, and music are meticulously added and synchronized with the video. This step is essential for creating a fully immersive experience, as audio engineers work to ensure that every sound element enhances the visuals and supports the narrative. Proper audio mixing balances dialogue, sound effects, and background music, contributing to the overall mood and emotional impact of the video.

Final Output

The final output is the concluding phase of post-production, where the edited video is exported in its final format and resolution. This step ensures that the video meets all technical requirements for its intended distribution channels, whether for online streaming, television broadcasting, or theatrical release. The final output is carefully reviewed to ensure quality and consistency, and any final adjustments are made to guarantee that the video is ready for its audience.

Figure 17

Final Output “Engkau Dalam Semua Perjalanan (left) and Caballero (right)”



Qualitative Data Analysis

The audience and practitioner feedback were transcribed and analysed thematically using Braun and Clarke's (2006) six-step framework. This process began with familiarisation through repeated reading of transcripts, followed by inductive coding of participant responses. Codes were then collated into broader categories, which developed into key themes such as emotional engagement, branding clarity, and audience recall. These themes provided structured insights into how animation influenced both the affective and cognitive responses of the viewers.

To ensure trustworthiness, multiple validation strategies were employed. Triangulation was achieved by comparing data from different participant groups such as fans, creative industry practitioners, and the client, while also situating findings against established theories in animation and music video studies. Member checking was conducted by sharing preliminary interpretations with selected participants, allowing them to confirm or clarify the accuracy of the analysis. An audit trail was maintained throughout the coding process, documenting analytic decisions and researcher reflections to provide transparency. In addition, peer debriefing sessions with academic supervisors further enhanced the dependability and confirmability of the findings.

Through these measures, the study ensured that the analysis was both systematic and credible, strengthening the interpretation of audience feedback and supporting the rigor of practice-based outputs.

FINDINGS AND DISCUSSION

The findings demonstrate that the integration of character design, 3D modelling, and storyboarding contributed significantly to the effectiveness of the animation production process for the music videos *“Engkau Dalam Semua Perjalanan”* and *“Caballero”*. The character design phase produced visually appealing and contextually appropriate characters that aligned with the emotional and thematic direction of each video. For instance, in *“Engkau Dalam Semua Perjalanan”*, the portrayal of twins and symbolic elements such as the tree reinforced the themes of grief, memory, and resilience. This is consistent with previous research that highlights the importance of visual symbolism in enhancing narrative depth and emotional resonance in animation (Wells, 2019; Thomas & Johnston, 1995). Audience responses echoed this, with several participants describing the visuals as “haunting yet comforting,” and noting that the symbolism made the storyline easier to connect with emotionally.

In *“Caballero”*, the use of dynamic poses and skateboard movements reflected the protagonist’s energy, determination, and passion. Storyboarding further emphasized these qualities by establishing clear narrative continuity, mood, and tone. The sequencing of events, from Caballero’s morning practice to evening performances, provided a temporal structure that mirrored his personal growth. This aligns with the argument that effective storyboarding not only ensures production efficiency but also strengthens audience engagement through coherent visual storytelling (Hart, 2020). Audience feedback supported this, with recurring codes such as “relatable journey” and “motivational vibe,” indicating that the temporal sequencing successfully conveyed progression and determination.

From a production standpoint, the findings underscore the significance of attention to detail in modelling and animation. Facial expressions, body movements, and props contributed to creating believable and relatable characters. Such findings reinforce the principle that technical precision in animation, particularly in polygon modelling and movement cycles, plays a crucial role in achieving narrative immersion. Moreover, the combination of music and visual animation demonstrates the potential of cross-media storytelling, where sound and imagery converge to evoke stronger affective responses from the audience. This was triangulated with audience comments highlighting that “music and visuals felt inseparable,” reinforcing Thaiwong and Fukumoto’s (2025) claim that integrated sound-image experiences heighten emotional impact.

The discussion also highlights the broader implications for creative industries. By blending symbolic design with technical execution, the project illustrates how animation can serve as a powerful medium for translating abstract emotional experiences into tangible visual narratives. This supports the view that animation extends beyond entertainment, functioning as a cultural and artistic tool for communication (Furniss, 2008). At the same time, participant feedback such as “the band feels more real with Johnny animated” suggests that branding clarity was enhanced, aligning with Hatch Studios’ (2025) notion of visual identity reinforcement through recurring motifs. Importantly, the collaborative approach adopted in this project emphasizes the value of integrating artistic vision with client requirements, ensuring both aesthetic impact and functional delivery.

Overall, the findings indicate that successful animation production requires a balance between narrative intention, visual design, and technical execution. This balance not only enhances the storytelling impact but also contributes to the growing recognition of animation as a versatile and expressive medium within

both artistic and commercial contexts. By explicitly connecting audience perceptions with theoretical frameworks, the study demonstrates that animation can effectively strengthen emotional engagement, reinforce branding clarity, and enhance audience recall, thereby achieving both artistic and strategic objectives.

CONCLUSION

In conclusion, the production of *“Engkau Dalam Semua Perjalanan”* and *“Caballero”* illustrates the significant role of animation in transforming abstract emotions and symbolic narratives into accessible visual forms that resonate with diverse audiences. Through the integration of character design, 3D modelling, and storyboarding, the project not only met the creative requirements of the client but also revealed how animation can function as both an expressive medium and a communication strategy. The findings demonstrate that visual storytelling has the capacity to convey themes of loss, resilience, determination, and cultural identity with a clarity that extends beyond traditional music video formats. Moreover, the project underscores the importance of aligning technical execution with narrative depth, as the balance between symbolic elements and visual aesthetics proved essential in enhancing audience engagement. Ultimately, this work emphasizes that animation can serve as a powerful platform for creative industries to explore complex human experiences while simultaneously strengthening brand identity and cultural presence in contemporary media landscapes. For musicians, the project recommends adopting animation as part of a branding strategy to build distinctive and memorable visual identities that complement musical expression. For animators, the findings highlight the need to refine workflow efficiency by balancing symbolic design with technical precision, ensuring that aesthetic quality is achieved without compromising production timelines. For researchers, future studies could investigate the impact of hybrid and emerging animation techniques on audience perception, branding effectiveness, and cross-media storytelling.

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AUTHOR CONTRIBUTIONS

All authors contributed to the study conception and design. Material preparation, data collection, and analysis were performed by all authors.

CONFLICT OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

Informed consent was obtained from all individual participants included in the study.

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