

Live2D Character Illustrations to Increase Engagement on CV. Pustaka Cemerlang's Instagram

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ABSTRACT

Social media platforms like Instagram have become crucial tools for promoting products and services, including in children's education. CV. Increasing audience engagement on social media, especially through interesting content, is challenging for Pustaka Cemerlang. A solution to produce more dynamic and interactive content that engages viewers, particularly young ones, is to use animated characters, particularly those that use Live2D technology. This study uses a qualitative descriptive approach to investigate audience preferences for animation and character design through questionnaires, observations, and interviews. Simple, happy, and instantly identifiable characters are excellent at promoting children's learning and increasing audience engagement with the company's material. This study explores how Live2D character design can enhance visual appeal and engagement with viewers on the Instagram platform of CV. Pustaka Cemerlang.

KEYWORDS

Live2D
Social Media
CV. Pustaka
Cemerlang

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INTRODUCTION

The primary use of social media nowadays is to connect businesses with customers. There are sites like Instagram with great scope for creative and interactive marketing of products or services. The major problem is that there is so much information bombardment that it is difficult to catch the audience. Innovative marketing methods thus become a primary tool in creating interest in content engagement with it. So much in life has changed because of digital technology and advertising concepts, and this is one of them. One of the evolving trends is using animated characters or eye-catching graphics to create content that's more inventive and creative to attract attention on social media (Billa et al., 2023).

Social media has become a dominant mode of interaction between businesses and their audiences. Platforms such as Instagram provide a vast canvas to market products and services in new and interactive ways. However, the most daunting task is to attract the audience amid information overload. Therefore, a creative marketing strategy needs to be devised to engage the audience more and make them interested in the content being presented. The rapid growth of digital technology has impacted many aspects of life, and one of them is how companies promote their brands. Among the trends that are becoming more popular is using cartoon characters and beautiful visual designs to create more innovative and creative content to gain attention on social media (Billa, Rakimahwati, Mayar, & Yaswinda, 2023). Character design is a significant process of creating a visual representation of specific ideas, values, or traits. A successful character design can create an emotional bond with the audience, especially children, who have a very strong sense of imagination and an affinity for visual information. An attractive, memorable, and appealing

character design can be an effective medium to present educational information and entertainment. As observed by Ersidyandhi (2019), not only does a character play the role of being an instrumental character within stories, but also acts as a symbol that bridges the audience to a story. Moreover, a well-crafted character is also instrumental in building a company's reputation, hence becoming an integral part of an overall marketing strategy. The necessity of developing interactive educational media for kids is increasingly urgent, particularly in the wake of growing concern regarding gadget addiction. MetroTV reported that up to 3,000 children and adolescents have been admitted to Menur Mental Hospital in Surabaya between January and July 2024, with most cases involving gadget addiction disorders. The hospital's director, Vitria Dewi, revealed that the number of cases of mental illnesses among children has been increasing regularly over the past two years, averaging 50 children daily. In fact, as of 2023, the number of child patients was 4,765 cases. This data raises the issue of monitoring children's phone usage and what they are viewing, and the necessity of providing alternative media that is more positive, interactive, and educational.

This is also reflective of the reality that, as comfortable as the virtual world is, it also holds high risks for the mental health of children. Placed under too much screen time and out of control, children can risk all sorts of negative effects, from attention deficits and socialization issues to extreme mental health issues. Therefore, presenting educational media with entertaining and stimulating learning opportunities serves as a crucial antidote to redirect children's dependence on passive digital use. Here, bringing variety to learning mechanisms becomes crucial to engage children (Ningsih, Nur, Fadilah, & Hidayah, 2025). Therefore, character development that addresses children's psychological and developmental requirements becomes necessary for developing effective communication. A character is not only an attractive figure but can also turn into a fantasy friend that assists children in learning through play. Expressive character designs, rich colors, and comprehensible narratives can generate curiosity and retain children, ultimately leading to more natural and pleasurable learning experiences.

Live2D is an animation technology that brings 2D characters to life and allows them to interact realistically and dynamically. Through the assistance of various devices and processes, the technology imposes smooth animation effects on static sketches, making the characters appear to be alive. The application of Live2D technology in social media applications can significantly boost the appeal of content, enabling characters to connect with audiences more effectively. Characters developed through Live2D technology can bring stories or information to life, delivering richer experiences to viewers, especially children who are highly sensitive to captivating visual effects. The presence of animation technologies such as Live2D also makes content more interactive and malleable. Characters can speak, show emotions, and express simple interactions such as commenting on statements or greeting audiences, which makes communication more dynamic and intimate. This advantage can be utilized by schools and children's book publishers to complement their educational materials and enhance audience interaction on social media sites.

One of the best companies for this situation is CV. Pustaka Cemerlang. This firm, founded in 2014, focuses on creating quality children's books. Pustaka Cemerlang, from the start, has strived to innovate continuously by creating books that are an ideal fit with the development requirements of children. Through repeated efforts in providing quality learning materials, the company has not only focused efforts on providing informative content but also on ensuring that the content is enjoyable, thus having a positive effect on children's creativity and intellectual growth. However, with the development of the digital era and shifts in the media consumption pattern, CV. Pustaka Cemerlang is faced with new

challenges to optimize its social media marketing efficiency. Audience engagement on social platforms such as Instagram remains relatively low. Static data, presented in the form of plain posters or plain product pictures, is no longer appealing to audiences who increasingly seek dynamic, interactive, and engaging content.

According to Al Fariz, Supriadi, and Resmadi (2018), there is a requirement for a more adaptive and innovative marketing communication approach to address changes in audience behavior. To address this need, CV. Pustaka Cemerlang must adopt innovative steps, such as leveraging the potential of interactive animation based on Live2D technology as part of its social media promotion strategy. With the advent of a mobile character that can talk and engage, it is anticipated that readers, particularly children and their parents, will become closer and more engaged with the material published. As an added benefit, the use of animated characters can also be utilized in reinforcing the company's brand image. The character can become an intangible visual icon, creating empathy with target consumers and establishing customer loyalty. With a developed design and innovative execution, such a character can move beyond being a mere promotional tool to that of a long-lasting icon projecting the company's principles and vision. Overall, in the face of increasing gadget addiction in children, literacy and education companies must offer positive and engaging alternatives using digital media. Adopting innovative animation technologies such as Live2D, in conjunction with context-relevant and pedagogic character designs, is one possible solution to this problem. By this approach, companies not only become more effective in their marketing efforts but also have a positive impact on the psychological and cognitive development of children.

METHOD

This study uses a qualitative descriptive approach that presents and describes the topic in its natural state, considering the circumstances and conditions when the research takes place (Sugiyono, 2017). The study aims to explore Live2D character design to increase interactivity on the Instagram of CV. Pustaka Cemerlang. Interviews were conducted with children, an illustrator, and the business owner to gather primary data on their favorite character and animation designs. Furthermore, an observation was made on the Instagram account of CV. Pustaka Cemerlang and the Shinna character from BMKG. A survey was also conducted to find out what the audience thought about the existing content.

The first interview in the data collection process was conducted with Mrs. Fitri, owner of CV. Pustaka Cemerlang, on 13 October 2024 at the company's office. The prime objective of this interview was to gather information on the company's vision, mission, products of the company, and the company's expectations regarding character development in their educational books. CV. Pustaka Cemerlang, established in 2014, has been long established in publishing children's books in Indonesia. With the rapid development of the times and the shift in the pattern of media consumption among society, the company now faces extremely serious challenges, particularly in transitioning from traditional door-to-door sales methods to newer digital marketing strategies.

Great emphasis is placed on activities to increase the efficiency of online sales and introduce product innovations to others. Mrs. Fitri explained in the interview that CV. Pustaka Cemerlang's purpose is to be one of Indonesia's leading publishers, enabling the development of children's literacy using high-quality, pedagogical, and helpful products in line with Islamic teachings. This mission is supported by the company's vision, which is to offer books that are not only engaging in terms of content and imagery but also helpful to the moral character development of children. Mrs. Fitri went on to say that they focused on

making a tangible contribution to Indonesian children's education by giving utmost importance to moral, social, and religious values in all their products. But Mrs. Fitri also voiced openly some of the challenges currently being experienced by CV. Pustaka Cemerlang, such as the rate of interaction and engagement on social media, particularly on Instagram, is low. The firm has posted various types of content, such as posters, product photos, and announcements of events, but the audience response has been very low.

This issue became a serious concern as social media so happens to be one of the key conduits towards reaching younger generations and parents in the current digitally empowered world. On enhancing interaction, Mrs. Fitri expressed that she hopes such characters developed in their books and online would contribute to beefing up the pedagogical side while simultaneously adhering to Islamic teachings, which include the very core essence of their company's mission and vision. She stressed ensuring that the characters not only look nice but also depict strong moral lessons, hence positively affecting children's learning.

To analyze the data gathered from this interview, a Thematic Analysis approach (Braun & Clarke, 2006) was utilized in an attempt to identify important themes regarding book product quality, promotional strategies, the necessity of adapting to digital marketing, and the urgent need for character development that is aligned with educational and Islamic values. In addition to the interview with Mrs. Fitri, a follow-up interview was also performed for Mr. Antasena, who is one of the illustrators of CV. Pustaka Cemerlang works in the creative activities of the company.

The interview took place on January 22, 2025, through WhatsApp chat to facilitate long-distance communication. The purpose of this interview was to learn the illustrator's view of creating character designs, especially in the context of promoting engagement through social media. During the interview, Mr. Antasena shared that the successful Live2D character design for social media would be centered on cheerful and bright expressions, bright and attractive colors, and the selection of accessories or visual elements mirroring children's everyday life. Mr. Antasena added that characters created should be uncomplicated to the extent that children can easily identify them but yet expressive enough to capture and maintain the audience's attention for a considerable duration. Characters, according to him, should not only be visual draws but also complement children's learning and development processes. The findings of this interview highlight the importance of creating characters that not only look beautiful but also carry educational value, thereby improving communication and interaction through digital media.

Gaya ilustrasi mana yang paling disukai oleh anak Anda?

33 responses

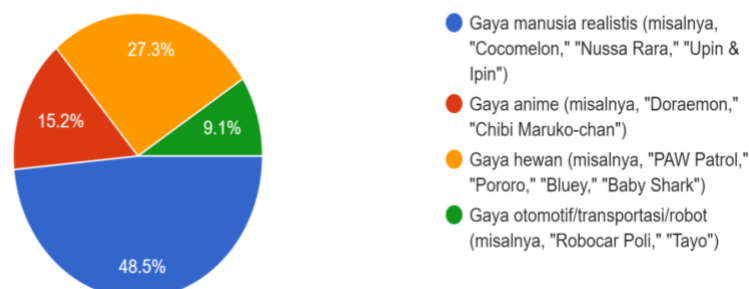


Figure 1. Questionnaire Results

For the thematic analysis of the data from this second interview, the Thematic Analysis approach was again used, and through that, it became possible to see prominent themes such as the necessity of creating easy but expressive characters, the utilization of colors as a means of communication, and the necessity of creating fun and interesting interactions on social media sites.

Survey results indicated that 48% of respondents between the ages of 20-50 have small children, which influences their decisions for kid-friendly content. With an Instagram usage rate of 48.5%, this suggests that there is still much mileage to be gained in engaging the audience with more attractive content. YouTube is the second-most popular at 93.9%, while 63% of children watch animated videos regularly. 54.5% of the respondents acknowledged the presence of Live2D animation technology, while 57% felt that Live2D characters could engage children's attention and interact with the content. The above implies that if Live2D character designs are used on CV. Pustaka Cemerlang's Instagram, the audience, particularly children, will engage interest in the more creative and educational content.

The BMKG Live2D character Shinna is a novel vision for communicating and popularizing meteorological data, especially for the younger audience. This bone-structure anime-styled design is pleasing and amicable, with huge eyes, a wide, happy smile, and hair dyed in colors such as pastel or white, exquisitely detailing, radiating friendliness and approachability. Another distinguishing feature is the wave-pattern decoration that symbolizes meteorological manifestations, thus consolidating Shinna's naming as the BMKG mascot. While in appearance Shinna arrayed in an official BMKG uniform complete with badges and institutional symbols, the informal anime character look does indeed carry an air of professionalism and authority. The very amiable aura and dynamic gestures further adorn this character in promoting approachable information dissemination. On the flip side, such casual characters may not appeal as much to the older target audience or anyone unfamiliar with the style. Nevertheless, the majority of teenagers and fans of Japanese pop culture really would wish to engage with her.

RESULT AND DISCUSSION

The Concept Design stage is a comprehensive process that brings the character Puspa to life through a combination of narrative, visual, and technical elements in a structured manner. The design of this character is derived from information gathered via questionnaires, interviews, and observation. Through these tools, the character was created as a learning companion for children, making the process of education enjoyable as well as imparting good values and assisting in developing good habits from a young age.

The title of the character is "Puspa," which translates as "Perpustakaan Untuk Sumber Pengetahuan Ananda" or "Library for Your Source of Knowledge." It was chosen because it expresses the primary task of the character in providing the development of literacy among children. The character "Puspa," which signifies "flower," symbolizes development, happiness, and beauty, traits which coincide with the personality of the character. The name was selected to be easy to remember, to be positive in connotation, and to convey an educational message that children can identify with. Furthermore, the name is aligned with the vision of CV. Pustaka Cemerlang strives to spread quality literacy, promote creativity, and encourage children's love for learning. Puspa is illustrated as a 6-year-old girl who is intelligent, active, and ever curious. Her dynamic and lively personality makes her the ideal character to teach children the pleasure of learning to read in a fun and interactive way. Puspa not only teaches children to love reading and learn new things but also imparts values of honesty, patience, gratitude, and kindness to others. She is not only a literacy product

character but also the embodiment of Islamic literacy that aims to generate reading interest and allow children to form desirable habits and desirable behaviors befitting Islamic values.

The Puspa character is designed for learning devices. She embodies CV values. Pustaka Cemerlang, a company that aims to contribute positively towards the development of children through the provision of books and products that are not only educational but also Islamic in orientation. Through Puspa, the company aims to offer children an environment where learning is not only fun but also creative and founded on the principles of honesty, kindness, and thankfulness. In addition to promoting literacy and Islamic values, Puspa is designed to be adaptable across various media, including books, social media, and other digital platforms. This allows her to engage children where they are, extending an invitation for them to use educational content in a manner that is both accessible and enjoyable. Puspa signifies CV. Pustaka Cemerlang's commitment to quality literacy for the well-being of children's growth. The company's vision is to facilitate young minds' development through an appreciation of reading and understanding the role in their lives. CV. Pustaka Cemerlang wants to encourage children to be lifelong learners who not only are well-educated academically but are also well-informed about the values that bring about a responsible, caring, and moral community through Puspa.

Visual Concept



Figure 2. Character Form References

The character design for Puspa intentionally adopts a realistic human representation, drawing inspiration from well-known animated figures such as Cocomelon, Nussa Rara, and Upin & Ipin—all of which are widely recognized and adored by young audiences. These references were chosen because they have proven to resonate with children across various cultural backgrounds, particularly in Southeast Asia. The decision to follow this visual style was not arbitrary; it was grounded in responses gathered from children themselves through observational validation, which indicated that designs resembling familiar, joyful characters were more engaging. As such, Puspa's design emphasizes visual appeal, approachability, and emotional warmth.

She is portrayed as a six-year-old Muslim girl with a petite build, a cheerful expression, and an oversized head—common in child-focused animation to emphasize cuteness and emotion. Her facial features are lively and expressive, encouraging instant connection and empathy from viewers. To reflect her active and playful nature, Puspa wears a modest yet flexible Muslim outfit that allows for movement while maintaining religious appropriateness. Small details such as a ribbon and pin featuring the CV. Pustaka Cemerlang

logo are added not only for decorative purposes but also as branding tools that help integrate the character into the visual identity of the publisher's products and digital media presence.

Color Palette



Figure 3. Colors Derived from Pustaka Cemerlang's Logo

With the development of this character, color becomes a central element in creating an overall and unique appearance for children. Colors are used throughout on all levels of the character so that there will be a balanced and enjoyable experience to behold. The utilization of orange and blue as prominent colors is one that not only defines the visual representation of CV. Pustaka Cemerlang is also full of meaning. Orange was selected as it symbolizes cheerfulness, energy, and enthusiasm values embedded in the inquisitive and energetic nature of children. Orange provides a warm and friendly touch, which makes children cheerful and interested in the material. Blue symbolizes professionalism, serenity, and reliability, symbolizing the depth of knowledge and serenity required in learning and education. Mixing these two shades is perfect to express happiness and educational abundance. Both colors of blue and orange used on the character are also derived from the CV. The application of such a use of CV. Pustaka Cemerlang logo creates harmony visually between the character and the company's identity. It brings familiarity to the character while making it associated with being consistent with the CV. Pustaka Cemerlang brand that offers literacy and kids' education.



Figure 4. Child-Friendly Character Color Palette

The character's default color is also borrowed from the most popular animated television show, Nussa Rara, which kids love. The natural skin color and large eyes provide the character with a friendly and warm face, so that kids can relate to the character emotionally. This is crucial in creating intimacy with the character and with the child reader. The accessories of the character consist of bold colors such as yellow and pink, with a welcoming touch and potential to catch the eyes of children. Yellow is the color that signifies brightness and joy, while pink incorporates a soothing and reassuring texture. Incorporating these vibrant colors, which are characteristic of cartoons such as Cocomelon, makes the character dynamic and interesting. With colors familiar and pleasing to children, this figure is designed to be easily welcomed and capture their attention in seeking knowledge.

Design Process



Figure 5. Brainstorming

To develop ideas that were both relevant to the target audience and imaginative in concept, the character design process began with an in-depth brainstorming session, where the initial concept of Puspa served as the primary source of inspiration (Brown & Smith, 2020). During this stage, the creative team explored various aspects, including the character's personality, visual traits, color symbolism, and potential cultural significance. Ideas were generated collaboratively, guided by both research findings and insights from interviews and observations with children and educators. From these discussions, several rough sketches and thematic directions were proposed, reflecting different interpretations of what an engaging and educational character might look like. The brainstorming stage laid the foundation for a structured design process that unfolded through iterative steps—such as sketching, coloring, validation, and refinement—ensuring that every visual and narrative element aligned with both pedagogical objectives and the brand identity of CV. Pustaka Cemerlang. This early conceptualization was crucial for shaping a character that is both meaningful and memorable.

Alternative Characters



Figure 6. Rough Sketches (Left) & Colored Alternative Designs (Right)

Following the initial brainstorming session, three distinct concept sketches of Puspa were developed, each carrying a unique interpretation of a Muslim child character while maintaining the core values of CV. Pustaka Cemerlang. The first version presented Puspa as a cheerful and highly appealing figure for children, wearing a colorful hijab adorned with multiple accessories such as ribbons, pins, and patterned motifs. This design emphasized visual charm and playfulness, aiming to instantly capture children's attention. The second version was more grounded in daily life, featuring casual clothes suitable for both play and study. The hijab was complemented by a two-tailed hairstyle, suggesting an active and energetic personality. The third version took a simpler, more modest approach—Puspa was dressed in a neat school uniform and a plain hijab with minimal accessories, portraying discipline, modesty, and readiness for learning.

Once the line sketches were finalized, the coloring phase began. This step was done directly on the rough sketches to provide a more vibrant and expressive visualization. Color selection was not arbitrary; it was based on color psychology suited to children—bright, warm, and inviting tones that could evoke feelings of joy, curiosity, and comfort. The coloring also helped the designers anticipate how Puspa would appear in animated form, especially when integrated into Live2D technology. By bringing the sketches to life through color, the team was able to assess not only aesthetic appeal but also the emotional resonance each version had with the intended audience—children and their caregivers.



Figure 7. Design Validations from Kindergarteners

After the coloring phase was completed, a direct validation process was conducted with kindergarten children, who represented the primary target audience for the character. This stage was crucial in understanding children's visual preferences and emotional responses. The three character designs—each representing a variation in attire, expression, and accessories—were displayed to the children in a classroom setting. The observation focused on spontaneous reactions such as facial expressions, excitement, and verbal responses. Among the three, the first version, featuring a vibrant hijab and a range of attractive accessories like pins and ribbons, gained the most positive attention. Its colorful and cheerful appearance resonated strongly with the children, making it the most memorable and likable character. This validation confirmed that bright, richly detailed designs tend to create stronger emotional bonds with young viewers.



Figure 8. Line Art (Left) and Coloring (Right)

Based on this feedback, the design team selected the most favored version and proceeded to the line art refinement stage. In this step, the chosen sketch was carefully traced into clean digital lines using vector-based illustration software. This was a critical step in preparing the character for the animation process, as clean line art ensures the clarity and precision required in frame-by-frame or rigged animation (Malik, Prasetya, & Sukmaraga, 2024).

Subsequently, the final colorization process was undertaken. Shading, highlights, and depth were added to enhance realism and dimensionality. The color palette was also optimized to support Live2D rigging, which requires segmented and layered artwork. Particular attention was given to ensuring that facial expressions, accessories, and movement points (e.g., eyes, mouth, arms) could be animated fluidly. As a result, the character was not only visually appealing in static form but also structurally ready to be brought to life in an interactive digital environment that aligns with educational goals.

After the final colorization process was completed, the character design was exported in PSD (Photoshop Document) format, a file type that supports editable layers. The artwork was then meticulously divided into separate, non-merged layers, with each key component—such as hair, face, eyes, mouth, clothing, and accessories—placed on its own individual layer. This layer separation is essential for the Live2D Cubism animation workflow, as it allows animators to manipulate specific parts of the character independently. By organizing the artwork in this way, the rigging and motion creation process becomes more flexible, efficient, and capable of producing smooth, lifelike animations.

Final Design



Figure 9. Final Design

After completing the detailed process of coloring and organizing the character into separate, functional layers, the next critical phase in the production pipeline was rigging using the Live2D Cubism software. Rigging is a fundamental technique in character animation where a virtual skeleton or structure is applied to a two-dimensional design to simulate realistic and responsive motion (Lau et al., 2016). In this stage, each body part—such as the head, eyes, eyebrows, mouth, arms, and accessories—was assigned to specific deformers, joints, and parameter points. These control points are essential to guide how each component behaves during animation, allowing the character to move fluidly and naturally within digital space.

For Puspa, rigging was particularly focused on enhancing expressive movements, such as blinking, smiling, nodding, and waving—actions that are not only visually engaging but also essential in building emotional connections with the audience, especially young children. Each motion was meticulously calibrated to ensure it appeared smooth, not robotic or disjointed. The rigging process also included facial expression variations, enabling Puspa to react to different learning scenarios or interact contextually with viewers through animated content on Instagram or other educational platforms.

Moreover, Live2D rigging allows the character to be interactive, responding to user input or pre-programmed sequences. This interactivity is what transforms Puspa from a mere illustration into a dynamic digital asset, capable of reinforcing messages, guiding learning, or simply entertaining through lifelike animation. The successful rigging phase ensured that Puspa was technically ready to become a fully functional and appealing character in the digital education ecosystem.

CONCLUSIONS

The design of the Live2D character illustration for CV. Pustaka Cemerlang represents a strategic and creative effort to enhance audience engagement, particularly on digital platforms such as Instagram. The resulting character, named Puspa, was carefully crafted to appeal to children while aligning with the company's core values—namely, Islamic principles, educational content, and positive moral development. Puspa is portrayed as a lively, hijab-wearing girl adorned with friendly facial expressions and playful accessories that reflect both innocence and curiosity. This design approach not only captures attention visually but also fosters emotional connection and trust, especially among parents seeking child-friendly content.

The process of creating Puspa was carried out through a well-structured and participatory design method that included brainstorming, visual sketching, color validation with children, and technical refinement for animation. Each phase—starting from conceptual ideation to the detailed line art and final colorization—was directed to ensure that the character could be effectively animated using Live2D Cubism. This meticulous preparation ensured that Puspa's movements would appear smooth, responsive, and expressive in digital interactions.

Importantly, Puspa is not merely a static visual mascot, but a dynamic communication tool that enables two-way interaction between content and audience. Her design is adaptable and scalable across various media, including videos, storytelling content, educational apps, and gamified learning platforms. With this versatility, Puspa has the potential to evolve beyond Instagram and become a central figure in CV. Pustaka Cemerlang's broader mission to deliver interactive, value-based education through innovative digital media. The project thus successfully merges design thinking, pedagogical insight, and technological application into a coherent, impactful solution.

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