

# ULTIMART

Vol. 18, No.1, June 2025

JURNAL KOMUNIKASI VISUAL

ISSN : 1979 - 0716



# ULTIMART

Vol. 18, No.1, June 2025

JURNAL KOMUNIKASI VISUAL

ISSN : 1979 - 0716



ULTIMART: Journal Komunikasi Visual is a journal published by the Faculty of Art and Design, Multimedia Nusantara University (UMN). The Ultimart journal, published twice a year, contains scientific writings and research results from both the academic community within UMN and outside UMN.

**Protector**

UMN Chancellor:  
Dr. Andrey Andoko

**Person in Charge**

Dean of The Faculty of Art and Design:  
M. Cahya M. Daulay, S.Sn., M.Ds.

**Editor-in-Chief**

Salima Hakim, S.Sn., M.Hum.

**Editorial Board**

Christian Aditya, S.Sn., M. Anim.	The Royal Melbourne Institute of Technology
Dr. Rista Ihwanny, S.Hum., M.Si.	Universitas Multimedia Nusantara
Ferdinanda, M.Sn.	Telkom Purwokerto Institute of Technology
Dominika Anggraeni Purwaningsih, S.Sn., M.Anim.	Universitas Multimedia Nusantara
Galih Putra Pamungkas, M.Sn.	Telkom Purwokerto Institute of Technology
Brian Alvin Hananto, S.Sn., M.Ds.	Pelita Harapan University
Lalitya Talitha Pinasthika, M.Ds.	Universitas Multimedia Nusantara
Ahmad Nurzaeni Fauzi, M.Ds.	Universitas Komputer Indonesia

**Artistic and Layout**

Dominika Anggraeni P., S.Sn., M.Anim.  
Adhreza Brahma, S.Ds., M.Ds.

**Editorial Address:**

Universitas Multimedia Nusantara  
Faculty of Art and Design  
Building D Floor 18 Jalan Boulevard Gading Serpong, Tangerang - Banten  
Tel. (021) 5422 0808 / Fax. (021) 5422 0800  
Email: ultimart@umn.ac.id



## TABLE OF CONTENTS

	page
01 <i>Seeking Comfort from Online Strangers: An Analysis of 'Kind Words 2' Game</i> <b>Ni Putu Anindhitha Ayesha Sandra</b>	— 001
02 <i>Adoption of AI-generative Image Tools and Evolving Designer Roles in Indonesia's Advertising Practices</i> <b>Indira Febriany</b>	— 017
03 <i>From Mystique to Muddle: Unresolved Logic in Joko Anwar's Series</i> <b>Fajar Nuswantoro</b>	— 031
04 <i>Fashion Trend Visualization through AI-based Illustration: A Case Study on Fashion Trend Forecast 2025/2026 Strive Book</i> <b>Enrico</b>	— 044
05 <i>Multisensory Stimulation as Rebranding Strategy for Community Empowerment in CIDCO</i> <b>Mariska Legia</b>	— 052
06 <i>Denimalz Mascot Plush Design: A Study on Cute Character Design Principles</i> <b>Jessica Laurencia</b>	— 066
07 <i>Expanding Horizon: Exploring Sustainable Movie Screening Venues for Student Films in Indonesia's Evolving Exhibition Landscape</i> <b>Adilla Amelia and Meilani</b>	— 080
08 <i>Analysis of The Implementation of The Viseme-based Method in Ficusia Animation</i> <b>Selly Artaty Zega, Adric Filbert, Gerson Julyfer Parulian Tambun, and Muhammad Fauzi Ardhi</b>	— 092
09 <i>Visual Identity Redesign of The Gelora Bung Karno Complex</i> <b>Natashia Lim, Ellis Melini, Alfiansyah Zulkarnain, and Kartika Magdalena Suwanto</b>	— 102
10 <i>AI as Aid Tool in Visual Programming Courses at Universitas Multimedia Nusantara</i> <b>Hadi Purnama and Vania Hefira</b>	— 119

## SEEKING COMFORT FROM ONLINE STRANGERS: AN ANALYSIS OF 'KIND WORDS 2' GAME

**Ni Putu Anindhitha Ayesha Sandra**

**Received April. 22, 2025; Revised May. 23, 2025; Accepted June. 09, 2025.**

**Abstract:** In an era where digital communication often lacks emotional resonance, the video game 'Kind Words 2' emerges as a distinctive platform for anonymous, empathetic exchange. This study investigates how anonymous interactions within the game promote emotional support, comfort, and a sense of companionship among players. Employing a mixed-methods approach—including self-observation, online surveys, and semi-structured interviews—the research uncovers key findings: players consistently report feelings of emotional relief, validation, and reduced loneliness after engaging with the community. The study also reveals that anonymity significantly enhances openness and authenticity in communication, allowing players to share vulnerabilities without fear of judgment. These findings demonstrate the game's potential as a digital tool for fostering mental well-being and community resilience. By highlighting how anonymous digital environments can facilitate meaningful social support, this research contributes to ongoing discussions on the therapeutic potential of video games and their role in addressing emotional needs in online spaces.

**Keywords:** 'kind words 2'; anonymous social support; empathy-driven; game design; online community interaction; emotional expression in games

### Introduction

In today's digital age, it is unavoidable for people to use technology as an escape from real-world difficulties, such as seeking consolation from strangers online rather than from those in their immediate surroundings. When it comes to seeking emotional support and wellbeing, the concept of "familiar strangers" is no longer unfamiliar. Familiar Strangers is a social phenomenon that refers to people we routinely see but never contact with. In other words, our connection with these known strangers is one in which both parties choose to ignore each other rather than interact directly (Paulos & Goodman, 2004). For example, if someone buys coffee at the

same cafe every day and then fails to show and disrupts their routine, we will notice right away.

However, there appear to be exceptions to the non-interaction rule with Familiar Strangers: as we move away from our usual encounters with them, we perceive them more as close friends with whom we have direct touch. As a result, we are more inclined to treat our coffee shop Familiar Strangers in other locations, such as distant cities, with courtesy than we do in our own area. Similarly, when we see them in sporadic situations such as accidents, injuries, and so on, we would engage in more encounters with our Familiar Strangers due to our previ-

Ni Putu Anindhitha Ayesha Sandra is a lecturer at The Faculty of Creative Industry, Universitas Surabaya (UBAYA).

e-mail : anindhitaayesha@staff.ubaya.ac.id



ous shared knowledge and awareness of each other, even if they were not direct.

Despite rapid technological breakthroughs and an ever-expanding digital landscape, loneliness and social isolation have arisen as important concerns in modern society (Jones et al., 2014). Interestingly, new study suggests that online interactions and video games may provide a unique opportunity for people to find consolation and form meaningful connections, even with strangers (Ducheneaut & Yee, 2013; Jones et al., 2014; Snodgrass et al., 2017; Villamil & Heshmati, 2023). In this context, the release of ‘Kind Words 2’ a video game in which players share their thoughts, feelings, and experiences with anonymous peers, has aroused renewed interest in the ability of digital platforms to build empathy, compassion, and a sense of community.

There is a wealth of research on how technology might support mental health and wellbeing, which offers a useful context for comprehending the effects of ‘Kind Words 2’ Research has demonstrated how video games can promote social connection, a feeling of accomplishment, and general life pleasure. Furthermore, studies have indicated that people, especially those who are socially isolated or upset, may be able to express themselves more freely and form meaningful connections with others due to the supposed anonymity and safety of online environments. In 2017, Snodgrass et al. Dunbar et al., for example, discovered that playing video games and other digital activities can result in “pleasant sensations” and a greater sense of “oneness” with other people, which in turn can improve one’s general quality of life. In a similar vein, Ryan et al. (Jones et al., 2014) highlighted how video games may provide a sense of accomplishment and purpose while also fostering strong social and emotional relationships, even when players are physically separated.

This research article seeks to add to the expanding body of literature on the beneficial effects of technology on mental health and well-being by analyzing how ‘Kind Words 2’ might provide a special means of seeking solace and connection in a world that is becoming more and more detached.

About “Kind Words 2 (lofi city pop)”  
Game

The second game in the ‘Kind Words’ series, ‘Kind Words 2 (lofi city pop)’ is the sequel to the original game, which was launched on July 16, 2019. On October 7, 2024, Popcannibal developed and released this game globally on several platforms, including Windows, Linux, Android, PlayStation, and Steam. According to its website, ‘Kind Words 2’ allows users to be authentic without fear of being judged or having to follow or subscribe to anything to join the community (lofichillbeats.com). Five million participants from around the globe have joined ‘Kind Words’ to express themselves and offer support to one another. With its comfortable settings and relaxing lo-fi music for the backdrop, ‘Kind Words’ is also classified as a casual life-sim independent game. ‘Spirit City: Lofi Sessions’ and ‘Virtual Cottage’ are two similar games, but none of them have the same characteristics as ‘Kind Words’ which is regarded more as a social media platform than a video game. In essence, ‘Kind Words 2’ is an expanded version of “Kind Words,” and players can combine their game histories so they can pick up the game without having to start from scratch.

Comfort in Strangers

‘Kind Words 2’ facilitates the experience of finding comfort and support from strangers by creating a safe and anonymous space for sharing vulnerabilities

and receiving encouraging responses. The game mechanics encourage empathy and compassion (Chen et al, 2021; Jerret et al., 2020) by allowing players to anonymously share their thoughts and feelings without fear of judgment. Players offer kind words and support to others, fostering a sense of community and connection (MacCarthy et al., 1989). This exchange of kindness can be particularly helpful for those experiencing social isolation or emotional distress, offering a sense of belonging and validation. The act of giving and receiving kindness within the game contributes to a positive feedback loop, reinforcing prosocial behaviors and creating a supportive environment. Furthermore, the game’s focus on positivity and encouragement can promote emotional well-being and resilience, helping players cope with challenges and build a sense of hope (Kind Words (Lo Fi Chill Beats to Write To), 2019).

Methodology

This research will explore the connection between playing ‘Kind Words 2’ and the experience of finding comfort between players anonymously using a mixed-methods approach incorporating both self- observation through gameplay and data collection from other players. This multifaceted approach allows for a richer understanding of the phenomenon by combining personal experience with the perspectives of a wider player base. The study will be conducted in two phases:

Phase 1: Self-Observation through  
Gameplay

This phase will involve the researcher actively playing ‘Kind Words 2’ for a predetermined period (e.g., one month). The researcher will engage in various in-game activities, including:

**1. Sending and receiving letters:** Experiencing the process of both requesting and providing support anonymously. This will involve sharing personal experiences and responding to the requests of others with kind words and encouragement.

**2. Observing community interactions:** Monitoring the general flow of communication within the game, noting recurring themes, expressions of comfort, and the dynamics of anonymous support.

**3. Documenting personal experiences:** Maintaining a detailed journal reflecting on personal emotional responses, observations of the in-game social environment, and insights gained through participation. This reflexive practice, as discussed in (Pezalla et al., 2012), is crucial for understanding how personal biases and experiences may influence the research process.

Phase 2: Data Collection from Other  
Players.

This phase will broaden the scope of the study by incorporating the experiences and perspectives of other ‘Kind Words 2’ players. This phase will include an online survey and interview, which will be distributed within the game itself and treated as if it were a question from a stranger or another player in the game. This strategy is thought to be the best way to get genuine responses from the players, just like talking to another player rather than an interviewer. The survey will include both closed-ended (e.g., Likert scale) and open-ended questions exploring players’ experiences of giving and receiving comfort, perceptions of anonymity, and the impact of the game on their emotional well-being. The anonymity provided by online platforms can facilitate more open disclosures, particularly when discussing sensitive topics (McLean et al.,

2018; Deleuze et al., 2019; Marques et al., 2023). In this phase, the respondents are only asked about their initials and country of origin to encourage deeper expression and opinions on 'Kind Words 2' and gain a sense of demographics on how widely the game has been played around the world. The survey was distributed widely to maximize reach and successfully gathered insights from 12 engaged respondents.

This mixed-methods approach offers a robust framework for investigating the connection between 'Kind Words 2' and the experience of finding comfort among players anonymously. The combination of self-observation and data collection from other players provides a more complete and nuanced understanding of the phenomenon. However, potential limitations include the researcher's subjective opinions and bias during self-observation and the challenges of recruiting a representative sample of players. Despite these limitations, this research aims to contribute valuable insights into the potential of online gaming communities to foster connection, support, and emotional well-being.

In order to avoid such circumstances in bias and subjective opinions, this research will also be using the Game Experience Questionnaire (GEQ), especially the Social Presence GEQ (IJsselsteijn et al., 2013), as the tool for the online survey to measure the player's emotions and cognitive responses during gameplay, especially targeted for measuring empathy, behavioral involvement, and psychological involvement between players. This method was formerly used by Sandra (2021) to determine the players' gaming experience in understanding 5 Stages of Grief in the form of video games, namely 'Gris'. The result shows that not only do players have distinctive understandings in the theory but also highlighting the importance of emotional connection between a game and its player. In conclusion, the Social Pres-

ence GEQ is likely the best approach in obtaining data and answers that involve the emotional engagement and behavioral impact of a player in a game.

Result

This study focuses on the gameplay of the 'Kind Words 2' video game and the interactions that build emotional connections between players. The data collected is summarized in three tables, explained as below:

1. Table 1 and 2 include reviews of various features from the game. All documentations and reviews are from self-observation, directly obtained from the game.

2. Table 3 includes direct responses from the players of 'Kind Words 2', which is obtained from online surveys and interviews from the players in the game.

Table 1 shows the analysis of "Home" in the 'Kind Words 2' game and user interactions within it. This part of the game has the exact same UI design as 'Kind Words', the first game, and has been adopted into the newer version to keep the main root of the game itself. The gameplay and interactions are shown as below:

Table 1. Gameplay analysis of Home Interactions on 'Kind Words 2'



Review	The main page of <i>Home</i> , the first page players will be encountered following the opening page of 'Kind Words', whether it's the first or the second version.
Interaction	Players can rotate the environment and would be given the full view of it. Players can also interact with the furniture inside the room and airplanes that's flying around the environment.
(1.B) View Request	
Review	Piles of requests from players all over the world can be found here.
Interaction	Players can view the requests, view others, and respond to each one.
(1.C) Make Request	

Review	Players make their own request to share thoughts for other people to respond.
Interaction	Players can write and send their writings
(1.D) Inbox	
Review	This part enables the player to look into other players' responses and look back into their past requests.
Interaction	Players can interact and read their past requests, respond to the sender with various stickers, and put them into <i>Favorites</i> . Players can also receive new stickers left by other players that responded to their requests.

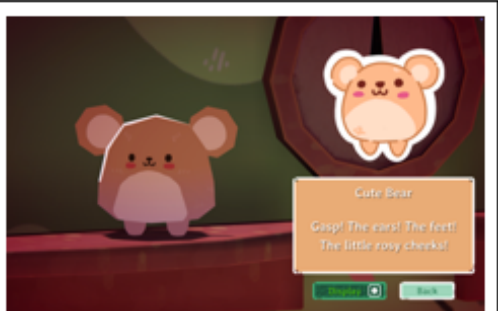




(1.E) Decorate



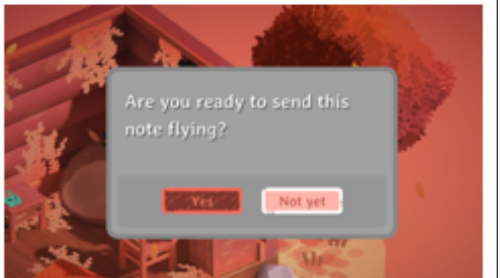
Review	This section enables players to get creative and decorate their ‘safe place’. It’s customizable and has several room design options to choose from.
Interaction	Players can decorate their house/environment by converting the collected stickers into exhibits or furniture. Each set of stickers represents one room design.



(1.F) Say Nice Things



Review	This feature allows players to send a short message to be read publicly, usually containing jokes, compliments, encouragements, etc.
Interaction	Players can write and send their short writings.



Paper plane preview as opened



Review	Players are allowed to treat this feature as their personal journal or diary.
Interaction	Players can add entries, save or delete each of them accordingly.

As far as the ‘Kind Words’ game goes, these parts are the only gameplay available to the players to be interacted with. However, in ‘Kind Words 2’, the developers also added some new features that allows the players to explore and interact more with the game. Thus, in addition to this analysis, Table 2 shows a deeper analysis of some of ‘Kind Words 2’ added features as shown below:

Table 2. Other expanded features and gameplay in ‘Kind Words 2’



Review	Players now are allowed to travel to the outside of their room, exploring the outside world and meeting other people in avatar form.
Interaction	Players can move around, enter various buildings, and interact with the people hovering around and have a chat with them. Players can also find paper planes that are flying around the environment.

(2.B) Home - Fashion!

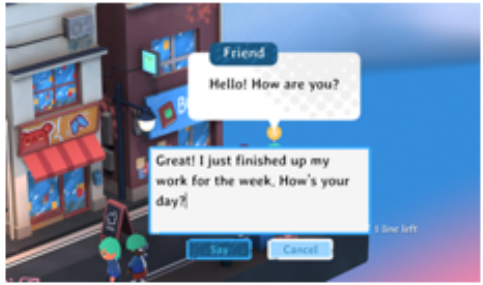
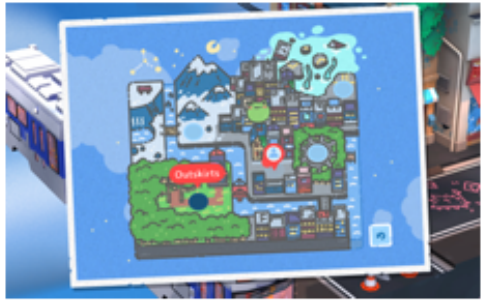




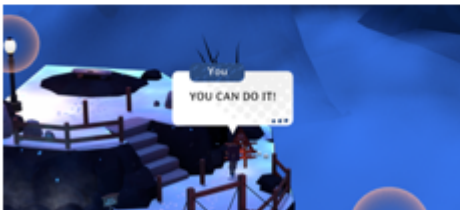

Review	This feature allows players to make a customized appearance of their avatars.
Interaction	Players can change their appearance at any time. The customization includes hairstyle, hair color, skin color, eyes, glasses, and outfits.

(2.C) Home - Vintage Stuff!






Review	Similar to <i>Inbox</i> feature, but this part is focused on discussion about movies, books, and similar other hobbies.
Interaction	Players can write and send their responses in long writings.
<b>(2.D) Home - Chat</b>	
	
Review	This feature allows players to interact 'directly' with other players around them and have small conversations.
Interaction	Players can write and send their writings in short responses.
<b>(2.E) Bus Stop - Map</b>	
	
Review	Other than the homebase, the map on the <i>Bus Stop</i> provides access to other places to explore.

Interaction	Players can choose their favored destination to travel to.
	
Map found near the Bus Stop on each location	
<b>(2.F) Snow Mountain - Magic Echo</b>	
	
Review	Like <i>Paper Planes</i> , this feature enables the player to send a message as a "shout" that can only be read once.
Interaction	Players can write and send their short writings.
	
	
Magic Echo preview in response	

<b>(2.G) Snow Mountain - Make a Wish</b>	
	
Review	Players are allowed to express their wishes, then they would be shared publicly as they stare into the sky landscape.
Interaction	Players can write and send their short writings.
	
Make a Wish preview can be shown to public	
<b>(2.H) Outskirts - Chain Forest</b>	
	
Review	This feature allows players to interact in short chain responses to discuss their interests or similarities or just to play mini games in text.


Interaction	Players can write and send their short writings.
	
Forest Chain preview when players make a start of a topic chain or a response to a topic chain	
<b>(2.I) Outskirts - Cafe</b>	
	
Review	For players that enjoy poems, they can share their writings in this feature where poems are greatly appreciated enough to have its own space in this game. And players can "perform" their poems in a virtual stage and be watched by the "audiences".
Interaction	Players can write and send their short writings.
	






*Player performing a Poem on virtual stage on Cafe*

**(2.J) Plaza - Cats!**




**Review** This feature allows players to match a cat's name into a description given by other players, giving them freedom of imagination and connecting each other through common affections towards cats.

**Interaction** Players are allowed to type a name for a cat or make a description of a cat to be named by other players.



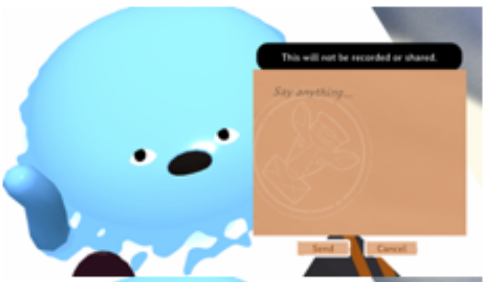
*Cat! preview, along with description and the cat's name*

**(2.K) Last Stop - Wiggling Void**



**Review** This feature allows players to express thoughts to be heard and forgotten. Players can feed the “void” with short writings, and they won’t be shared to the public as the other features do.

**Interaction** Players can write and send their short writings.



*Make a Wish preview can be shown to public*

Furthermore, Table 3 also shows the feedback from ‘Kind Words 2’ players when being asked about the game’s impact and what makes it become a safe place for them to share their thoughts and private matters to strangers. This data is

sampled by taking respondents from the players in the game. The result is shown below:

Table 3. ‘Kind Words 2’ players’ reviews on why they use the game as their comfort zone  
(Source: personal record, 2024-2025)

Anonymity	
A, Mexico	“I would say anonymity. Nobody knows me here and I don’t know anybody, so that makes me comfortable to share anything. This also helps me get unbiased opinions on whatever I need help with!”
M, Germany	“It’s the anonymity that gives me the confidence to reveal more about myself. But also answers to questions. There is less fear of rejection and being misunderstood here. It’s fun to be there for others. Perhaps making a difference through words.”
C	The ability to be anonymous, for each question and between questions
	Not needing to get into a whole conversation
K	Not needing to evaluate make a fancy appreciation of the replies, one just sends a sticker
	“I’m sure we all struggle with bias and prejudice (even if we don’t consciously operate in those ways). The anonymity helps to level the playing field. We remember that we’re all just monkeys on a space rock :P With so much social media, it can be easy to get stuck in comparison mindsets. This game frees us of that insecurity to truly focus on others.”
Emotional Support	

P, China	“I want to contact other people. But I don’t have enough courage to speak with my parents and my friends can’t help me all the time. So I come to write my feelings, which make me feel good. And I’m very excited when I receive useful letters from strangers. I want to help others as a way to express my gratitude to everyone!”
B, Slovenia	“I think this game in general just puts you in the right mood. Helping other people at least a bit makes you feel like you did something good for someone, so you keep coming back. and when you get the courage to open up to you always get these supporting replies that you know are from an objective eye instead of subjective when you talk to friends/family).”
A	“I think what’s more important is trust- -the belief that this space is kind and warm, where everyone’s thoughts can receive gentle responses. Well, I write replies more often because of my desire to help, I want to share the little kindness I can.”
C. United States	“I like bringing some positivity to other ppl. Even though I struggle a lot with my own anxiety and sense of inadequacy, lifting others up surprisingly helps a lot with that.”
S, North Carolina	“If all the requests are sad, I kind of shut down and I’ll go elsewhere. I do usually feel like I can help though. I also have the music off. It’s not bad music! I like the music! but it’s also like working at a CVs in December. I can only hear the songs so many times.”
B	“This game makes me feel like I’m not going in blindly and has some advice behind me.”

Helping Oneself and Others	
O	“Occasionally I do come on to vent about something specific. But mostly, I enjoy responding to other people and helping them with their own problems. I might write one post of my own, but respond to 10+ other people in return.”
J, Peru	“I honestly feel pretty warm using this game. I love that I'm able to help people and that people show concern for me when I'm down. I'd call this a support tool rather than a game. And that's just what was in the 1st version, here there's so much to do! There's the forest, the recommendation shop, lots! And yeah, sometimes I let it run while I study due to the music letting me focus.”

Discussion

The analysis of the ‘Kind Words 2’ gameplay and players’ feedback focus on two aspects: gaming experience and players’ interactions with each other as can be seen in sections below.

Players and Strangers

Table 1 and Table 2 shows various interactions that the ‘Kind Words 2’ players could do during the gameplay. Unlike other games, this game shows no storyline and focuses on the interactions between players with the game and players to players. When it comes to player involvement, ‘Kind Words 2’ uses a variety of approaches to encourage players to share their most

private thoughts that they can express to a wide range of interests. In terms of human interaction, players of the game ‘Kind Words 2’ can communicate with one another—from all over the world—but only through short messages sent at random and anonymously. As illustrated in Tables 1.C, 1.D, and 1.F, players are encouraged to actively participate in the community by exchanging messages, requests, and responses. Although the interactions are short and don’t last long, it gives players freedom in expression and shows compassion towards other players. To support this claim, Table 3 is presented as a cumulative response from a few players from all over the world, who are questioned based on the Social Presence GEQ. As shown in the table, most players are drawn to the game because of the anonymity it provides, allowing them to express themselves without fear of rejection. They go on to say that ‘Kind Words 2’ gives a space for players to discover bravery and confidence in the words of others who empathize with them, even if they do not know the full narrative of their troubles. Although it is comforting for them to vent about their life in the game, they also like responding to and encouraging other strangers. Thus, “Kinds Words 2” serves as a platform for people to demonstrate kindness, empathy, and bravery by stepping out of the shadows and reaching out for advice and aid, even if it means simply starting a conversation.

In terms of sharing, gamers are expected to discuss their problems in “Kind Words.” However, in “Kind Words 2,” players are also encouraged to express their interests and hobbies through special features such as 2.C, 2.D, 2.H, 2.I, and 2.J. These elements are most likely being developed since users were using the key features in ‘Kind Words’ to discuss their interests and initiate chains of conversation. With this new addition to the game, players will be more likely to have the platform they need to share their interests

with others.

The way that these players seek comfort from strangers other than their loved ones represents the shift in the dynamics of social support and emotional well-being that often comes from various factors, including the perceived lack of judgement or preconceived notions from unfamiliar individuals, offering a safe space for vulnerability and open expression (Loveys et al., 2019). The anonymity provided by conversations with strangers through ‘Kind Words 2’, particularly in virtual and online situations, might decrease the worry of social repercussions or disrupted relationships that may accompany confiding in loved ones (Lotun et al., 2024). Additionally, the emergence of social media and online groups has made it easier to interact with people who have similar viewpoints or experiences, creating a sense of understanding and belonging that might not exist in one’s immediate social circle (Zhang et al., 2023). These diverse yet similar viewpoints can provide validation and emotional support, especially when dealing with niche issues or unconventional lifestyles (Merza, 2022), which are heavily referred to by the players of ‘Kind Words 2’ during the gameplay with other players (Table 3).

The Comfort and Safe Medium

This section will be focusing specifically on the private aspects of the interactions rather than the more public ones—since it is happening between players, the interactions that let them share their interests and hobbies are already covered in the previous section. And as mentioned before, ‘Kind Words 2’ is adopting the main features of its previous version, ‘Kind Words’, which is focusing on sharing the players’ thoughts and responses. A one-sided interaction between the player and the game itself is provided by this more recent edition of the game, never-

theless. These elements are shown in 1.F, 1.G, 2.F, 2.G, and 2.K, where players are just asked to express their opinions without having to respond to another player. “Journal” (1.G) and “Wiggling Void” (2.K) are two features that even function as a private journal that can be written at any moment and as a “trash” where secrets can be safely shared. These aspects provide the security that most individuals require—the ability to express themselves and be heard without being judged by others (Jiménez, 2015; Siyahhan et al., 2017). Writing about private or sensitive topics provides a structured way to cope and find psychological comfort. According to research, persons who confess their secrets, whether through private writing or another means, frequently report feeling better and more capable of dealing with life’s obstacles (Slepian & Moulton-Tetlock, 2018). Furthermore, deciding to destroy written records—such as burning a diary or deleting a record—is a symbolic act of release and closure, indicating a conscious break with past obligations. This is most likely why elements like “Journal” and “Wiggling Void” were included in the game: to provide another type of comfort and platform for discharging burdens and unwanted feelings that no one else can help with.

In addition, the game also offers personalized features to which players often use to decorate their ‘room’ and give a preferred touch to their avatars, though it’s in limited customization (1.E and 2.B). Players can express themselves more through visual preferences and appearances that better reflect their personality thanks to these features. In a way, ‘Kind Words 2’ also serves as avenues for self-expression, identity construction, and psychological empowerment, even when the available options are limited. Customizing one’s avatar or in-game surroundings allows players to transfer aspects of their real-life identity into the virtual world, giving them a sense of per-



sonal control and ownership over their gaming experience (Shang, 2024). Self-expressive customization satisfies the dual desire of conveying individual uniqueness and enabling players to align with communal identities, which can ultimately improve their willingness to contribute in the experience, further enhancing their sense of accomplishment and engagement in the game (Lei et al., 2020). Therefore, ‘Kind Words 2’ offers its players features—such as “Decorate” and “Fashion!”—to address fundamental psychological motivations and to provide a creative outlet for self-expression and personal identity in virtual settings.

Conclusion

In summary, using ‘Kind Words 2’ or other such video games to seek solace from strangers might be viewed as a complex coping mechanism that took advantage of the special social dynamics of virtual spaces. Interacting with new players promotes social capital bridging and bonding, offering chances for emotional support that may not be easily accessible offline. Virtual worlds’ inherent anonymity makes it possible for people to discuss personal weaknesses with a perceived decreased danger of judgment, creating a comfortable and safe environment for emotional exposure (Coanda & Aupers, 2019). Furthermore, the collaborative aspect of many online games allows even brief contacts with strangers to develop into important supporting connections. Overall, the comfort gained from connecting with strangers in video games emphasizes the value of virtual communities in current psychosocial support systems, where the act of sharing and receiving empathy in digital contexts is critical to human well-being.

In addition to that, this research is limited by the small scope of the sample and might need to be improved in future

research to gain a more comprehended result. Furthermore, it is kindly encouraged to do more research on the importance of game design in modern and digital society, especially when it comes to its relation to building emotional connection and safe place in the virtual world.

References

Chen, B., Wong, S., Chang, W., & Fan, R. (2021). Towards Social Interaction between 1st and 2nd Person Perspectives on Bodily Play. Adjunct Proceedings of the 34th Annual ACM Symposium on User Interface Software and Technology. <https://doi.org/10.1145/3474349.3480211>

Coanda, I. and Aupers, S. (2019). Mechanisms of disclosure: a socio-technical perspective on sociality in massively multiplayer online role-playing games. *Television & New Media*, 21(3), 315-333. <https://doi.org/10.1177/1527476418824557>

Deleuze, J., Maurage, P., Schimmenti, A., Nuyens, F., Melzer, A., & Billieux, J. (2019). Escaping reality through video games is linked to an implicit preference for virtual over real-life stimuli.. *Journal of affective disorders*, 245, 1024-1031. <https://doi.org/10.1016/j.jad.2018.11.078>

Ducheneaut, N., & Yee, N. (2013). A View from Computer Science (p. 517). <https://doi.org/10.1002/9781118427378.ch29>

IJsselsteijn, W. A., de Kort, Y. A. W., & Poels, K. (2013). The Game Experience Questionnaire. Technische Universiteit Eindhoven.

Jerrett, A., Howell, P., & Dansey, N. (2020). Developing an Empathy Spectrum for Games. *Games and Culture*, 16, 635 - 659. <https://doi.org/10.1177/1555412020954019>

Jiménez, O. (2015). Leveraging the Social Aspect of Educational Games. *Theory Into Practice*, 54(2), 101–108. <https://doi.org/10.1080/00405841.2015.1010845>

Jones, C., Scholes, L., Johnson, D., Katsikitis, M., & Carras, M. C. (2014). Gaming well: links between videogames and flourishing mental health. In *Frontiers in Psychology* (Vol. 5). Frontiers Media. <https://doi.org/10.3389/fpsyg.2014.00260>

Kind Words (lo fi chill beats to write to). (2019). <https://store.steampowered.com/app/1070710>

Lotun, S., Lamarche, V.M., Matran-Fernandez, A. et al. People perceive parasocial relationships to be effective at fulfilling emotional needs. *Sci Rep* 14, 8185 (2024). <https://doi.org/10.1038/s41598-024-58069-9>

Loveys, K., Fricchione, G. L., Kolappa, K., Sagar, M., & Broadbent, E. (2019). Reducing patient loneliness with artificial agents: design insights from evolutionary neuropsychiatry. *Journal of Medical Internet Research*, 21(7), e13664. <https://doi.org/10.2196/13664>

MacCarthy, B., Kuipers, L., Hurry, J., Harper, R., & Lesage, A. (1989). Counselling the Relatives of the Long-Term Adult Mentally Ill. In *The British Journal of Psychiatry* (Vol. 154, Issue 6, p. 768). Cambridge University Press. <https://doi.org/10.1192/bjp.154.6.768>

Marques, L., Uchida, P., Aguiar, F., Kadri, G., Santos, R., & Barbosa, S. (2023). Escaping through virtual gaming—what is the association with emotional, social, and mental health? A systematic review. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsyt.2023.1257685>

McLean, L., & Griffiths, M. (2018). Female Gamers’ Experience of Online Harassment and Social Support in Online Gaming: A Qualitative Study. *International Journal of Mental Health and Addiction*, 1-25. <https://doi.org/10.1007/s11469-018-9962-0>

Paulos, Eric & Goodman, Elizabeth. (2004). The familiar stranger: Anxiety, comfort, and play in public places. *Conference on Human Factors in Computing Systems - Proceedings*. 223-230. <https://doi.org/10.1145/985692.985721>.

Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: an exercise in interviewer self-reflexivity. *Qualitative Research*, 12(2), 165-185. <https://doi.org/10.1177/1468794111422107>

Sandra, N. P. A. A. and Mutiaz, I. R. (2021). The embodiment of the kübler-ross model through game elements in Gris and its impact on player experience. *Advances in Social Science, Education and Humanities Research*. <https://doi.org/10.2991/assehr.k.211228.033>

Sandra, N.P. Anindhitha Ayesha. (2021): The Study on Gaming Experience with Visual Narrative in Gris as A Non-Verbal Story-Based Game, Master’s Thesis, Institut Teknologi Bandung.

Shang, M. (2024). The impact of character creation and customization on self-expression and identity in rpgs. *HC*, 1(9). <https://doi.org/10.61173/np7wyr90>

Siyahhan, S., Ingram-Goble, A. A., Barab, S., & Solomou, M. (2017). Educational Games to Support Caring and Compassion Among Youth: A Design Narrative. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 9(1),



- 61-76. <https://doi.org/10.4018/IJG-CMS.2017010104>
- Slepian, M. and Moulton-Tetlock, E. (2018). Confiding secrets and well-being. *Social Psychological and Personality Science*, 10(4), 472-484. <https://doi.org/10.1177/1948550618765069>
- Snodgrass, J. G., Bagwell, A., Patry, J. M., Dengah, H. J. F., Smarr-Foster, C., Oostenburg, M. V., & Lacy, M. G. (2017). The partial truths of compensatory and poor-get-poorer internet use theories: More highly involved video game players experience greater psychosocial benefits. In *Computers in Human Behavior* (Vol. 78, p. 10). Elsevier BV. <https://doi.org/10.1016/j.chb.2017.09.020>
- Villamil, A., & Heshmati, S. (2023). Engaging in the good with technology: a framework for examining positive technology use [Review of Engaging in the good with technology: a framework for examining positive technology use]. *Frontiers in Psychology*, 14. Frontiers Media. <https://doi.org/10.3389/fpsyg.2023.1175740>
- Zhang, C., Tang, L. & Liu, Z. How social media usage affects psychological and subjective well-being: testing a moderated mediation model. *BMC Psychol* 11, 286 (2023). <https://doi.org/10.1186/s40359-023-01311-2>

## ADOPTION OF AI-GENERATIVE IMAGE TOOLS AND EVOLVING DESIGNER ROLES IN INDONESIA'S ADVERTISING PRACTICES

Indira Febriany

Received May. 13, 2025; Revised May. 27, 2025; Accepted June. 09, 2025.

**Abstract:** This research investigates the adoption of AI-generative image tools in Indonesia's advertising practices and how it influences the requirements of designers in the industry. Through qualitative interviews with creative professionals from different agency backgrounds and after analyzing them thematically, it is found that the tools are embraced for efficiency and conceptual diversity. AI-generative image tools are not yet considered a replacement for human creative judgment. Particularly in producing emotionally resonant or detail-sensitive visuals. The study identifies shifting role expectations for designers, emphasizing adaptability, conceptual skill, and aesthetic sensibility. The findings highlight the nuanced integration of AI in creative workflows and the influence of clients and ethical considerations.

**Keywords:** AI-generative image; advertising; designer roles; creative industry

### Introduction

AI (Artificial Intelligence) continues to spark controversies over the impact on the creative industries. AI has been helping creatives with content creation, image processing and design, content personalization, media editing, film and animation making, and even data analysis and prediction (Hanifa et al., 2023). However, despite the numerous advantages of AI, there are concerns over ethical implications and the future of the creative professions (Zulkarnain, 2022, p.28).

One of the most controversial is the AI generative image tools. AI generative image tools regenerate images from a stored database on the internet, based on keywords (mostly known as prompts) provided by users (Zulkarnain, 2022, p.28). According to Gu et al (2024); Hartmann,

Exner, & Domdey (2024), the quality, reality, and aesthetic value of AI-generated creations might surpass human creations. Since AI can access and process vast amounts of online data, generating creative alternatives in ways humans might never have thought of before, due to their cognitive and access limitations.

### AI Generative Image Controversies

According to Drozd & Tavarez (2024), if a task is already done automatically by a machine, technology will be developed to increase the machine's productivity and efficiency. However, if the task is still carried out by humans, then technology will be developed to increase efficiency through automation. The benefit of automation offered by AI generative image tools has raised concerns about

Indira Febriany is a lecturer at The Faculty of Technology and Design, Universitas Bunda Mulia.

e-mail: ikasmidi@bundamulia.ac.id



the replacement of several graphic design professions. Given the fact that there have been several reports of this implementation in the industry. For instance, as reported by Business Insider on April 14th, 2023, a Chinese advertising agency, BlueFocus, was reported to have an internal memo that included the information of contract termination with copywriters and graphic designers, to be replaced with AI. Another notable case was reported by a consulting firm, Challenger, Gray and Christmas, in May 2023, in which 4,000 jobs were replaced by AI generative tools in an organization.

Another concern is regarding copyright protection over AI-generated creations. According to Guadamuz (2017), there remains ambiguity in terms of how copyright applies to AI-generated creations. In the US and Europe, copyright applies only to works created by human intellect or effort. In Indonesia, the copyright law-UU No.28 of 2014, stated that copyright is an exclusive right to a creator that is automatically given based on a declarative principle after a creation has been put into realization. Another clause explains that “a creator” is an individual or a group of individuals who produce a creation that is distinctive and personal. AI is a computer program that does not have a characteristic or a personality; therefore, it cannot be considered a creator (Tektona et al., 2021, p.291).

Uncertainties about future professions and the ethical implications are among the primary factors influencing the pessimistic view towards AI adoption. On a global scale, this perspective is brought to light by the movement “Create Don’t Scrape,” which advocates for creators to fight over AI exploitations. As reported by Republika on January 3rd, 2024, through the social media hashtag #TolakGambarAI, which was trending on X, Indonesia’s artists and designers were also raising their concerns towards the use of AI generative image

tools in creative practices. However, the advertising industry, which is one of the primary platforms for graphic designers to thrive, is projecting different attitudes toward the use of AI generative image tools. It is more positive and even enthusiastic about the future that AI brings.

AI-generative Image in the Advertising Industry

In an article published by Kompas.com on January 24th, 2024, the Co-founder, Chief Strategy & Digital Officer from Indonesia’s advertising agency Moonfolks, stated that “we are here to redefine the scope of possibilities, to make all the daring goals achieved through strategic movement in a world led by AI”. This enthusiasm is also reflected in other publicity in the advertising industry. In Indonesia, several real implementations of AI-generated content are the poster design of the Pasutri Gaje movie in 2023 (Fig.1); the illustrations used in the Indomie ads in 2023 (Fig.2); and the character illustrations used for the Prabowo-Gibran campaign for 2024 presidential election (Fig.3).



Figure 1. Pasutri Gaje Film Poster  
(Source: suara.com)



Figure 2. AI illustrations in Indomie ads  
(Source: mediaformasi.com)



Figure 3. One of Prabowo-Gibran campaign material  
(Source: inilah.com)

The application of AI generative image tools in these advertisements received both positive and negative responses. There is a perception that the use of AI in the previously mentioned content disrespects designers, artists, and creative practitioners. However, some perceived that as a creative and innovative movement (Rachmawati et al., 2024, p.68).

According to Hartmann et al. (2023), images in advertisements are highly persuasive. They tend to be easily remembered compared to texts. Further investigation by Delen & Ilter (2021) suggests that this is due to the natural characteristic of images, in which humans must use imagination to connect them to a context or an idea. An advertisement’s value of uniqueness is from the combination of

creative elements such as image, motion, and sound that become visual and audio stimuli for humans (Kristanti & Marta, 2021).

A systematic literature review by Harborth and Bauer (2017) highlighted how advertising impacts consumer behavior in adopting new technologies. The study demonstrates how advertising influences the perceived usefulness and trust, social norms, and perceived social pressure in adopting new technologies. The use of AI generative image tools in advertising not only helps promote products and services, but also the applied technology.

This research aims to explore how AI generative image tools are used in Indonesia’s advertising practices and how their use influences the role of designers in the industry. Regarding this topic of interest, several studies have covered the implementation of AI in the advertising industry. Such as a study by Smith & Hutson (2024) about the role of generative intelligence in the current age of digital marketing; a study by Leszczynski et al. (2022) about acceptance of artificial intelligence in advertising agencies; and a study similar to this, is a study by Nguyet that explores the adoption of generative AI in content creation with a case study from the advertising industry in Singapore. However, few have examined the implementation of a specific AI tool, such as a generative image, and its impact on professional roles, especially in Indonesia.

Methodology

This research adopts qualitative approaches to disclose more insights rather than merely verifying a phenomenon. Qualitative approaches allow the possibility to deeply understand the motives and contextual nuances of AI generative image tools in Indonesia’s advertising prac-

tices (Creswell & Poth, 2018).

The primary data collection is individual in-depth interviews. Interviews were conducted with advertising professionals who were directly involved in creative departments. According to Smith & Hutson (2024), interviewing marketers who have used AI tools will provide insights into the practical applications of AI. In-depth interviews allow researchers to understand how each participant experiences, perceives, or understands the investigated topic, in their own terms (Osborne & Smith, 2021).

The interview questions cover several topics related to AI generative image tools, such as background knowledge, perception, decision-making process, context of application, as well as topics related to the designer’s role in the industry, such as qualification and recruitment criteria; controversy and ethical concerns; collaboration and future projection. The secondary method is literature studies. Literature studies are used as the foundation for analyzing patterns found in the data and strengthening the context of the discussion.

Purposive sampling is used in this research to target key creative decision-makers within advertising and creative agencies. This sampling method is used to increase the depth of understanding, from the selected respondents who are most likely will provide useful information (Campbell et al., 2020). However, due to response constraints, participant recruitment also relied on convenience, involving those who voluntarily responded to interview requests. In a case where the sample population is hard to reach, a very small number of participants (5 to 25) is considered common and sufficient (Osborne & Smith, 2021).

The study involved 8 participants occupying senior creative roles – two creative directors, one creative manager,

four art directors, and one creative group head- across agencies engaged in advertising creation. While all these agencies share the same characteristic, in which they have provided services for well-established national clients, they differ in characteristics such as:

**R1:** Creative manager in a small public relations and communication service agency, with a duration of existence of 5 years, primarily focused on digital marketing.

**R2:** Art director in a small creative agency, active for 5 years, primarily focused on digital and event marketing. The agency has received eight national advertising awards.

**R3:** Creative director in a start-up agency specialized in branding, digital marketing, and social media management, active for 6 years, primarily focused on digital marketing.

**R4:** Art director in a marketing service network consists of several agencies, active for 10 years, engaged in both digital and conventional marketing. Has received a national brand communication award.

**R5:** Creative group head in an integrated creative agency, active for 7 years, engaged in both digital and conventional marketing. The agency has received more than 10 awards.

**R6:** Art director in a creative social media agency, active for 10 years, primarily focused on social media and digital campaigns.

**R7:** Creative director in a hybrid advertising agency, active for 4 years, has received a national award for the most performing agency.

**R8:** Art director in an advertising agency, active for 54 years, engaged in both digital and conventional marketing,

with three national award achievements.

The interviews were conducted in Bahasa Indonesia, and participants agreed that the conversation would be recorded and used for research purposes only. The transcript audio recordings were translated into English and underwent a thematic analysis. The translations were kept as close as possible to the original phrases, to ensure the authenticity of meanings. Thematic analysis is useful for understanding people’s views, opinions, knowledge, experiences, or values from qualitative data (McLeod, 2024). This study follows the 6 steps of thematic analysis defined by Braun & Clarke (2019), including familiarization with data, generating initial codes, generating initial themes, reviewing themes, refining, defining, and naming themes, and writing up.

Result

Transcripts were reviewed and manually coded to identify meaningful units of data. Initial codes were grouped into patterns, which were then developed into broader themes. The themes were refined through iterative review and cross-checked against the literature. Table 1 summarizes the six key themes identified through thematic analysis, along with the supporting codes.

Table 1. Supporting codes and themes  
(source: personal documentation)

No.	Codes	Themes
1.	<ul style="list-style-type: none"><li>• Used for ideation</li><li>• Combined with other tools</li><li>• As references</li></ul>	AI generative image tools are valued for efficiency and conceptual variation

	<ul style="list-style-type: none"><li>• Cost-efficient</li><li>• Helpful for short deadlines</li><li>• Variative</li></ul>	
2.	<ul style="list-style-type: none"><li>• AI-generated visuals are detectable</li><li>• Lack of human touch</li><li>• Errors in generating human proportions</li><li>• Not authentic</li><li>• Lack of vibes and emotions</li></ul>	Human-made visuals are perceived as more detailed and emotionally resonant
3.	<ul style="list-style-type: none"><li>• Increasing clients’ demands</li><li>• Concept brief</li><li>• Storytelling needs</li><li>• Target audience compatibility</li><li>• Accuracy, execution efficiency</li></ul>	Adoption of AI generative image tools is influenced by the client’s needs, concept, and target audiences
4.	<ul style="list-style-type: none"><li>• Sense of art</li><li>• Taste</li><li>• Communication</li></ul>	A strong sense of design and communication skills are still viewed as core competencies



	<ul style="list-style-type: none"><li>• Flexibility</li><li>• Time</li><li>• Experience</li></ul>	
5.	<ul style="list-style-type: none"><li>• Bonus skill</li><li>• Understand technicalities</li><li>• Useful for designers</li><li>• Update and embrace</li><li>• Collaborate</li><li>• Operated by humans</li></ul>	Adapting to AI generative image tools is seen as essential for future-proofing design careers
6.	<ul style="list-style-type: none"><li>• Depends on individuals</li><li>• Clear terms &amp; conditions</li><li>• Acceptable as references</li></ul>	Views on AI-generated visuals copyright vary based on context and personal ethics

**AI generative image tools are valued for efficiency and conceptual variation**

Across interviews, it is found that all participants have used AI generative image tools either for personal or professional purposes. However, in most cases, these tools were rarely used to complete an entire project. The AI-generated contents are combined or manually retouched by designers using conventional tools. Participants noted that the tools are helping designers with ideas or concept visualization, such as creating storyboards, developing key visuals, and serving as reference materials.

“It is okay if it’s only used for presentations to clients. Because it helps with generating and communicating ideas, but not for publication.” (R5, creative group head).

Participants agree that AI generative image tools are very helpful and efficient in terms of reducing time and costs. Three participants emphasized that AI generative image tools are effective for projects requiring new variations and new final touches.

“AI is significantly improving efficiency. Time efficiency, budget efficiency. For example, for photos or videos, we must hire talent or a celebrity. It is possible not to do that because of the machine.” (R7, creative director).

Participants also agree that the current AI generative image tools have evolved significantly in the past few years. Several participants informed that Midjourney is one of the tools that is often used. A participant supported the advancement of Midjourney by explaining how it allows the possibility of generating images with a certain artist’s style.

“If it’s about the uniqueness and creativity, with AI it is more variable, because it can create something imaginative that is sometimes unthinkable for us..” (R3, creative director).

“Let’s say we want a style like which artist, let’s say Eko Nugroho (Indonesia’s contemporary artist, well known for street art). Then, we must go to him.... We must collaborate with him. AI is based on the prompt. We can decide what kind of style we want through that prompt...reducing the time” (R7, creative director).

This theme suggests that AI generative image tools are generally used in advertising practices and have evolved significantly. Despite the different media focus of the agencies, this could mean that such tools have been adopted in both dig-

ital and conventional marketing practices. One of the most used and powerful AI generative image tools in the industry is Midjourney. However, designers in agencies still do not rely on this tool for their creations without human intervention.

**Human-made visuals are perceived as more detailed and emotionally resonant**

According to participants, human-made visuals are still preferable for final deliverables. A particular perspective shared by all participants is that something is missing emotionally from AI-generated visuals. Several participants noted that the visuals shared the same artificial characteristics. Therefore, they are easily detectable.

“The results of AI and humans can be compared through their perfection. AI visuals tend to show their artificial side through tone and contrast; they tend to have patterns. While human-made tends to fluctuate more.” (R2, art director)

Another point highlighted by participants is that the current AI generative tools are developing rapidly but are not perfect and exhibit significant weaknesses. According to most participants, the tools cannot generate visuals with perfect details, specifically in terms of generating visuals that contain human forms. Another participant highlighted how the tools might not have the capability to generate specific culturally detailed visuals because the tools are still Western-centric. However, several participants show uncertainty towards how AI generative image tools might become more advanced in the future.

“In terms of quality, for now we can say there are details that cannot be achieved by AI.... Especially for small details such as hands, always missed.... but maybe in the future it will be more perfect.” (R6, art

director)

The preferences over human-made visuals align with the first theme, in which AI generative image tools are not primarily used for their creations. In the meantime, AI generative image tools still have weaknesses in terms of communicating ideas as intended. In this case, human-made visuals are superior due to the irreplaceable characteristics that cannot be achieved by AI-generated visuals.

**Adoption of AI generative image tools is influenced by the client’s needs, concept, and target audiences**

In terms of factors influencing the adoption of AI generative image tools in visual creations, most participants indicated that it depends on the concept briefing given by the client. Two participants highlighted that the trends of using such tools influence clients’ requests upon using AI visuals. Another participant highlighted that the client’s demand for AI is based on time and budget efficiency.

“...based on concept. Sometimes the client requested certain characteristics to be included.... sometimes a client has been exposed to the direction or imagination of AI that was seen before.” (R2, art director)

However, in most cases, participants indicated that the decision to use AI for visual creations is still made by the agencies. If the visual suits the concept and reduces time and costs, then the tools will be used. Three participants highlighted that before working on a project, there will be discussion between the agencies and the clients about copyright issues and the compatibility with the brand identity.

“...there was a client one time who wanted to get the AI moods... at that time, AI was trending, many clients requested

to use AI, but after discussion, it was decided that the use of AI is not suitable for the brand” (R6, art director).

Two participants provided their insights about how the target audience influences the adoption of AI generative image tools. Both participants took the Prabowo-Gibran 2024 campaign as an example. One participant said that the adoption of an AI generative image tool in the campaign is considered suitable if the target audience is suitable too. Another participant indicated that the campaign of Prabowo-Gibran is considered effective because its target audience, which is Gen Z and millennials, are generations that grew up closely with the evolution of AI.

**A strong sense of design and communication skills are still viewed as core competencies**

According to six participants, in their agencies, the evaluation of qualifications in the designer recruitment process is still not AI-oriented. They specified that in the present time, the main qualification relies heavily on the ability to think creatively and the built-up experience of the design sense. Three participants highlighted the importance of communication skills, in terms of communicating ideas through visuals and communicating ideas to the team and clients. One participant highlighted the importance of having time flexibility when working in the advertising industry.

“The qualifications evaluation of a designer is based on his/her ability to think creatively, understand briefs and the brand worked on, and the ability to implement visual ideas that are suitable for the brand. Other than that, is the ability to work fast, and communicate with clients and team.” (R3, creative director).

“AI can be learned quickly. What’s important is how he/she can cooperate and

his/her taste too.” (R8, art director).

**Adapting to AI generative image tools is seen as essential for future-proofing design careers**

In the present time, participants agree that in the industry, humans are still irreplaceable. Given the fact that the operation of AI still relies on humans. However, participants show uncertainty over how this might last in the future. According to most participants, AI will continue to evolve, and even now, AI generative image tools have evolved so much from the latest version. Two participants also specified that professions such as visualizer and storyboard artist have not been used so often anymore in their practices.

“It is very possible for a storyboard that is usually created manually, for now I’ve already been using Imagine.art, already been using AI, before we used to hire a visualizer for that” (R8, art director).

As creative professionals have already been using AI generative image tools, all participants recommend that designers embrace and collaborate with these tools. One participant shared a perspective on how AI generative image tools, as new tools, are supposed to bring new excitement for designers, as they break the monotony of relying on the same tools repeatedly. Although not all participants stated that AI skills are one of the key requirements in the recruitment process. However, all participants agreed that it is a plus point or a bonus skill to have one.

“Graphic designers must update, even if they are not using AI; they must understand the results of AI and, as tools, how it works. AI must be upgraded as a hard skill... if not, they will not be able to compete” (R5, creative group head).

**Views on AI-generated visuals copyright vary based on context and personal ethics**

Out of eight participants, three specified that copyright controversies over AI-generated visuals do not affect preferences for using the tools. One participant specified that it affects the agency’s preferences. However, all participants agree that it all depends on how the tools are used. Six participants highlighted that if the tools are only used in the ideation stage and only as a source of inspiration, then it should not be a problem. However, if generated visuals are used exactly as they are, without any modifications, and publicly shared, then the use of tools is unethical. Three participants also highlighted the importance of clear privacy policies provided by AI platforms. According to two participants, based on the usual AI generative image tools that they have been using, because of the subscription, all the generated images are already licensed and legal for commercial use.

“Copyright controversies do not come from the AI itself. It is because of the user, by using the same references. Even without AI, it is not right.” (R5, creative group head)

“Actually, in terms of copyright, every premium subscribed AI is already legal to use. There are provisions stating that subscription allows for commercial use” (R7, creative director).

**Discussion**

This study investigated the adoption of AI generative image tools within Indonesia’s creative industry, with a focus on advertising-related practices. Drawing from the perspectives of eight creative professionals, the findings reveal a complex relationship between the perceived value of these tools, their limitations, and their implications for designers’ roles.

Through the data analysis, it is found that AI generative image tools are mostly used in the ideation stage. Its ability to provide a variety of unthinkable ideas helps designers with conceptualization. Participants highlighted how AI generative image tools offer new conceptual variation, uniqueness, and creativity. This aligns with the research done by Gu et al. (2024), and Hartmann, Exner, & Domdey (2024), in which AI generative image tools gave access to visuals beyond human cognition.

According to Nguyet (2024), in terms of performance expectancy, AI generative tools are considered time-saving. The tools help designers in sharpening their ideas and efficiently reducing the time spent on content ideation. This was also one of the main reasons why the creative agencies adopted AI generative image tools in their practices. The tools are valued for their ability to save time and costs. Because producing advertising images is quite a long process. It requires specialized creative skills and can be costly. Starting from developing a written concept based on the target audience, to producing images through manual photography, editing, or Computer-Generated Imagery (CGI). This aligns with several examples given by participants, in which they highlighted how AI generative image tools allow them to generate a specific art style or human model visualization, without having to go through the long, conventional process.

However, it is also known that AI-generated visuals are never used as the final deliverables. In the process, the AI-generated visuals are always retouched manually using other conventional tools. In this process, designers are still needed to craft the visuals as expected. Through the data analysis, it is found that there are two possible reasons for this. First is that AI-generated images lack human aspects. The second is about the copyright issues.



The uniqueness and variety creations of AI-generated visuals do not fulfill the needs for details and emotional resonance. Participants highlighted how AI-generated visuals are artificial. Although the tools are favored in terms of generating new ideas, the visuals are detectable because they share similar styles. According to Bakpayev et al. (2022), AI is not effective in creating emotional content in advertising. It is only good for creating non-emotional content or certain products. This aligns with a point of view shared by a participant, in which AI-generated images might not work for health and beauty advertisements. Because such advertisements must portray the reality of humans. It is also known that, according to most participants, AI generative image tools tend to fail in terms of generating perfect visuals containing human forms. This was supported by the study done by Bakpayev et al. (2020), in which it was found that in terms of emotional appeal, consumers favor advertisements with humans rather than AI.

Another issue in terms of adopting AI-generated visuals in final advertisement deliverables is copyright. Across the interviews, it is found that agencies are aware of the copyright issues with AI-generated images. However, participants believe that copyright issues do not come from the use of the tools themselves, but from the humans who operate the tools. AI generative image tools are merely tools that help designers in crafting creations, just like any other manually operated tools, like Adobe Photoshop, Illustrator, and such. If the designers use the AI-generated visuals without modifications at all, and claim them as their own, then it is unethical. The law of copyright in most countries states that copyright is given to works that are the result of human intellectual and production, or the creator who has characteristics and personality. Perhaps from the point of view of participants and the law of copyright, it can be inter-

preted that if designers use AI-generated images with no alteration, then the works are purely the work of the machine. But, if the designers can craft the AI-generated images in their own style, uniqueness, and characteristics, then it can be considered as creations that are the result of human intellect and production.

Indonesia's agencies that are involved in advertising practices are embracing AI generative image tools and have been adopting them in their daily practices. Participants agree that the tools have been consistently improving, and they might evolve even faster and better in the future. Therefore, participants as creative professionals in the industry believe that designers will have to adapt and embrace the changes.

In the present time, in terms of the qualifications that the agencies are looking for, they are still heavily relying on basic skills such as a sense of design, communication, and time availability. Even though AI generative tools have been used in everyday practices, they still need a designer's sense of design to bring the visuals to perfection. This aligns with what is found in Kshetri et al (2024) study, which found that AI generative is an effective tool in terms of productivity and creativity but cannot replace humans' skills and experiences. However, most participants also agree that having AI skills is considered a bonus skill, and it can be helpful for the designer's daily work itself. Perhaps this has a connection to the demand for the use of AI in the advertising industry.

According to participants, as the AI trend emerges, clients are also embracing the use of AI in requested projects. Client's requests upon AI might not solely be to follow the trend, but also to adapt to the changing target audience. A participant shared a point of view about the upcoming generation that grows together

with the evolving AI is the target audience for many brands now. To connect with these tech-savvy characteristics, several brands use AI-generated visuals in their advertisements or campaigns.

For example, a campaign from DBS Bank in 2024, titled "Dream fulfilled: Gen Z and Millennial story", as can be seen in Fig.4, which promoted their digibank Z credit card. It is unknown what percentage of AI generative tools are used in this ad campaign. However, as can be seen in Fig.4, the visuals in the campaign can be seen as AI-generated. The whole campaign shares similar visual styles. As was also stated by the participants, AI-generated visuals are detectable.

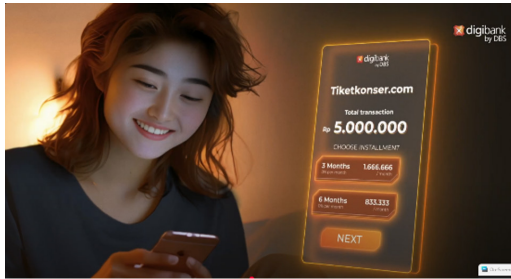


Figure 4. Dream fulfilled advertisement: Gen Z and Millennial story from DBS Bank (Source: youtube.com)

This shows how industry is adapting to AI, and consequently, needs practitioners to follow the adaptation. According to Erlyana et al. (2023), conventional marketing tools are no longer attracting the attention of modern consumers, requiring changes following the technological trends. Adaptation in the advertising industry is important as advertisements are not only a medium to communicate products but also influence broader aspects such as social trends (Everlin & Erlyana, 2021). Participants as creative professionals suggested that in the future, designers need to be open to collaborating with AI generative image tools. Either as references or as a helpful tool in finishing daily

tasks. It is necessary to compete in the ever-evolving technology era.

This study provides valuable insights into the adoption of AI generative image tools within Indonesia's advertising practices. However, several limitations should be acknowledged. First, the sample size was relatively small, comprising eight participants, which may limit the generalizability of the findings. Although the participants were selected based on their relevance and expertise in handling creative outputs in the agencies, the perspectives may not fully represent the diversity of practices across the broader advertising and creative sectors in Indonesia. As not all the participants are decision-makers in the agencies, there is not a single participant who works in an agency that has ever published an AI-generated campaign.

Second, the study primarily involved professionals working in only several varieties of creative agencies that handle advertising-related projects. While this focus ensures relevance to the research objectives, it also means the findings may not reflect adoption patterns in other design-related sectors, such as branding consultancy, publishing, or in-house corporate design teams.

Third, due to the qualitative nature of the study, the emphasis was placed on exploring subjective experiences and perceptions. As such, the study does not evaluate the actual outcomes or effectiveness of AI-generated visuals in campaigns, nor does it measure consumer responses or visual quality, which were beyond the intended scope.

For future research, studies that explore how the agencies' different firmographic characteristics affect the adoption of AI generative image tools in the industry will be valuable. It would also be valuable to conduct longitudinal research to examine how attitudes and practices

evolve as AI technologies become more integrated into daily workflows. Especially those who manually recraft or retouch the AI generative image results.

Finally, future studies could explore the implications of AI adoption for design education and curriculum development, especially as proficiency with such tools becomes increasingly relevant for entry-level designers.

Conclusion

In the present time, the AI generative image tools are positively embraced in Indonesia’s advertising practices. The tools are no longer considered unconventional, as they have been used in daily practices. Although they have been used with a lot of considerations, creative practitioners predict that in the future, there will be an increase in the tool’s usage. As the demand is higher, with the ever-changing market.

AI generative image tools are evolving fast year by year. It can be seen through generated visuals that they have become better than the previous versions. Midjourney is considered a very helpful and advanced AI generative image tool. However, despite this advancement, AI generative image tools are still not considered for their visual outputs. The tools might help with time and budget efficiency, but the results are lacking in details, human touch, and emotions. There remains the need for a designer to be involved.

However, designers are advised to know how the AI generative image tools work, the characteristics of AI-generated visuals, and implement the tools in daily practices. These are considered necessary to compete in the industry. These adoptions must be balanced with basic skills such as a strong sense of design, communication, and time availability, as these are still the core competencies required in the fast-paced advertising industry.

References

Bakpayev, M., Baek, T. H., van Esch, P., & Yoon, S. (2022). Programmatic creative: AI can think but it cannot feel. *Australasian Marketing Journal*, 30(1), 90–95. doi:10.1016/j.ausmj.2020.04.002

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. https://doi.org/10.1177/1744987120927206

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

DigitalSEA Indonesia. (2025). Digibank by DBS - Dream Fulfilled: A Gen Z & Millennial Story. Retrieved from https://www.youtube.com/watch?v=5TSa5zKszXM&pp=ygUQQZGJzIGJhbmsgZHJlYWoge-g%3D%3D

Delen, E., & İlter, B. (2021). The Effect of Human Images in Advertisements on Consumer Attention by Product Type and Gender: An Eye Tracking Study. *Pazarlama ve Pazarlama Araştırmaları Dergisi*, 0–3. https://doi.org/10.15659/ppad.14.2.267

Drozd, L., & Tavaréz, F. (2024). Generative AI: A turning point for labor’s share? (Discussion Paper No. DP24-01). Federal Reserve Bank of Philadelphia. https://doi.org/10.21799/frbp.dp.2024.01

Erlyana, Y., Setiawan, J. A., & Saputra, N. R. (2023). Augmented Reality for XYZ Perfume Brand: Enhancing Promotional Experiences through User-Centered Design. *Proceedings of the International Conference of Innovation*

in Media and Visual Design, 8797.

Everlin, S., & Erlyana, Y. (2021). Creative Strategy Analysis on the Billboard Ads of Gojek AnakBangsaBisa Edition. 512(Icoflex 2019), 150–155. https://doi.org/10.2991/assehr.k.201230.029

Gu, C., Jia, S., Lai, J., Chen, R., & Chang, X. (2024). Exploring Consumer Acceptance of AI-Generated Advertisements: From the Perspectives of Perceived Eeriness and Perceived Intelligence. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(3), 2218–2238. https://doi.org/10.3390/jtaer19030108

Guadamuz, A. (2017). Artificial intelligence and copyright. *WIPO Magazine*. Retrieved from https://www.wipo.int/web/wipo-magazine/articles/artificial-intelligence-and-copyright-40141

Hanifa, H., Sholihin, A., & Ayudya, F. (2023). Peran AI Terhadap Kinerja Industri Kreatif Di Indonesia. *Journal of Comprehensive Science (JCS)*, 2(7), 2149–2158. https://doi.org/10.59188/jcs.v2i7.446

Harborth, D., & Bauer, E. K. (2017). The Influence of Advertising on the Process of Technology Adoption: A Systematic Literature Review. *SSRN Electronic Journal*, January. https://doi.org/10.2139/ssrn.3069809

Hartmann, J., Heitmann, M., Siebert, C., & Schamp, C. (2023). More than a Feeling: Accuracy and Application of Sentiment Analysis. *International Journal of Research in Marketing*, 40(1), 75–87. https://doi.org/10.1016/j.ijresmar.2022.05.005

Hartmann, J., Exner, Y., & Domdey, S. (2024). International Journal of Research in Marketing The power of generative marketing: Can generative AI create superhuman visual marketing content? *International*

*Journal of Research in Marketing*, xxxx. https://doi.org/10.1016/j.ijresmar.2024.09.002

Kristanti, E., & Marta, R. F. (2021). Persuasive and Educative Advertising Content of Quick Response Code Indonesian Standard in Pandemic Era. *Jurnal Ilmu Sosial Dan Humaniora*, 10(2), 301. https://doi.org/10.23887/jish-undiksha.v10i2.34474

Kshetri, N., Dwivedi, Y. K., Davenport, T. H., & Panteli, N. (2024). Generative artificial intelligence in marketing: Applications, opportunities, challenges, and research agenda. *International Journal of Information Management*, 75, 1–36. https://doi.org/10.1016/j.ijinfomgt.2023.102716

McLeod, S. (2024). *Thematic Analysis: A Step by Step Guide*. October. https://doi.org/10.13140/RG.2.2.13084.71048

Napolitano, E. (2023). AI eliminated nearly 4,000 jobs in May, report says. Retrieved from https://www.cbsnews.com/news/ai-job-losses-artificial-intelligence-challenger-report/

Nguyen, B. (2023). A Chinese company is reportedly planning to replace some human copywriters and graphic designers with AI. *Business Insider*. Retrieved from https://www.businessinsider.com/chinese-company-to-replace-some-copywriters-graphic-designers-ai-report-2023-4

Nguyet, D. T. C. (2024). Adoption of Generative AI in content creation: A case study from the advertising industry. *Proceedings - 2024 IEEE Conference on Artificial Intelligence, CAI 2024*, 111–112. https://doi.org/10.1109/CAI59869.2024.00029

Noviandi, F. (2023). Tanggapi Kritik



FROM MYSTIQUE TO MUDDLE:  
UNRESOLVED LOGIC IN JOKO ANWAR'S SERIES

Fajar Nuswantoro

Received March. 15, 2025; Revised May. 20, 2025; Accepted June, 03, 2025.

**Abstract:** *Television series, as narrative mediums, rely on the audience's ability to suspend disbelief to emotionally and intellectually engage with fictional worlds. This study examines the "Orphan" episode from Joko Anwar's 'Nightmares and Daydreams', is focusing on how logical inconsistencies disrupt this process. Using Samuel Taylor Coleridge's suspension of disbelief theory, the research explores why unanswered questions—stemming from an implausible adoption process, a child's undisclosed peanut allergy, and an unexplained transition from a trash avalanche to a luxury house—undermine audience trust and narrative coherence. A qualitative methodology was employed, involving scene-by-scene analysis to decode messages, document arising questions, search for answers within the film, and log unresolved issues. Findings reveal that while the episode builds anticipation through mystical premises rooted in Indonesian culture, it fails to resolve key logical gaps, pushing the suspension of disbelief beyond its limits and reducing viewer engagement. The study suggests practical alternatives, such as tying adoption ease to insider ties or magical elements, to address these flaws. This analysis underscores the importance of balancing creative liberty with narrative accountability in audiovisual storytelling, offering insights for filmmakers, academics, and critics on sustaining audience immersion in the digital era. It contributes to the broader discourse on narrative quality and the application of suspension of disbelief in contemporary media.*

**Keywords:** *joko anwar; suspension of disbelief; nightmare and daydream; unresolved issues*

## Introduction

Television series have an important role in building narrative experiences that can influence the emotions, thoughts and imagination of the audience. One of the important elements in enjoying the story presented is the audience's ability to suspend disbelief or what is known as "suspension of disbelief." This theory was first introduced by Samuel Taylor Coleridge, who stated that the audience or reader needs to set aside certain illogicalities in the story in order to be emotionally and

intellectually engaged. In this context, a successful narrative will be able to bring the audience to accept the fictional world without being hampered by logical or plot inconsistencies (Coleridge, 1817).

This concept not only applies to television series but also in anthology series. An anthology television series is a format in which each episode features a self-contained story with different characters, settings, and plots. Unlike traditional serial shows that follow a continuous narrative, anthology series offer fresh stories

Fajar Nuswantoro is a lecturer at The Faculty of Film and Television, Institut Kesenian Jakarta (IKJ) Jakarta.

e-mail : fajarnuswantoro@ikj.ac.id

Poster AI Film Pasutri Gaje, Kiky Saputri Malah Diceramahi Balik. Suara. Com. <https://www.suara.com/entertainment/2023/06/22/062000/tanggapi-kritik-poster-ai-film-pasutri-gaje-kiky-saputri-malah-diceramahi-balik>

Priatna, A. (2023). Foto: Melihat Baliho Politik Prabowo-Gibran Hasil Teknologi AI. Inilah.Com. <https://www.inilah.com/foto-melihat-baliho-politik-prabowo-gibran-hasil-teknologi-ai>

Osborne, N., & Grant-smith, D. (2024). In-Depth Interviewing In-depth Interviewing Author Book Title Griffith Research Online. January. <https://doi.org/10.1007/978-981-16-1677-8>

Patrick, V. M., & Hagtvedt, H. (2015). Advertising Visuals. 16. <https://pdfs.semanticscholar.org/9463/5c7f74baa-980367fa662bdbefb9efc9e629b.pdf>

Rachmawati, I., Parman, S., Solihah, Y. A., Design, V. C., Catur, U., & Cendekia, I. (n.d.). Exploring the Boundaries of Creativity in the Digital Age by Understanding the Impact and Implications of AI Work. IN. 294–307.

Rachmawati, I., Rosyid, D. F., Parman, S., Solihan, Y. A., & Putra, G. M. (2024). Penerapan Artificial Intelligence Pada Media Desain Grafis Menggunakan Analisis Interpretasi Edmund Feldman. Jurnal Digit, 14(1), 66. <https://doi.org/10.51920/jd.v14i1.372>.

Rilia. (2023). Indomie Gunakan AI di Iklan Terbaru Mereka, Hemat Biaya atau Bunuh Kreativitas? Mediaformasi.Com. <https://mediaformasi.com/2023/09/indomie-gunakan-ai-di-iklan-terbaru-mereka-hematbiaya-atau-bunuh-kreativitas/>

Rostanti, Q. (2024). Gambar AI Marak di Medsos, Mengapa Diprotes Seniman dan Ilustrator? Republika. Retrieved

from <https://ameera.republika.co.id/berita/s6ov9u425/gambar-ai-marak-di-medsos-mengapa-diprotes-seniman-dan-ilustrator>

Smith, A., Smith, A., & Hutson, J. (2024). intelligence in the new age of digital marketing Design + From concept to creation: The role of generative artificial intelligence in the new age of digital marketing. Design + Journal <https://doi.org/10.36922/dp.4776>

Tektona, R. I., Sari, N. K., & Alfari, M. R. (2021). Quo Vadis Undang-Undang Hak Cipta Indonesia: Perbandingan Konsep Ciptaan Artificial Intelligence di Beberapa Negara. Negara Hukum, 12(2), 285–305.

Zulkarnain, A. (2022). Adaptabilitas Seni dan Desain atas Fenomena Seni Kecerdasan Buatan (Ai Art) melalui Kacamata Sejarah. Prosiding Konferensi Mahasiswa Desain Komunikasi Visual 2022, 3, 27–38.

each time, allowing creators to explore a wide range of themes, genres, and storytelling styles. This format has gained popularity for its creative freedom and flexibility. Anthologies often tackle complex or experimental ideas, making them ideal for audiences who enjoy variety and thought-provoking content without long-term commitment to a single storyline. The example of anthology series is our main topic below.

On June 14th 2024, Joko Anwar released the series "Nightmares and Daydreams" on the Netflix platform. This anthology series is packaged in seven episodes. This series was directed by Ray Pakpahan, Tommy Dewo, and Randolph Zaini while Joko Anwar served as executive producer. Joko Anwar said that this genre has great potential to become popular in the film industry. As long as this genre is combined with stories that are close to people's lives (Kompas, 2024). Joko promised that this series will be mind-blowing. (Tempo, 2022)

Promotion of this series was carried out intensively with attracted attention posters. This series succeeded in attracting hype in social medias and their netizen, including the author. The author watched the series soon after its release date. However, the author was disappointed because the series' storyline did not match expectations. The author felt something was odd after watching the first three episodes, especially the second episode entitled "Orphan". The author feels that there is a discrepancy in the logic of the story. Several scenes raise questions that are not answered until the end of the episode, and leave a less cohesive impression on the narrative as a whole.

The author remembered the experiences when watching another similar anthology series. Black Mirror is a British

anthology television series created by Charlie Brooker that explores the dark and often dystopian sides of modern society and technology. Each standalone episode presents a thought-provoking story set in a near-future or alternate reality, highlighting the unintended consequences of innovation and human behavior. The show is known for its sharp social commentary, psychological depth, and unsettling twists that reflect contemporary anxieties about surveillance, artificial intelligence, social media, and digital dependence. The author felt that Black Mirror manages to convince all the scenes was real and believable. It gave an opposite feeling from "Nightmares and Daydreams". This is obviously a subjective opinion from the author but it triggers the need to explore the cause objectively.

In an effort to understand this flaw, the author was motivated to analyze one episode of the series using the suspension of disbelief theory approach. This analysis aims to identify aspects that cause confusion, reveal potential causes of logical inconsistencies, and explore ways to prevent similar problems from recurring in the future. Through this research, it is hoped that it can contribute to a deeper understanding of the importance of logic and consistency in building stories that are able to maintain the audience's suspension of disbelief.

By focusing on the second episode, this research will dive into the messages in each scene to find the missing messages. It is hoped that the results of the analysis will provide practical recommendations that can help content creators avoid similar problems in the future, as well as enrich the study of the theory of suspension of disbelief in the context of audiovisual narratives.

Research on suspension of disbelief

has become an important focus in narrative studies, media theory, and aesthetics, especially in understanding how audiences engage with works of fiction. This concept was first introduced by Samuel Taylor Coleridge in his *Biographia Literaria* in 1817. For the past two centuries that phrase "willing suspension of disbelief"—has been repeatedly used by scholars and laity alike to describe how readers, listeners, viewers, and players seemingly disregard reality to enter into and become engaged with the circumstances and the inhabitants of fictional worlds (Ji, 2016).

David Bordwell, a leading figure in film studies, heavily emphasizes the concept of cause and effect as the fundamental organizing principle of classical narrative cinema. For Bordwell, a narrative is essentially "a chain of events in cause-effect relationship occurring in time and space." This means that events in a film are not random occurrences, but rather interconnected by a logical progression where one event serves as the catalyst for the next, propelling the story forward. Characters, in this framework, often act as the primary causal agents, initiating actions that elicit reactions from others, thereby weaving a coherent and engaging plot. This reliance on clear causality is central to how classical Hollywood cinema, in particular, constructs its narratives, encouraging viewers to constantly form hypotheses and anticipate future events, thus generating curiosity, suspense, and surprise as the causal chain unfolds towards a resolution (Bordwell, 2020).

The process of suspension of disbelief involves the audience's ability to integrate imaginative experiences with everyday reality. In this context, elements that may be unrealistic - such as the presence of supernatural beings, futuristic technology, or situations that are far from real-world possibilities - are accepted as part of the

narrative world as long as the story presents a consistent logic. This logic will be reflected creatively in character development, a solid plot and clear rules of the story world. If this logic is well received by the audience, then suspension of disbelief can be said to be successful.

This is linear with the screenplay theory where character must live in the believable environment that creates problems which can be solved by the character and or with the help of the environment itself (Maras, 2019).

In media studies and film theory, suspension of disbelief is an important framework for understanding audiences' relationships with various forms of entertainment, including film, television, and video games. For example, in science fiction or fantasy films, audiences often encounter elements such as alien worlds, magic, or technology that does not exist in the real world. However, if these elements are combined with a convincing narrative and the creation of cause-and-effect logic for the existence of these elements, the audience will not only accept their presence but also feel emotionally involved in the story.

It is important to note that suspension of disbelief has limitations. When a story violates its own internal logic or fails to answer important questions raised in the narrative, audiences tend to lose their emotional and intellectual engagement. A work's inability to maintain narrative coherence can make viewers doubt the fictional world, ultimately ruining the viewing experience.

Janet H. Murray argues that interactive media, such as film and television, have the unique ability to create worlds that are relatable to audiences (Murray, 2017). This is reinforced by Jenkins who explains that elements of a fictional



world, such as internal consistency, in-depth characterization, and a structured storyline, are key in maintaining suspension of disbelief. When these elements are compromised, the audience’s engagement with the story can be significantly reduced (Jenkins, 2006).

Methodology

This research employs a qualitative approach to conduct an in-depth analysis of cinematic scenes. This methodology is specifically designed to unpack the intricate layers of meaning within the series, moving beyond surface-level plot points to explore the deeper messages and implied narratives embedded in each scene. Rather than focusing on quantitative metrics, the author approach prioritizes a rich, nuanced understanding of the series storytelling efficacy and artistic intent. While the introduction to this study alludes to broader discussions concerning narrative logic in other series, the core of this methodology is dedicated to a meticulous, scene-by-scene deconstruction of the chosen episode, ensuring a granular understanding of its internal coherence and thematic development. The following steps outline our systematic process for analyzing and interpreting the visual and auditory information presented in the episode. The steps are:

- 1. Information parsing per scene.

Each scene in the series is analyzed to identify the scene’s message. The information contained in the scene is described in detail to understand the context and its contribution to conveying the story message.

- 2. Collecting arising questions. If during the scene describing process the author needs to question something, the

question will be noted. These questions may cover aspects of the story, symbolism, cinematography techniques, or the intent of a particular scene.

- 3. Search for information in the episode to find answers for the questions.

The questions that have been prepared are then answered by reviewing scenes or other parts in the film. This process aims to ensure that each question is answered based on the evidence contained in the film work itself.

- 4. Logging unanswered questions.

If there are questions that cannot be answered even though they have been explored in the film, these questions are specifically noted. This is to identify empty spaces in the analysis that can become a focus for further research or critical discussion.

This methodology aims to support in-depth and structured analysis, with an emphasis on understanding the context and meaning of each scene in the film.

Result

The following are the results of research conducted by the author. The report format consists of three elements. The first is the time of the scene in the episode. Second is the content of the story. Third are questions that arise naturally when watching scenes over a certain period of time. The research results are sorted by broadcast time from start to finish.

00:00 – 01.30

Story content: Iyos took part in washing the body. Iyos wonders about the body. He then discovered that he was not

a relative or neighbor of the corpse. He was chased but managed to escape.

Questions: No questions arise in this scene.

01:30 – 02:30

Story content: bumper series

Question: No question.

02:30 – 06:19

Story content: In the hut where they live, Iyos tells the truth about the gossip which says that the corpse he washed became rich because he picked up a magical child in an orphanage. Iyos suggested his wife, Ipah, to adopt a magical child so he can become rich. Ipah disagreed because according to him there was no point in being rich but dying on the seventh day of adoption. Iyos convinced Ipah to still adopt the child and immediately throw them away on the seventh day so they wouldn’t die. Ipah still doesn’t want to. Considering their income continues to fall and debt collectors threaten to burn down their house, Ipah changed her mind and is willing to adopt the miracle child.

Question: No question.

06:20 – 07:30

Iyos and Ipah went to the adoption place. They intend to adopt the child that Mas Bagas adopted yesterday. The Adoption Officer seemed to know that the child they adopted was indeed special and had magical powers. The Adoption Officer asked why they had to adopt the child. Ipah replied that if they didn’t adopt, they would both die. The officer approved their request.

Question: Is it that easy for them to adopt? They are a poor family but can adopt a child?

07:30 – 08:40

The Adoption Officer handed Syafin over to Iyos and Ipah. The officer suspected that Iyos and Ipah were looking for something from the child. The officer only asked them to love Syafin.

Question: What made Iyos and Ipah to be approved for adoption? What’s the argument other than they will die? Will there be additional information?

08:40 – 12:38

First day of adoption. Ipah offers Harum Manis, a cheap cake. Syafin refused and instead looked at an expensive restaurant called The Maja. Ipah approached the restaurant and seemed to intend to find information. However, Ipah was asked to leave the restaurant. Ipah then took Iyos and Syafin home. When they got home, Ipah immediately fed Syafin only with rice and fried egg. At night when Syafin was asleep, Iyos and Ipah wondered if they were going to be rich. They both want to buy a house and cook delicious food. Suddenly, they found five hundred thousand rupiah behind the pillow. They don’t know the origin of this money but they are sure this is the impact of Syafin’s presence.

Question: This scene raises an even sharper question, why could a poor scavenger adopt a child and take the child to a rickety house?

12:39 – 19:20

Second day of adoption. It turns out

that Ipah once had a child named Rian. Rian is dead. Iyos came with toys for Syafin. Iyos then said goodbye and went to work fixing the gutter. Ipah will go scavenging. Syafin joins Ipah in scavenging. While Ipah is scavenging, Ipah’s memories go back to the past when Rian was ran over by a garbage truck. When Ipah woke up from her reverie, Ipah saw that Syafin was in danger of being ran over by a garbage truck too. Ipah immediately saved Syafin. Syafin was saved. Syafin felt safe and started calling ‘Mum’. That evening, Iyos questioned Ipah’s attitude in allowing Syafin to call her ‘Mum’. Iyos reminded Ipah not to get too carried away with children who are considered to be descendants of the devil. That night, they both got a gold bracelet.

Question: The adoption process looks even more strange and impossible when we discover the fact that Ipah once had a child and died in an accident because he was run over by a garbage truck. How could a poor family with a history of negligence be able to get an adoption?

19:20 – 21:00

Third day of adoption. Iyos sells the gold bracelet they got the night before. Iyos earned enough money to pay off the debt. Iyos told Syafin that he would buy a luxury house to live in with Ipah and Syafin. On the evening of the third day, Iyos found a gold necklace in the drinking kettle.

Question: No question but the question from the previous scene is still annoying.

21.01 – 25.30

Fourth day of adoption. Ipah and

Iyos took Syafin to an expensive restaurant that they couldn’t afford to visit before. Ipah, Iyos and Syafin ordered a lot of food. When they were eating, Syafin choked and then lost consciousness. Ipah and Iyos panicked and immediately took Syafin to the hospital. Syafin turned out to have a history of allergy to peanuts. Ipah was shocked. Iyos then protested to Ipah who was considered too affectionate. Iyos reminds the purpose of adoption is to get money and not to love him. Ipah didn’t seem to care about Iyos. That night they did not get money.

Question: A new fact related to the adoption process. How is it possible that a child who has acute allergies to something can be adopted by a poor family who does not have enough knowledge about health?

25.30 – 29.40

Fifth day. Iyos invited Syafin to play at the night market. Ipah reminds them they don’t have any money. Iyos persuades Ipah to use the remaining money to please Syafin. If Syafin is happy, they will get more money. Ipah begins to have an emotional attachment to Syafin. Ipah wants Iyos to forget about money. Iyos ignored Ipah and instead forced Syafin to bring in money. Iyos got emotional and hit Syafin. That night, again they didn’t get any money.

Question: none.

29.41 – 33.00

The sixth day. Syafin wakes up in the morning and leaves the hut. Ipah wakes up and realizes Syafin is not by his side. Ipah rushed out and found Syafin playing near the curb of the garbage pile. Sudden-

ly there was an avalanche of garbage that hit Syafin. Ipah and Iyos immediately rescue Syafin. A moment later, a larger landslide occurred and this time it hit Ipah and Iyos. They then woke up in a luxury house and had a certificate in the name of Ipah and Iyos. Syafin is still unconscious due to the landslide.

Question: how did they get to the luxury house? Who helps or picks them up from the garbage avalanche? Who completed the luxury house?

33.01 – 45.37

The seventh day. Iyos wakes up in his luxurious house. He found Ipah and Syafin in the next room. Syafin is in a sick condition due to a landslide. Ipah told Iyos that it was not Syafin who would kill them. Iyos immediately eliminated all items that could possibly kill them both. Iyos’ attitude changed. This time he apologized to Syafin. Iyos wants to be a good father. That night, Iyos got sacks of money. Unexpectedly, Iyos actually changed after getting a lot of money. Iyos is convinced again that Syafin is the son of the devil and should be killed. Without Ipah’s knowledge, Syafin is taken and will be buried by Iyos. Ipah realized what was going to happen and immediately saved Syafin. Ipah carried Syafin and ran back to their ramshackle hut. Iyos chases Ipah. Iyos wanted to kill Syafin but it was Ipah who stabbed Iyos. Iyos lost. Not long after, Ipah committed suicide. Syafin mourns Ipah’s passing.

Question: Why did you run to the shack? Why not ask the people for help? Why didn’t Syafin turn into a demon? Where is the ‘miracle of the devil’s son’ who is thought to kill on the seventh day?

Discussion

From the research results, it can be seen that there are several questions that arise when watching the “Orphan” episode. This question arises and is not answered until the end of the story. In fact, this question is not answered in other episodes in this series.

Iyos and Ipah heard rumors that there was a child born to Satan who could be adopted and could bring a big fortune in a week. His fortune can be in the form of sacks of money, a big house and a luxury car. However, those who receive good fortune are threatened with death on the seventh day after adoption. Increasingly pressing economic factors make Iyos and Ipah agree to adopt the magical child with all the risks.

When the author watched it, the issue about magical children was not surprising. Mystical premises like this are nothing new in local cinema or in the daily lives of Indonesian citizens. Many people believe in magical things beyond logic. There are still residents who are deceived by someone who has magical powers (Ibrahim, 2024).

The “Orphan” episode series went quite smoothly at the start. The introduction of the characters and their life problems went on without any significant questions. However, there is a scene that starts to raise questions when Iyos and Ipah adopt the devil’s child. The adoption process went smoothly without a hitch and without drama. Iyos and Ipah also did not pay or reimburse the costs, which makes the logical question even bigger.

In the adoption scene, Iyos and Ipah only need a few hours to get Syafin, the name of the child to be adopted. This scene raises the question: is the adoption process that easy?



The scene depicting the effort to get Syafin looks flat. Moreover, the argument put forward was that Iyos and Ipah were threatened with death by debt collectors if they did not immediately pay off their debt. Doesn't that argument actually show their poor economic situation? Iyos and Ipah are completely ineligible to adopt a child due to their difficult economic conditions. Then why were they allowed to adopt Syafin?

Actually, the audience can accept this not-so-logic considering they are watching a film. A good film breaks down information little by little. Not all information can be put at the beginning of the film because that can make the film end quickly (Bordwell, 2020). This is where the suspension of disbelief occurs. The audience is willing to postpone requests for answers to questions that arise. The audience is still willing to continue watching the scene. Of course, that question shouldn't be left floating around for too long. The question must be answered.

When suspending disbelief, the audience can assume that the adoption process was easy because of the closeness to the insider. Viewers may also think that the adoption institution has bad administration so that people easily take children home. In scenario theory, the audience is carrying out an anticipation process (Bordwell, 2020). The audience prepares answers to questions that arise when they find oddities in the film.

In the experience of watching a film, it is normal for questions to arise in the viewer's mind. These questions may vary depending on the information presented in the film and the subjective perspective of each viewer. In screenwriting, there is a technique of deliberately delaying providing answers to questions that arise to create suspense and surprise. As Linda

Cowgill explains, audiences often have anticipation for the resolution of the conflict, but effective scenarios provide unexpected resolutions, creating satisfying surprises (Cowgill, 2007).

Cowgill said that the character will play the rhythm of the story; the character's actions will help in building suspense, and provide unexpected surprises for the audience. According to Cowgill, this is called the relationship between anticipation and surprise. She said that creating anticipation and providing surprises is one of the jobs of a screenwriter in satisfying the audience. The scenario must be interesting, not boring, entertaining and make sure the character's actions in the story can be understood by the audience. For that, the scenario should not provide too much information to the audience because it makes the scenario story easy to predict by the audience. According to him, a good scenario story is one that influences the audience. A story that makes the audience always want to guess the unanswered problems and is in front of the character in resolving the conflict. The audience has anticipation of the resolution of the conflict but the scenario story provides something else in resolving the conflict so that it creates a surprise for the audience.

However, it is important to note that while a delay in answers is acceptable, ultimately the questions must be answered to maintain the audience's satisfaction and trust in the narrative (Martin, 2015). Donald Spoto said suspense is the audience's emotional reaction to the characters resulting from delaying or withholding information from the film's story. According to him, suspense can work by involving the protagonist and opposition characters (Spoto, 2010).

The statement is reinforced by Robert

McKee who said that suspense can create curiosity and attention in the audience about the film's story. Suspense can be done by delaying information. According to him, 90% of films use suspense in their stories. The screenwriter does this because suspense can make the audience empathize with the characters. He continued to empathize with the audience by searching throughout the film to obtain pending information. According to him, when the audience does this, the suspense in the story will cause anxiety (McKee, 1997).

McKee gives an example of suspense in a drama film in Michael Curtiz's work entitled *Casablanca* (1942). In the film, much information is withheld from the audience. This is exemplified by McKee in the first act of the film. The audience is not told what anxiety Rick's character is experiencing. Information is only given through the character Yvone (a girl who was rejected by Rick) and the conversation of the character Renault. When the character Ilsa appears and her relationship with Rick, the audience only gets information about the reason Rick rejected Yvone. McKee continues that the audience only finds out the real relationship between Rick and Ilsa at the end of the first act during the flashback scene. In that scene, the audience is given information about Rick's love affair with Ilsa while in Paris. According to McKee, suspense in drama films can be applied by delaying information and giving it to the audience slowly before it is finally revealed.

Several scenes later, new information emerges that it turns out Syafin has a peanut allergy. This allergy turned out to be at an acute stage where he could faint if he ate the wrong food. Syafin had to be taken to hospital because of the allergy. This information made the audience even more surprised. There are more and more audience questions. How is it possible that

a child with a health condition that is at risk of being fatal can be easily adopted by poor people who cannot afford rent or even a hospital?

The author's increasing number of questions brought the suspension of disbelief process to an end. The author thought this episode has a logical flaw and reduces their interest in continuing to watch. At this point, Coleridge's theory of suspension of disbelief has been proven. This series of scenes and questions proves that there is a time for audience awkwardness and should not be left for too long without an answer.

The arising questions haven't stopped. There is a scene where Iyos, Ipah and Syafin are buried by an avalanche of rubbish. Using human logic, they should have died. However, they instead moved to a room in a luxurious house. In that room there is a house certificate in their name which indicates that the house belongs to them. The luxury house does not raise any questions because from the beginning of the story it has been informed that Iyos and Ipah can get luxuries including a house. In short, their dream of getting wealth has been achieved. The audience was not happy but instead asked how they could get to the house? With technology? Or by miracle? Moreover, the house is shown as a reality which can be interpreted as meaning that Iyos and Ipah are not living in a dream or magic world. This means that the house is as real as most people's houses. At this stage, the audience needs clarity so that they can continue watching the film without any further distractions in their minds.

Filmmakers are allowed to create any scene, but that doesn't mean they are free from the obligation to explain the logical consequences of this creativity. They have to be careful with all objects displayed

in the frame as they will create meaning in the mind of audiences (Tierno, 2024). The transition from the avalanche of trash to the luxury house just happens and is never explained until the end of the story. In fact, a funny thing happened when Ipah decided to go home to the hut. Ipah carried Syafin and moved from the luxury house back to the hut 'manually' a.k.a running. Leave for the luxurious house with magical help and return to the hut with a run. Next question: why did you have to run to the hut? Wouldn't it be true that if she was threatened, Ipah could run to the authorities or a known neighbor? The audience's logic is damaged. If we look at it from the theory of suspension of disbelief, it can be said that the audience's trust has been completely destroyed. No upcoming information which can restore the ruined trust.

We need defensive questions to correct this failure. Should illogical scenes not be created? Can't the story in this episode be improved? If possible, what should be done?

Delaying logic is necessary to make an interesting story. Without any suspension of logic, we may never see a film about a man who can crawl on walls after being bitten by a spider. Maybe we also won't see a human war with extraterrestrial creatures. However, delaying logic has consequences.

Coleridge said that the suspension of disbelief must be resolved immediately. In the context of the Iyos and Ipah case, the director must know what the audience thinks or questions after seeing scene after scene. The director should be ready to answer questions about the ease of the adoption process shortly after the adoption scene takes place. That is the main function of a director: to direct.

If viewed from the perspective of the

suspense of disbelief theory, there are two things that the director should pay attention to. First, the audience should not be left wondering for too long about the illogicality. Second, the director must refocus the audience and prepare for the next scene. Audience focus is part of the Director's responsibility.

When a viewer looks at an image, they try to make sense of it and when it is placed next to another image they try to make sense of the relationship between them. Beneath each is written the viewer's interpretation (Lambden, 2022).

The illogical adoption scene needs to find a solution. The author proposes several alternatives to answer the question about the adoption process being too easy. Of course, this alternative is only an example and not a requirement. The first alternative, the director can create a story that the admin who takes care of the adoption is part of Iyos and Ipah's environment. It could also be said that the admin is Iyos' brother. The admin understands the threats faced and is willing to help. The second alternative, Iyos and Ipah know the secret of the crimes committed by the admin or adoption agency so that the admin is forced to pass the adoption. The third alternative, it turns out that the admin is part of the devil's strategy which deliberately ensnares poor people who have reached a dead end.

The addition of the suggested stories will complete the mise en scene. The information will become a whole where the action and reaction are available. This formula will resolve the question (Eisenstein, 2020).

Meanwhile, in the context of the scene of moving from the avalanche of rubbish to the luxury house, the director can use the 'power' of the devil child to create a magic portal that instantly transports

them. This also shows that Syafin is a child who has magical powers. Syafin is not seen as the incarnation of Satan throughout the film. In fact, the child looked like a weak child. This magic portal could also be the answer to the suspension of disbelief from the logic that has been distorted in the previous scenes. The director was also able to show Syafin's physical changes when he transformed into a devil.

This idea is just a common visualization of demons. This is the easiest way to tell someone is evil because that is the stereotype of a demon. Audience has seen many visualizations of demons before and it helps them to acknowledge the boy character. A common symbol will make the film easier to understand (Bartesaghi, 2016).

Joko tried to explain the timeline of this anthology (CNN Indonesia, 2024). The Author was seeking additional information to answer the unresolved logic. The effort returned failed.

The Author was not alone in questioning the logic in this series. A reviewer named Yuni also suggested that the audience watch the movie a few times because the series is raising questions (Usmanda, 2024). She did not mention which scene that raises questions or whether rewatching will help answer those questions. The Author has rewatched many times and did not find the answers.

As stated in an article, a confusing or ambiguous ending can trigger debate among viewers and influence their perception of the entire film (Protheroe, 2023).

### Conclusion

In conclusion, the "Orphan" episode presents a compelling yet flawed narrative that struggles to maintain the audience's

suspension of disbelief due to unresolved logical inconsistencies. The story of Iyos and Ipah adopting Syafin, a child rumored to be born of Satan, introduces mystical elements that initially captivate viewers, aligning with cultural beliefs in Indonesia about the supernatural. However, the ease of the adoption process, Syafin's undisclosed peanut allergy, and the abrupt transition from a trash avalanche to a luxurious house without explanation stretch the audience's willingness to overlook logical gaps beyond a reasonable limit. Theories from Coleridge, Cowgill, Spoto, and McKee highlight the importance of suspense and delayed information in storytelling, but they also emphasize that such delays must eventually be resolved to preserve narrative coherence and audience trust.

While the episode successfully builds anticipation, it fails to deliver satisfying surprises or explanations, leaving viewers with lingering questions that undermine their engagement. Proposed alternatives—such as tying the adoption to insider connections, blackmail, or Syafin's magical powers—demonstrate how the story could address these flaws, though these remain speculative without evidence from the creative team. Ultimately, "Orphan" serves as a case study in the delicate balance between creative liberty and logical accountability, underscoring that while audiences are willing to suspend disbelief, they require eventual clarity to sustain their investment in the narrative. Without it, as seen here, the story risks losing its emotional and intellectual impact, leaving viewers frustrated rather than fulfilled.

This research is also relevant in the context of fictional content production in the digital era, where streaming platforms such as Netflix have become the main medium for story distribution. In

the increasingly fierce competition in the entertainment industry, narrative quality and the ability to maintain audience trust are key factors in the success of a work. Therefore, learning from this analysis is not only useful for filmmakers, but also for academics, critics, and fans who want to understand more deeply the dynamics between story, logic, and audience reception.

References

Bartesaghi, S. (2016). *The Director's Six Senses*. California: Michael Wiese Production.

Bordwell, D., Thompson, K., Smith, J. (2020). *Film Art: An Introduction Twelfth Edition*. NY: McGraw-Hill Education.

CNNIndonesia.(2024,0625).Retrieved05 27,2025,fromCNNIndonesia:<https://www.cnnindonesia.com/hiburan/20240621233556-220-1112659/penjelasan-timeline-cerita-joko-anwars-nightmares-and-daydreams>

Coleridge, S. T. (1817). *Biographia Literaria*. London: Rest Fenner.

Cowgill, L. (2007). *The Art of Plotting: Add Emotion, Suspense, and Depth to Your Screenplay*. UK: Lone Eagle.

Eisenstein, S. (2020). *Mise En Jeu and Mise En Geste*. Montreal: Caboose.

Ibrahim, M. B. (2024, September 24). *Hukum dan Kriminal*. Retrieved from detik.com: <https://www.detik.com/jatim/hukum-dan-kriminal/d-7554935/rugi-rp-55-juta-war-ga-klaten-tertipu-dukun-pengganda-uang-asal-malang>

Jenkins, H. (2006). *Converge Culture: Where Old and New Media Collide*. New York: NYU Press.

Ji, Q., Raney, A.A. (2016). Examining Suspension of Disbelief, Perceived Realism, and Involvement in the Enjoyment of Documentary-Style Fictional Films. *Projections*. 10(2). 125-142. [https://doi: 10:3167/proj.2016.100207](https://doi.org/10.3167/proj.2016.100207)

Lambden, J. (2022). *Film Editing: Emotion, Performance And Story*. Great Britain: Bloomsbury.

Maras, S. (2019). *Screenwriting: History, Theory and Practice*. Great Britain: Wallflower Press.

Martin, A. (2015). *Mise en Scene and Film Style: From Classical Hollywood to New Media Art*. Hampshire: Palgrave Macmillan.

McKee, R. (1997). *Story: Substance, Structure, Style and the Principles of Screenwriting*. New York: Regan Books.

Murray, J. (2017). *Hamlet on the Holodeck: The Future of Narrative in Cyberspace (Updated Edition)*. Cambridge: MIT Press.

Protheroe, B. (2023, 12 1). *Trending*. Retrieved 2 28, 2024, from Screenrant: <https://screenrant.com/confusing-movie-endings-fans-debate-argue/>

Rantung, R., Setiawan, T. (2024, 06 13). *Suguhkan Genre Baru Lewat Nightmares and Daydreams, Joko Anwar: Kalau Penonton Diberi Itu-itu Saja Bosan*. Kompas. <https://www.kompas.com/hype/read/2024/06/13/194718966/suguhkan-genre-baru-lewat-nightmares-and-daydreams-joko-anwar-kalau>

Spoto, D. (2010). *The Art of Alfred Hitchcock: Fifty Years of His Motion Picture (Kindle Edition)*. USA: Achor.

Tempo. (2022, 09 6). *Joko Anwar Ciptakan Universe Baru Lewat Serial*

*Nightmares and Daydreams*. Tempo. <https://www.tempo.co/teroka/joko-anwar-ciptakan-universe-baru-lewat-serial-nightmares-and-daydreams-296224>

Usmanda, Y. (2024, 06 24). *Review Serial Nightmares and Daydreams (2024)*. Kincir. <https://kincir.com/movie/review-serial-nightmares-and-daydreams-2024/>

Tierno, M. (2024). *Semiotics for Screenwriters: Break Down Your Favorite Movies Then Write Your Own*. New York: Bloomsbury Academy.



## FASHION TREND VISUALIZATION THROUGH AI-BASED ILLUSTRATION: A CASE STUDY ON FASHION TREND FORECAST 2025/2026 STRIVE BOOK

Enrico

Received May. 13, 2025; Revised June. 05, 2025; Accepted June. 13, 2025.

**Abstract:** Digital technology has evolved and brought significant changes in various aspects of the creative industry, including the fashion industry. One of the innovations that is now starting to be applied in the visualization process, especially in producing fashion illustrations, is artificial intelligence (AI) technology. Through a case study on Fashion Trend Forecast 2025/2026 STRIVE book, this research aims to analyze how AI technology compares with manual and digital illustrations in communicating ideas and narratives of fashion trends. The method used in this research is a descriptive qualitative approach to visual analysis based on the main aspects of stroke line, color, proportion, and composition. The results show that AI-based fashion illustration is able to display visuals with high quality and detail, but it needs to be supported by prompt experiments to achieve the intended image results. The efficiency of the process to produce illustrations is also very significant, because no hand-draw sketch skills are required. It can be concluded that AI has great potential as a tool in the visualization process of fashion trend books, especially in conceptualizing and communicating trend elements quickly and adaptively.

**Keywords:** visualization; fashion trend; illustration; artificial intelligence (AI)

### Introduction

Fashion trends are rapidly evolving and dynamic in this modern era, influenced by various social, economic, cultural, and technological factors. In today's digital era, shifting lifestyles and utility patterns have accelerated the emergence of new trends that are increasingly complex and diverse. Fashion trends are not only a guide, but also serve as an important driver for innovation and marketing strategies in the fashion industry, one example of the connectivity between the fashion industry and sustainability issues is also integrating environmentally friendly approaches into current fashion trends. This shows the

connection between design innovation, social responsibility, and trend setting. (Bris et al., 2021; Grace Gatawa, 2022).

In the context of trend setting, trend visualization is a crucial element to help fashion designers, brands, and fashion observers understand the direction of aesthetic movements and consumer preferences. Trend visualization serves not only as a form of documentation, but also as a media for communicating creative ideas that are relevant to the present and the future.

The fashion industry is currently showing a significant increase in technology implementation starting from the

research process, the creation of illustrations, and the production process of its products. Since 2023, there has been an emerging issue about the role of artificial intelligence (AI)-based technology in all fields, which is expected to help human activities. One of the roles of artificial intelligence (AI) in the fashion industry is in the creation of fashion illustrations and designs. Along with the increasing use of technology in the creative process, AI-based illustration offers a new approach in the process of describing possible upcoming fashion trends. This can be seen from several studies that show that AI is not only used in data analysis and to predict social or consumer activity behavior, but can also produce creative and technically more effective and efficient designs (Akram et al., 2022; Sohn et al., 2021). Research shows that AI image generator technology is able to produce realistic and attractive illustrations, becoming a creative partner in providing more accurate design recommendations. (Kamiliyana et al., 2024; Rachmawati et al., 2024).

However, challenges are encountered in integrating artificial intelligence (AI) in the field of illustration and design. Some studies show that while using AI can improve efficiency and creativity, basic skills in creating illustrations are still important. Insight and understanding of the elements, color composition, and proportion are still needed to achieve a quality illustration or design. (Dewanto, 2024).

Several previous studies related to the application of artificial intelligent in the design and fashion industry have been conducted., Sohn (2020) in his article conducted research on consumer responses to fashion products designed by generative adversarial network (GAN) technology, Kamiliyana (2024) dan Rachmawati (2024) conducted research related to the application of AI technology in graphic design media with the aim that graphic designers can optimize

the use of AI in their work and work together to produce innovative graphic works. This research discusses how to utilize artificial intelligence (AI)-based technology to produce visual illustrations of fashion trends, with a case study on Fashion Trend Forecast 2025/2026 STRIVE book, which is an important reference in mapping the future development of Indonesian fashion aesthetics.

This research attempts to answer the following questions:

1. How is the implementation process of artificial intelligence (AI) technology in generating visual illustrations for fashion trends?
2. What are the implications of using AI illustrations on the way fashion trends are communicated and perceived in the local fashion industry?

### Fashion Trend

Fashion has become part of the human lifestyle, always changing with the times and as a medium of communication and social identity. Fashion inherent in time and space is called fashion trend. Fashion trends as a social phenomenon reflect changes in style preferences and aesthetic values in society at a certain period, which can occur due to changes in social, economic and technological aspects that affect how fashion is utilized and shaped in society. As the impact of digital technology affects the development of fashion trends, the use of big data analysis that applies machine learning can study consumer behavior patterns and analyze the best-selling fashion products (Huang, 2024; Lee & Suh, 2024). By taking advantage of this technology, companies can respond to trends quickly, producing fashion products that match market preferences.

Fashion trends often reflect the changing values and norms in society, not stand-

ing alone as an aesthetic phenomenon, but as a medium of symbolic communication that reflects identity, social status and power relations. Cultural and social aspects can influence how people dress and what is considered fashionable. For example, in urban communities, fashion trends tend to be influenced by global issues such as sustainability, gender equality, and digitalization, which are then translated into the shapes, colors, or materials used.

Overall, fashion trends are a complex reflection of the interconnections between technology, society, culture and consumer behavior. Changes in fashion trends not only directly affect the fashion industry, but also serve as a reflection of broader socio-economic conditions. To communicate this, media such as specific websites that discuss fashion trends or in the book form are designed. One of the most widely seen institutions as a guide to fashion trends is WGSN, a company in London that provides design and consumer predictions as well as business and marketing consulting. While in Indonesia itself also has a book Fashion Trend Forecast, which is a fashion trend guide that adjusts global fashion trends and socio-cultural values, and consumer behavior in Indonesia.

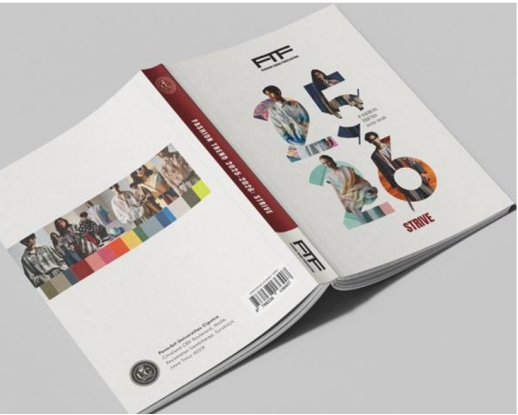


Figure 1. Fashion Trend Forecast 2025/2026 STRIVE (Source: Fashion Trend Forecast 2025/2026 STRIVE book)

Visualization on Fashion Forecasting

In fashion trend forecasting, the role of visuals is indispensable as a media for communicating information and effectively integrating data, intuition, and visual narratives and current trends. Visual representation serves as a connection between data and design interpretation (Kim et al., 2021). Some types of visualization that are considered essential in fashion forecast media are:

- 1. Mood Boards are visual collages that depict a collection of elements of inspiration or creative ideas. The elements in a fashion moodboard show the themes, styles, colors, details that will appear in the design of a fashion collection. Mood Boards also reflect the expression and aesthetic of the current fashion trend, which provides a very important emotional context for the visualization of textiles and styles (Rolansa, 2021).
- 2. Fashion sketches/illustrations, to support the image elements on the moodboard which are commonly included with a few fashion sketches/illustrations.
- 3. Photo visualization is a popular and important part of fashion branding. In addition to sketches, there are also many fashion photos by designers that have been published to strengthen the image of the fashion trend element to be communicated.

Methodology

The method used in this research is a descriptive qualitative approach with a case study method. The main object for analysis is Fashion Trend Forecast 2025/2026 STRIVE book, especially on trend visualization. The research stages are:

- 1. Data collection was through a

documentation study of the visual and narrative content in Fashion Trend Forecast 2025/2026 STRIVE book. In addition, semi-structured interviews were conducted with the creative team of the trend book.

- 2. Data analysis, including the visual content of trends in the book, comparison between manual illustrations that have been created in previous trend books and AI-based illustrations, and interpretation of visual meaning in the context of trend narratives.
- 3. Validation of data triangulation through confirmation with sources and review between visual documents.

Result

The role of illustration in fashion trend books is very important, contributing to an in-depth visual understanding of emerging styles and aesthetics. Illustrations not only play a role as visual support, but also serve to attract readers' attention and provide inspiration for designers (Mustikarani & Irwansyah, 2019). By displaying attractive illustrations, readers will more easily understand the concept of fashion trends to be delivered in the trend book.

The process of creating illustrations in fashion used to be done manually before digital technology developed. High hand skills are needed to draw or paint, and it takes a long time to produce aesthetic illustration works. But along with the development of digital technology, the process of fashion illustration has shifted to apply digital methods. The use of graphic design software such as Adobe Illustrator, Adobe Photoshop and the like allows designers to create illustrations faster and easier. The resulting illustration also looks more realistic because many figure templates and material textures have been provided by the design software.

In recent years, the application of artificial intelligence (AI) in illustration creation has become increasingly popular. Several application platforms such as ChatGPT, Bing, Midjourney, Copilot, and the like that belong to the Generative Adversarial Networks (GANs) technology have started to be used to create highly realistic and automated images.

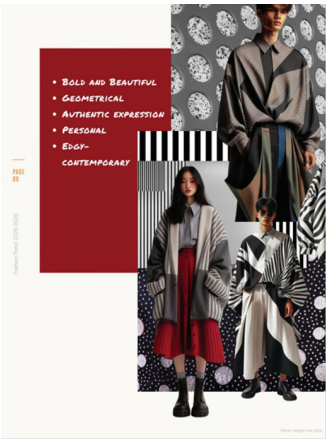


Figure 2. Visualization using AI Generated (Source: Fashion Trend Forecast 2025/2026 STRIVE book)

The shifting in illustration methods from manual to AI-generated reflects a major transformation in the fashion industry. This more efficient process allows designers to focus on the creative aspects, while AI performs the technical tasks. The following is an analysis of the comparison of the types of illustrations created manually to AI-generated.



Figure 3. Illustration type comparison (Source: Pinterest and Fashion Trend Forecast 2025/2026 STRIVE book)



Figure 3 shows that the left image was created manually, the middle image was processed using Adobe Photoshop software, and the right image was AI-generated. The left hand-drawn sketch uses expressive and spontaneous lines, has a variety of textures and looks rough, indicating direct hand pressure. The lines are not always neat, sometimes to draw a straight line still looks slightly curved, suggesting the dynamism and energy of the designer's movements. The center and right images created with digital technology look cleaner and more controlled than manual illustrations. The outline is smooth and precise with digitally processed texture effects. The right image, although the lines look very smooth, is not always consistent. Some parts are visually unbalanced (such as the hand not appearing).

From the coloring technique aspect, the color media used in hand-draw sketches are limited (markers, colored pencils, etc.), and skills are needed to make the colors more alive. In terms of visual character, colors in illustrations with manual methods are only used to give emphasis, not a realistic representation that gives the impression of dynamic and expressive designers. For digital illustrations, coloring is more realistic and can display smoother gradations to texture effects. The colors used are more accurate and can be reproduced for subsequent sketches. The visual character of colors from AI-generated illustrations is very rich and complex, looking very realistic and resembling photographic lighting. The effects of textile materials, shadows and gloss are detailed. However, care must still be needed for the details, as sometimes there are small errors in the shadows or the logic of light that can be out of place.

In terms of proportions, manual illustration drawings look slim and elongated, because they are adjusted to the expression of the designer's drawing style. For digital images, they are more proportional

and look natural. While the proportions on illustrations made by AI are realistic but sometimes look too symmetrical or rigid.

The use of realist illustrations such as photography is also used in Fashion Trend Forecast 2025/2026 STRIVE book. To make it easier for readers to understand the trend elements to be communicated, experiments were conducted by the creative team of the trend book to create realist illustrations through AI-generated.



Figure 4. Illustration made with AI-generated  
(Source: Fashion Trend Forecast 2025/2026 STRIVE book)

The quality of the visual illustration in figure 4 looks realistically photographic, with subtle lighting. The texture of the textile material is visualized with details resembling the original fabric, the fabric fibers and folds looks natural and the weight of the heavy fabric falls naturally. From the interview with the creative team, the prompt used to interpret the illustration is as follows "Please create visual illustration a young male model in exaggerated oversized brown wool blazer jacket, layered with a sheer translucent inner fabric, styled in a muted and editorial fashion aesthetic, very realistic style, detailed fabric texture, and cinematic

lighting".



Figure 5. Sketch illustration made with AI-generated  
(Source: Fashion Trend Forecast 2025/2026 STRIVE book)

The sketch illustration shown in Figure 5 is also one of the images in the Fashion Trend Forecast book created using AI technology. It was generated using the following prompt: "Sketch a fashion illustration of a male model wearing loose cargo pants with pleats at the darts and ankle boots- sneakers style, with detailed ink line shading and a dynamic posture." The keywords "sketch" and "ink line shading" help produce visuals that resemble a hand-drawn style. The phrase "with pleats at dart" directs the details of the cargo pants to include a folding element at the dart of the pants, aligning with the identified trend.

## Discussion

Based on the results of the study and interviews with the creative team, the use of AI-generated to create illustrations is very helpful in strengthening the visuals in the fashion trend book. Some of the advantages of applying AI include being able to quickly and automatically create visuals whose results look professional,

of course, by using detailed prompts. The visuals produced are attractive and modern, the appearance of textures, volumes, and the effects can look detailed and realist without much of manual effort. The effort made is to try trial and error in writing the prompt, the illustration concept must be developed first in detail what elements you want to use. As shown in Figures 3 and 4, developing the prompt is a trial-and-error process requiring repetition and refinement. The illustration in Figure 4 was not generated with a single prompt. The basic prompt began with the following description: "Young male model wears an oversized brown wool blazer lined with a thin inner fabric". Then, style and atmosphere cues were added: "styled with a calm and editorial fashion aesthetic, highly realistic styling, detailed fabric textures, and cinematic lighting".

To ensure the color palette aligned with the designed trend guidelines, prompts such as "earthy color palette," "neutral colors," and "natural lighting" were added.

In addition, there are things that can be developed because there are still some gaps in the current shortcomings for AI-generated technology. Small errors in the use of prompts will cause some details to also look illogical. For example, shadows or light logic can appear in certain parts so that the writing of the prompt must be examined again or the details of the prompt need to be added. In addition, sometimes the visual appearance is too generic or similar to other outputs on other internet sites. Throughout this process, the designer's role is to envision and clearly articulate the concept in the form of a structured prompt. Prompt development is a new design literacy that connects conceptual and visual intent.



Conclusion

From the results of this discussion, it is concluded that the application of artificial intelligence (AI) technology in the visualization of illustrations on fashion trends is very significant, and was successfully carried out in the creation of Fashion Trend Forecast 2025/2026 STRIVE book. Through a visual analysis approach to hand-drawn sketch, digital, and AI-generated illustrations, it can be said that AI-based illustrations offer the advantages of efficiency in the process, high quality of visual details, and the ability to adjust to certain aesthetic directions based on the written prompt. However, designer involvement is still needed to direct creativity and ensure the relevance of the design to the market character.

The integration of AI and fashion trend illustration can accelerate the visual exploration process for the dynamic and fast-changing needs of the fashion industry, and can open a bridge between technology and design. This research recommends further exploration of the utilization of AI technology at other stages in the fashion production process cycle.

References

Akram, S. V., Malik, P. K., Singh, R., Gehlot, A., Juyal, A., Ghafoor, K. Z., & Shrestha, S. (2022). Implementation of Digitalized Technologies for Fashion Industry 4.0: Opportunities and Challenges. Scientific Programming, 2022. <https://doi.org/10.1155/2022/7523246>

Bris, A., Wang, T. Y. H., Zatzick, C. D., Miller, D. J. P., Fern, M. J., Cardinal, L. B., Gregoire, D. A., Shepherd, D. A., Westphal, J. D., Shani, G., Troster, C., Van Quaquebeke, N., Lanaj, K., Hollenbeck, J. R., Ilgen, D. R., Barnes, C. M., Harmon, S. J., Feldman, E. R.,

DesJardine, M. R., ... Sangiorgi, F. (2021). Knights, Raiders, And Targets - The Impact Of The Hostile Takeover - Coffee,Jc, Lowenstein,L, Roseackerman,S. Journal Of Banking & Finance, 37(1).

Dewanto, T. H. (2024). Mengungkap Pencapaian Manusia dalam Karya Seni Pertunjukan “Rhythm o” Melalui Ilustrasi Berjudul “Adornment.” Nirmana, 24(2), 137–154. <https://doi.org/10.9744/nirmana.24.2.137-154>

Grace Gatawa, N. (2022). The Rising Influence of Sustainability in South Africa’s Fashion Industry. African Journal of Innovation and Entrepreneurship, 1(1). <https://doi.org/10.31920/2753-314x/2022/v1n1a4>

Huang, Y. (2024). Research on the Development of Fashion Brands Under the Trend of Digital Economy: Taking Shein and Zara as Examples. Finance & Economics, 1(8). <https://doi.org/10.61173/6pqqm669>

Kamiliyana, A. A., Lusiani, S., & Kamalia, S. C. (2024). Implikasi Perkembangan AI terhadap Keberlanjutan Sumber Daya Desainer Grafis dalam Lingkup Masyarakat Industri 5.0. Arus Jurnal Sosial Dan Humaniora, 4(1), 362–369. <https://doi.org/10.57250/ajsh.v4i1.420>

Kim, E., Fiore, A. M., Payne, A., & Kim, H. (2021). Fashion Trends: Analysis And Forecasting. In Fashion Trends: Analysis and Forecasting.

Lee, N., & Suh, S. (2024). How Does Digital Technology Inspire Global Fashion Design Trends? Big Data Analysis on Design Elements. Applied Sciences, 14(13), 5693. <https://doi.org/10.3390/app14135693>

Mustikarani, T. D., & Irwansyah, I. (2019). Pemanfaatan Teknologi Informasi dan Komunikasi dalam Industri Fashion Indonesia. Warta ISKI, 2(01), 8–18. <https://doi.org/10.25008/wartaiski.v2i01.23>

Rachmawati, I., Rosyid, D. F., Parman, S., Solihan, Y. A., & Putra, G. M. (2024). Penerapan Artificial Intelligence Pada Media Desain Grafis Menggunakan Analisis Interpretasi Edmund Feldman. Jurnal Digit, 14(1), 66. <https://doi.org/10.51920/jd.v14i1.372>.

Rolansa, F. (2021). Pengembangan interaktif dashboard kemahasiswaan di program studi teknik informatika dengan teknologi big data. Jurnal Pendidikan Informatika Dan Sains, 10(2), 110–118. <https://doi.org/10.31571/saintek.v10i2.2190>

Sohn, K., Sung, C. E., Koo, G., & Kwon, O. (2021). Artificial intelligence in the fashion industry: consumer responses to generative adversarial network (GAN) technology. International Journal of Retail and Distribution Management, 49(1). <https://doi.org/10.1108/IJRDM-03-2020-0091>

## MULTISENSORY STIMULATION AS REBRANDING STRATEGY FOR COMMUNITY EMPOWERMENT IN CIDCO

Mariska Legia

Received May. 13, 2025; Revised June. 04, 2025; Accepted June. 13, 2025.

**Abstract:** *Creative Business of Diffable Community (CIDCO) is an inclusive art community that empowers children with disabilities through creative art practices. Despite its products' high aesthetic and social value, CIDCO faces challenges in building a consistent and emotionally resonant brand identity for the public. This study aims to formulate a multisensory rebranding strategy to enhance emotional bonds with the audience and increase awareness of the social values carried. A descriptive qualitative approach is used through literature studies, participant observations, and in-depth interviews with CIDCO managers and audiences. SWOT analysis and TOWS matrix were utilized to map the community's strategic position and to formulate key value propositions for redesigning its brand identity. The findings of this study offer a contribution to inclusive branding practices by integrating sensory and affective aspects in the context of community social entrepreneurship.*

**Keywords:** *inclusive branding; multisensory experience; disability empowerment; social entrepreneurship*

### Introduction

Creative Business of Diffable Community (CIDCO) is an inclusive art community that aims to empower children with disabilities through the practice of visual art and design. The products created by CIDCO not only carry aesthetic value but also convey social narratives that reflect the spirit of inclusion and independence. Since its establishment, CIDCO has engaged in various collaborations, including the CIDCO Corner at Studio Atoz, participation in the Indonesia Creative Cities Festival (ICCF), and distribution partnerships with several hotels through a consignment system. However, CIDCO's brand visibility in public spaces remains limited, with inconsistencies in visual identity and communication strategies.

Despite the originality and emotional value embedded in its artistic offerings, CIDCO struggles to communicate its social mission effectively and establish a consistent brand identity. One of the main obstacles lies in the lack of a structured and narrative-based visual communication approach. Current brand representation focuses more on the form of physical products, such as tumblers, scarves, and t-shirts, without being supported by an emotional narrative that conveys the values and processes behind the work. The main digital platform is CIDCO Instagram account (@cidco.bandung), which has been utilized for promotion purposes, but has not comprehensively narrated the mission, creative process, and personal stories attached to each product. As a result, the emotional connection with the

audience has not been consistently established.

In the contemporary marketing landscape, consumer experiences are increasingly determined by emotional and sensory dimensions, rather than solely by the functional value of the product. A study by Schmitt (1999, in Bortolotti, 2025) emphasizes the importance of building meaningful and enjoyable experiences in the process of forming brand perceptions. This aligns with the perspective of Lemon and Verhoef (2016), who show that branding strategies in the digital era require deeper emotional involvement, especially through personally integrated experiences.

Multisensory branding is a potential approach to build engagement between consumers and brands through the activation of multiple senses—sight, hearing, smell, touch, and taste. This approach has been shown to enhance brand recall and create stronger affective relationships (Krishna, 2013). In the context of a community like CIDCO, this strategy opens up opportunities to combine visual elements from children's artwork with community narratives and authentic sensory experiences.

While previous studies have shown that sensory elements can enrich brand experiences (Legia & Nurfarina, 2024), few studies have specifically formulated implementation strategies in the context of inclusive arts communities.

Therefore, this study aims to develop a CIDCO rebranding strategy based on multisensory stimulation. Using a SWOT analysis along with the TOWS matrix, this research delineates CIDCO's strategic standing and proposes actionable recommendations that encompass narrative elements, visual identity, and sensory experiences. These findings are expected to provide practical contributions toward strengthening the brand identity of inclu-

sive and sustainable social communities.

### Social Community Branding Strategy

Branding plays a strategic role in shaping the image of social communities, strengthening credibility, and articulating collective values to a wider audience. According to Kapferer (2012), branding not only forms an identity but also involves distinguishing an entity within an increasingly dense and competitive information landscape. In the context of community-based initiatives, visual elements such as logos, color palettes, and typography serve as symbolic representations of collective aspirations and the emotional character of the group (Wheeler, 2017).

As part of non-verbal communication, color has a strong symbolic capacity in shaping emotional perceptions of a brand. Labrecque et al. (2013) assert that the right choice of color can strengthen social messages and clarify inclusive values. In the context of CIDCO, integrating visual elements derived from the artwork of children with disabilities, including their distinct use of color and form, can help establish a cohesive brand identity while deepening emotional resonance with the audience.

In addition to visual identity, a multisensory experience-based approach expands the possibilities for fostering deeper emotional connections with the public. Through the activation of senses such as sight, hearing, touch, and smell, brand experiences can become more meaningful and memorable (Krishna, 2013). For an inclusive arts community like CIDCO, strengthening the sensory dimension can be implemented through product texture, visual narratives of the creative process, and the use of authentic audio elements that reflect the personal journeys of its creators.



Brakus et al. (2009) showed that brand experiences designed to evoke emotional responses can increase user loyalty and expand social impact. In this context, integrating sensory elements in CIDCO's branding strategy not only supports the consistency of brand identity but also enriches audience engagement through experiences that are reflective, emotionally grounded, and aligned with the community's social values.

### Branding in Social Entrepreneurship

Social entrepreneurship integrates the principles of business innovation to create sustainable social impact. In this framework, branding functions not merely as a communication tool but also as a strategic approach to strengthen credibility, clarify social missions, and expand the organization's reach (Schmidt & Henseler, 2022). Unlike commercial branding, which focuses primarily on product value, branding in social entrepreneurship prioritizes transparency, participation, and the reinforcement of collective identity.

As a community that focuses on empowering children with disabilities through art, CIDCO requires an authentic branding approach that is in line with the principle of inclusion. In this context, branding expands visibility and becomes a vehicle for building a relevant and sustainable social narrative. The active involvement of stakeholders, both internal and external, in the co-creation process of brand identity is a crucial factor in ensuring the legitimacy and long-term resonance of the brand in the public eye (Schmidt & Henseler, 2022).

Multisensory experience-based approaches offer further potential to deepen audience engagement. As Lindstrom (2010) points out, sensory activation—through visuals, textures, sounds,

and scents—can strengthen the emotional connection between a brand and its audience. For CIDCO, this can take the development of elements such as the texture of products made by children with disabilities, visual storytelling that captures the creative process, and authentic audio elements shared via digital media. This approach not only supports the reinforcement of CIDCO's identity as an arts community, but also strengthens its position as a catalyst for social change based on collective experience.

However, while multisensory branding approaches offer great potential in building emotional connections with audiences, its implementation in small communities-based organizations such as CIDCO faces several structural and cultural challenges. First, limitations in human resources and technical expertise are significant obstacles in designing consistent and high-quality sensory experiences. As stated by Kovanen (2021), social organizations often operate with limited resource capacity, which results in limitations in adopting innovative technologies or marketing methods.

Second, visual and sensory literacy among community members and potential audiences varies significantly. This requires designing adaptive multisensory experiences, ones that go beyond high-end aesthetics to also prioritize accessibility and emotional resonance across diverse social backgrounds (Norman, 2000).

Third, limited access to digital platforms and supporting technologies can hinder the dissemination of sensory-based brand experiences, especially among communities with limited digital infrastructure. This challenge reinforces the importance of developing creative and sustainable local resource-based strategies.

In summary, while multisensory pro-

vides an opportunity to strengthen community identity, its success largely depends on how well it adapts to the resource context, the ability to co-create with community members, and a deep understanding of the preferences and constraints of the target audience.

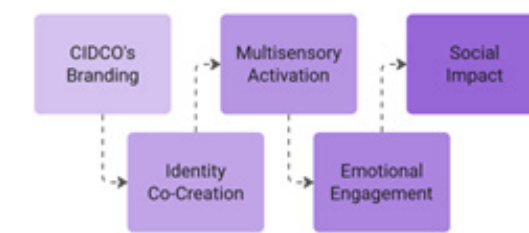


Figure 1. CIDCO Branding Strategy Flowchart (source: personal research documentation)

### Methodology

This study adopts a qualitative descriptive approach to explore the challenges faced by CIDCO in developing a branding strategy, as well as formulating a rebranding model based on multisensory stimulation. This approach allows for an in-depth exploration of social values, emotional experiences, and visual representation processes that evolve within an inclusive arts community (Silverman, 2021).

Data were collected through literature review, in-depth interviews, and participant observation. The literature study focused on theories of emotional branding, multisensory experiences, and social entrepreneurship strategies.

Interviews were conducted to gain insights into perceptions of brand identity, communication challenges, and preferences for sensory elements. The research involved eight respondents with varying levels of familiarity and interaction with CIDCO to provide a comprehensive perspective on its branding challenges and opportunities. The respondents were carefully selected to represent different

stakeholder categories: CIDCO administrators (R1) and chairpersons (R2), two regular audience members (R3 and R6), two first-time observers (R4 and R5), and two potential collaborators (R7 and R8). This diverse group enabled the research to capture a holistic understanding of CIDCO's strengths, weaknesses, opportunities, and threats from both internal and external perspectives.

In addition, direct observations of CIDCO's activities, including the CIDCO Corner initiative and its Instagram channels, helped identify existing forms of visual representation and opportunities for developing multisensory-based brand experiences.

SWOT analysis was used to map the strengths and weaknesses alongside opportunities and threats relevant to CIDCO. Internal factors such as the uniqueness of its social value-based products and existing inconsistency in brand identity, combined with external factors such as increasing public awareness of inclusion, and competitive challenges from similar communities (Gürel & Tat, 2017). The SWOT findings were then followed up through the TOWS matrix to formulate specific and contextual implementation strategies.

According to Gürel & Tat (2017), TOWS enables organizations to align internal strengths with external opportunities while addressing weaknesses and threats through adaptive strategies.

Within this framework, the strategies developed include the use of visual narratives, integration of sensory elements in brand communications, and optimization of digital media as an interactive channel to reach a wider and more diverse audience.

### Result

### **CIDCO's Profile and Branding Challenges**

Since 2019, Creative Business of Difa-bel Community (CIDCO) has been operating as an extension initiative of the Art Therapy Center (ATC) of Widyatama University, focusing on art and design training for people with disabilities. CIDCO aims to support both the economic sustainability and creative expression of ATC graduates through the production of artworks that carry social value while remaining commercially viable. This initiative seeks to redefine the narrative around disability, positioning children with disabilities not as objects of pity but as creative subjects contributing meaningfully to the creative industry.

CIDCO's products include lifestyle merchandise such as tumblers, scarves, and t-shirts, all of which are designed from the work of children with disabilities. This creative process not only produces aesthetically original products but also represents empowerment through active participation and inclusivity in design practices. Each product carries personal values and expressive traces of its creator, transforming design into a narrative medium that communicates the story of the community.

However, the observation results at the CIDCO booth showed a gap between the visual appeal of the product and the communication of their underlying social context. Although the product design was considered visually engaging, information about the community, creative process, and personal background of the creator was not explicitly articulated. A visitor, for example, only understood the origin of the product after receiving an explanation from the booth attendant. The absence of this narrative diminishes the potential for emotional connection between the audience and the product, as emphasized by Fog et al. (2005), who highlighted the

importance of integrated visual storytelling in building affective relationships between brands and users.

In addition, the product display at the booth tends to be cluttered and lacks curation. This disorganized layout compromised the overall aesthetic and hindered appreciation of each product's unique characteristics. This observation is in line with Levy and Weitz (2018), who assert that functional and curated spatial arrangements strengthen the perception of product value.

On the digital side, CIDCO's Instagram account (@cidco.bandung) demonstrates strong visual potential but falls short in fully articulating the community's story. The existing content focuses more on the final product results than on the creative process or personal experiences of the creators. Interview respondents suggested developing content formats such as short documentary videos to showcase the creative journey and background of the community. This approach is considered more capable of building emotional attachment, in line with Randazzo (2019), who emphasizes that authentic brand experiences are crucial for meaning-making and customer loyalty in the digital space.

An interview with a potential collaborator, a local fashion brand owner, confirmed that CIDCO has an attractive narrative strength but noted the need for a more professional presentation to increase its value proposition in business partnerships. The respondent emphasized the importance of a product catalogue that incorporates storytelling elements about the design process, creator backgrounds, and community context. These findings support Aaker's (2010) view on the importance of structured and consistent information in building brand credibility, as well as Keller's (2013) assertion that continuous storytelling strengthens value-based differentiation.

Overall, the findings suggest that CIDCO's primary branding challenge lies in the lack of consistent visual identity and the absence of a strong emotional narrative. Both aspects are essential for creating an affective brand experience that resonates with audiences and attracts strategic partners.

Another significant challenge is the limitation of human resources. CIDCO's management relies entirely on the participation of parents and children with disabilities, most of whom lack expertise in social entrepreneurship management and digital technology skills. Although several training sessions have been conducted, the implementation of branding and marketing strategies is still not optimal, exacerbated by the varying levels of commitment among members. This finding aligns with the study of Doherty, Haugh, and Lyon (2014), which revealed that social enterprises often face capacity limitations due to reliance on internal communities. As reminded by Eade (1997), without sustained implementation support, training tends to fail to produce significant structural changes.

This condition shows that the challenge of CIDCO's branding is not merely a technical issue, but is deeply rooted in the social and cultural dynamics of the community, where the values of participation, collective capacity, and adaptive readiness are determining factors in the success of narrative-based and multisensory rebranding strategies.

### **Qualitative Analysis Result**

Thematic analysis of interviews with six respondents comprising regular audiences, first-time observers, and potential collaborators, revealed four major themes that illustrate CIDCO's branding challenges and potentials. These findings complement the observational insights and serve

as the foundation for the SWOT analysis.

#### **1. Low Emotional Visibility Despite Strong Social Narrative**

Although CIDCO's mission and community values were appreciated by respondents, many noted that these narratives were not clearly communicated in either physical or digital touchpoints. For instance, booth visitors often failed to recognize the social purpose of the products until informed by staff. This gap indicates that CIDCO's emotional storytelling, while inherently powerful, is not yet effectively integrated into its brand presentation.

#### **2. Strong Product Aesthetics but Weak Storytelling Integration**

Participants consistently praised the visual design of CIDCO's products, particularly the unique color usage and originality. However, they pointed out a lack of storytelling, especially about the creators and their process, which weakened the emotional impact. Respondents suggested using short videos or captioned visuals to highlight personal stories and creative journeys.

#### **3. Untapped Potential for Multisensory Branding**

Several respondents responded enthusiastically to the idea of adding sensory elements such as soft background music, distinctive aromas, or tactile packaging—to enhance emotional engagement. These elements were seen not only as aesthetic improvements but as meaningful ways to reflect the identity and spirit of the creators.

#### **4. Need for Structured and Professional Brand Presentation**

From the perspective of potential collaborators, CIDCO's branding still lacks consistency and polish. Suggestions included developing a formal community



profile, catalogues that include storytell-  
ing elements, and curated displays or ex-  
hibitions. These elements were considered  
crucial to appeal to partners and position  
CIDCO as a credible social enterprise.

These qualitative insights provide a  
grounded understanding of CIDCO’s cur-  
rent brand perception and operational  
challenges. The emerging themes serve  
as the foundation for the following SWOT  
analysis, which synthesizes internal and  
external factors influencing the develop-  
ment of CIDCO’s rebranding strategy.

CIDCO SWOT Analysis

After conducting observations and  
interviews, a SWOT analysis can be com-  
piled to describe the current business situ-  
ation and conditions, as well as formulate  
strategies that need to be determined and  
implemented through the preparation of a  
TOWS matrix.

As shown in Table 1, the SWOT anal-  
ysis indicates that CIDCO has significant  
strengths in its social values, product  
quality, and authentic narratives, which  
provide a strong foundation for building  
emotional connections with the audience.  
However, various internal challenges,  
such as limited human resources, unstruc-  
tured product presentation, and subopti-  
mal implementation of training outcomes  
undermine CIDCO’s ability to achieve the  
full potential of this community.

Table 1. SWOT Analysis  
(source: personal research documentation)

	HELPFUL	HARMFUL
	Strengths	Weaknesses
INTERNAL	1. High social value products by empowering children with disabilities.	1. The creative and social value of the products is not articulated in the booth and digital media.
	2. Personal stories behind each product foster strong emotional connections with the audience.	2. Product arrangements are disorganized, reducing visual appeal and perceived professionalism.
	3. Visualization of children with disabilities' artworks highlightedI aesthetic and originality that reflect their personal values.	3. Limited human resources in management, digital skills, and social entrepreneurship.
	4. Operating under ATC Widyatama, provide legitimacy and access to educational and training resources.	4. The level of commitment among some members undermines CIDCO's development.
		5. Post-training branding and management strategies have not been optimally implemented.

EXTERNAL	Opportunities	Threats
	1. Growing consumer interest in socially responsible products opens up promising market opportunities.	1. Competition with social-based creative communities may dilute CIDCO's uniqueness.
	2. CIDCO's compelling narrative and social values open up opportunities for local collaboration.	2. Competition with local MSMEs that have more structured products and marketing.
	3. CIDCO often receives external support for training and research for its development.	3. Risk of being overlooked in a highly competitive market if branding is not optimized.
	4. The rise of emotional value-based marketing aligns with CIDCO's storytelling.	4. Lack of professional presentation reduces the trust among new audiences.
	5. Rapid growth in digital media opens up wider marketing opportunities, including reaching broader audiences.	5. Limited funding constrains the development of branding and marketing initiatives.
		6. Underutilizati on of digital media causes

6. Trend of multisensory products and brand experiences offers opportunities to create more immersive and memorable audience engagement.	CIDCO to lag in technological opportunities.
--	--

On the other hand, the growing trend of public awareness of social entrepre-  
neurship and opportunities for collabo-  
ration with local partners provide room  
for expansion and development. Never-  
theless, the threat of competition from  
similar communities and more structur-  
ally established local brands, as well as  
limited access to technology and financial  
resources, needs to be addressed with the  
right strategy.

Given the identified strengths, weak-  
nesses, opportunities and threats that  
exist, a rebranding strategy that inte-  
grates multisensory experiences and  
narrative-driven storytelling is necessary  
to capitalize on the opportunities while  
overcoming the existing obstacles. This  
analysis serves as the foundation for con-  
structing a TOWS Matrix that will offer  
actionable strategic solutions for CIDCO’s  
future development.

TOWS Matrix for CIDCO’s Rebrand-  
ing Strategy

After conducting the SWOT analysis  
that identified strengths, weaknesses, op-  
portunities, and threats faced by CIDCO,  
the next step is to develop an implemen-  
tation strategy using the TOWS Matrix.  
This strategic tool enables the integration

of internal and external factors to develop specific and targeted strategies. The TOWS Matrix serves as a framework to connect organizational strengths to external opportunities, addressing weaknesses by leveraging opportunities, using strengths to reduce the impact of threats, and mitigating weaknesses when facing external threats.

In the context of CIDCO, the TOWS Matrix will facilitate the formulation of rebranding strategies that align with the community's potential while simultaneously addressing challenges that hinder the development of its brand identity and long-term social sustainability.

Table 2. TOWS Matrix  
(source: personal research documentation)

TOWS Matrix		External Factors	
		Opportunities	Threats
Internal Factors	Strengths-Opportunities (SO) Strategy	1. Develop a marketing strategy that highlights the social value of CIDCO's products and personal stories of its creators to build emotional connections with	Strengths-Threats (ST) Strategy 1. Building collaboration with creative communities that share similar social values, in order to enhance social impacts and create uniqueness through complementary collaboration
	Weaknesses-Threats (WT) Strategy	2. Leverage the social value and personal stories behind each product to enhance emotional appeal while opening up opportunities for collaboration with local partners who share similar values. (S1, S2, O2) 3. Develop a multisensory experience	1. Establish a clear organizational structure with specific task division and set both short and long-term achievement targets to increase member commitment and optimize branding strategies, thereby reducing the risk of marginalization in a competitive market. (W3, W4, T3)

		that combines personal stories and original visualizations of works by children with disabilities, in line with the trend of marketing based on emotional and multisensory experiences. (S2, O6)	competitive market. (S1, S2, T2, T3) 4. Leverage the personal stories behind products and institutional support from ATC Widyatama to attract external funding support, as well as increase CIDCO's visibility and credibility in the market. (S2, S4, T5)
		4. Utilize external training and research support to continuously improve the creative abilities of children with disabilities, enhancing their aesthetic and	

		market value of their original designs. (S2, S4, O3)	
	Weaknesses	Weaknesses-Opportunities (WO) Strategy 1. Leverage the growth of digital media and multisensory marketing trends to convey creative and social value information about products more engaging and interactive manner, reaching a broader audience, even those in remote locations.	Weaknesses-Threats (WT) Strategy 1. Establish a clear organizational structure with specific task division and set both short and long-term achievement targets to increase member commitment and optimize branding strategies, thereby reducing the risk of marginalization in a competitive market. (W3, W4, T3)



		(W1, O5, O6)	2. Optimize external partnerships and existing resources to increase managerial, digital, and social entrepreneurship capacity, and establish funding support through collaborative campaigns and crowdfunding. (W3, W4, T3, T5)
		2. Reorganize product layout using a multisensory approach that incorporates visual, audio, and tactile elements to enhance visual appeal and create a more immersive experience for the audience. (W2, O6)	
		3. Leverage local collaboration opportunities through collaborative projects driven by CIDCO's social values. (W3, O2)	3. Define periodic achievement targets and develop a priority scale to maximize the use of limited resources in the face of human resource and funding constraints. (W3, W4, T5)

Based on the results of the TOWS matrix analysis as seen in Table 2, CIDCO's development strategy is formulated with an integrative approach that considers internal strengths, weaknesses, external opportunities, and potential threats from the competitive environment. The Strengths-Opportunities (SO) strategy focuses on maximizing the social value of CIDCO's products and the narratives behind the creative work of children with disabilities through an emotional and multisensory marketing approach. External support, such as training and research, is utilized to sharpen creative skills and increase product competitiveness.

		4. Take advantage of external support in the form of training and research to strengthen HR capacity, increase member commitment, and optimize the implementation of branding strategies and post-training management strategies. (W3, W5, O3)	4. Accelerate the implementation of post-training branding and management strategies by involving the entire team in practical implementation and structured progress monitoring to avoid the risk of being marginalized in the market. (W5, W3)
--	--	--	--

In the Strengths-Threats (ST) strategy, CIDCO can reinforce differentiation through authentic product narratives while building collaboration with other creative communities that share similar values to expand social impact. Institutional legitimacy from ATC Widyatama is also an important asset to increase visibility and credibility, as well as attract external funding.

The Weaknesses -Opportunities (WO) strategy focuses on utilizing digital media and multisensory trends to convey social and creative values more interactively, reaching a wider audience. Visual and multisensory product layout is expected to increase audience appeal, while local collaboration and external training play a role in strengthening organizational capacity.

Lastly, the Weaknesses-Threats (WT) strategy is directed toward reinforcing internal structures through clear task distribution, improved managerial and digital capacity, and utilizing external partnerships. With these actions, CIDCO is expected to be able to maintain the sustainability of branding development amidst limited resources.

Discussion

Implementation Recommendations of Multisensory Branding

The results of the TOWS strategy analysis show that the multisensory branding approach has the potential to increase CIDCO's competitiveness in a competitive market. The uniqueness of the design and social narrative behind each product are the main strengths in building emotional connections with the audience.

As an initial step, CIDCO can strengthen both visual and auditory elements. Visually, the original design that reflects the expression of disabled creators should

be supported through display curation, product grouping based on themes, and catalogs and digital content that highlight the creator's narrative. A visual storytelling approach through photographs, infographics, and short videos can effectively help convey the creative process in a more compelling and empathetic manner.

In terms of auditory engagement, audio or video narratives about the creative process and the creator's background can be produced to deepen audience engagement. This content can be uploaded to a digital platform or played at the booth to support the visitor experience.

Tactile experiences can be presented through textile-based products with unique textures or embossed artwork, presented through exhibitions or workshops. Olfactory elements can also be added, for example, through distinctive aromas in packaging or exhibition spaces to create a deep impression. However, the implementation of multisensory branding faces a number of challenges, including limited human resources in management, digital marketing skills, and social entrepreneurship; limited operational funds; low technological literacy among members; potential audience misunderstanding of personal narratives; and competitive pressure from similar business actors. Therefore, this strategy needs to be implemented gradually, accompanied by increasing internal capacity and support from strategic partnerships to ensure its sustainability and effectiveness.

Conclusion

Multisensory branding holds significant potential to strengthen CIDCO's identity, deepen emotional connections with audiences, and expand collaboration networks. By integrating visual, auditory, and social narrative elements, CIDCO can communicate its social mission more ef-

fectively. Moving forward, priority needs to be given to developing digital content, strengthening organizational structures, and building strategic partnerships to support the implementation of the strategy in a sustainable manner.

This study also contributes to the theoretical development of inclusive social branding by contextualizing multisensory strategies within a community-based disability empowerment framework. Unlike conventional branding models, CIDCO's case demonstrates how narrative and sensory branding can operate as both emotional engagement tools and instruments of social inclusion. The findings thus offer a grounded example of how affective and sensory branding theories (Schmitt, 1999; Krishna, 2013) can be adapted to strengthen identity, dignity, and advocacy in marginalized creative communities.

The implementation of multisensory branding also requires a careful balance between conveying social values and maintaining operational sustainability. As a social-based community, CIDCO needs to ensure that the narratives raised not only strengthen the brand image but also maintain the principles of inclusivity and empowerment without making the experiences of people with disabilities a commodity. In this regard, developing evaluation and feedback mechanisms is important so that the branding strategy remains aligned with the organization's ethical and social vision.

Furthermore, the success of a multisensory branding strategy depends heavily on the internal capacity of the organization. Strengthening human resource capacity, especially in digital literacy, content management, and visual communication, is a critical prerequisite to ensure the sustainability of implementation. Through the support of training, cross-sector collaboration, and technology adaptation, CIDCO has the opportunity to develop a branding

approach that is not only aesthetically compelling but also socially and contextually meaningful. This opens up space for CIDCO to become an example of good practice in developing inclusive community-based brands in Indonesia.

For future research, it is recommended to conduct design implementation trials and field tests that apply multisensory branding concepts in real community events or exhibitions. This will help validate the practical effectiveness of the proposed strategy. Additionally, further studies could explore how digital technologies such as AR or immersive storytelling can enhance multisensory branding for social organizations. Researchers working with communities with limited resources are also encouraged to investigate co-design methods that foster inclusive participation and sustainability.

References

Aaker, D. A. (2010). Building strong brands. Free Press.

Bortolotti, A. (2025). Exploring cross-modal color correspondences through neuromarketing. *Color Culture and Science Journal*, 17(1). <https://doi.org/10.23738/CCSJ.170103>

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–68. <https://doi.org/10.1509/jmkg.73.3.052>

Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises and hybrid organizations: A review and research agenda. *International Journal of Management Reviews*, 16(4), 417–436. <https://doi.org/10.1111/ijmr.12028>

Eade, D. (1997). Capacity-building: An approach to people-centred develop-

ment. Oxfam.

Fog, K., Budtz, C., Munch, P., & Blanchette, S. (2005). *Storytelling: Branding in practice*. Springer.

Gürel, E., & Tat, M. (2017). SWOT analysis: A theoretical review. *Journal of International Social Research*, 10(51), 994–1006. <https://doi.org/10.17719/jisr.2017.1832>

Kapferer, J.-N. (2012). *The new strategic brand management: Advanced insights and strategic thinking* (5th ed.). Kogan Page.

Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity*. Pearson.

Krishna, A. (2013). *Customer Sense: How the 5 Senses Influence Buying Behavior*. Palgrave Macmillan US. <https://doi.org/10.1057/9781137346056>

Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The marketers' prismatic palette: A review of color research and future directions. *Psychology & Marketing*, 30(2), 187–202. <https://doi.org/10.1002/mar.20597>

Legia, M., & Nurfarina, A. (2024). Kajian Literasi Konsep Rebranding Berbasis Multisensory Stimulation. *Jurnal Visual Ideas*, 4(2), 133–146. <https://doi.org/10.33197/visualideas.vol4.iss2.2024.2159>

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>.

Levy, M., & Weitz, B. A. (2018). *Retailing management* (10th ed.). McGraw-Hill Education.

Lindstrom, M. (2010). *Brand sense: How to build powerful brands through touch, taste, smell, sight, and sound*.

Free Press.

Randazzo, S. (2019). *Brand experiences: Building connections in a digitally cluttered world*. Paiphen Publishing.

Schmidt, S., & Henseler, J. (2022). Building brand meaning in social entrepreneurship organizations: The social impact brand model. *Journal of Brand Management*, 30(3), 207–226. <https://doi.org/10.1057/s41262-022-00299-1>

Silverman, D. (2021). *Qualitative research: Theory, method, and practice* (5th ed.). SAGE Publications.

Wheeler, A. (2017). *Designing brand identity: An essential guide for the whole branding team* (5th ed.). Wiley.



## DENIMALZ MASCOT PLUSH DESIGN: A STUDY ON CUTE CHARACTER DESIGN PRINCIPLES

Jessica Laurencia

Received April. 24, 2025; Revised June. 10, 2025; Accepted June. 20, 2025.

**Abstract:** *This research explores the role of visual design in enhancing the appeal of character mascots, especially cute characters. Cute mascots are often more favored by audiences, as seen in the evolution of characters like Mickey Mouse, whose design has become increasingly childlike, in line with the principles of Kindchenschema. While previous existing study has explored what visual elements make mascots appear cute, most studies examined different types of mascots. This research focuses on a single mascot series that has undergone several subtle design changes over the years, Denimalz, a mascot of South Korean Pop Rock Band Day6. The research aims to identify which visual features make a character look cuter to audiences by using a mixed-methods approach. Data were collected through a survey of 129 participants including both fans and non-fans, along with open-ended questions, visual analysis of Denimalz plush versions, and a comparison with existing design theories. The findings show that facial expression and proportion or ratio are the two dominant features that determine cuteness. Future studies are recommended to explore cultural differences in cuteness perception, particularly how audiences from different regions interpret the same design elements.*

**Keywords:** *cute character design; mascot; kindchenschema; Denimalz*

### Introduction

The fulfillment of spiritual needs is often linked to consumerist culture. According to Marwati et al. (2024), there are several factors that drive fans to purchase merchandise products, one of which is the desire for self-satisfaction and social recognition through their collections. This phenomenon creates significant business opportunities, prompting many companies to design mascots not only as promotional tools but also as the foundation for developing additional products such as plush toys, clothing, and decorations to

boost sales (SendPoints, 2019).

One emerging approach in product design is emotional design, which focuses on creating an emotional connection between users and products. Unlike traditional design approaches that prioritize form or function, emotional design enhances the user experience by addressing three emotional levels: the visceral level, which elicits instinctive responses through sensory elements such as color and form; the behavioral level, which focuses on the effectiveness and usability of the product; and the reflective lev-

el, which engages users through symbolic meaning, personal relevance, and cultural associations (Yusa et al., 2023). These elements can significantly increase user satisfaction and brand loyalty, making emotional design an essential strategy in today's competitive product markets. A study by Hong Fang (2019) also found that most consumers are willing to pay more for products featuring their favorite characters. This highlights the importance of good mascot designs, as a well-designed mascot can strengthen brand identity and capture the audience's attention (Novica et al., 2020)

One of the key factors contributing to a mascot's success is the application of the Kindchenschema principle, a concept introduced by Konrad Lorenz in 1943. This theory explains that certain infant's physical traits, such as a large head, high and protruding forehead, large eyes, small nose and mouth, chubby cheeks, short thick limbs, and plump body are perceived as cute and can trigger positive emotional responses, such as the instinct to nurture and protect (Glocker et al., 2009). Research has further explored this principle in consumer behavior, showing that cute product designs can enhance emotional engagement and drive impulsive purchasing decisions (Öztürk et al., 2021).

Research by Borgi et al. (2014) found that this preference is not only limited to human infants but also extends to animals like dogs and cats that exhibit Kindchenschema traits. Their study further revealed that children aged 3–6 years show a strong visual preference for faces with pronounced Kindchenschema characteristics, both in humans and animals, with a primary focus on the eyes and mouth as key features that enhance perceived cuteness and appeal. These findings suggest that the attraction to cute and Kindchenschema-based visual features emerges early in life and is universally applicable.

In animal mascot design, implementing the Kindchenschema principle has been shown to enhance a character's appeal. Dydynski (2017) highlighted that mascots featuring these characteristics tend to be more popular among audiences, particularly those with large eyes, rounded protruding cheeks, soft bodies, and large head relative to body size. One of the most prominent examples is Mickey Mouse, the iconic mascot of The Walt Disney Company. Since its initial appearance, Mickey Mouse's design has undergone various transformations, with its features becoming more and more childlike to strengthen its attractiveness to a broader audience (Gould, 1979).

Aside from Kindchenschema, animal mascots are frequently given human-like characteristics, a design approach referred to as anthropomorphism (Hart, 2010). Incorporating human gestures, expressions, and behaviors into non-human entities helps strengthen their familiarity and emotional resonance with audiences (Novica et al., 2020). Other studies also suggest that visual aspects such as body proportions and facial expressions contribute to heightened consumer interest in mascot-based products (Chen & Zhunag, 2023).

One company that has successfully incorporated mascots as part of its merchandise marketing strategy is JYP Entertainment, a South Korean entertainment company and record label. JYP introduced the Denimalz mascots as part of the official merchandise line for the pop-rock band Day6 (JYP Entertainment, n.d.). Sungjin, the leader, vocalist, and guitarist of the team, is represented by BANG, a bear character. Jae, a former member in charge of vocals and guitar, is represented by JJE, a chicken character. Young K the bassist and vocalist of the group is symbolized by KE, a fox character. Wonpil the keyboardist and vocalist is represented by PIL, a rabbit character. Lastly, Dowoon

the drummer is represented by DON, a dog character.



Figure 1. Evolution of Denimalz plush 2018–2024. Image compilation from official accounts and online marketplace  
(Source: x.com/theJYPshop, x.com/day6official, x.com/hyebooboo, and x.com/seungkwanbns. Denimalz © JYP Entertainment.)

The Denimalz mascots, as can be seen in Fig. 1, were first introduced on June 17, 2018, as part of the official merchandise lineup for Day6’s first world (The JYP Shop, 2018). However, the term “Denimalz” was first introduced on January 3, 2019, after it was officially registered as a trademark. As of 2025, several minor modifications have been made. This study seeks to compare the design modifications made to Denimalz plush and evaluate them in relation to audience responses and the principles of cute character design. By conducting this analysis, the research aims to identify the most visually appealing features or elements that enhance the cuteness.

Methodology

The research consists of three main stages, audience perception surveys, visual analysis of the mascot plush design, and comparison with cute character design theories. Primary data will be collected from the survey and visual analysis, while secondary data will be sourced from academic literature on cute character design.

First, a survey-based study will be conducted to assess audience preferences regarding which year’s mascot plush design is perceived as the cutest. Participants will be presented with different versions of the mascot plush and asked to choose which version they think is the cutest. Additionally, open-ended questions will be included to explore the specific visual elements that contribute to their perception of cuteness. Participants were asked to explain why they selected a particular version of the Denimalz mascot as the cutest and the responses collected through the open ended question were analyzed using a thematic coding approach. These responses were read carefully and coded to identify recurring keywords, phrases, and descriptive patterns. Common themes such as “expression”, “proportion”, “round face”, and “color” were noted, and the frequency of each theme was counted across all responses. This will provide insight into the psychological and aesthetic factors that make a character design more appealing.

Following the survey, a comparative visual analysis will be conducted to examine the transformations in Denimalz plush. The findings from the survey and visual analysis will be compared with theoretical principles of cute character design to determine which design aspects align with audience preferences. By employing this methodology, the study aims to identify essential elements for cute character design.

Result

The survey was conducted anonymously using Google Forms and distributed over a two-week period, from February 28 to March 16, 2025. The form was shared across various platforms, including Reddit, Instagram, Twitter and Discord. Participation was entirely voluntary, with no compensation offered and participants were all informed that their response was being collected for research purposes.

To understand the background of survey participants, data on age, country of origin, and whether they are fans of Day6 were collected. This information helps provide context for the survey results by identifying the diversity of participants and potential biases.

Table 1. Participant Demographics  
(Source: Personal research documentation)

Category	Details	Qty.
Country	Indonesia	67
	USA	20
	Singapore	6
	Philippines	6
	Australia	5
	Canada	5
	Malaysia	3
	New Zealand	2
	Other countries (1 each)	11
	Blank	4
Total		129
Age	13-19	20
	20-29	75
	30-39	30
	40-49	3
	Above 50	1
Total		129
Fan of Day6	Yes	91
	No	33
	(blank)	5
Total		129

The survey gathered responses from 129 participants from a diverse range of backgrounds. The data from Table 1 shows that most participants are from Indonesia, followed by USA. In terms of age distribution most participants came from the 20-29 age group, followed by 30-39 and 13-19 age groups. This will offer a broad perspective on preferred design. Additionally, a significant portion of the participants are fans of Day6, which allows for an analysis of whether familiarity with the group influences their choices.

In the forms, participants were presented with images showcasing the evolution of each Denimalz mascot plush over the years, as can be seen here in Fig. 2. Participants were asked to compare and select the version they liked the most. For each part, open-ended questions are included to allow participants to explain the reasons behind their choices.



Figure 2. Evolution of BANG plush 2018–2024. Image compilation from official accounts and online marketplace  
(Source: x.com/theJYPshop, x.com/day6official, and x.com/hyebooboo. Denimalz © JYP Entertainment.)

Table 2. Preferred Versions of BANG by Fan Status.  
(Source: Personal research documentation)

Overall	129
2018 BANG	13
2019 BANG	57
2020 BANG	22
2022 BANG	9
2024 BANG	28
Fans of Day6	91
2018 BANG	7
2019 BANG	43



2020 BANG	16
2022 BANG	6
2024 BANG	19
Non Fans	33
2018 BANG	6
2019 BANG	11
2020 BANG	5
2022 BANG	3
2024 BANG	8
Not Specified	5
2019 BANG	3
2020 BANG	1
2024 BANG	1

The survey results as shown on Table 2, show that the 2019 version of BANG was the most favored overall, receiving 57 votes out of 129 total responses. This preference was consistent across different participant groups, with 43 votes coming from Day6 fans, 11 from non-fans, and 3 from those who did not specify their fan status. The 2024 version followed with 28 votes, including 19 from fans, 8 from non-fans, and 1 from an unspecified participant. The 2020 version ranked third with 22 votes, followed by 2018 with 13 votes and 2022 with 9 votes. The visual evolution over the years, can be seen here in Fig. 2.



Figure 3. Evolution of JE plush 2018–2024. Image compilation from official accounts and online marketplace (Source: x.com/theJYPshop and x.com/day6official. Denimalz © JYP Entertainment.)

Table 3. Preferred Versions of JJE by Fan Status. (Source: Personal research documentation)

Overall	129
2018 JJE	5
2019 JJE	90
2020 JJE	34
Fans of Day6	91
2018 JJE	3
2019 JJE	65
2020 JJE	23
Non Fans	33
2018 JJE	2
2019 JJE	21
2020 JJE	10
Not Specified	5
2019 JJE	4
2020 JJE	1

As shown in Table 3, the 2019 version of JJE was the clear favorite, receiving 90 of 129 total votes. Version 2019 was preferred by both fans and non-fans, with fans contributing 65 votes and non-fans 21. Followed by the 2020 version with 34 votes, 23 from fans, 10 from non-fans. The 2018 version received the fewest votes. The visual evolution over the years, can be seen here in Fig. 3.



Figure 4. Evolution of KE plush 2018–2024. Image compilation from official accounts and online marketplace (Source: x.com/theJYPshop, x.com/day6official, and x.com/seungkwanbns. Denimalz © JYP Entertainment.)

Table 4. Preferred Versions of KE by Fan Status. (Source: Personal research documentation)

Overall	129
2018 KE	2
2019 KE	38
2020 KE	60

2022 KE	16
2024 KE	13
Fans of Day6	91
2018 KE	2
2019 KE	29
2020 KE	40
2022 KE	11
2024 KE	9
Non Fans	33
2019 KE	8
2020 KE	18
2022 KE	3
2024 KE	4
Not Specified	5
2019 KE	1
2020 KE	2
2022 KE	2

The survey results, as shown in Table 4, reveal that the 2020 version of KE was the most preferred, receiving 60 out of 129 total votes and was the highest votes from both fans and non-fans,. Followed by the 2019 version in second place, 38 votes with 29 from fans, 8 from non-fans, and 1 unspecified. The 2022 and 2024 version came third and fourth place, with 16 votes and 13 votes. While the 2018 versions only got 2 votes. The visual evolution over the years, can be seen in Fig. 4.



Figure 5. Evolution of PIL plush 2018–2024. Image compilation from official accounts and online marketplace (Source: x.com/theJYPshop, x.com/day6official, and x.com/seungkwanbns. Denimalz © JYP Entertainment.)

Table 5. Preferred Versions of PIL by Fan Status (Source: Personal research documentation)

Overall	129
2018 PIL	5
2019 PIL	27
2020 PIL	33
2022 PIL	13
2024 PIL	51
Fans of Day6	91
2018 PIL	3
2019 PIL	23
2020 PIL	23
2022 PIL	10
2024 PIL	32
Non Fans	33
2018 PIL	2
2019 PIL	3
2020 PIL	9
2022 PIL	2
2024 PIL	17
Not Specified	5
2019 PIL	1
2020 PIL	1
2022 PIL	1
2024 PIL	2

The survey results, as shown in Table 5, indicate that the 2024 version of PIL was the most favored overall, receiving 51 out of 129 total responses. This preference was consistent across different participant groups, with 32 votes coming from Day6 fans, 17 from non-fans, and 2 from those who did not specify their fan status. The 2020 version followed with 33 votes, 23 from fans, 9 from non-fans, and 1 unspecified. In third place, the 2019 version received 27 votes. The 2022 version ranked fourth with 13 votes, followed by 2018 with 5 votes. The visual evolution over the years, can be seen in Fig. 5.



Figure 6. Evolution of DON plush 2018–2024. Image compilation from official accounts and online marketplace  
(Source: x.com/theJYPshop, x.com/day6official, and x.com/seungkwanbns. Denimalz © JYP Entertainment.)

Table 6. Preferred Versions of DON by Fan Status.  
(Source: Personal research documentation)

Overall	129
2018 DON	20
2019 DON	30
2020 DON	38
2022 DON	22
2024 DON	19
Fans of Day6	91
2018 DON	15
2019 DON	25
2020 DON	27
2022 DON	11
2024 DON	13
Non Fans	33
2018 DON	5
2019 DON	4
2020 DON	11
2022 DON	8
2024 DON	5
Not Specified	5
2019 DON	1
2022 DON	3
2024 DON	1

The survey results, as shown in Table 6, indicate that the 2020 version of DON was the most favored overall, receiving 38 out of 129 total responses. It was preferred by 27 Day6 fans, 11 non-fans, and no unspecified participants. The 2019 version followed closely with 30 votes with 25 from

fans, 4 from non-fans. The 2022 version ranked third with 22 votes. Meanwhile the 2018 and 2024 version is almost tied with 20 and 19 total votes. Unlike other Denimalz mascots, DON showed a more balanced distribution of preferences, with no version standing out. The visual evolution over the years, can be seen in Fig. 6.

To gain deeper insight why a certain version is favored than the other, open-ended responses were asked to allow participants to notice the small changes made in each mascot plush and identify the most appealing characteristics that made one design stand out over others with similar forms. This approach aimed to identify recurring themes in participant responses and determine whether the mentioned features aligned with cute character design theory, without informing them about the theory beforehand.

Table 7. Commonly Mentioned Features.  
(Source: Personal research documentation)

Mentions Features	Qty
Expression	231
Proportion & ratio	119
Blush (2019 JJE)	61
Look alike	42
Color	36
Shape	31
Material	17
Teeth (2024 PIL)	16
Round	14
Clean	13
Eyes	12
Facial feature	11
Cheek	8
Big head	4
Details	4

From the open-ended responses, a few similar answers stood out. The most frequently mentioned aspect was expression, cited 231 times, indicating that expressions played a central role in shaping perceptions of cuteness. Followed by pro-

portion and ratio, 119 mentions.

Table 8. Most Mentioned Features.  
(Source: Personal research documentation)

Denimalz	Expression	Proportion & Ratio
BANG	62 mentions	27 mentions
	2019 (33)	2020 (9)
	2024 (13)	2024 (7)
JJE	12 mentions	13 mentions
	2019 (7)	2020 (9)
	2020 (4)	2019 (4)
KE	46 mentions	28 mentions
	2019 (21)	2020 (21)
	2020 (13)	2024 (4)
PIL	52 mentions	22 mentions
	2024 (18)	2024 (10)
	2019 (16)	2020 (7)
DON	59 mentions	17 mentions
	2022 (16)	2020 (8)
	2020 (14)	2019 (4)









To further explore the design elements that participants found most appealing, a comparative visual analysis will be conducted across mascot plush versions.




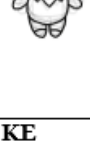

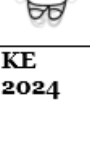


Table 9. Mascot Plush Visual Analysis.  
(Source: Personal research documentation)

Version	Details
BANG 2018	- smallest body among all
	- round face shape
	- facial features are large and fill most of the face area, with the widest spacing but still centered on the head
BANG 2019	- snout is aligned with the lower part of the eyes
	- smiling expression with closed mouth
	- legs are the farthest apart









BANG 2019	- head-to-body ratio: 1:0.5
	- round face shape
	- facial features are close together and centered on the head
BANG 2020	- snout is positioned slightly below the center of the eyes
	- smiling expression with open mouth
	- head-to-body ratio: 1:0.5
BANG 2022	- round face shape
	- facial features are the closest together and centered on the head, leaving a lot of empty space on the face
	- eyes are slightly smaller than the other versions
BANG 2024	- snout is slightly above the center of the eyes
	- smiling expression with closed mouth
	- head-to-body ratio: 1:0.5
BANG 2024	- round face shape
	- facial features are slightly farther apart but still centered on the head
	- snout is aligned with the lower part of the eyes
BANG 2024	- surprised expression with open mouth
	- head-to-body ratio: 1:0.5
	- round face shape
BANG 2024	- facial features are slightly farther apart but still centered on the head
	- snout is aligned with the lower part of the eyes
	- surprised expression with open mouth









<b>JJE 2018</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.75</li><li>- round face shape</li><li>- facial features are larger and fill the face, closely spaced and centered on the head</li><li>- beak is positioned below the eye area</li><li>- largest wattles size</li><li>- legs are close together</li></ul>
<b>JJE 2019</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- facial features are close together and centered on the head</li><li>- beak is positioned right below the eyes</li><li>- additional blush detail on the cheeks</li><li>- medium-sized wattles</li></ul>
<b>JJE 2020</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- facial features are smaller, close together, and centered on the head, leaving a lot of empty space on the face</li><li>- beak is positioned right below the eyes</li><li>- smaller wattles size</li></ul>
<b>KE 2018</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5, the largest head size</li><li>- rounded hexagon face shape</li><li>- biggest distance between the eyes and nose</li><li>- nose is located below the eye area</li><li>- smiling face with closed mouth</li></ul>

<b>KE 2019</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.75</li><li>- oval face shape</li><li>- facial features are centered on the face</li><li>- nose located below the eye area</li><li>- smiling with an open mouth</li></ul>
<b>KE 2020</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.75</li><li>- rounded hexagon face shape</li><li>- smallest facial features, placed at the center of the face, leaving a lot of empty space</li><li>- nose located right below the eye area</li><li>- smiling with a closed mouth</li></ul>
<b>KE 2022</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.75</li><li>- wide oval face shape</li><li>- eyes are farthest apart than other version</li><li>- nose is located right below the eye area</li><li>- surprised expression with open mouth</li></ul>
<b>KE 2024</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.75</li><li>- facial features are centered on the face</li><li>- nose located right below the eye</li><li>- smiling face with closed mouth</li><li>- desaturated color</li></ul>

<b>PIL 2018</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.4</li><li>- round face shape</li><li>- ears positioned on top of the head and tilted to the sides</li><li>- nose located in the middle of the eye area</li><li>- long distance between the mouth and nose</li><li>- closed smiling mouth</li><li>- closest distance between the legs</li></ul>
<b>PIL 2019</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.4</li><li>- round face shape</li><li>- ears positioned on top of the head and tilted to the left and right</li><li>- nose located in the middle of the eye area</li><li>- long distance between the mouth and nose</li><li>- round, large eyes with one eye winking</li><li>- closed smiling mouth</li></ul>
<b>PIL 2020</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- ears positioned directly on top of the head and pointing straight up</li><li>- shortest distance between the eyes</li><li>- nose located in the middle of the eye area</li><li>- closed smiling mouth</li></ul>

<b>PIL 2022</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- ears positioned on top of the head and tilted to the sides</li><li>- nose located in the middle of the eye area</li><li>- open smiling mouth</li></ul>
<b>PIL 2024</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- ears positioned directly on top of the head and pointing straight up</li><li>- nose located in the middle of the eye area</li><li>- open smiling mouth with visible teeth</li></ul>
<b>DON 2018</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.5</li><li>- round face shape</li><li>- eyebrows, eyes, and nose are the largest in size</li><li>- nose is located near the lower part of the eye area</li><li>- open smiling mouth</li><li>- legs are positioned far apart</li></ul>
<b>DON 2019</b>  	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.6</li><li>- round face shape</li><li>- eyes and nose are slightly larger</li><li>- nose located in the middle of the eye area</li><li>- closed smiling mouth</li><li>- legs are positioned farthest apart compared to other version</li></ul>

 	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.6</li><li>- round face shape</li><li>- eyes and nose are smaller than the previous version</li><li>- nose located in the middle of the eye area</li><li>- open smiling mouth</li><li>- legs are positioned close together</li></ul>
 	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.6</li><li>- round face shape</li><li>- eye and nose size are the same as the 2020 version</li><li>- distance between the eyes is wider</li><li>- nose is located near the lower part of the eye area</li><li>- tongue is sticking out</li><li>- a mole near the eye</li><li>- legs are positioned close together</li></ul>
 	<ul style="list-style-type: none"><li>- head-to-body ratio: 1:0.6</li><li>- round face shape</li><li>- eye spacing is the same as the 2022 version</li><li>- nose is located near the lower part of the eye area</li><li>- mouth shaped like the number 3</li><li>- a mole near the eye</li><li>- legs are positioned close together</li></ul>

Discussion

As shown in Tables 2 to 6, the two most preferred versions of each mascot were consistent across both fans and non-fans. BANG was most favored in its 2019 and 2024 versions, JJE in its 2019

and 2020 versions, KE in 2020 and 2019, PIL in 2024 and 2020, and DON in 2020 and 2019 versions. Minor differences only appeared in lower ranks, suggesting strong overall agreement on which designs looked the cutest. Although there is “look alike” factor as seen on Table 7, where a mascot’s design resembles the band member it represents and is likely more recognizable to fans, the overall results remained solid, with consistent top two choices across both groups.

Based on the collected data, the most frequently mentioned features were facial expression and proportion/ratio. As we can see on the data in Table 8, for Bang the most favored expression appeared in the 2019 version with 33 mentions out of 62 mentions, BANG 2019 version characterized by an open-mouth smile that convey happy expression and friendliness. Meanwhile, the 2020 version was most mentioned for its proportions with 9 out of 27 mentions, featuring a 1:0.5 head-to-body ratio, smaller eyes, and closely placed facial features where the snout is located slightly above the center of the eyes. This layout created more negative space on the face, enhancing the roundness and chubbier cheeks.

In case of JJE plush, the 2019 version was most liked for its friendly facial expression with 7 out of 12 mentions. This plush also has distinctive blush detail on its cheeks, which is also a form of expression that got 61 mentions as seen on table 7. In terms of proportion, the 2020 version was slightly more preferred. The 2020 has 1:0.5 head to body ratio, smaller and closely grouped facial features. Just like BANG plush, this layout increased its facial roundness because of its larger negative space.

For KE, the 2019 got mentioned 21 times out of 46 mentions for its expression which is smiling with an open mouth. For proportion and ratio, the 2020 version

got the most votes with 21 mentions out of overall 28 mentions. This version has 1:0,75 head to body ratio, rounded hexagon face shape, and centered features with lots of negative space around the features, that gave the illusion of fuller cheeks.

With PIL, both the most favored expression and proportion/ ratio were found in the 2024 version. It featured a smiling mouth with visible teeth, which got special mention 16 times as seen on table 7. It has a 1:0.5 head-to-body ratio, paired with a round face and centered features.

Lastly for DON plush, even with the most balanced distribution of preferences still has some slight difference. The 2022 version received the highest number of mentions for expression with 16 mentions out of 59, largely due to its tongue-out smile which gave out a more playful personality. However, the 2020 version was preferred for its proportion/ratio, with a 1:0.6 head-to-body ratio and smaller facial features.

When compared to established cute character design theories or principles and previous research, mascots featuring open-mouth smiles, visible blush, or tongue-out expressions consistently ranked among the favorites in participant responses. These expressive elements conveyed emotions such as friendliness, playfulness, and approachability traits that fostered a stronger emotional connection with viewers. This finding supports existing studies by Novica et al. in 2020 and Chen & Zhunag in 2021, which emphasize the role of facial expression and anthropomorphic gestures in enhancing character relatability and audience engagement.

For proportion and ratio, there are several consistencies along with some slight differences. Previous research by Dydyński (2017), which explored perceptions of cuteness in animal mascot characters, observed that not all features outlined in Lorenz’s Kindchenschema theory

were equally emphasized. While elements such as a protruding forehead is not mentioned by the respondents while listing cute features on animal mascot characters, features like large eyes, round body shapes, protruding cheeks, soft textures, and large heads were more commonly associated with cuteness.

In contrast to Dydyński (2017), in this study, some participants expressed a preference for mascots with smaller eyes. This may be due to the visual impression created by smaller features creating the illusion of tighter spaced and centered facial features, which increases the negative space on the face. This layout contributes to a more chubby and rounded appearance.

Conclusion

The findings from this study, based on survey responses from both fans and non-fans indicate a consistent agreement regarding the features that contribute to cuteness in character design which are facial expression and proportion or ratio. Expressions that conveyed happiness or playfulness were especially favored. Additional details such as blushes, open-mouth smiles with teeth, winks, or tongue-out gestures were often cited as features that enhanced a mascot’s charm. These elements reflect the use of anthropomorphism in mascot design, where non-human characters are given human like traits to increase relatability. By incorporating expressive gestures typically associated with human emotion, designers are able to create mascots that feel more familiar, approachable, and emotionally engaging to the audience. This human-like traits not only strengthens the emotional connection but also enhances the perceived personality and appeal of the character, making anthropomorphic design a powerful tool in developing effective mascots.



In terms of proportion and ratio, the most preferred designs closely reflected the principles of Kindchenschema, particularly the use of large head-to-body ratios, round shapes and soft body. However, this study also revealed that participants often favored smaller eyes, as long as the proportion looks better. Based on the findings, facial features that were tightly grouped and centered on the face is more preferable than just having larger eyes. This arrangement increased the negative space around the features, which in turn amplified the perception of roundness and fullness, contributing to a chubbier and softer appearance. These findings suggest that while classical cuteness principles still hold value, audience perception is also strongly influenced by facial proportion.

These results offer clear, practical insights for designers working in the development of character based products. The strong audience preference for certain proportions and expressive features highlights how small design choices like adjusting the space between facial elements or adding subtle details or changing the expressions can significantly affect how a character is perceived. For designers developing mascots for merchandise, attention to visual balance and emotional cues is essential. These findings also underscore the importance of iterative testing, visual refinement, and attention to proportion and details when developing mascots.

However, as most participants were from Indonesia, cultural preferences may have influenced the results. Perception of cuteness may vary across regions, as preferences for round shapes, gentle expressions, or certain stylistic cues may reflect regional interpretations of cuteness influenced by local media and aesthetics. As such, while the findings align with established design principles, they may not fully represent global perspectives. Future re-

search with more culturally diverse samples is recommended to validate whether these preferences apply universally.

References

Borgi, M., Cogliati-Dezza, I., Brelsford, V., Meints, K., & Cirulli, F. (2014). Baby schema in human and animal faces induces cuteness perception and gaze allocation in children. *Frontiers in Psychology*, 5. <https://doi.org/10.3389/fpsyg.2014.00411>

Chen, C. Y., & Zhunag, X. Q. (2023). The image ratios for designing cute non-human anthropomorphic characters. *Entertainment Computing*, 47(47). <https://doi.org/10.1016/j.entco>

Day6 [@day6official]. (2019, August 19). DAY6 WORLD TOUR ‘GRAVITY’ in DAEGU OFFICIAL MD LIST. X. <https://x.com/day6official/status/1163465843973349376>

Day6 [@day6official]. (2020, May 29). DAY6 ‘The Book of Us : The Demon’ SPECIAL MD LIST. X. <https://x.com/day6official/status/1266202743892348928>

Dydynski, J. M. (2017). Perception of Cuteness in Animal Mascots/Characters. *Tartu*.

Fang, H. (2019). Consumers’ Willingness to Pay More for Character Licensed Merchandise. *Seoul National University*.

Glocker, M. L., Langleben, D. D., Ruparel, K., Loughead, J. W., Gur, R. C., & Sachser, N. (2009). Baby Schema in Infant Faces Induces Cuteness Perception and Motivation for Caretaking in Adults. *Ethology : Formerly Zeitschrift Fur Tierpsychologie*, 115(3), 257. <https://doi.org/10.1111/J.1439-0310.2008.01603.X>

Gould, S. J. (1979). Mickey Mouse Meets Konrad Lorenz. *Natural History*, 30–36.

Hart, Christopher. (2010). *Cartoon Cute Animals : How to Draw the Most Irresistible Creatures on the Planet*. Watson-Guption.

JYP Entertainment. (n.d.). DENIMALZ - JYP SHOP. Retrieved February 22, 2025, from <https://thejypshop.com/category/denimalz/77/>

Marwati, A. R., Rivan, M. W., & Diwangkara, R. (2024). Studi Etnografi Perilaku Konsumtif Fandom NCT pada Pembelian Album dan Merchandise K-POP. *Juremi: Jurnal Riset Ekonomi*, 4(2), 467–490.

Patch [@seungkwanbns]. (2025, March 10). PIL DENIMALZ 2022 2024. X. <https://x.com/seungkwanbns/status/1898930687274836329>

Patch [@seungkwanbns]. (2025, March 31). DON KE DENIMALZ 2022. X. <https://x.com/seungkwanbns/status/1906455940196704362>

Patch [@seungkwanbns]. (2025, April 4). PIL PETIT DENIMALZ 2022 2024. X. <https://x.com/seungkwanbns/status/1908011391832961297>

Patch [@seungkwanbns]. (2025, April 5). KE DENIMALZ 2022 2024 (damaged box, with ring). X. <https://x.com/seungkwanbns/status/1908347023629365534>

Patch [@seungkwanbns]. (2025, June 4). DON DENIMALZ 2024 (damaged box, with ring). X. <https://x.com/seungkwanbns/status/1930126815101919248>

Personal Order Jastip Korea [@hyeboo-boo]. (2024, September 19). READY STOCK Day6 Denimalz 2022 New. X. <https://x.com/hyebooboo/status/1836770930196115763>

SendPoints. (2019). Mascot Design. SendPoints.

Novica, D. R., Hidayat, I. K., & Sutrisno, A. A. (2020, September 2). Aesthetic of Cuteness Dimensions in Malang City Mascot. *International Conference on Art, Design, Education and Cultural Studies*. <https://doi.org/10.18502/kss.v4i12.7592>

Öztürk, A., Kırmızıyaka, A., & Akin, M. S. (2021). The Effect of Emotional Benefit of Cute Products on Impulsive Buying Behavior. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 10(3), 2975–2991. <https://doi.org/10.15869/itobiad.931127>

The JYP Shop [@theJYPshop]. (2018, June 17). DAY6 1ST WORLD TOUR “Youth” OFFICIAL MD LIST. X. <https://x.com/theJYPshop/status/1008303240931209217>

The JYP Shop [@theJYPshop]. (2018, November 1). DAY6 OFFICIAL MD PLUSH DOLL PRE-ORDER. X. <https://x.com/theJYPshop/status/1057829582123028480>

Yusa, I. M. M., Ardhana, I. K., Putra, I. N. D., & Pujaastawa, I. B. G. (2023). Emotional design: A review of theoretical foundations, methodologies, and applications. *Journal of Aesthetics, Design, and Art Management*. <https://doi.org/10.58982/jadam.v3i1.308>

## EXPANDING HORIZON: EXPLORING SUSTAINABLE MOVIE SCREENING VENUES FOR STUDENT FILMS IN INDONESIA'S EVOLVING EXHIBITION LANDSCAPE

**Adilla Amelia<sup>1</sup>**  
**Meilani<sup>2</sup>**

**Received May. 26, 2025; Revised June. 17, 2025; Accepted June. 24, 2025.**

**Abstract:** *Emerging new exhibition venues and platforms have created an evolving landscape of sustainable movie screening spaces for film students in Indonesia. Using descriptive research and observational methods this study aims to analyze multiple movie screening venues that can sustain film students' showing. From the traditional theatrical exhibition spaces, alongside recent developments in the Indonesian film exhibition ecosystem. The research identifies six different screening space categories: commercial franchised theaters in major cities, regional cinema chains, serving smaller cities and regencies, privately owned community screening spaces, foreign cultural centers, subscription-based OTT services, and non-subscription streaming platforms. Exploring the geographic relationship between prominent film schools and these exhibition spaces, revealing new opportunities for student filmmakers outside of major cities with access to movie screening venues. The findings suggest that a hybrid exhibition strategy—combining intimate community screenings, regional theatrical exhibitions, and digital distribution—offers the most sustainable approach for student films, maximizing both audience reach and exhibition longevity. This research contributes to understanding how the democratization of screening spaces through both physical venues and digital platforms is reshaping opportunities for emerging Indonesian filmmakers in the post-pandemic era.*

**Keywords:** *movie exhibition; screening spaces; sustainable distribution; student films, digital platforms*

### Introduction

In 1910, all films that are shorter than feature length films are called "short films" (Felando, 2015). But recent definition shows that The Academy of Motion Picture Arts and Sciences -- the world's pre-eminent movie related organization, com-

prised of 7,000+ accomplished men and women working in cinema—states that a short film has a running time 40 minutes or less, including all credits (Meilani, 2021). But the length of short films is still debatable as Sonja Schenk points out that very few film festivals accept short films that are longer than 10 minutes (Schenk

& Long, 2011).

Students who study filmmaking are at least able to produce one short film that can be used as a portfolio into the industry and it's their most compelling reason to attend formal film school to a great degree by winning awards at film festivals to gain exposure (Cleve, 2005). For film production, the process of making a 5-minute short is exactly the same as that of a feature film. Every film production – either short or feature length—should go through seven stages of film production from development idea or story, funding and proceed to pre-production, production, post- production, marketing and distribution/exhibition of the final film (Meilani, 2021).

This research will focus on the exhibition stage of film production, which is the act of displaying film to audiences. This stage is one of the hardest stages especially for student film since most of the public screening site or platform, such as the movie theater, are made for paying screening, whereas student films is an class assignment based film that rarely appeal to the paying audience

To show the film to best advantage, special screenings may take place in plush, low seat-count theaters with very high quality (sometimes especially certified) projection and sound equipment and can be accompanied by food and drink and spoken remarks by producers, writers, or actors. Special screenings typically occur outside normal theatrical showing hours. The different types of screenings are presented here in their order within a film's development.

The process of getting the movie available to the audience is called distribution. This process will help channel films to reach its spectator through several platforms such as theatrical exhibition, non-theatrical screenings, broadcast television, cable TV, web streaming, digital down-

load, and home videos (Ascher & Pincus, 2012).

When a film finds its way to an audience through distribution, that film is exhibited at a certain screening platform. There are two types of exhibitions: Theatrical and Non-Theatrical. Theatrical exhibition refers to public screening space that pays admission, conventionally such as commercial movie theaters. On the other hand, the Non-Theatrical Exhibition includes all other presentations, such as home video, cable TV, Internet platform, and screenings in schools and colleges (Bordwell et al., 2017). Interestingly, although not as popular as commercial movie theaters, art centers, museums, film festivals, and cinema clubs are considered as Non-Conventional Theatrical Exhibition. In the context of student films, as a medium of visual language films use visual cues to help emote the story to its audience (Amelia, 2015). It was mentioned earlier that having audience feedback and going through the experience of exhibiting their films on a screening space, is crucial in their learning process as a filmmaker. However, this approach has been disrupted due to the COVID-19 pandemic. Although theatrical exhibitions remain the best way to engage audiences, this study will also explore the non-theatrical exhibition.

Gatot Prakoso, a well-known Indonesian film scholar, introduced the concept that "film needs forum" more than two decades ago in his seminal work on alternative cinema. Gatot Prakoso's concept can be theoretically grounded within what film scholar Janet Harbord (2002) terms the political economy of cinema exhibition, where access to screening spaces directly correlates with cultural and economic capital. Prakoso's "marginal films" concept resonates with Laura Marks (2000) theory of intercultural cinema, which argues that non-dominant cinematic voices require alternative dis-

<sup>1</sup>Adilla Amelia is the head of Film Department, School of Design, Bina Nusantara University, Tangerang.

e-mail : aamelia@binus.edu

<sup>2</sup>Meilani is the deputy head of Film Department, School of Design, Bina Nusantara University, Tangerang.

e-mail: meilani.dkv@binus.edu



tribution networks to resist hegemonic commercial systems.

Although written in the early 2000s, his observation that while big budget commercial films can afford conventional theatrical exhibition, other types of film such as short films, documentary films, and certain Indonesian films—which he termed “marginal films”—need alternative screening spaces, remains highly relevant today (Prakoso, 2008). This concept has been further validated by the post-pandemic emergence of regional cinema chains and digital platforms, demonstrating the continued need for diverse exhibition spaces for non-mainstream content.

Bordwell et al. (2017) in *Film Art: An Introduction* discuss that alternative screening or non-conventional screening spaces are also considered theatrical exhibitions. Therefore, these types of screening do need to have certain specification requirements. No matter what type of exhibition, film is an audio-visual medium that holds a certain standard both technically and artistically. As a commercial space big movie theatre needs to be able to deliver competitive service experience.

According to Independent Cinema Office UK, movie theatres have extremely specific requirements that exhibitors need to follow to develop screening facilities that audiences can enjoy. Some features are needed to achieve a higher number of audiences such as theatre capacity. Many factors can affect the theatre capacity but a general calculation using 1.10-1.20-meter seat and 0.55-0.66-meter width will hold 200 seats for 270 square meter auditorium; 150 seats for 190 square meters; 75 seats for 125 square meters. The quality of seating may differ according to size and comfort; some small space screening rooms may offer luxury seating and service that affect marketing and pricing.

Second is a technical requirement and equipment issue, as audio-visual medium

of course image and sound quality matters. As the most disregarded element in cinema, sound has several issues that are less apparent than projecting visuals. Sound needs to be transmitted within the area of the theatre properly with consideration of sound insulation both external and internal noises; noise control that are coming from the equipment used inside the theatre like projector and air conditioning; and acoustics.

On the other hand, the projection of the image will need to consider Screen and Projection facilities. It is stated that the size of the screen relates to viewing angles of the audience. ICO further elaborates that the ideal picture size should span 45-degree horizontal angle from the prime seat, which then makes the prime seat two third way back from the center-line of the theatre. Projection box placement will also determine the architecture of the movie theatre. Light beam projected from the box must be higher than the audience's head. Other factors concerning projection are aspect ratio and film formats. Most movie theatres are equipped with digital projectors and only able to project Widescreen (1:1.85) or Cinemascope (1:2.35) ratios.

For student films specifically, the suitability of screening spaces can be evaluated through several criteria: (1) Technical aspects - capability to project digital HD/4K formats, adequate audio systems for dialogue and music reproduction, and controllable lighting conditions; (2) Economic factors - affordable rental costs within student budgets (typically under Rp 2,000,000 per screening session); (3) Educational value - availability of space for post-screening discussions and constructive audience feedback; (4) Accessibility - convenient location relative to film schools and public transportation; and (5) Programming flexibility - willingness to accommodate student film content and scheduling needs. These criteria help

determine which venues can genuinely support the educational and professional development goals of student filmmakers.

## Methodology

The methodology of this research is descriptive research using literature reviews and observational methods. Descriptive research is made to define, explain, and give detailed information regarding certain subjects. Descriptive research involves collecting data to test hypotheses or answer questions concerning status of the subject of the study (Gay, L.R. & Diehl, 1992). The description is made after creative exploration of a certain subject, and it is done to help organize information that will support the explanations that will be tested and validated (Krathwohl, 1997).

Descriptive research is used when researchers need to gain a better understanding of a topic because this research allows the exploration of the existing certain phenomena. This type of research fits with the aim of this research, which is to find a suitable screening space for student films.

Along with literature review to find the list of requirements to create a suitable screening space for student films, this research will also implement an observational method (field observation) to see the screening space used for student films. The observational process will take place primarily in Jakarta as the capital city contains the highest concentration of film schools in Indonesia, including Institut Kesenian Jakarta (IKJ), BINUS University, Universitas Multimedia Nusantara (UMN) and etc. Jakarta also serves as the center for most alternative screening venues and foreign cultural centers, making it a representative case study for understanding the national screening landscape. However, the research also examines regional cinema chains that oper-

ate across multiple provinces to provide a broader perspective on exhibition opportunities outside major urban centers.

Data collection involved direct interviews with venue managers and programmers to understand their policies regarding student film screenings, documentation of actual student film screening events held between 2023-2024, and analysis of programming schedules to identify patterns of student film exhibition. The research also examined specific examples of student films that have been successfully screened at these venues to validate the practical accessibility of each screening space category.

The inquiring data in the literature review process and observing screening spaces for student film in Jakarta, this research will compare the findings and make analysis to address the question “What is a suitable screening space for student films?”

## Result

### A. Conventional Theatrical Exhibition

The three biggest chain movie theatres in Jakarta are Cinema XXI, CGV Blitz, Cinemaxx. Being the oldest, Cinema XXI has seventy-seven movie theatres that span across Indonesia (Utama, 2016). Cinema XXI mostly screens Hollywood films, but they do have a portion of its screens dedicated to Indonesian feature films. To be able to screen a film on this Cineplex, first filmmakers need to have a distribution deal with Cinema XXI that requires profit sharing. Alternatively, filmmakers can rent the facilities for approximately Rp. 17.000.000 depending on the location and the capacity of the theatre for one showing of two hours. The second one is CGV, a South Korean owned theatre franchise that acquires Blitz Megaplex, an Indonesian movie theater company, in 2015.

Cinepolis, formerly known as Cinemaxx is the third largest franchise movie theater, previously owned by Lippo Group one of the biggest conglomerate in Indonesia. In 2019, they sold their shares to Cinepolis, a movie theater chain based in Mexico (Stefanie, 2020). Both have similar rent fees with Cinema XXI in which they count by number of seats of the theatre auditorium booked. Digital film format is accepted in all three theatrical exhibitors, but to screen a film on their premises, filmmakers need to have a censorship letter from the Indonesian Censorship Board.

In recent years, new smaller cinema chains have emerged to serve areas outside major urban centers, creating what are known as “bioskop kabupaten” (regency/district cinemas). Two notable examples are Sam’s Studio and New Star Cineplex (NSC).

1) Sam’s Studio: Launched in December 2024, Sam’s Studio is a new cinema chain founded by producer Sonu Samtani that exclusively shows Indonesian films. The chain operates in 17 cities and regencies across Indonesia, including Cibadak (Sukabumi), Lingkar Jalur Sukabumi, Cianjur, Subang, Garut, Indramayu, Pematang, Gombong, Pekalongan, Ungaran, Salatiga, Pekalongan Kesesi, Probolinggo, Solo/Karanganyar, and Colomadu (Hidayat, 2024).

Sam’s Studio’s business model focuses on smaller cities and regencies not served by major cinema chains, integrating with local UMKM (small businesses) through food courts. This approach creates new economic centers in regional areas and provides employment opportunities for local communities. A distinctive feature of Sam’s Studio is its weekend screenings that prioritize children’s films.

The initiative has received significant government support, with backing from the Vice Minister of Culture (Giring Ganesha) and Utusan Khusus Presiden (Raffi

Ahmad). This support underscores the importance of expanding access to theatrical film exhibition beyond major urban centers, supporting the Indonesian film industry by providing more screening venues, and aligning with government initiatives to develop regional economies.

2) New Star Cineplex (NSC): Operating since 2013, New Star Cineplex (NSC) is run by PT Karya Media Jaya Bersama and has grown to become one of Indonesia’s largest independent cinema chains. With headquarters in Malang, Jawa Timur, NSC currently operates in 33 locations across Java, Madura, Kalimantan, and Bangka Belitung (New Star Cineplex Official Site).

Like Sam’s Studio, NSC focuses on smaller cities and regencies not served by major cinema chains like Cineplex 21 Group. NSC offers an affordable pricing structure: Monday-Wednesday (Rp25,000), Thursday-Friday (Rp30,000), and Saturday-Sunday and holidays (Rp35,000). Tickets include beverage vouchers (Rp9,000 value, Rp13,000 in Belitung), though the Rangkasbitung location has Rp5,000 higher pricing. Unlike major chains, NSC currently offers only on-site ticket sales with no online booking. Most NSC locations feature 2 screens, with some locations having 3-4 screens (Kudus: 4 screens, Pati: 3 screens, Purbalingga: 3 screens, Salatiga: 3 screens, Pasuruan: 3 screens). The theaters are often located in shopping centers, malls, or commercial areas.

The significance of NSC lies in its democratization of cinema access across Indonesia’s smaller cities and regencies, providing affordable entertainment options in areas previously underserved, supporting the growth of Indonesia’s film industry by expanding exhibition venues, and creating cultural and entertainment hubs in regional areas.

**B. Non-Conventional Theatrical Exhibition and Non-Theatrical Screening Space**

Previous study states that non-theatrical screening space is a screening space that holds curated programs, screening schedule, and screening space. Even though some non-theatrical screening spaces hold curated programs, others also facilitate private or special screenings for the community (Kurniawan, 2018). According to the mentioned study, the most recognizable non-theatrical screening space in Jakarta is Kineforum, Kinosaurs, Paviliun 9, as can be seen in Figure. 1 and other foreign cultural centers. Financially, Kinosaurs and Paviliun 9 are privately owned while Kineforum is an art center funded partly by the government. Recently, the film industry has been supported by the explosive development of information and communication technology by providing an Over-The-Top platform that offers various streaming experiences (Sofiyanti et al., 2023). Media entertainment services delivered over the Internet are known as Over-The-Top (OTT) media services. This type of media typically seeks to charge consumers for its services and requires some form of online platform authentication to access it (Kokaram et al., 2015).



Figure 1. Non-Conventional Theatrical Screening Space (Kineforum, Kinosaurs, Paviliun 9). Photographs by coconuts.co, M. Revi, Bintaro & Beyond. [Public domain], via Google. (<https://tinyurl.com/ybvmzyff>, <https://tinyurl.com/3cm7fsjj>, <https://tinyurl.com/28tvjuw8>)

Kineforum is the longest-running facility in an art compound, Taman Ismail Marzuki. This facility holds curated film screenings as a part of the Jakarta Art Council program. Films in Kineforum

vary from short films, feature films, classical films, both Indonesian and foreign, and documentary films. It stands across seven by eight meters with 45 seats and five additional seats. It is equipped with three by six screens with a rental fee of one million Rupiah to screen a film or for two to three hours of use of the space. One film is considered one slot, while two slots (3-6 hours) are listed at two million Rupiah, and three slots (6-9 hours) are listed at Rp. 3.000.000.

Kineforum, as part of the Jakarta Arts Council programming, occasionally features student works and independent films alongside its regular programming of Indonesian and international cinema. The venue’s accessible rental rates and flexible programming make it a potential option for student film screenings, though specific data on student film usage would require further investigation.

In 2015, several independent filmmakers collaborated with a local book house in the South of Jakarta to open Kinosaurs. Although the venue has since ceased regular operations as a dedicated screening space, during its active period (2015-2022), it served as an important model for community-based film exhibition, holding 40 people with 30 seats and four bean bags at a rental fee of Rp. 1.200.000 for two hours. The Kinosaurs model demonstrates the viability of informal screening spaces and has inspired similar community-driven initiatives across Indonesia. There is no curated program in Kinosaurs; the film format needed is HD format. Besides screening, this facility can also be rented for events such as meetings, gatherings, parties, and other events.

Kinosaurs served as a community space that was open to various types of programming, including independent and student films. The venue’s informal setting and affordable rates made it ac-



cessible to emerging filmmakers, though detailed documentation of specific student film activities would require archival research or interviews with former operators.

Another privately owned screening space is Paviliun 9, located in Bintaro, South Tangerang. This space regularly held screenings for the film community. Paviliun 9, established in 2014, is a commercial space owned by Eugene Panji, an Indonesian Film and TV commercial director. This screening space held 35 – 40 seats and with a rental fee of Rp. 900.000 for a film screening. These discussed screening spaces do not have a specific ticket fee, unlike commercial theaters; sometimes, there is no admission fee to watch these films.

Another screening space worth noting is the cultural center owned by a foreign nation. In Jakarta, two notable screening spaces often screen films for the film community, such as Goethe-Institute Jakarta and Institut Français d'Indonésie. These two foreign cultural centers are in the center of Jakarta, in the same vicinity as Kineforum. Goethe Institute is a German cultural center run by the German embassy in Jakarta, the capital city of Indonesia. The French government owns Institut Français d'Indonésie (IFI) and operates as a part of the French Embassy's cultural center.

As a cultural center, both exhibitors held special programming for respective cultures, not limited to film screenings. Goethe-Institute Jakarta owns The Goethe Haus shown in Figure no. 2, an auditorium with 301 seats plus a foyer for stage performance. Their website states the auditorium can hold 301 people with a 5.90 by 10.86-meter stage. Regarding film projection, several film formats are acceptable in this cultural center since they own two 16mm celluloid projectors, HD projectors with the specification of 6500

ANSI Lumens, including two projection screens that hold film format 16:9 and 4:3 (GoetheHaus Screening Room, 2023).



Figure 2. Non-Conventional Theatrical Screening Space (Goethe-Institute Auditorium). Photographs by GOETHEHAUS. [Public domain], via website. (<https://www.goethe.de/ins/id/id/sta/jak/gau.html>)

Established in 2015, IFI is in the center of Jakarta, located in the same compound as the French Embassy in Jakarta, Indonesia. One of its facilities is an auditorium designed for various cultural performances such as film screenings, piano recitals, mini orchestras, intimate concerts, conferences, seminars, and other small to medium-sized gatherings shown in Figure no. 3. Information gathered from their official website states that this auditorium held 181 people equipped with a DCP player, Full HD projector, 7.1. Surround sound system that can function as a professional movie theater (IFI-ID, 2020).



Figure 3. Non-theatrical Screening Space (IFI Auditorium). Photographs by IFI-id. [Public domain], via website. (<https://www.ifi-id.com/jakarta-auditorium/>)

## Discussion

The COVID-19 closure and social distance limits have impeded movie production and dissemination. Due to concern about contracting the virus, the most famous locations for watching movies and theatres have either been shut down or are empty. Consumers are using online streaming services more than ever, and Twice as many new subscribers as expected—15 million—have joined Netflix (Nikolic et al., 2023). In Indonesia, OTT has taken over the exhibition sector as the pandemic continues; in 2020 alone, several new OTT sprung into existence with the demand for entertainment during the lockdown and the scarcity of filmmakers' ability to sustain during the pandemic (Changsong et al., 2021).

The Indonesian film industry has been booming in recent years, with considerable US-franchised names such as Netflix, Disney Plus Hotstar, and Amazon Prime securing their place in the market by opening regional offices. It brought more international content to Indonesian audiences and opened opportunities for local filmmakers to showcase their work on a global OTT platform. In addition to these big names, local over-the-top (OTT) services such as Vision Plus, Genflix, Viu, and GoPlay have also gained momentum in reaching record subscribers.

These OTT services offer a wide range of content, including short films produced by film students. Furthermore, it has become an excellent opportunity for aspiring filmmakers to showcase their work and reach wider audiences. The technical qualifications for short films to be presented on these local OTT services, such as high-definition video quality, subtitles, and metadata of film information, are highly attainable for film students as they are primarily part of their institution's standard. Moreover, with the growing popularity of these OTT services, there

has never been a better time for local filmmakers to showcase their talent and prepare for a career in the film industry, which could lead to the future of Indonesian cinema.

Beyond subscription-based OTT services, student filmmakers have increasingly turned to free digital platforms that offer more accessible distribution channels. YouTube has emerged as the most significant platform for Indonesian student films.

Vidsee, a Singapore-based platform focusing on Asian short films, has become another important venue for Indonesian student works, regularly featuring content from film schools across the archipelago. The platform's curatorial approach and focus on regional content make it particularly suitable for student films exploring Indonesian themes and narratives.

These free platforms offer several advantages for student filmmakers: immediate global distribution, audience analytics, potential for viral reach, and no upfront costs. However, they also present challenges including content saturation, limited curatorial support, and monetization difficulties.

Another example of local OTT that film students can explore is Bioskop Online. Bioskop Online, operated by PT Bioskop Digital Indonesia, is a non-subscription online streaming service focused on Indonesian films, documentaries, and TV series. The platform offers special features such as director's cut and uncut versions of content. Unlike subscription-based services, Bioskop Online employs a pay-per-view model where users purchase individual films with a 48-hour viewing window. Pricing varies by film (for example, Rp20,000 per film), with payment processed through third-party payment gateways. The platform is globally accessible, though some content may have geo-restrictions.

Currently, Bioskop Online is accessible via web browsers on laptops and mobile devices, with mobile apps and Smart TV support in development. The platform features standard streaming controls including play, pause, rewind, and fast-forward. The content on Bioskop Online includes Indonesian films, documentaries, TV series, and special programming like “Bioskop Rakyat” featuring independent and art films. The platform also hosts film festivals and curated collections.

The user experience is straightforward, involving a simple registration process using email or phone number, One-Time Password (OTP) verification, direct film purchase without subscription commitment, and a 48-hour viewing window after purchase. Bioskop Online’s significance lies in providing a digital exhibition space for Indonesian films, offering an alternative distribution channel for independent filmmakers, making Indonesian cinema accessible globally, supporting the film industry during and after pandemic restrictions, creating opportunities for films that might not secure theatrical release, and serving as a platform for film festivals and special programming.

The platform’s pay-per-view model allows student filmmakers to retain greater control over their content distribution while reaching national audiences.

Conclusion

This research finds that there are now six main screening space types across Indonesia, shown in this Table 1.

Table 1. Four Main Screening Space

Screening Space	Screening Type	Type of Screening Space	Location
Movie Theater	Commercial	Conventional Theatrical Exhibition	Big Cities Across Indonesia
		Independent Theatrical Exhibition	Regional Cities Across Indonesia
Private Screening Space	Community	Non-Conventional Theatrical	Jakarta
Modern Auditorium	Foreign Cultural Center	Non-Conventional Theatrical	Jakarta
Over the Top	Commercial	Non-Theatrical Subscription-based	Across the Globe
		Non-Theatrical Non-Subscription Based	Across the Globe

This research finds that there are now six main screening space types across Indonesia for student films:

- 1) Commercial franchised movie theaters (Cinema XXI, CGV Blitz, Cinemaxx) - Available in multiple locations across major cities but require expensive screening fees.
- 2) Regional cinema chains (“bioskop kabupaten”) (Sam’s Studio, New Star Cineplex) - Located in smaller cities and regencies, offering more accessible venues for Indonesian films outside major urban centers.
- 3) Privately owned community-screening spaces Kinosaurus, located in South Jakarta, offering intimate screening experiences. Paviliun 9 in Bintaro, located in South Tangerang, offering intimate screening experiences.
- 4) Foreign cultural centers (Goethe-Institute Jakarta, Institute Francais d’Indonesie) - Equipped with modern auditoriums located in Central Jakarta.
- 5) Subscription-based OTT services (Netflix, Disney+ Hotstar, Vision Plus, Genflix, Viu, GoPlay) - Offering wide dis-

tribution but typically focused on commercial content.

6) Non-subscription streaming platforms (Bioskop Online) - Providing pay-per-view access to Indonesian films with special programming for independent and art films.

These six types of screening spaces offer different options to student filmmakers. For intimate sessions, students can use community-based screening spaces to gather audience feedback and engage in meaningful dialogue about their films (Hanssen, 2020). For a more professional exhibition experience, they can use proper facilities at commercial theaters or foreign cultural centers, though at a higher cost.

The emergence of regional cinema chains like Sam’s Studio and New Star Cineplex creates new opportunities for student films to be screened outside major urban centers, potentially reaching audiences in the filmmakers’ home regions. This is particularly valuable for film students from institutions like around Bandung (near Sam’s Studio locations in Garut and Subang) or Surabaya (near NSC locations in Surabaya).

Digital platforms like Bioskop Online offer yet another avenue, allowing student films to reach a global audience without the constraints of physical screening spaces. The platform’s focus on Indonesian content and special programming for independent films makes it particularly suitable for student works.

This research identifies potential screening opportunities based on venue characteristics, accessibility, and programming policies. While specific quantitative data on student film usage across these venues was not systematically collected, the analysis of venue specifications, rental costs, and programming flexibility provides a framework for understanding their potential suitability for student film

exhibition. Future empirical research involving detailed venue usage tracking and filmmaker interviews would be necessary to validate actual utilization patterns.

Based on venue analysis and accessibility factors, a multi-platform approach appears most promising for student filmmakers: utilizing affordable community venues for initial screenings and feedback, exploring digital platforms for broader distribution, and considering regional cinema opportunities where feasible. However, the effectiveness of this approach requires empirical validation through longitudinal studies tracking actual filmmaker experiences and outcomes across different screening strategies.

Contemporary student filmmakers have also found success through platform combinations: screening at campus events, uploading to YouTube for broader audience reach, submitting to international festivals through platforms like FilmFreeway, and eventually securing theatrical or streaming distribution deals.

This study acknowledges several limitations, the focus on Jakarta-area venues may not represent opportunities in other regions, some venue information may have changed since data collection, and the rapidly evolving digital landscape requires ongoing research to maintain relevance.

Future research should examine screening opportunities in other major Indonesian cities, track the evolution of digital platform policies regarding student content, and conduct longitudinal studies of student filmmaker career trajectories across different distribution strategies.

References

Amelia, A. A. B. (2015). Visual language in Indonesian children film:



- How Indonesian film makers talk to children. *Interdisciplinary Behavior and Social Sciences* Edition: 1st, 429–432. [https://books.google.co.id/books?hl=en&lr=&id=9COsCQAAQ-BAJ&oi=fnd&pg=PA429&ots=6\\_Nq\\_u\\_h\\_o\\_4\\_3\\_a\\_s\\_i\\_g=F\\_V\\_r\\_w\\_E\\_p\\_s-R8N1z\\_7LD-KMSq4k2h\\_Q&redir\\_esc=y#v=onepage&q&f=false](https://books.google.co.id/books?hl=en&lr=&id=9COsCQAAQ-BAJ&oi=fnd&pg=PA429&ots=6_Nq_u_h_o_4_3_a_s_i_g=F_V_r_w_E_p_s-R8N1z_7LD-KMSq4k2h_Q&redir_esc=y#v=onepage&q&f=false)
- Ascher, Steven., & Pincus, Edward. (2012). *The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age* (5th ed.). Plume.
- Bordwell, D., Thompson, K., & Smith, J. (2017). Film art: An introduction, eleventh edition. In *Film Art: An Introduction*.
- Changsong, W., Kerry, L., & Marta, R. F. (2021). Film distribution by video streaming platforms across Southeast Asia during COVID-19. *Media, Culture & Society*, 43(8), 1542–1552. <https://doi.org/10.1177/01634437211045350>
- Cleve, B. (2005). *Film Production Management* (3rd Edition). Routledge. <https://doi.org/https://doi.org/10.4324/9780080477732>
- Felando, C. (2015). Discovering short films: The history and style of live-action fiction shorts. In *Discovering Short Films: The History and Style of Live-Action Fiction Shorts*. <https://doi.org/10.1057/9781137484369>
- Gay, L.R. & Diehl, P. L. (1992). *Research Methods for Business and Management* New York: MacMillan Publishing Company. New York: MacMillan Publishing Company.
- GoetheHaus Screening Room. (2023). GoetheHaus. <https://www.goethe.de/ins/id/en/sta/jak/gau.html>
- Hanssen, S. (2020). At Issue Film Society: Starting a Screening Series at a Community College. *Community College Enterprise*, 26(2), 37–45.
- Harbord, J. (2002). *Film Cultures*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446219591>
- Hidayat, A. N. (2024, December 6). Sam's Studio Resmi Dibuka di 17 Kota dan Kabupaten di Indonesia, Giring: Pemerintah Dukung Pembangunan Bioskop seperti Ini. <https://Wartaekonomi.Co.Id/Read551549/Sams-Studio-Resmi-Dibuka-Di-17-Kota-Dan-Kabupaten-Di-Indonesia-Giring-Pemerintah-Dukung-Pembangunan-Bioskop-Seperti-Ini>
- IFI-ID. (2020). IFI-ID Auditorium. <https://www.ifi-id.com/jakarta-auditorium/>
- Kokaram, A., Crinon, R., & Catania, N. (2015). OTT (Over-The-Top) in 2015. *SMPTE Motion Imaging Journal*, 124(6), 65–68. <https://doi.org/10.5594/j18597>
- Krathwohl, D. R. (1997). A Taxonomy for Learning, Teaching and Assessing. In *Methods of educational and social science research: An integrated approach* (2nd ed.). Allyn & Bacon.
- Kurniawan, F. (2018). Bioskop Alternatif di Mata Penonton. <https://tirto.id/bioskop-alternatif-di-mata-penonton-cGW9>
- Marks, L. U. (2000). *The Skin of the Film*. Duke University Press. <https://doi.org/10.1215/9780822381372>
- Meilani, M. (2021). Sustainability and eco-friendly movement in movie production. *IOP Conference Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/794/1/012075>
- Nikolic, D., Kostic-Stankovic, M., & Jeremic, V. (2023). How does genre preference influence the importance of film marketing mix elements: evidence during the COVID-19 pandemics. *Economic Research-Ekonomska Istraživanja*, 36(1). <https://doi.org/10.1080/1331677X.2022.2080734>

- dence during the COVID-19 pandemics. *Economic Research-Ekonomska Istraživanja*, 36(1). <https://doi.org/10.1080/1331677X.2022.2080734>
- Prakoso, G. (2008). *Film Pinggiran: Antologi Film Pendek, Film Eksperimental, Dan Film Dokumenter*. Yayasan Seni Visual Indonesia (YSVI) dan Koperasi Sinematografi IKJ.
- Schenk, S., & Long, B. (2011). *The Digital Filmmaking Handbook*, Fourth Edition. In *Course Technology of Cengage Learning*.
- Sofiyanti, D., Irwanto, I., & Meilani, M. (2023). Fostering Heroine's Journey on Digital Platform to Sustain Re-representation of Women Role. *International Conference on Biospheric Harmony Advanced Research (ICOBAR) 2021*, 2594(April 2023). <https://doi.org/https://doi.org/10.1063/5.0109660>
- Stefanie, C. (2020, January 19). Geliat Bioskop Independen di Antara Jejaring Raksasa. <https://Www.Cnnindonesia.Com/Hiburan/20200117214646-220-466456/Geliat-Bioskop-Independen-Di-Antara-Jejaring-Raksasa>
- Utama, A. P. (2016). Layar Alternatif Solusi dari Mahal dan Langkanya Bioskop. <https://tirto.id/layar-alternatif-solusi-dari-mahal-dan-langkanya-bioskop-cc6H>

## ANALYSIS OF THE IMPLEMENTATION OF THE VISEME-BASED METHOD IN FICUSIA ANIMATION

Selly Artaty Zega<sup>1</sup>  
Adric Filbert<sup>2</sup>  
Gerson Julyfer Parulian Tambun<sup>3</sup>  
Muhammad Fauzi Ardhi<sup>4</sup>

Received May. 18, 2025; Revised June. 13, 2025; Accepted June. 24, 2025.

**Abstract:** Based on interviews with the Ficusia animation team and professionals from Infinite Frameworks Studios, it was found that the lip and jaw movements in Ficusia were too fast, making them appear less realistic. This study aims to improve the quality of lip-sync animation in Ficusia using the viseme-based method, which allows for more natural lip and jaw movements. The viseme-based method was chosen because it is more suitable for 3D animation, producing smoother lip movements that are better integrated with facial expressions compared to the phoneme-based method, which tends to be rigid. A qualitative case study approach was conducted on the first episode of Ficusia, which contains scenes with predominantly human mouth shapes. Primary data were obtained through interviews with experienced animators and supervisors, while secondary data were gathered from literature. The results show that the viseme-based method can enhance the quality of lip-sync, create more natural animation, and improve the integration between lip movements and character expressions. This method is considered effective by professional animators and is expected to serve as a reference for producing realistic lip-sync in 3D animation.

**Keywords:** 3d animation; blender; lip-synch; viseme-based

### Introduction

Lip-sync, or lip synchronization, aligns lip movements with pre-recorded audio and is essential in animation for creating lifelike characters and natural dialogue

(Hoon & Shaharuddin, 2019; Shukurov, 2024). Poor lip-sync is easily noticeable and diminishes animation quality (Hoon & Shaharuddin, 2019). Successful shows like The Forces of Evil, My Little Pony, and Mr. Bean demonstrate how effective

<sup>1</sup>Selly Artaty Zega is a lecturer at Department of Informatics Engineering, Animation Study Program, Politeknik Negeri Batam.

e-mail : selly@polibatam.ac.id

<sup>2</sup>Adric Filbert is a student at Department of Informatics Engineering, Animation Study Program, Politeknik Negeri Batam.

e-mail: adric.filbert@students.polibatam.ac.id

<sup>3</sup>Gerson Julyfer Parulian Tambun is a lab assistant at Department of Informatics Engineering, Animation Study Program, Politeknik Negeri Batam.

e-mail: gerson@polibatam.ac.id

<sup>4</sup>Muhammad Fauzi Ardhi is Consultant 3D Layout Artist at Anima Vitae Point Sdn Bhd.

e-mail: ardhi.fauzi@gmail.com

Analysis of The Implementation of The  
Viseme-based Method in Ficusia  
Animation

Selly Artaty Zega<sup>1</sup>  
Adric Filbert<sup>2</sup>  
Gerson Julyfer Parulian Tambun<sup>3</sup>  
Muhammad Fauzi Ardhi<sup>4</sup>

lip-sync supports storytelling and character (Aneja & Li, 2019).

Ficusia — an anti-drug animation by 69 Politeknik Negeri Batam students and collaborators—serves as a local example of lip-sync application (Alfi & Prasetya, 2023; Hidayah & Zega, 2023). It tells the story of a tree obsessed with Cuta seeds to attract Flowna. Despite local animation advances, Ficusia struggles to meet international lip-sync standards.

Ficusia was selected as a case study due to its realistic style in facial expressions, the availability of production team insights, and its role as a representative example of emerging 3D animation practices in Indonesia. Compared to other local animations, Ficusia is the latest Indonesian animation that openly documents its process and showcases clear lip-sync challenges, making it suitable for in-depth qualitative analysis. The lip-sync challenges are found during interviews with Ficusia animators and professionals from Infinite Frameworks Studios. It was revealed that while mouth shapes were accurate, lip and jaw movements were too fast, resulting in unnatural animation. Neither team initially identified their lip-sync technique, but this study found two relevant approaches in literature: phoneme-based and viseme-based (Shukurov, 2024; Nakada et al., 2024).

The lip-sync with phoneme-based method, commonly used in 2D animation, matches mouth shapes to phonemes but can cause stiff or exaggerated motions in 3D (Osipa, 2010). The viseme-based method, preferred for 3D, groups similar sounds and blends movements of lips, corners, and jaw for a more natural look (Osipa, 2010; Hoon & Shaharuddin, 2019; Muhammad, 2023).

This qualitative case study analyzes viseme-based lip-sync in Ficusia episode

one, selected for its clear dialogue scenes. Data were collected through interviews with experienced animators and supervisors, literature reviews, expert consultations, and shot analysis using Blender. This research also only applied to human-like facial structures as their facial structures demand more precise and realistic lip-sync. While several characters that meet the requirements are analyzed in this research too, due to page limitation, this study will only show the picture of Uci the little girl for comparison as she has the clearest close up shots.

This study aims to contribute to animation literature and offers practical guidance for local animators aiming to produce lip-sync animations that meet international standards.

### Lip-sync

Lip-sync, or lip synchronization, matches mouth movements to audio and is key to making animated characters appear natural (Hoon & Shaharuddin, 2019; Shukurov, 2024). It's often done by linking mouth shapes to phonemes (Chen et al., 2010). Though no single method guarantees realism (Osipa, 2010), several criteria from research and interviews help evaluate it.

1. There is ease in And ease out, timing Good, and felt squash and stretch (William, 2001; Wahkid, personal communication, 2024)
2. Different mouth shape or asymmetry (Osipa, 2010; Danar, personal communication, 2024)
3. Character expressions are legible (William, 2001; Danar, personal communication, 2024)
4. Integration of other facial ele-



ments (William, 2001; Osipa, 2010).

Viseme-based Method

The viseme-based method links mouth shapes with facial expressions and character, making lip-sync more natural than strict phoneme matching (Hoon & Shaharuddin, 2019). It groups similar sounds (e.g., M, B, P) into one viseme and blends poses by focusing on mouth corners and chin (Osipa, 2010). This suits realistic 3D animation, as people often speak with less precision (Chen et al., 2010; Osipa, 2010). Below are combined rules from Osipa and Williams for applying this method.

**B/M/P:** Closed mouth with a tip that matches the letter before and after it. This sound must be made, with the lips turning back for emphasis. The width of the mouth can widen or narrow according to context

**EE (expanded):** The tip of the mouth widens from the previous shape. The width of the mouth can change, adapting to the shape of the mouth before and after.

**F/V:** The lower lip rolls back, the upper lip rises slightly to reveal the upper teeth. This form should always be clearly visible in the dialogue.

**OR:** Lips curl forward, corner of mouth narrows. U is more oval and smaller than O. The width of the mouth must be maximum to read clearly, except in certain sentences. This form is not affected by expression.

**SH/CH:** The tip of the mouth widens from its previous shape, revealing teeth with a proportion of 70% upper teeth and 30% lower teeth, with a closed chin. The width of the mouth depends on the context.

**Th:** The tip of the mouth adapts to the previous shape, with the chin lower except after M, and not closed completely.

Mouth shapes that are not mentioned can be adjusted to the mouth shape rules above because one visemes can represent several words (Osipa, 2010).

1. Define an expression.

Character expressions can be determined based on storyboard or the sound when the character speaks (Osipa, 2010). The characteristics of expressions according to Osipa are based on Building stylized brow shapes :

**Happy:** Focus on the upward movement at the corners of the lips and the small wrinkles around the eyes.

**Sad:** The position of the lips is lowered, the eyebrows are curved upwards, and the lower eyelids are slightly raised.

**Angry:** The eyebrows are drawn together and lowered, the eyes are narrowed, and the lips may be pressed.

**Scared:** Eyes wide open, eyebrows raised, and lips tensely parted.

**Surprised:** Eyes very open, eyebrows raised high, and mouth wide open.

**Disgusted:** The nose is wrinkled, the upper lip is raised, and asymmetrical expressions are often used.

2. Adapt viseme with phoneme and overall expression animation

To adjust viseme with phonemes, determination is required in dialogue. The following Fig.1, is an illustration of how to determine viseme for character based dialogue waveform from audio.

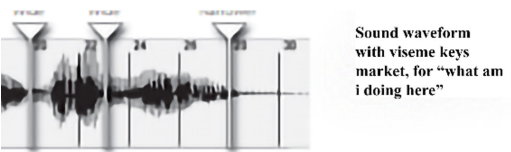


Figure 1. Determine viseme in dialogue  
(Source: Stop Staring : Stop Staring : Facial modeling and animation done right )

3. Simplifies movement of the tip of the mouth and chin

According to Osipa, mouth shapes are simplified by adjusting the corners (narrow or wide) and using squash and stretching on the chin. Not all phonemes are equally important (Osipa, 2010; Williams, 2001). Animators should prioritize key shapes and blend similar sounds like A and E. Smoothing can be done in the viewport or graph editor (Osipa, 2010; Zega, 2021).

4. Working on teeth and tongue

The character’s teeth must sync with the chin, with only the lower teeth moving in line with it (William, 2001). During speech, characters typically show upper teeth, lower teeth, or a 70:30 ratio (William, 2001). Tongue movements should be quick, usually without ease-in or ease-out (William, 2001; Osipa, 2010).

5. Create asymmetry

Asymmetry in expressions or mouths can be created using uneven mouth corners, misaligned lips, and differently raised eyebrows (William, 2001; Osipa, 2010). Asymmetry is applied last to enhance expression and is sometimes minimized if unnecessary (Osipa, 2010).

Methodology

This study uses a qualitative case study to analyze the impact of the viseme-based method on Ficusia’s lip-sync animation, with conclusions based on expert feedback. The viseme-based method then applied in episode 1 of the Ficusia series.

The research process includes the following steps:

- 1. Identification of primary and secondary data
- 2. Determination of time and location
- 3. Identification of necessary shots
- 4. Determination of production stages
- 5. Implementation of the production stages
- 6. Data analysis

This qualitative case study focuses on the third, fourth, and sixth stages to address the research questions. The unit of analysis is each shot from the Ficusia film, described and critiqued based on interviews. Problematic shots are improved using the viseme-based method, then evaluated by experts. The study aims to enhance Ficusia’s lip-sync quality according to research and interview criteria.

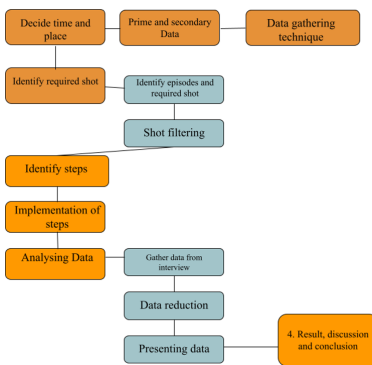


Figure 2. Animated interactive wall  
(Source: Personal research documentation)

Data Collection Techniques

Data collection will be based on 3 things:

1. Observation

Observations will be carried out at Batam State Polytechnic to analyze differences before and after implementation viseme-based method, and at Infinite Studios Batam to determine the criteria for shots and episodes that will be used for implementation viseme-based method.

2. Interview

Interviews will be conducted with sources from Infinite Framework Studios who have at least more than 5 years of experience to obtain valid information.

3. Recording

Recording will be carried out to document work, collect data from interviews, and analyze before and after implementation viseme-based method.

Determination of Primary and Secondary Data

Primary data will come from interviews with Infinite Frameworks Studios' professional animators: Wahkid Joko Sayekti and Danar Donianto (lead animators, more than 5 years experience), as well as Denis James Deegan and Phil Mitchell (supervisors, 20 years of experience). Secondary data is taken from literature such as Animation Survival Kit and Stop Staring.

Determination of Time and Place

The interview was conducted at Infinite Frameworks Studios according to the resource person's schedule, while the production process was carried out in the

Galang room, Polibatam Techno Building. The research takes place from October 20 to November 28, 2024.

Identify the Shot that is required

- 1. SC01\_SH07\_ANM
- 2. SC01\_SH08\_ANM
- 3. SC01\_SH12\_ANM
- 4. SC04\_SH16\_ANM

Determination of Manufacturing Stages Lip-Sync

Determination of stages will be based on the Osipa and William's rule:

- 1. Define an expression.
- 2. Adapt the viseme with the phoneme and the overall expression animation.
- 3. Simplifies the movement of the tip of the mouth and chin.
- 4. Working on teeth and tongue.
- 5. Create asymmetry.

Implementing Stages

The implementation stages will be carried out in Blender 2.9. The documentation and animation files are placed inside Gdrive and Youtube.

1. Define an expression

Expressions will be determined from the character's voice based on observation results. As for the expression for each shot, that is:

- SC01\_SH07\_ANM = Happy
- SC01\_SH12\_ANM = Happy
- SC01\_SH08\_ANM = Happy sad
- SC04\_SH16\_ANM = Happy

2. Adapt the viseme with the phoneme and the overall expression animation

An adaptation of viseme with audio can be taken from the waveform in the audio. The shot of SC01\_SH07\_ANM below.



Figure 3. Results of determination analysis viseme shot SC01\_SH07\_ANM. (Source: doc. Adric Filbert)

As can be seen in Fig. 3, it is shown that the phoneme will widen, narrow, or close according to the waveform of the sound. Based on this, the animation is refined using viseme principles from William and Osipa's guidelines.

3. Simplifies the movement of the tip of the mouth and chin

The animation lip-sync was then smoothed at the corners and chin to create a smooth animation. Simplifying movement is created with the corner mouth rig and chin as can be seen in Fig. 4 below.



Figure 4. Image of the mouth corner rig (Left) and chin (Right) (Source: doc. Adric Filbert)

Fig. 5 showcase the graph editor for the jaw in rotate x.

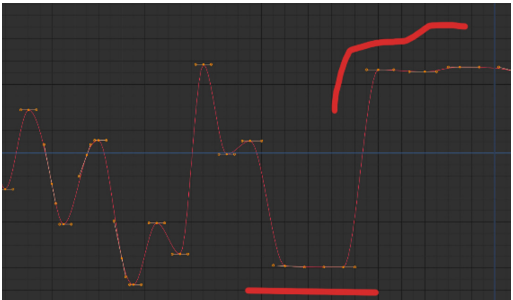


Figure 5. Example of non-smooth rotation of the chin shot SC01\_SH07\_ANM. (Source: doc. Adric Filbert)

In Fig. 5, the Graph Editor revealed uneven jaw animation curves. These were refined into smoother, curved motions to enhance the animation's fluidity (Zega, 2021). In Fig. 6, are the results after the adjustments.

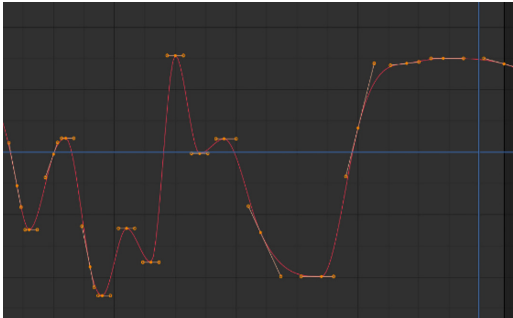


Figure 6. Example of subtle rotation of the chin shot SC01\_SH07\_ANM (Source: doc. Adric Filbert)



4. Working on teeth and tongue



Figure 7. Rig Uci's teeth  
(Source: doc. Adric Filbert)

As can be seen in Fig. 7 & Fig. 8, the work on teeth and tongue is carried out using rig upper and lower teeth in character. Work will use grab to raise or lower gears according to the 70:30 ratio (William, 2001).

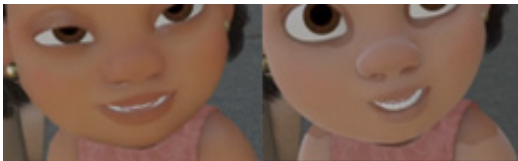


Figure 8. Pictures of teeth before and after  
(Source: doc. Adric Filbert)

5. Create asymmetry

Asymmetry adjustments on Uci's mouth and eyebrows were made to keep a subtle, realistic look. Based on Gerson's interview, Ficusia's style is realistic, not cartoonish. As Osipa states, asymmetry should be present but not exaggerated. Fig. 9, as can be seen below are the results of this work.

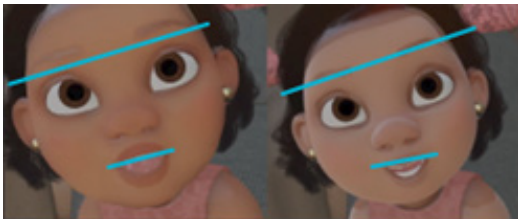


Figure 9. Asymmetry before (left) and after (right).  
(Source: doc. Adric Filbert)

At frame 42 ("Pin" in "Siapin"), the original shows parallel eyebrows and mouth. The revision adds subtle asymmetry in eyebrow and mouth angles, with lips and teeth adjusted to align with the chin.

Analyzing Data

This study uses thematic analysis to identify patterns and themes from interview data (Ramdhani et al., 2024). It aims to assess the realism of viseme-based lip-sync and find areas for improvement.

Data Collection

Data was collected through interviews with sources from Infinite Frameworks Studios. According to the interviews, the viseme-based method has increased the quality of the lip-sync. However, there are still several things to do in order to improve the animation which are ease in, ease out, good timing, squash and stretch, mouth shape or asymmetry, readable expression and facial integration.

Reducing Data

After improving the animation according to the revision. Research is continued with another animation review to check the effectiveness of viseme-based methods. The reduction of data is done by determining the themes based on the Osipa and William's lip-sync realism criteria and reevaluating the overall sentences of each interviewee whenever it matches each of the themes or not (Nur & Saihu, 2024). Data reduction then served in a table with shot name, theme, and result. Results are shown for each theme by having a plus or minus in each opinion of the interviewee, which total will be 4 symbols

or either plus or minus, then determined whenever it's good or bad by overall plus or minus in each column. Table 1 can be seen below.

Table 1. Quality Improvement Second Attempt

Data Presentation 2				
Shot	Criteria			
	ease in, ease out, good timing, squash and stretch	mouth shape or asymmetry	Read able expression	Facial integration
SCo1_SHo7_N OTE	Good (++++)	Good (++++)	Good (++++)	Good(++++)
SCo1_SHo8_A NM	Good (++++)	Good (++++)	Good (++++)	Good (++++)
SCo1_SH12_N OTE	Good (++++)	Good (++++)	Good (++++)	Good (++++)
SCo4_SH16_AN M	Good (++++)	Good (++++)	Good (++++)	Good (++++)

Result

The initial use of the viseme-based method improved timing and reduced hard stops in most shots. However, some issues still remain in the first try. The shot SCo1\_SHo8\_ANM and SCo1\_SH12\_ANM still had slight jaw popping that disrupted motion, and SCo1\_SHo7\_ANM needed better asymmetry and more natural mouth rest positions. In general, facial expressions were unclear, and eye and eyebrow movements were either underused or not linked to the lip-sync. The revised version fixed these issues with more detail. Jaw movements became smoother with squash and stretch, and viseme-phoneme alignment improved, especially during vowel changes. Facial expressions were more dynamic with small tweaks to eyebrow angles and mouth corners. SCo4\_SH16\_ANM stood out for its

strong integration of lips, jaw, and facial features, clearly showing better animation quality.

Discussion

The second attempt has significantly enhanced animation lip-sync quality by emphasizing full facial integration. Coordinated counter movements between the nose and lower face added realism, while mouth corner adjustments made the character's expressions create more positive and emotionally engaging. This approach brought the animation closer to professional standards, as also emphasized in Osipa and Richard William's literature. The revised shots have met all key criteria for high-quality lip-sync, including smoothness, mouth shape, and facial integration. These results confirm that the viseme-based method when combined with expression focused refinements effectively improves lip-sync animation quality. Such improvement can be seen in Fig. 10.



Figure 10. Top for integration (Left before, right after), bottom for expression.  
(Source: doc. Adric Filbert)

Conclusion

Interviews have shown that the viseme-based method has succeeded in

improving lip-sync quality. As we can see from the result section, the facial integration, smoothness and timing of the mouth in SCo1\_SHo8 until SCo4\_SHo16\_ANM has improved considerably and was approved by interviewee. Below are the overall ways to create realistic lip-sync animation quality with viseme-based method:

1. Define an expression

Character expressions are determined by the storyboard or the character's spoken sound, as done in this study. This research focuses on happy and sad expressions, chosen based on Osipa's observations and supporting literature:

Happy: Focus on the upward movement at the corners of the lips and the small wrinkles around the eyes.

Sad : The position of the lips is lowered, the eyebrows are curved upwards, and the lower eyelids are slightly raised.

2. Adapt viseme with phoneme and overall expression animation

Viseme adjustments based on the audio waveform follow Osipa's guidance: large waves correspond to wide mouth corners, while small waves indicate narrow corners. For example, the letter O starts with narrower corners than the letter A. Expressions follow Osipa's rule that the nose area moves opposite to the lower face.

3. Simplifies movement of the tip of the mouth and chin

The mouth and chin shapes can be simplified by following the Osipa's rules, narrow and wide mouth corners and squash and stretch for the chin based on the second stage's identification. This step focuses on achieving smooth ease-in/out, timing, and squash and stretch, while simplifying mouth movements as described

by Osipa.

4. Working on Teeth and tongue

The character's teeth must sync with the chin, with only the bottom teeth moving in line with the chin (William, 2001). Characters typically show upper teeth, lower teeth, or a 70:30 ratio while speaking (William, 2001). The tongue moves quickly and usually doesn't require ease-in or ease-out (William, 2001; Osipa, 2010).

5. Create asymmetry

Asymmetry in expressions can be created using mouth corners, misaligned lips, and uneven eyebrows (William, 2001; Osipa, 2010). It is applied at the end to clarify expressions and may be minimized (Osipa, 2010). Interviews added two terms: "popping" (excessive spacing) and "hard stop" (abrupt transitions without ease-in/out), emphasizing the importance of easing and spacing. These terms can aid future animation quality reviews.

References

Alfi, N. F., & Prasetya, H. Y. (2023). Semiotic analysis of John Fiske's message on drug use in the 3D animation film "Ficusia". DECA: Journal of Visual Communication and Multimedia Design, 12(3), 75–85. <https://jurnal.polibatam.ac.id/index.php/DECA/article/view/5271>

Aneja, D., & Li, W. (2019). Real-time lip-sync for live 2D animation. arXiv preprint, arXiv:1910.08685. <https://arxiv.org/pdf/1910.08685>

Blaine, J. (2020). The complete guide to Blender graphics: Computer modeling and animation (5th ed.). CRC Press. <https://www.taylorfrancis.com/books/>

[mono/10.1201/9780429196522/complete-guide-blender-graphics-john-blain](https://www.blender.org/docs/2.80/animation/mono/10.1201/9780429196522/complete-guide-blender-graphics-john-blain)

Chen. (2010). Animating lip-sync characters (1st ed.). [https://www.academia.edu/110410717/Animating\\_Lip\\_Sync\\_Characters](https://www.academia.edu/110410717/Animating_Lip_Sync_Characters)

Heiderich, T. (n.d.). Cinematography techniques: The different types of shots in film [PDF]. Ontario Media Arts. Retrieved November 24, 2024, from <https://oma.on.ca/en/contest-pages/resources/free-report-cinematography.pdf>

Hidayah, A. (2023). Application of animation principles in the animated series film "Ficusia" episode 1. Journal of Electrical and Computer Engineering (DECA), 12(2), 85–92. <https://jurnal.polibatam.ac.id/index.php/DECA/article/view/6036/2174>

Hoon, L. N., & Shaharuddin, S. S. (2019). Accuracy performance and potentiality of real-time avatar lip-sync animation in different languages. International Journal of Recent Technology and Engineering (IJRTE), 7(6S2), 57–66. <https://www.researchgate.net/publication/343442180>

Muhammad, Y. (2023). Unlocking the power of Azure audio-to-viseme conversion: Explained [PDF]. ResearchGate. Retrieved November 26, 2024, from <https://www.researchgate.net/profile/Rakan-Alwabel-2/publication/385381042>

Nakada, K., Matsuda, S., Tanaka, Y., Sasaki, H., & Ueda, T. (2023). Lip-Sync ML: Machine learning-based framework to generate lip-sync animations in FINAL FANTASY VII REBIRTH. ResearchGate. <http://www.jp.square-enix.com/tech/library/pdf/LipSync->

[ML\\_SIGGRAPH\\_Talks\\_2024\\_abst.pdf](#)

Nelli, N., & Aliyyah, N. R. (2024). Implementation of learning media in the independent curriculum in junior high schools: Thematic analysis study. Karimah Tauhid, 3(8), 8541–8552. <https://ojs.unida.ac.id/karimahtauhid/article/view/14412>

Nur, M. A., & Saihu, M. (2024). Data processing. Scientica: Scientific Journal of Science and Technology, 2(11), 163–175. <https://jurnal.kolibi.org/index.php/scientica/article/view/2764>

Osip, J. (2010). Stop staring: Facial modeling and animation done right (3rd ed.). Wiley.

Shukurov, S. (2023). Audio to viseme and viseme to lip sync using Azure. ResearchGate. <https://www.researchgate.net/publication/380895958>

Williams, R. (2001). The animator's survival kit (Expanded ed.). Faber & Faber.

Zega, S. A., Soon, S. H., Firmanda, A., & Lumombo, L. (2020). Automatic in-between frames of snappy animation using linear interpolation. In Proceedings of the 3rd International Conference on Applied Engineering (ICAE 2020) (pp. 12–19). SciTePress. <https://www.scitepress.org/Papers/2020/103510/pdf/index.html>



## VISUAL IDENTITY REDESIGN OF THE GELORA BUNG KARNO COMPLEX

Natashia Lim<sup>1</sup>  
Ellis Melini<sup>2</sup>  
Alfiansyah Zulkarnain<sup>3</sup>  
Kartika Magdalena Suwanto<sup>4</sup>

Received May. 27, 2025; Revised June. 20, 2025, Accepted June. 27, 2025.

**Abstract:** The Gelora Bung Karno (GBK) Complex is a national heritage site in Indonesia. It has changed from a sports facility into a public space that is open, inclusive, and multifunctional. This transformation requires rebranding to reflect its new role while keeping its historical and national spirit. Visual identity plays an important role in this process. It is not just about how things look, but how people see and understand the place. Based on Alina Wheeler's idea, visual identity is a planned way to shape public perception and build loyalty. The new identity for GBK is based on two things: its well-known architecture that's reflected in the logo, and cultural motifs from across Indonesia. These ideas helped create a new logo, a color system for various applications, and graphic patterns inspired by local textiles. The research methods used include benchmarking other public spaces, interviews with users and staff, and visual studies of the landmark inside the complex. These helped guide the design process and make sure the results were meaningful and useful. This paper explains the process of research & analysis phase, clarifying strategy, up to the design stage and the resulting visual identity system.

**Keywords:** gelora bung karno; complex; visual identity; national heritage; Indonesia; rebranding

### Introduction

The Gelora Bung Karno (GBK) Complex, a national heritage site and iconic sports venue in Indonesia, has undergone significant transformations since its es-

tablishment in 1962. Today, it serves not only as a multifunctional public space but also as a symbol of national unity—welcoming people from all 34 provinces of Indonesia, and reflecting the country's cultural diversity.

<sup>1</sup>Natashia Lim is a student at The Faculty of Design, Universitas Pelita Harapan (UPH).

e-mail : natashialim5@gmail.com

<sup>2</sup>Ellis Melini is a lecturer at The Faculty of Design, Universitas Pelita Harapan (UPH).

e-mail: ellis.melini@uph.edu

<sup>3</sup>Alfiansyah Zulkarnain is a lecturer at The Faculty of Design, Universitas Pelita Harapan (UPH).

e-mail: alfiansyah.zulkarnain@uph.edu

<sup>4</sup>Kartika Magdalena Suwanto is a lecturer at The Faculty of Design, Universitas Pelita Harapan (UPH).

e-mail: kartika.suwanto@uph.edu

Originally designed as an international-standard sports facility, GBK is now evolving into an inclusive public space, serving diverse communities beyond just sports. This shift in function has prompted the need to redesign its visual identity to align with its current vision and values.

In the context of GBK, rebranding is essential to stay relevant and competitive. As GBK transforms into a multifunctional public space, a renewed and cohesive visual identity will help reflect this new direction, appeal to broader audiences, and enhance visitor experience. Visual identity is a crucial element in representing a brand. According to Wheeler (2018), branding is a strategic and structured process aimed at building awareness and fostering customer loyalty. It allows an organization to communicate its values and competitive edge. Brands can create a welcoming and cohesive environment, cultural identification, and create trust and comfort; which are crucial elements to forge a strong emotional bond (Rebelo, 2025).

Visual identity is the collection of visual components like graphics, fonts, and colors that symbolize a brand and help communicate its overall character to the audience, influencing how the brand is seen and understood (Wrona, 2015).

Rebranding is the process of updating or altering a company's brand identity. This may include changes to its name, logo, color scheme, messaging, and other visual or verbal components that represent the brand (Sakib, 2025). This journal examines the GBK visual identity redesign by assessing its current state, user needs, and applying strategic branding to create a more inclusive, consistent, and forward-looking brand system.

This research seeks to answer the following problems:

1. The visual identity of GBK Complex no longer matches its updated vision

and mission due to a shift in its purpose.

2. The current visual identity is applied inconsistently across various media, such as promotional materials and signage, leading to a lack of visual coherence.

The objective of this research is to redesign the visual identity of GBK to better reflect its current values, purpose, and ensure consistent application across all platforms.

### Methodology

This section contains the design method used to collect and analyze data relevant to the research questions. The research in this project employs a qualitative approach with a constructivist paradigm, focusing on how meaning is constructed through design practice and stakeholder perspectives.

The design process adopted in this project refers to the five-stage branding framework (Wheeler, 2018), which includes: (1) Conducting research; (2) Clarifying strategy; (3) Designing identity; (4) Creating touchpoints; (5) Managing assets.

During the research phase, data were collected from both primary and secondary sources. Primary data came from interviews with two public relations staff from the Gelora Bung Karno Complex Management Center, which were then analyzed using content analysis. Secondary data included GBK's website, social media, and relevant publications, offering insight into internal branding issues. These sources were examined using formal (visual) and content analysis to identify visual inconsistencies and communication gaps, as well as benchmarking to compare GBK's branding approach with similar public spaces.

The strategy phase clarified brand po-

sitioning through research findings that were summarized in a creative brief. Interview data were analyzed using thematic analysis to identify key insights, values, and expectations. Management expectations were found to align with what they believed the public wanted from GBK's identity and services. These findings guided the brand's positioning and messaging.

In the design phase, logo and identity elements were developed and refined. These were then applied across media and signage during the creating touchpoints phase. Lastly, brand guidelines were created in the managing assets phase to maintain consistency across various implementations.

## Result

In-depth interviews were conducted with two representatives from the Public Relations team of the Gelora Bung Karno Complex Management Center, Dwi K. Pratiwi and Ganda Syahputra, to gain insights into the management and evolving role of the GBK complex.

Managed by the Ministry of State Secretariat, GBK spans 279 hectares and serves as a hub for sports, business, and public activities. According to the respondents, GBK functions as a melting pot—a gathering space for diverse communities across Indonesia—receiving around 25,000 visitors daily. The campaign “GBK untuk Semua” highlights its inclusive vision.

GBK is often seen only as a stadium, so raising awareness of its multifunctional role and improving signage are key challenges. Communities shape its identity, and interviews support its vision as a modern, eco-friendly, globally certified public space. Communication relies on social media and media partnerships. Future plans include easier facility access and sustainable innovations like electric

buses and cashless systems to enhance inclusivity. This study involved three site visits in 2024–2025, focusing on visual design elements like signage and promotional media.



Figure 1. GBK Existing Wayfinding Signage  
(Source: Personal research documentation)

This signage, as can be seen in Fig.1, is used to guide visitors throughout the GBK Complex. However, the visual design lacks consistency in typography, color, and hierarchy, making navigation less effective.



Figure 2. Existing Identification Signage for ABC Football Field  
(Source: Personal research documentation)

The identification signage for the ABC Football Field in Fig. 2, features outdated visual elements and does not reflect GBK's current brand image or identity.



Figure 3. Identification Signage for Softball Field  
(Source: Personal research documentation)

Like other signages, the Softball Field marker in Fig. 3, lacks visual coherence and does not follow a unified design system, leading to a fragmented user experience.



Figure 4. Existing Printed Information Media  
(Source: Personal research documentation)

Printed materials such as brochures or event posters, as can be seen in Fig.4, show inconsistent use of visual identity elements, weakening visual coherence. During the second visit, the focus shifted to observing visitor interactions and events at GBK to better understand how design and visual identity contribute to the visitor experience.



Figure 5. Community picnic atmosphere on GBK  
(Source: Personal research documentation)

During the second visit to GBK, the observation focused on visitor interactions. Many non-sport community members were seen enjoying activities like picnicking as can be seen in Fig. 5, highlighting GBK's role as a public space for social and recreational use beyond sports. This variety of activities enriches visitor experience, making GBK an inclusive and dynamic space.



Figure 6. GBK's Old Logo  
(Source: Respondent documentation)

Previously, Gelora Bung Karno (GBK) had two different logos: the original logo featuring an archer illustration used for official correspondence symbolizing sports spirit and tradition as can be seen in Fig .6.



Figure 7. GBK's Current Logo  
(Source: Respondent documentation)

The new red “GBK” logotype, seen in Fig. 7, was created for branding during the Asian Games. However, inconsistencies in logo usage across promotional media, especially on social media platforms, were observed, with several examples of inconsistent logo application shown in Fig.8, below.

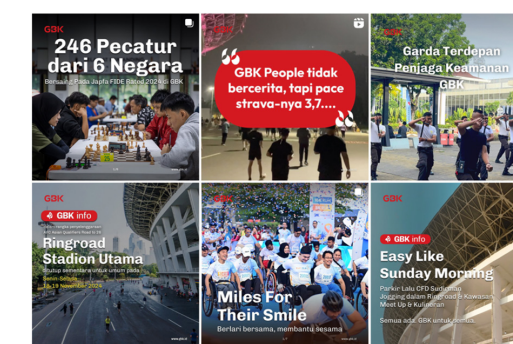


Figure 8. GBK's Instagram Feeds  
(Source: Gelora Bung Karno (@love\_gbk))

In the observed social media post, GBK's visual identity appears only as a logo in the top-left corner, lacking supporting elements—unlike signage and print materials, indicating inconsistency.



Sources also noted the logo’s limited flexibility across various touchpoints like merchandise and promotions.

In this age of new media technology, where brands should reach younger generations who increasingly relies on digital channels for information and engagement, a strong and consistent visual presence in the social media is essential (Prasanna & Priyanka, 2024). A coherent and aesthetically pleasing design not only builds recognition but also strengthens GBK’s identity in a crowded digital space. In today’s fast-moving online culture, where visual appeal often determines whether content is noticed or ignored, maintaining a unified and appealing presence across social platforms is key to connecting with diverse audiences.

As part of the rebranding, a mind-mapping exercise identified four core values shaping GBK’s visual identity: Diverse (social richness), Cultural (heritage), Immersive (memorable experiences) and Dynamic (growth and evolution as a public space).

In the mood board section, as can be seen in Fig.9, the designer curated visual references aligned with these values. Each image was selected to evoke emotional resonance and represent the cultural depth and aesthetic direction of the project, serving as inspiration for the development of GBK’s visual identity.



Figure 9. Moodboard  
(Source: Personal research documentation)

The designer created a Morphological Matrix, seen in Fig.10, to explore design elements related to the keywords cultural, immersive, diverse, and dynamic. This matrix organizes aspects such as color, typography, form, and illustration style to identify potential combinations that support the brand identity.

keyword	typography	graphic element/symbol	color
cultural			
immersive			
diverse			
dynamic			

Figure 10. Morphological Matrix  
(Source: Personal research documentation)

Based on the stylization results, the designer identified visual elements to form the foundation of the design. A logo was developed to reflect the essence of the Gelora Bung Karno complex, aiming to create a strong and inspiring image. The initial stage involved rough sketches to explore various ideas and design concepts.



Figure 11. Logo Rough Sketches  
(Source: Personal research documentation)

After the logo rough sketching process, seen here in Fig. 11, the designs were refined into cleaner, more detailed digital versions. Three alternative logo; Fig. 12, Fig.13 and Fig 14, concepts were devel-

oped as options for consideration before selecting the final logo.



Figure 12. First Logo Alternative  
(Source: Personal research documentation)



Figure 13. Second Logo Alternative  
(Source: Personal research documentation)



Figure 14. Third Logo Alternative  
(Source: Personal research documentation)

Following several discussions, it was concluded that none of the logo concepts were fully suitable as the final design for the GBK rebranding. However, the overall conceptual direction was considered appropriate. Of the three options, the first alternative (Fig. 12) was seen as the closest to the desired visual, with its wide, horizontal form conveying a sense of space and immersion—aligning with GBK’s key themes.



Figure 15. Logo Variant Sketch  
(Source: Personal research documentation)

After reviewing several rough sketches, it was concluded that none fully matched GBK’s identity due to shapes lacking real references, risking misperceptions. Field study identified the fire cauldron, seen in Fig.16, at GBK as a strong potential icon.



Figure 16. Bilah Nusantara (Fire Cauldron)  
(Source: Personal research documentation)

The Bilah Nusantara cauldron, designed in 2018, symbolizes spirit, peace, and sportsmanship (Velarosdela & Maharani, 2018). Positioned before the main stadium, it enhances GBK’s identity and visual appeal. To deepen relevance, the design also incorporates elements from the iconic stadium.

Using elements from the Main Stadium of GBK presents a design challenge, as the rebranding aims to shift public perception of GBK from being solely a stadium to a broader urban complex that serves various communities and functions. To address this, the visual identity incorporates architectural features from the stadium as secondary elements rather than as the central focus. This approach maintains visual familiarity while emphasizing the diversity of the entire complex.

### Discussion

This section describes the findings and analysis of the research data and explains the limitations of the study. It can also describe what the results of the study imply,

why does it matter, and the perspective for future research.



Figure 17. Logo Variant Sketch 2  
(Source: Personal research documentation)

The sketching process then became more focused, producing refined and minimal variations that still captured the core design essence aligned with the desired identity as can be seen in Fig 17 & Fig 18.

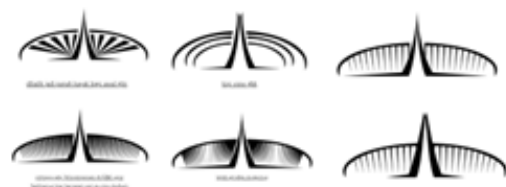


Figure 18. Logo Variant Sketch 3  
(Source: Personal research documentation)

Overall, the logo concept is on the right track, but its sharp, pillar-like angles give a cold impression. Further refinements were made to soften the design and create a more harmonious look aligned with the desired identity.



Figure 19. Final Horizontal Logo  
(Source: Personal research documentation)

After discussions and refinements, the final GBK logo was designed to embody unity and diversity within the community, seen here in Fig. 19. Inspired by GBK's iconic architecture, it reflects the area's dynamism, openness, and great potential. The visual elements symbolize togetherness, energy, and growth. This inclusive design portrays GBK as a shared space to be enjoyed, preserved, and developed by all. Beyond visual identity, the logo represents GBK as a center for sports, culture, and social life.



Figure 20. Unity Element on Logo  
(Source: Personal research documentation)

The central element of the logo symbolizes community spirit, where individuals from diverse backgrounds come together to interact and contribute. The handclap-like shape represents unity and cooperation, seen in Fig. 20, reflecting GBK's core value of togetherness. Additionally, this element points upward, signifying growth, progress, and GBK's potential as an inclusive and dynamic public space.



Figure 21. Stadium Roof Element on Logo  
(Source: Personal research documentation)

The curved line in the logo, seen here in Fig. 21, symbolizes protection and the grandeur of GBK as an inclusive, accessible activity center. Inspired by the iconic circle on the stadium roof, it reflects GBK's architectural identity while representing unity, continuity, and connection among its diverse activities. This circular form embodies a vibrant space where sports, culture, and social interaction blend, creating a dynamic and sustainable environment.



Figure 22. Bow and Arrow Element on Logo  
(Source: Personal research documentation)

The center of the logo and its curved line represent a bow and arrow, inspired by GBK's original logo symbolizing youth struggle, as can be seen in Fig. 22. This element reflects focus, determination, and dedication of the younger generation in building the future, aligning with GBK's core values. Beyond historical reference, the design aims to preserve and inspire the enduring spirit of unity and progress within the community.

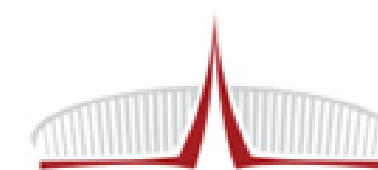


Figure 23. Fire Cauldron Element on Logo  
(Source: Personal research documentation)

The cauldron at the logo's center, seen here in Fig. 23, symbolizes a burning spirit, reflecting energy, perseverance, and enduring enthusiasm. It represents determination, collaboration, and sustainability in all GBK activities.



Figure 24. Diversity Element on Logo  
(Source: Personal research documentation)

The vertical lines in the logo represent inclusivity and diversity, reflecting GBK as an open space for all, as seen in Fig. 24. Inspired by the 17 pillars on each side of the Main Stadium, symbolizing Indonesia's Independence Day (August 17) and 34 pillars representing the country's provinces. This structure symbolizes unity in diversity and the enduring national spirit at GBK.

GELORA BUNG KARNO  
GBK

Figure 25. GBK Final Logotype  
(Source: Personal research documentation)

The "Gelora Bung Karno" logotype, seen in Fig. 25, features a wider design with subtle serif details at the ends of each letter, creating a refined yet understated look. The letter stems are closer to the baseline, blending traditional feel with a modern approach to balance national heritage and contemporary aes-



thetics.

There are two logotype versions: “Gelora Bung Karno” and “GBK.” The full text must always be paired with the logogram, while “GBK” can be used alone, as it is more familiar to the public.



Figure 26. GBK Final Vertical Logo  
(Source: Personal research documentation)

The vertical GBK logo, seen in Fig. 26, is an alternative for limited-space or non-landscape media. It uses the “GBK” text to maintain visual identity while ensuring readability and effectiveness. This version offers flexibility without losing the main design’s essence.



Figure 27. GBK Final Logotype & Logogram  
(Source: Personal research documentation)

If the logo use is too repetitive or space is limited, the logomark alone can be used. Depending on media needs, either logotype or logogram, seen here in Fig. 27, may be chosen without compromising GBK’s visual identity.

Graphic elements are central to renewing GBK’s visual identity, high-

lighting cultural diversity and its role as a national community space. Traditional textiles, recognized as intangible heritage, were chosen for their rich cultural and artistic value. Motifs from various regions were selected to reflect GBK’s inclusive vision and create a meaningful, culturally rooted design.

In Sulawesi, several traditional textiles are recognized as intangible cultural heritage, including Kain Koffo (North Sulawesi), Tenun Sukomandi from West Sulawesi, Tenun Donggala from Central Sulawesi, and Lipa Sabbe and Lipa Saqbe Mandar from South and West Sulawesi (Indra, 2017). Analysis shows that horizontal line motifs frequently appear in these textiles, seen in examples in Fig. 28, either as main patterns or accents, especially dominant in Lipa Sabbe and Tenun Donggala.



Figure 28. Analysis of Sulawesi Island Textile Motifs  
(Source: Personal research documentation)

Vertically, the lines symbolize the bond between leaders and people, while horizontally, they represent relationships among the community (Setiawan, 2020). These lines reflect

the harmonious coexistence within the GBK complex, modernized with woven elements to create a dynamic and visually appealing design, seen here in Fig. 29.



Figure 29. Graphic Element Component of Sulawesi  
(Source: Personal research documentation)

Several traditional textiles from Sumatra have been recognized as intangible cultural heritage, including Palembang Songket from South Sumatra, Tapis from Lampung, Besurek from Bengkulu, and Minangkabau Sotif Songket. Through visual analysis, it was found that a recurring motif—characterized by an open triangular form resembling a folded line in a single direction, frequently appears in these textiles, as can be seen in Fig.30. This motif is prominently featured in Minangkabau Songket and Lampung Tapis, and also appears as an accent in other regional fabrics.

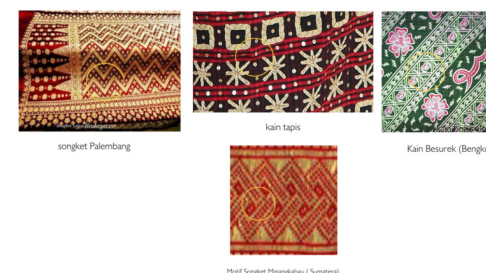


Figure 30. Analysis of Sumatra Island Textile Motifs  
(Source: Personal research documentation)

This directional motif, known as Saluak Laka – Pilinan Lidi, sym-

bolizes unity in achieving common goals. It features interwoven lines resembling twisted palm sticks, representing strong communal bonds (Nella, 2022).



Figure 31. Graphic Element Component of Sumatra  
(Source: Personal research documentation)

The author interprets this motif by adapting upward-pointing elements from the logo, symbolizing hope and continuous growth for GBK, seen in Fig. 31. The shape also echoes the flame cauldron in the logo, creating visual continuity that reinforces the design identity.

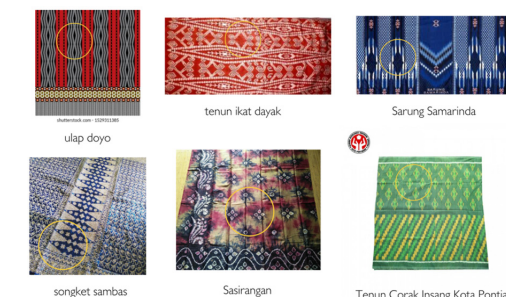


Figure 32. Analysis of Kalimantan Textile Motifs  
(Source: Personal research documentation)

In Kalimantan, traditional textiles like Sasirangan and Ulap Doyo often feature the Bintang Bahambur motif, a four-pointed star symbolizing harmony and noble aspirations, seen here in Fig. 32.



Figure 33. Graphic Element of Kalimantan  
(Source: Personal research documentation)

The author adapted this motif by curving its edges to reflect the flame cauldron shape, ensuring visual continuity within the logo, as can be seen in Fig. 33.



Figure 34. Batik Kawung  
(Source: Kompas.com)

In Java, batik is recognized as intangible cultural heritage, with the Kawung motif chosen for its symbolic meaning of life and origins, seen in Fig. 34 and Fig. 35.



Figure 35. Graphic Element Component of Java  
(Source: Personal research documentation)

In Bali, traditional textiles like Gringsing Tenganan and Endek are recognized as intangible cultural heritage, with deep social and spiritual meaning. Gringsing, made using the rare double ikat technique, symbolizes protection and healing (Anggraeni, 2023). Visual analysis shows frequent use of four-pointed star motifs in Balinese textiles. Thus, a similar star-shaped element—also found in Kalimantan textiles (Fig. 32) was chosen to maintain visual cohesion.

In Papua, Noken as can be seen here in Fig. 36, is recognized as an intangible cultural heritage. More than a traditional woven bag, it holds deep social and cultural meaning. Made from tree bark or leaves, its unique weaving technique reflects values of unity, hard work, and self-reliance (Koesno, 2020; Lisnawati & Tarigan, 2025).



Figure 36. Noken Bag  
(Source: Kompas.com)



Figure 37. Graphic Element Component of Papua  
(Source: Personal research documentation)

Rather than adopting a specific motif, the author draws from the woven structure itself—interpreting it as a symbol of order and resilience, seen here in Fig. 37, in line with the values of balance and harmony in Papuan life.

This approach aims to ensure that the graphic elements not only represent the cultural diversity of the archipelago but also harmonize Papua's weaving structure with motifs from other regions. The combination symbolizes unity and inclusiv-

ity, aligning with the people-oriented spirit of GBK's visual identity. To maintain coherence with the logogram, the author incorporates visual elements that reflect its dimensional qualities, namely repetitive lines and gradient transparency, seen in Fig. 38, enhancing visual integration and cohesion with the Gelora Bung Karno logogram.



Figure 38. Graphic Element Component of GBK Pillars  
(Source: Personal research documentation)

The graphic elements, seen here in Fig 39, are designed using an abstract and modern approach, structured through a grid system to achieve a clean, organized and aesthetically balanced composition. This method allows for a harmonious integration of traditional elements from various regions, balancing order and flexibility within a unified visual framework.



Figure 39. GBK Graphic Elements: Landscape Configuration  
(Source: Personal research documentation)

This layout adapts traditional textile motifs from various Indonesian regions into elongated, horizontal compositions. The motifs are simplified into geometric forms to reflect a

modern aesthetic while preserving cultural roots.



Figure 40. GBK Graphic Elements: Corner Configuration  
(Source: Personal research documentation)

In this configuration, seen in Fig. 40, motifs are arranged in corner positions, creating a frame-like structure. This setup emphasizes space and symmetry, supporting both decorative and directional uses within the visual system.



Figure 41. GBK Graphic Elements: Rectangular Configuration  
(Source: Personal research documentation)

Rectangular configurations, seen in Fig. 41, organize the elements into grid-based patterns. Some areas are intentionally left blank to introduce negative space, enhancing clarity and evoking a humanistic and abstract feel.





Figure 42. GBK Graphic Elements Line Configuration  
(Source: Personal research documentation)

This linear format, seen here in Fig. 42, uses simplified lines derived from traditional patterns to create rhythm and flow. The arrangement contributes to a sense of movement, aligning with GBK’s dynamic and adaptive brand identity.

The landscape configuration offers flexibility for media like social platforms, business cards, and signage.



Figure 43. Application of Landscape Graphic Elements on Business Cards  
(Source: Personal research documentation)

In business card applications, the landscape graphic configuration ensures a clean and professional look, as can be seen in Fig. 43. The use of

negative space keeps the layout uncluttered, allowing the essential information and branding elements to stand out clearly while maintaining a modern aesthetic.



Figure 44. Application of Landscape Graphic Elements on Social Media  
(Source: Personal research documentation)

For social media platforms, the landscape configuration supports consistent visual presence by offering a flexible format that adapts well to feed posts, stories, and banners, seen here in Fig. 44.

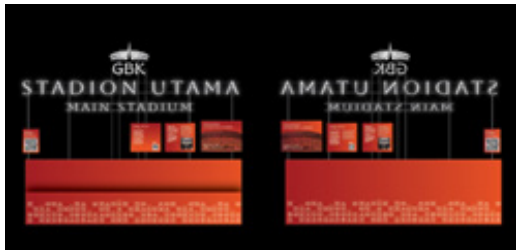


Figure 45. Application of Landscape Graphic Elements on Identification Signage  
(Source: Personal research documentation)

When applied to signage, the landscape configuration provides clear visual guidance while integrating graphic elements harmoniously along the lower or side edges (Fig. 45). This allows messages and directions to remain readable while reinforcing the brand identity subtly and effectively in physical environments.



Figure 46. Application of Corner Graphic Elements on Letterhead and Folder  
(Source: Personal research documentation)

The corner configuration suits portrait formats like A4 and vertical signage, ensuring balanced layouts, as can be seen in Fig. 46. It’s less effective in landscape, where it disrupts visual harmony, so it’s best used for vertical media to maintain visual identity.



Figure 47. Application of Corner Graphic Elements on Wayfinding Signage  
(Source: Personal research documentation)

Since wayfinding focuses on delivering clear information, graphic elements are arranged to highlight, not distract from, key messages. Their placement guides the viewer’s eye toward directions or location names, ensuring clarity while maintaining

GBK’s visual identity, as can be seen in Fig. 47.



Figure 48. Application of Rectangle Graphic Elements on ID Card  
(Source: Personal research documentation)

The rectangle configuration fills square empty spaces to strengthen GBK’s visual identity. Serving as a graphic accent, it enhances aesthetics and branding across media. An example is its use on staff ID cards, as can be seen in Fig. 48, where the boxed elements maintain a neat, balanced, and cohesive design aligned with GBK’s identity.

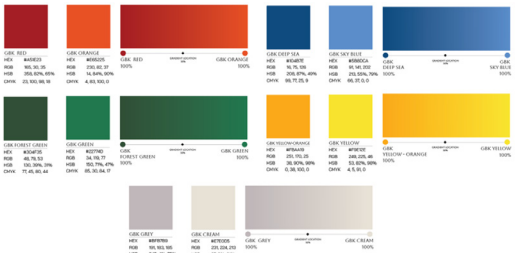


Figure 49. GBK’s Corporate Color  
(Source: Personal research documentation)

The GBK corporate color palette, as can be seen here in Fig. 49, draws inspiration from its environment and Indonesian symbolism to create a strong, recognizable identity. The primary color, GBK Red—a ma-

roon red reflecting courage and passion—is paired with a dynamic gradient to GBK Orange, symbolizing energy. Supporting colors include a blue gradient (GBK Deep Sea to GBK Sky Blue) representing Indonesia’s waters and skies, and a green gradient (GBK Forest Green to GBK Green) reflecting GBK’s green spaces and sustainability. Additionally, GBK Yellow to GBK Yellow-Orange evokes sunlight and spirited enthusiasm. Neutral tones GBK Cream and GBK Grey balance the palette, adding calmness and a nod to GBK’s historic legacy.

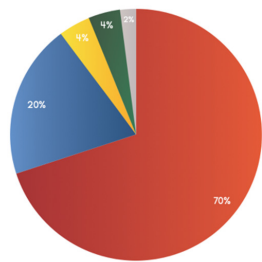


Figure 50. GBK’s Color Proportion  
(Source: Personal research documentation)

The GBK visual identity uses colors proportionally for consistency and recognition, seen here in Fig. 50. GBK Red-Orange is the dominant color, supported by 20% GBK Deep Sea–Sky Blue for balance. GBK Green and Yellow serve as 4% accents, while neutral Grey and Cream enhance readability and harmony. This balanced palette creates a strong, versatile identity across various media.



Figure 51. GBK’s Typeface  
(Source: Personal research documentation)

GBK’s visual identity uses Aboreto for headlines, offering a modern, humanist feel, and Bai Jamjuree for body text, combining nostalgic type-writer charm with digital-era clarity, as can be seen in Fig. 51.

To assess the paper’s objective, the author examines how the logo aligns with the visual identity principles in Chapter II. A strong visual identity builds recognition, consistency, trust, and emotional connection. Drawing from Indonesia’s cultural diversity, the logo incorporates traditional motifs to enhance relevance and resonance. Its flexible use across media highlights adaptability, effectively embodying the core principles of a strong visual identity.

Conclusion

The transformation of Gelora Bung Karno (GBK) Complex from an international-scale sports venue into a multifunctional public space necessitates a relevant and representative visual identity. The GBK logo design draws inspiration from the site’s architectural elements, which are widely recognized and

strongly associated with the area’s historical image. The design also integrates values of unity, diversity, and sustainability through visual elements such as traditional textile motifs from various regions in Indonesia. This visual identity successfully represents GBK’s evolution into an inclusive public space, while honoring its cultural and historical roots.

For visual identity design in national-scale place branding such as GBK, it is recommended to prioritize architectural elements that are visually familiar to the public, as they foster stronger emotional connections. Additionally, the design approach should reflect Indonesia’s cultural diversity, rather than focusing on a single regional identity. Exploring and incorporating cultural elements from across the archipelago will enrich the visual narrative, foster a broader sense of collective ownership, and ultimately enhance the effectiveness of the visual identity in building a strong and unifying public image.

References

Anggraeni, A. (2023, March 17). Mengenal Kain Gringsing, Kain Tenun Langka Khas Bali. Detikbali. <https://www.detik.com/bali/budaya/d-6624434/mengenal-kain-gringsing-kain-tenun-langka-khas-bali>

Indra, R. (2017, August 24). 33 Kain Tradisional Ditetapkan Jadi Warisan Budaya. CNN Indonesia. <https://www.cnnindonesia.com/gaya-hidup/20170824194938->

277-237118/33-kain-tradisional-ditetapkan-jadi-warisan-budaya

Koesno, D. (2020, December 4). Ketahui Filosofi Noken Papua yang Muncul di Google Doodle Hari Ini. Tirto.Id. <https://tirto.id/ketahui-filosofi-noken-papua-yang-muncul-di-google-doodle-hari-ini-f7JK>

Lisnawati, F., & Tarigan, E. (2025, January 17). Papua’s noken bag, the knotted legacy of resilience and identity. AP News. <https://apnews.com/article/indonesia-papua-noken-traditional-bag-photos-028d6e0090578ab-44828b8ae4624d8be>

Nella, B. F. (2022, December 27). 9 Keunikan Motif dari Songket Silungkang di Sumatera Barat. Infosumbar. Net. <https://infosumbar.net/artikel/9-keunikan-motif-dari-songket-silungkang-di-sumatera-barat/>

Prasanna, M., & Priyanka, A. L. (2024). Marketing to Gen Z: Understanding the Preferences and Behaviors of Next Generation. International Journal for Multidisciplinary Research,6(4). <https://doi.org/10.36948/ijfmr.2024.v06i04.26612>

Rebelo, A. (2025). Brand symbiosis: Emotional development. Cadernos de Comunicação, 29. <https://doi.org/10.5902/2316882x87944>

Setiawan, A. (2020, May 30). Lipa Saqbe, Tenun Sutra Cantik Warisan Mandar. Portal Informasi Indonesia. <https://indonesia.go.id/kategori/kuliner/1857/lipa-saqbe-tenun-sutra-cantik-warisan-mandar?lang=1>

Velarosdela, R. N., & Maharani, D. (2018, August 30). Makna Kaldron Api di Gelora Bung Karno. Kompas.com. <https://megapolitan.kompas.com/read/2018/08/30/10290241/makna-kaldron-api-di-gelora-bung-karno>





Wheeler, A. (2017). Designing Brand Identity - An Essential Guide for The Entire Branding Team. Wiley.

Wrona, K. (2015). Visual Identity and Rebranding. Marketing of Scientific and Research Organisations, 16(2). 91–119 <http://dx.doi.org/10.14611/minib.16.02.2015.06>

AI AS AID TOOL IN VISUAL PROGRAMMING COURSES AT  
UNIVERSITAS MULTIMEDIA NUSANTARA

Hadi Purnama<sup>1</sup>  
Vania Hefira<sup>2</sup>

Received June. 06, 2025; Revised June. 21, 2025; Accepted June. 27, 2025.

**Abstract:** This research investigates AI usage within a Visual Programming course at Universitas Multimedia Nusantara, focusing on how design students integrates AI into interactive media development. In this case, the output is game development using Unity platform that requires fundamental programming logic. This study aimed to assess AI's involvement in the development process and explore its limitations for programming for design students. Data was collected via questionnaires (n=44) and continued by interviews (n=8) to further pursue insights on AI's potential to replace programmers. The questionnaire results showed 100% of the respondents use AI across various game development stages, from ideation and story development to asset creation, soundtracks, programming, and animation. The practical application of AI in a first-person controller game demonstrated its effectiveness for generating basic code, but also highlighted the need for human intervention in debugging, adaptation, and quality assurance. The interview reveal students' challenges with faulty logic AI solutions. The research concludes that AI is a valuable programming assistant during game development, expanding human capabilities, but cannot fully replace human understanding of programming logic, problem-solving, and creativity. This underscores the importance of strategically integrating AI into curricula to enhance, but not replace, human learning and programming skills.

**Keywords:** visual communication design; technology of artificial intelligence; learning assistance

Introduction

Artificial Intelligence (AI) has become an important part of various industries. Its implementation can be seen on various aspects, such as in marketing (Octavany & Wicaksana, 2020) and in agriculture (Shabrina et al., 2023). However, the integration of AI becomes more prominent in the programming sector (Coello et al., 2024). Previous GitHub research men-

tioned how game developers found incorporating AI in their game development process as useful. Enhancing both the creation process and the player experience (Barke et al., 2023). It can be said that AI applications span across multiple stages of development, not only as an administration tools. With this in mind, the study further studied how AI is used in game development. The statement has

<sup>1</sup>Hadi Purnama is a lecturer at The Faculty of Art and Design, Universitas Multimedia Nusantara (UMN) Tangerang.

e-mail : hadi.purnama@umn.ac.id

<sup>2</sup>Vania Hefira is a lecturer at The Faculty of Art and Design, Universitas Multimedia Nusantara (UMN) Tangerang.

e-mail: vania.hefira@umn.ac.id

raised questions on how AI can push the boundaries of what interactive media can achieve. Previous research has proven AI integration in the game developing process in the game industry. For instance, AI has been incorporated in the asset and game mechanics (Filipović, 2023). Game mechanics focused on the fundamental of the gameplay experience. In this case, having AI as part of the game mechanic development process, significantly highlights its evolving capabilities in refining the dynamic adjustments. For example, through AI-driven behaviors, developers can create game mechanics where players can encounter unexpected interactions or emergent gameplay. Continuing, developers can also use AI to develop sandbox or simulation games with evolving world building in response to the player's decision.

It is necessary to always consider the fundamental elements in game development before incorporating AI to advance the development process. In this case, the fundamental elements in shaping a meaningful gameplay experience, considered player goals (purpose and direction), rules (boundaries and play structure) and conflict (challenges that player need to overcome). Additionally, the storytelling and narrative structure also enhanced the gameplay context (Schell, 2008).

When talking about developing game mechanics, this study highlighted one of elements in game mechanics named first-person shooter. This type of game mechanic was intended to enhance immersive aspects to the game (Kishor, 2024). The first-person controller is a game feature that positions the camera at the player's eye level. By doing this, the game is the one that simulates the player's direct point of view. Given this context, the perspective enhanced the immersive experience. The player was able to get better spatial awareness and personal perspective to the gameplay (Fullerton,

2024). That being said, there are many game developers onto this industry to achieve the immersive aspect.

To develop a first-person shooter game, one of the game development tool is called Unreal Engine 5. As the latest Epic Game's industry-leading game engine, it was first released in 2022 aiming for next-generation gaming, film production, virtual reality to other types of real-time applications. It is known for its capabilities to push boundaries in graphic, workflow and scalability. Previous research has mentioned its key features such as Nanite (virtualized geometry) and Lumen (real-time global illumination) that supported visual clarity without compromising game performance. The Unreal Engine 5 itself supported the developers with enough physics system and animation controllers that empowered them to create responsive design in a multiplayer setting. In addition, it also supported debugging and quality assurance process through live coding and automated testing (Kishor, 2024).

Debugging and quality assurance are part of the critical stages in game development that game developers cannot ignore. It aims to ensure the game smoothness and consistency. As games grow its complexity, it is essential for game developers to spare time to undergo this stage. At the same time, it is known for its time-consuming aspect. The manual testing is repetitive and labor-intensive. But nowadays AI has been incorporated in this stage as well. Using AI, game developers were able to accelerate the process to be smarter, faster and thorough.

Aligned to this, there were also another research that prove generative AI has huge impact on game design and development processes, augmenting coders (programmer) from coding manually to assisted by AI, or even procedural content generation that help developers to create

assets on the fly (Ratican & Hutson, 2024).

These findings also enable players to create their own worlds and challenges thus making player without programming capabilities to code (Ratican & Hutson, 2024). However, both study wanted to underline it is essential to remember that by nature, game development requires essential programming logic as well. Thus, in preparing future game developers, academics need to prepare students to have necessary workability skills (Fauziah & Vantisssha, 2021) With this in mind, educators are further encouraged to consistently integrate real-life applications with academic content (Hefira, 2024).

This is aligned with earlier study that mentioned how teachers are encouraged to consistently integrate real-life applications with academic content (Hefira, 2024). One of the courses offered by Universitas Multimedia Nusantara, is called Visual Programming. An elective course for undergraduate visual design communication students majoring in interaction design, that prepares design students to create interactive media with programming skills. One of the class outcome is to develop a game. Formerly the Visual Programming class curricula taught students using "Bolt", a visual scripting tool in Unity, to understand the basics of programming. "Bolt" is a native node-based visual scripting tool used for Unity platform, to help game developers in creating logic and interactivity without writing the traditional code. So instead of applying the script with C# language, students were taught to connect visual blocks (nodes) that represents logic operations, variables, events, and game functions. With this in mind, it can be said that using "Bolt", encourages students to focus more on creative aspects (such as 2D/3D asset development) in an interactive design ecosystem. The visual scripting became a solution to answer the student's struggle in understanding the C# programming logic. The course's goal

itself is not to have programming fluency but help design students to understand them, so that in they can collaborate with developers in the future (Martyastiadi, 2022). To date, the class curricula continued to teach design students using "Unity" as the game development platform. The use of AI on an academic level cannot be avoided.

Previous research has proven how AI usage in courses has shown benefits to certain extent (Holmes et al., 2019). AI has helped teachers in developing teaching material and assisting lectures in class (Sangheethaa & Korath, 2024). Aligned, previous survey also mentioned 56% of 1000 undergraduate student admitted using AI in assignments (Grattia, 2023; Nam, 2023). This has proven AI can do simple tasks that are manually done (Brey & Dainow, 2023; Hauer, 2022). In the implementation, one of the most used AI platforms is ChatGPT (Annur, 2023), a Large Language Model that works from user input. Large Language Mode is an advanced type of AI that is developed to understand, generate and manipulate human language based on its vast database. With that extensive capability, the AI model continuously update itself with learning language patterns, especially its structure (grammar, syntas, context, to tone).

On the other hand, there have been several issues when the whole game development process relies on AI (Sarkar et al., 2022). One of them is the dependency on AI (Huang, 2023) to create solutions from existing problems (Birkenkrahe, 2024). For example, AI can be seen in programming class where students can simply copy AI-generated code without understanding the underlying logic. This type of AI falls into the category of Generative AI. In the process, user asks, in the form of a command, to the computer to create (generate) a solution. The process generates an image, program or idea to



answer the problem (Egon et al., 2023). This is because Generative AI models work based on their intended use. But not all of AI output is 100% accurate, which will pose a problem in the future (Birkenkrahe, 2024; Coello et al., 2024; Sarkar et al., 2022). That can be said, the computer is the one that creates a solution to the problem, and AI still has some limitation on the programming side (Chen et al., 2021). AI system still driven by massive collection of data that gathered without consent and this raises the privacy concerns (Ratican & Hutson, 2024).

Therefore, this research investigates the use of AI in the Visual Programming course, operating under the hypothesis that AI serves as a valuable aid but cannot fully replace human understanding of programming logic.

Methodology

In this research process, the authors applied a mixed-method approach that included literature review, selective sampling questionnaires, and in-depth interviews. The literature review was conducted to establish a fundamental understanding and to contextualized the AI usage in the game development industry as well as academic setting. The references of this study were studies on AI in programming, visual learning tools as well as its potential roles in an interactive media development.

The primary data was collected from undergraduate students of Visual Communication Design at Universitas Multimedia Nusantara who had taken an interest focus in Interaction Design, and were eligible to enroll in this elective course named “Visual Programming” which were typically accessible starting from the second year onward. A selective sampling method was conducted, targeting 20% of the total population of 200 students across three semesters (Even Semester

2023-2024, Odd Semester 2024-2025, and Even Semester 2024-2025). This resulted in a sample size of 44 respondents across eight classes (n=44). The following table was questionnaire questions.

Table 1. Questionnaire Questions  
(Source: Personal Research Documentation)

1.	Name	(Open Answer)
2.	On which term you took Visual Programming Courses	(Term Selection Answer)
The following <b>Yes/No</b> questions were asked to know what happens in students’ group.		
3.	I/My group uses AI in <b>the game idea search/generation process.</b>	
4.	I/My group uses AI in <b>the game story creation process.</b>	
5.	I/My group uses AI in <b>the process of creating game visual assets.</b>	
6.	I/My group uses AI in <b>the process of creating soundtracks with AI</b>	
7.	I/My group uses AI in <b>the programming process</b>	
8.	I/My group uses AI in <b>character animation process</b>	
The following Likert scale was used to measure student AI capability understanding (Strongly Disagree, Disagree, Agree, Strongly Agree)		

9.	AI can create/ help the process of creating code for my group project
10.	AI can <b>replace the role of</b> programmers for my group project
11.	AI can create/ help the story creation process for my group project.
12.	AI can <b>replace the role of</b> story writer for my group project.
13.	AI can create/help the asset creation process for my group project
14.	AI can <b>replace the role of</b> asset creator (Audio, 2D / 3D) for my group project
Open Answer Section	
15.	Please write another use case of AI in your group
16.	What AI platforms do you use in class

The questionnaires aimed to gather data on the students’ general usage and perceptions of AI in the interactive media development process, specifically in game design. Additionally, the study also conducted a quantitative finding through interviews (n=8) with selected students to further understand their experiences of using AI in developing their first-person shooter (FPS) game using Unity platform as part of their task in class. The interview questions explored how students approached the AI-generated code, their problem-solving methods when facing broken scripts and whether they had additional resources or relied solemnly on AI.

Result

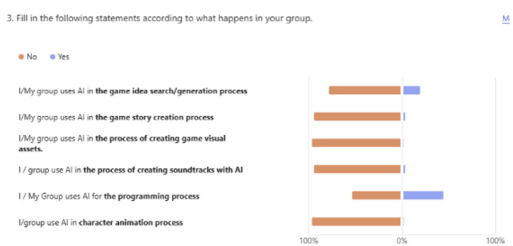


Figure 1. Respondent’s Statement in Using AI in Class Project  
(Source: Personal Documentation)

Based on the questionnaire results as can be seen in Fig. 1, it can be concluded that the use of AI is currently limited to story development and assisting in the programming process. The questionnaire shows that most students did use AI on their story or game assets creation. use AI on game idea creation (20.5%), story creation (4.5%), Visual assets creation (2.3%), soundtracks (4.5%), **game programming (45.5%)**, character animation (2.3%). Additionally, follow-up questions were conducted to assess the respondent’s understanding of AI’s functions.

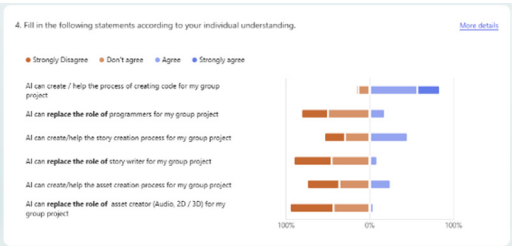


Figure2. Respondent’s Statement in Understanding AI Capability  
(Source: Personal research documentation)

Based on the follow-up responses, seen here in Fig.2, it can be concluded that all participants agree on the use of AI only to assist them in the creation of interactive media (such as programming and story design). However, only a few believe that AI can replace the role of

real programmers and designers. Furthermore, the author observes the following intriguing statement.

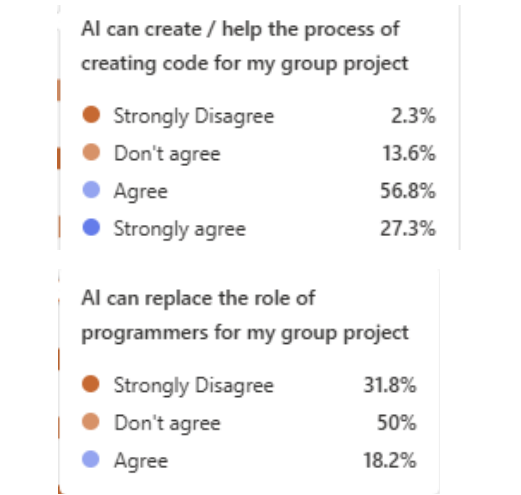


Figure 3. Respondent's Statement in Understanding AI Capability to Create Code and Replace Programmers (Source: Personal research documentation)

According to the statement that can be seen in Fig. 3, participants agree that AI can assist them in program development, according this Likert scale student states that AI could help them create code (Strongly Disagree: 2.3%, Disagree, 13.6%, Agree 56.8%, Strongly Agree 27.3%), but the majority do not believe that AI can replace programmers from this statement: “AI can **replace the role of programmers**” (Strongly Disagree 31.8%, Disagree 50%, Agree 18.2%).

The results of this questionnaire could be followed up with brief interviews of respondents who believe (or do not believe) that AI can replace programmers, as well as a comparative study with existing literature. Because most of the students don't agree that AI can replace programmer, authors selected 3 students, that don't agree (Group A) and 4 students that agree AI “mostly can” replace programmer (Group B). First, the authors ask about feedback for this course and how it feels to code with AI. Both respondents said they were

shocked at first, and didn't know anything about code, and both of respondents already use AI to help them in class. The response piqued the author's interests and continue to follow up with the following question of: “did you validate the code?”. Because the respondents have the same response about using AI to help their team code. Then the authors received opposing answers; Group A use other resources such as Unity Forum & YouTube whilst the other group decided to leave the programming side to ChatGPT. The authors asked one final question “Did your code works? And how it went?”. Group A responded with “At first our generated code didn't work but we sought help on forum and watched some tutorials online, after implementing some changes from tutorials and asking our lecturer it did work”. Group B responds with; “sometimes the code just works, but when the code straight up didn't work, we were just stuck in a place, so we tried to run the prompt again and again, until our friends came up with a solution”.

After both qualitative and quantitative data gathered, the authors found out that some groups still depend on AI to a certain extent. The authors used AI with the aim of seeing how to code using AI to provide instructions for beginners to create a first-person controller in Unity. At first, the authors found that AI helps when the user already has basic Unity and code skills. The authors then generate the code by prompting the AI “I need the code for first person controller in unity” (Fig. 4). AI replies with detailed instructions but didn't explain any of the functions of the code, this will cause problems later on.

Instructions for creating a first-person controller in Unity and producing detailed steps. Based on the author's interviews, it was found that although AI provides detailed steps, when the author practiced these steps using the script, some steps were easy to follow, and the first problem

AI did explain everything about that line, but still didn't mention how to extend the code and implement another feature to this generated code. The authors try to add another typically asked feature in game mechanics in to AI by asking it to implement features like “Double Jump”, “Inventory System” to store items and the “Shooting” parts from FPS genre with this prompt “can I implement double jump to this code?” (Fig. 6). Then AI reply the following message.

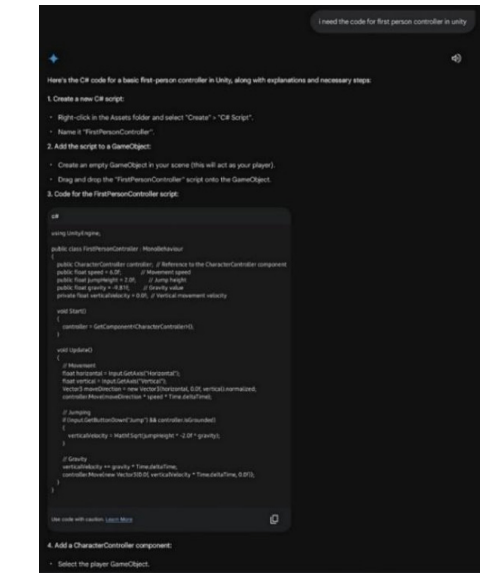


Figure 4. Prompting AI to Create Code of First Person Controller for Unity (Source: Personal research documentation)

arose, this code couldn't be further developed because user cannot understand the code written by AI. This problem can be tackled after asking for an explanation for a specific line of code by prompting “can you explain the code? I need to understand the logic behind this scripts”, as seen in Fig. 5.

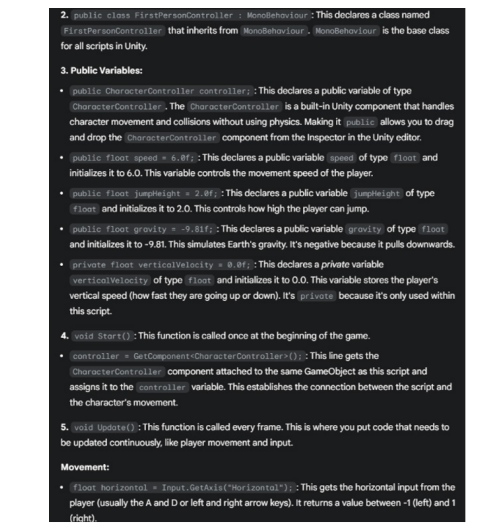


Figure 5. Prompting AI to Explain the Code Created (Source: Personal research documentation)

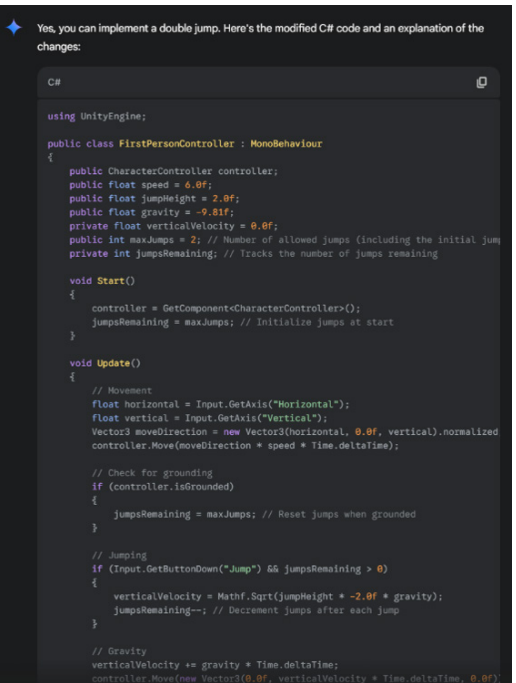


Figure 6. Prompting AI to Create Code of “Double Jump” Action for Unity (Source: Personal research documentation)

When the authors decided adding double jump was a good decision, then the authors continue to add another mechanic to this code, like shooting and inventory which should be good to facilitate a simple game. After adding 2 features, the authors prompted once more and got another reply, as can be seen here in Fig .7.



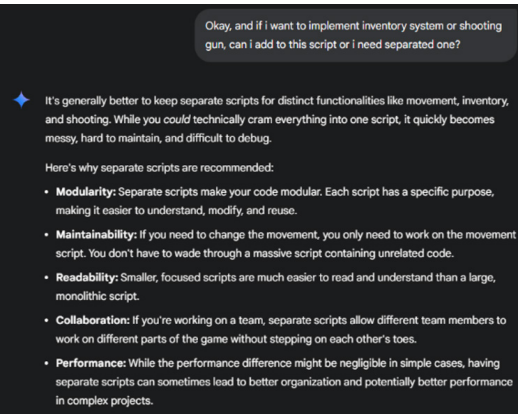


Figure 7. Prompting AI to Create Additional Mechanic Code for Unity  
(Source: Personal research documentation)

The AI explains that the authors can add those features but must do so by trying to add new script and not to mix everything. Afterwards, the AI gave a response to separate “Shooting” and “Inventory” scripts from the “First Person Controller” scripts.

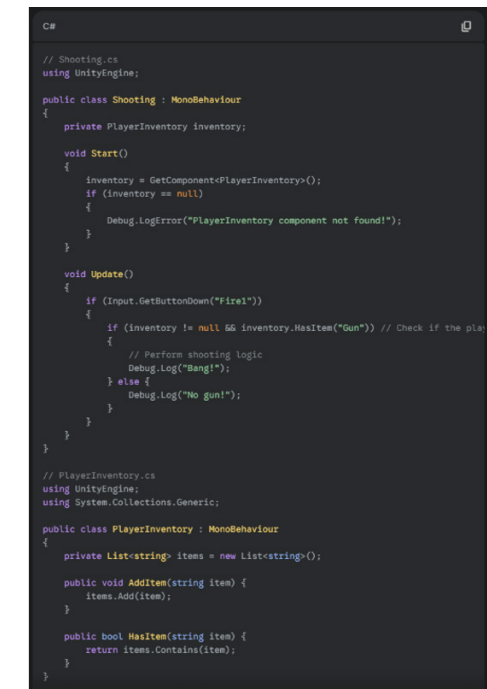


Figure 8. AI Created New Coding Script for “Shooting Gun” Action for Unity  
(Source: Personal research documentation)

This is when the authors encounter a second problem where the AI gave two completely different script in single file as shown in Fig 8. Due to the fact that the authors had some experience in Unity and C#, the authors found this could be a problem in the future. At first, this small warning can be ignored because there are no errors in this specific code, but turns out the AI did not include expandability and modularity in the code section. Even so, the AI did clarify that this script has to be separated from first scripts as shown here on Fig. 9.

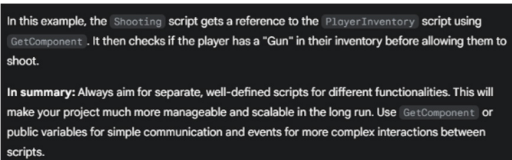


Figure 9. AI Created Coding Script Excluded Expandability and Modularity for Unity  
(Source: Personal research documentation)

AI has its own reasoning to keep both scripts separate (Fig 9), and claimed “well managed” code is separated. There might be more to explore in relation to how AI define or reasoning when to separate or when to combine two scripts in a further research. After a couple of attempt, the authors finally manage to achieve the first-person controller with AI, with results that met the author’s expectation. This entire process of prompting, trial and error as well as debugging, the authors realized that there are still a lot of AI base code tweaking that must be done, in order to meet the author’s needs. Because there’s previous research that discusses programming from a visual perspective, that focuses on understanding the logic behind the programming for interactive media (Martyastiadi, 2022), that proves AI cannot replace the skill of programmer entirely.

## Discussion

The findings of this study offer a multidimensional perspective of how AI is currently used in the context of visual programming education for design student, specifically in undergraduate Visual Communication Design students who took Interaction Design at Universitas Multimedia Nusantara. Based on the questionnaire distributed as well as the follow-up in-depth interviews, it can be seen that AI has been predominantly used to assist in their early stages of interactive media development, specifically in game design development as part of their task at class. On the other hand, the study also found that there was a variation of perceptions on the AI’s capabilities.

The Mult perspectives can be seen while all research respondents accepted AI as a tool to support their game development, there was also a few who believed it can replace human game developers and designers. This finding is aligned with prior research (Chen et al., 2021; Sarkar et al., 2022) where it has previously highlighted that while AI can definitely automate tasks, it is also lacking in the contextual awareness and adaptability that only human possessed, possibly human cognition. Historically, humans have utilized machines in daily life, with significant advancements beginning during the Industrial Revolution. Human roles and contributions are more expansive compared to AI, which is limited by the data it possesses (Birkenkrahe, 2024; Coello et al., 2024; Sarkar et al., 2022). Our research affirmed this distinction, where although all respondents in this study used AI at various stages of the game development, none believed AI could fully replace human expertise. It can be said that, rather, AI was seen as a supportive tool that made the process more efficient, specifically code generation and task execution.

The study also wanted to underline

the triangulation of both quantitative and qualitative data that further supported this view on AI that cannot fully replace human. It can be said that Group A (students who believed AI cannot replace developers) validated the AI-generated code through YouTube tutorials, Unity forums as well as lecture assistance or consultation. On the other hand, the other group or Group B relied more heavily on AI assistance but struggled more when they faced with broken or incomplete AI-generated code. This difference underlined a critical aspect where AI as a learning assistant in programming, still need human intervention in terms of debugging, adapting as well as testing, which further emphasis what Chen et al. (2021) had stated previously.

From a pedagogical or academic teaching view, it can be said that this human intervention on AI as a learning assistant is aligned with previous statement where the class taught students with Unity and previously “Bolt”. Previously, “Bolt” has supported design students to construct logic through node-based systems, which has proven to eased their cognitive load of learning C# programming language but still actively introduced to computational thinking. The upgraded curricula to include AI-assisted learning can be seen as an iterative process to continuously update the knowledge. This view is aligned with previous statements where AI-assisted learning promoted a broader educational trend on how AI can support educators in delivering materials and enhance student’s productivity (Grattia, 2023; Hefira et al., 2022; Nam, 2023; Sangheethaa & Korath, 2024). However, as previously mentioned by Huang (2023) and Egon et al. (2023), this study wanted to underline that there were also valid concerns regarding this over reliance on the Generative AI, specifically on ChatGPT. This study wanted to also remind that students risk their surface-level of understanding of programming language, when they

used AI to skip their critical problem-solving and logic-building skills. It can be said that, AI must be framed as a co-pilot, not a substitute to their learning journey.

The integration of AI in visual programming course offered significant promise, particularly in supporting accessibility and efficiency among design students. However, its effectiveness can only be used effectively when there is fundamental human cognitive level of creativity and logic reasoning. Drawing on the historical pattern of human and computer interaction, it is evident that AI is best positioned as an assistant or extension of human capability, not a total replacement.

Conclusion

This concludes the author’s hypothesis that AI can only be used as an assistant in developing code. Humans possess authentic intelligence necessary for open-minded thinking in situations with various probabilities, such as work environments that require high levels of strategy and creativity (Cremer & Kasparov, 2021).

This research found that for now, AI still cannot replace real human touches, but AI can help for basic tasks such as generating base code or auto correct. Our survey data, reflecting the widespread use of AI tools by students, aligns with broader trends of AI integration in education (Holmes et al., 2019). This widespread use underscores the importance of educators strategically incorporating AI into curricula to enhance, rather than supplant, human learning and skill development. Further research should explore the long-term effects of AI on student learning habits, examine the potential for over-reliance on technology, and investigate the ethical implications for designers and programmers working with AI.

Acknowledgement

The authors would like to express their gratitude to Universitas Multimedia Nusantara for all the support.

References

Annur, C. M. (2023, June 26). Survei: ChatGPT Jadi Aplikasi AI Paling Banyak Digunakan di Indonesia. <https://databoks.katadata.co.id/infografik/2023/06/26/survei-chatgpt-jadi-aplikasi-ai-paling-banyak-digunakan-di-indonesia>

Barke, S., James, M. B., & Polikarpova, N. (2023). Grounded Copilot: How Programmers Interact with Code-Generating Models. *Proceedings of the ACM on Programming Languages*, 7(OOPSLA1), 1–26. <https://doi.org/10.1145/3586030>

Birkenkrahe, M. (2024). the Role of Ai Coding Assistants: Revisiting the Need for Literate Programming in Computer and Data Science Education. *INTED2024 Proceedings*, 1(March), 127–132. <https://doi.org/10.21125/inted.2024.0071>

Brey, P., & Dainow, B. (2023). Ethics by design for artificial intelligence. *AI and Ethics*, 0123456789. <https://doi.org/10.1007/s43681-023-00330-4>

Chen, M., Tworek, J., Jun, H., Yuan, Q., Pinto, H. P. de O., Kaplan, J., Edwards, H., Burda, Y., Joseph, N., Brockman, G., Ray, A., Puri, R., Krueger, G., Petrov, M., Khlaaf, H., Sastry, G., Mishkin, P., Chan, B., Gray, S., ... Zaremba, W. (2021). Evaluating Large Language Models Trained on Code.

Coello, C. E. A., Alimam, M. N., & Kouatly, R. (2024). Effectiveness of ChatGPT in Coding: A Comparative Analysis of Popular Large Language Models. *Digital*, 4(1), 114–125. <https://doi.org/10.3390/digital4010005>

Cremer, D. De, & Kasparov, G. (2021). Should Augment Human Not Replace It. *Harvard Business Review*, 18, 97–101. [https://www.daviddecremer.com/wp-content/uploads/HBR2021\\_AI-Should-Augment-Human-Intelligence-Not-Replace-It.pdf](https://www.daviddecremer.com/wp-content/uploads/HBR2021_AI-Should-Augment-Human-Intelligence-Not-Replace-It.pdf)

Egon, K., J, R., & R, J. (2023). AI in Art and Creativity: Exploring the Boundaries of Human-Machine Collaboration. *International Journal of Art and Art History*, October. [https://www.researchgate.net/publication/374945291\\_AI\\_in\\_Art\\_and\\_Creativity\\_Exploring\\_the\\_Boundaries\\_of\\_Human-Machine\\_Collaboration](https://www.researchgate.net/publication/374945291_AI_in_Art_and_Creativity_Exploring_the_Boundaries_of_Human-Machine_Collaboration)

Fauziah, Y., & Vantishsha, D. (2021). Pengaruh Implementasi Kegiatan Merdeka Belajar Kampus Merdeka (MbkM) Terhadap Mahasiswa Di Program Studi Sistem Informasi Fakultas Ilmu Komputer Universitas Esa Unggul. *Jurnal Abdimas*, 8(2), 117–123.

Filipović, A. (2023). the Role of Artificial Intelligence in Video Game Development. *Kultura Polisa*, 20(3), 50–67. <https://doi.org/10.51738/kpolisa2023.20.3r.50f>

Fullerton, T. (2024). Game Design Workshop; A Playcentric Approach to Creating Innovative Games.

Grattia, M. (2023, April 24). Survei: 17 % Mahasiswa Kampus Top di AS Ini Pakai ChatGPT untuk Ujian Akhir . Detikedu. <https://www.detik.com/edu/perguruan-tinggi/d-6687500/survei-17-mahasiswa-kampus-top-di-as-ini-pakai-chatgpt-untuk-ujian-akhir>

Hauer, T. (2022). Importance and limitations of AI ethics in contemporary society. *Humanities and Social Sciences Communications*, 9(1), 1–8. <https://doi.org/10.1057/s41599-022-01300-7>

Hefira, V. (2024). Exploring Educational Media on Indonesian Studies for Third-Culture Kids’ Identity Development. *Ultimart: Jurnal Komunikasi Visual*, 17(2), 192–204. <https://doi.org/https://doi.org/10.31937/ultimart.v17i2.3909>

Hefira, V., Utomo, P., & Ade, K. S. (2022). Examining The Implication Of Teachers’ Resilience Factors On Teaching Effectiveness During Covid-19 Pandemic. *Journal of Positive School Psychology*, 6(9), 1320–1344. <http://journalppw.com>

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial Intelligence in Education. Promise and Implications for Teaching and Learning.

Huang, L. (2023). Ethics of Artificial Intelligence in Education: Student Privacy and Data Protection. *Science Insights Education Frontiers*, 16(2), 2577–2587. <https://doi.org/10.15354/sief.23.re202>

Kishor, I. (2024). First Person Shooting Game Development using. <https://doi.org/10.13140/RG.2.2.15725.81124>

Martyastiadi, Y. S. (2022). Observation on The Use of Visual Scripting for Interaction Design Students. *International Journal of Creative and Arts Studies*, 9(2).<https://doi.org/10.24821/ijcas.v9i2.8217>

Nam, J. (2023, November 22). 56% of College Students Have Used AI on Assignments or Exams. *BestColleges*. <https://www.bestcolleges.com/research/most-college-students-have-used-ai-survey/>

Octavany, & Wicaksana, A. (2020). Cleveree: An artificially intelligent web service for Jacob voice chatbot. *Telkomnika (Telecommunication Computing Electronics and Control)*, 18(3), 1422–1432. <https://doi.org/10.12928/TEL->



KOMNIKA.v18i3.14791

Ratican, J., & Hutson, J. (2024). Adaptive Worlds: Generative AI in Game Design and Future of Gaming, and Interactive Media. <https://doi.org/10.5281/zenodo.13894497>

Sangheethaa, S., & Korath, A. (2024). Impact Of AI In Education Through A Teachers Perceptive. Educational Administration: Theory and Practice, 30(4), 3196–3200. <https://doi.org/10.53555/kuey.v30i4.1349>

Sarkar, A., Gordon, A. D., Negreanu, C., Poelitz, C., Ragavan, S. S., & Zorn, B. (2022). What is it like to program with artificial intelligence? Section 2, 1–27. <http://arxiv.org/abs/2208.06213>

Schell, J. (2008). The Art of Game Design: A Book of Lenses.

Shabrina, N. H., Lika, R. A., & Indarti, S. (2023). Deep learning models for automatic identification of plant-parasitic nematode. Artificial Intelligence in Agriculture, 7, 1–12. <https://doi.org/10.1016/j.aiia.2022.12.002>

# ULTIMART

Vol. 18, No.1, June 2025

JURNAL KOMUNIKASI VISUAL

ISSN : 1979 - 0716

## PUBLICATION GUIDELINES FOR ULTIMART JOURNAL

### I Scope

The editors accept writing in English, in the form of research results summaries, preliminary research results, research reports or essays in the field of Visual Communication, especially covering graphic design, animation, cinematography and games. Manuscripts submitted must be accompanied by a statement that the manuscript is their own work and has never been published or sent to other organizations/ institutions.

### II Technical Provisions

The editors have provided writing templates and guideline provisions for submitting manuscripts. Submission guidelines can be accessed on the official website of the ULTIMART Journal:

<http://ejournals.umn.ac.id/index.php/FSD/about/submissions>

### III Decision of Publication

The editor will provide confirmation of the acceptance or rejection of the manuscript in writing via electronic mail and the Ultimart Open Journal System Website. Questions regarding article submissions and the status of submitted articles can be emailed to: [ultimart@umn.ac.id](mailto:ultimart@umn.ac.id)



**UNIVERSITAS MULTIMEDIA NUSANTARA**

Faculty of Art and Design  
Building D Floor 18 Jalan Boulevard Gading Serpong, Tangerang - Banten  
Tel. (021) 5422 0808 / Fax. (021) 5422 0800  
Email: [ultimart@umn.ac.id](mailto:ultimart@umn.ac.id)