Heterogeneous brand identities in Cross-IP mobile game collaborations: a case study of visual design characteristics

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ARTICLE INFO

ABSTRACT

The rise of mobile games has opened a new potential market for brands, but there is a lack of research focusing on mobile game collaboration designs, as they tend to focus on other industries despite the mobile game industry having a high rate of collaborations. The objective of this study is to extend the subject of brand collaboration design analysis into the mobile gaming landscape. In addition, we will analyze how mobile game collaborations incorporate brand identity extensions of heterogeneous visual identities into distinctive designs, and the rationale of how these collaborations work well despite the contrasting brand identities. To analyze, we used a qualitative case study method. The case study includes three cases of mobile game collaborations chosen based on heterogeneity, originality, and utilization. The main findings of this paper are the design characteristics of the collaborative product, which consists of six attributes. This study can be used as a reference for the key design characteristics in heterogeneous mobile game collaboration designs in the future.

1. Introduction

In the rising popularity of mobile games [1], design and visual elements will be among the first things potential consumers will consider within this industry. Within the highly competitive space, mobile games, like other forms of games, need to have distinct and recognizable characteristics in their designs to attract potential players and also to properly convey the purpose of the design [2]. In this study, we will analyze the design characteristics and the role of visual elements within cross-IP (*Intellectual Property*) collaborations, focusing on heterogeneous brand identities and how those brands utilize contrasting visuals and identities in the designs of collaboration items in the game. Gaming can be defined as a form of entertainment and as a way to help people relax and retreat from daily routines [3]. In contrast to other entertainment media, games require continuous engagement from the player, resulting in a significantly greater impact and memorability on cognition [4]. This could result in negative effects, shown through previous studies about how easily younger players will get addicted to a game or be influenced by violent video games, which could lead to disastrous consequences [5]–[9]. Of all types of games, Mobile games are among the most accessible forms of gaming. Despite the constantly evolving digital landscape, due to advances in miniaturization and the development of mobile video games, modern mobile gaming has become a significant and expanding part of the gaming industry and culture, exhibiting constant development. This rise in significance also shows in the growing quality of mobile games, as mobile games have emerged as a platform for creative and novel approaches to gameplay and game design [1], [10]. Jeong and Kim describe mobile games as games played on handheld devices equipped with network capabilities [10]. The key features of this concept are portability and networkability. Mobile games distinguish themselves from other

platforms, such as PC and console games, by offering the benefit of portability. Portability also allows mobile games to work on a daily basis. This is due to practices related to mobile application use. A 2011 study involving over 4,000 Android phone users revealed that, on average, people interacted with various apps on their phones around 50 times a day, accumulating more than an hour of use daily. However, each individual app session, from launching to closing the app, typically lasted just 71 seconds [11]. This affected how mobile games are designed, where games are made to fit the quick and short mobile usage sessions [1]. Other than those two key features, mobile games also have other factors unique to them, such as their lower graphics, giving visual designers a unique challenge where they need to be able to communicate visual elements with clarity despite the limited graphics quality. Another unique factor is microtransaction-based monetization, where you can get most mobile games for free with optional, smaller transactions within the game. Unlike most PC and console games (excluding some online games), you buy the game in a one-time transaction and acquire most of the content for free. This allows for more accessibility in mobile gaming, as players don't actually need to spend money to enjoy the game.

With said rise of mobile gaming, a new potential market for brands has opened. Previous studies regarding the impact of mobile games on the marketing of brands have shown the upside of co-branding with game companies. The study discovered that game repetition has a substantial effect on the players' brand attitude and purchase intention. This is especially prevalent in mobile games, where the games are designed for daily sessions. This data indicates that co-branding or collaboration with game companies has a good impact, as seen by the positive response and consumer attitude towards collaboration products and the high purchase intentions towards said products [12]. Various companies have used this opportunity to score collaborations with game companies to boost their advertising and brand awareness towards the younger generation through games [13], [14]. And within this rise of brand collaboration, we will focus on what we call heterogeneous brand collaborations and the unique way they extend visual brand identities through the designs of the collaborative products. But to understand what that entails, we must first understand Brand Identity and what it means to the brand. Brand identity refers to the distinctive attributes that define a brand's perceived persona, aesthetic, and behavior. A brand's identity comprises both tangible and intangible components, such as its history, name, personality, and visual identity [15]. There are seven key elements of a brand's identity: Brand story, Brand personality, Visual identity, Communication style, Product or service, Brand name, and Sensory identity. While these are the key elements, Brand identity within different brands' management literature may vary, which can lead to different interpretations. By utilizing the unique background and image each brand has, brands can create a strong brand identity that appeals to their target audience. And with a strong brand identity, brands can utilize it to extend their brand awareness through various methods, such as brand alliances. Brand alliances are utilized by organizations across diverse sectors to pursue innovation and establish new consumer relationships. With the success and growth of brand collaborations, several forms have developed. Through diverse collaborations with businesses, artists, and media, they produce various kinds of creations [16]. Among the several types of brand collaborations [17], [18], one is the heterogeneous brand collaborations. Heterogeneous brand collaborations refer to partnerships between brands with distinct markets and brand identities. Conversely, homogeneous brand collaborations typically possess analogous brand images and target market demographics. Homogeneous brand collaborations are typically more common because they are safer to invest in. Within the brand collaboration world, choosing the correct partner may significantly affect the success of the collaboration [17]. While trickier to execute correctly, the diversity of visual brand identities in heterogeneous collaborations provides brands with a fresh creative spark, merging their identities into a unique and distinctive product for consumers. This gives them an additional edge within the highly competitive market of brand collaborations, resulting in more sales [19], [20].

The rise of brand collaborations has resulted in a diverse array of mobile game partnerships. The products that result from said collaborations also vary. From in-game assets such as costumes, characters, and items, for example, the *Free Fire x BLUELOCK* and *Sky: Children of The Light x AURORA* collaborations, to tangible things available in retail establishments such as standees and bags, for example, the *Project SEKAI: Colorful Stage! x LAWSON* and *Genshin Impact x OnePlus* collaborations. Although the attributes of each collaboration are distinct, they possess a common element: the enhancement of brand identity. Mobile games gain benefits from collaborations by providing unique material to players, utilizing the partnering brand to develop distinct characteristics, and conveying the unique identity of each brand. Simultaneously, the partnering brand enhances its

brand identification via the mobile game, thus increasing brand recognition among the user demographic. Heterogeneous brand collaborations have also started to gain more attention in recent years [20]. Although previous studies examine the effects of brand collaborations in the entertainment sector, through observation, there is a shortage of studies regarding the mechanisms that contribute to the beneficial outcomes of such collaborations. Prior research on brand collaborations within the entertainment sector has concentrated on the marketing elements underlying these partnerships, rather than the design and mechanisms that facilitated their success [12]–[14], [21]–[23]. Although research exists on design and extension of brand identities, it predominantly concentrates on other industries such as fashion [24]–[26], and tourism [27], [28].

An empirical study aimed at game collaborations revealed a lack of design originality within the industry. Game collaborations, especially ones with other entertainment franchises such as other games and films, mostly only use the IP (Intellectual Property) of the partnering brands and use it as a garment, skin, or character in-game without producing anything unique or new. But this lack of creativity is mainly a result of the consumers' wants as well, because players don't actually want anything creative. Game collaborations predominantly appeal to an emotional point rather than a functional. Among the many marketing strategies, brand collaborations might somehow stimulate those emotional needs [29]. They want to see familiar characters in the game. A fan of *Gojo Satoru* does not want a *Gojo Satoru*-inspired outfit or item; they want *Gojo Satoru* in the game. So, game collaborations don't need to be creative in their designs to be successful and profitable. But some collaborations produce new things because they simply couldn't use the IP within the limits of the game design or system. Therefore, they must create something unique. This research studies how such cases utilize the limitations they have within the collaborations and turn them into advantages instead, making creative, unique designs that players love simply because of how good the design is, not because of the IP it collaborated with. Audience motivation is also a huge factor in encouraging consumers to purchase the products. There are many motivations that could influence a player to buy game items. In the context of original designs, designers need to keep them in mind during the process of developing the collaborative product. Some of the most common motivations for a player to buy an in-game product are visual aesthetic, fear of missing out *(FOMO)*, character attachment, and brand attachment. Taking these into consideration, designers must create visually appealing designs that reflect the character's personality (appealing to fans of the character) while also ensuring that the final product maintains a clear and consistent image and identity of the collaborating brand. This study will focus on original designs, extending the subject of visual elements in cross- IP collaboration designs into the entertainment sector, particularly within the mobile gaming landscape, analyzing how prominent mobile games incorporate heterogenous visual brand identities from the collaborating brands into the visual elements of the designs, how they utilize audience motivation to get consumers to buy the products, and the rationale behind the effectiveness of these designs. This will offer a new perspective on how mobile game collaborations gain success.

2. Method

For this paper, we used a qualitative approach of case study analysis as the main methodology, with interviews as the supporting method to strengthen the analysis results, adding further insight into the matter. To simplify the procedure, we made a framework of the steps used in the procedure, as seen in Fig. 1. To collect data, a variety of sources were utilized, including primary sources such as interviews with players and direct observation of the visual elements in the collaborative products. Secondary sources include other research papers and official brand websites (*e.g.,* https://en.bduck.com/brand/), while tertiary sources include blogs (*e.g.,* https://howbrandsarebuilt.com/the-brand-identity-prism-and-how-it-works/) and official social media accounts of the brands or games (*e.g.,* https://twitter.com/GameIdentityV). After we collected enough data, we defined the criteria for the case study to choose the samples. Because this paper is going to focus on heterogeneous visual brand identities between two partnering brands, our first and most important criterion is the heterogeneity between the two brands' visual brand identities. Heterogenous visual brand identities was chosen specifically because other than the uniqueness of the collaboration end products, the contrasting brand images makes the process of analyzing the visual components easier, as it is clearer to see which elements are implemented in the designs, such as the silhouettes, brand image or logo, colors, and style; whereas analogous collaboration designs tend to blend into

each other's visual identity. It will also be useful to assess how designers avoid making the end products look out of place within the game's environment [18].
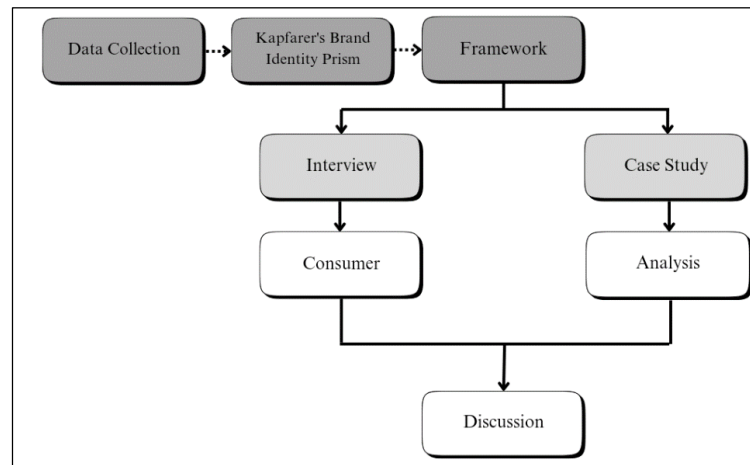

Fig. 1. The Methodology Framework Used for This Study

Through this criteria, we excluded collaborations where they partnered with franchises that share same or similar genres, such as *Dead By Deadlight x Nightmare on Elm Street*, where both are within the horror genre, *Sky: Children of The Light x Moomin,* who are both similarly styled as a relaxing, melancholic IPs, and *Fortnite x NERF,* who both have high energy and fun visual brand identities. The next criterion narrowed the sample size by a large margin, which is the Originality criterion. This criterion was chosen because we will be analyzing how they utilize heterogeneous brand identities, which will not work if the collab product simply borrows the collaborating brand's IP as a garment or item in-game without making an original design. Therefore, we excluded those collaborations, such as *Super Smash Bros x The Legend of Zelda*, *Brawlhalla x Adventure Time, Cookie Run: Kingdom x BTS*, and *Identity V x Persona 5*. And as an additional criterion, we also excluded collaborations that we feel didn't fully utilize the visual brand identity of the partnering brand. An example of the sample we checked off using this criterion is the Splatoon x Teenage Mutant Ninja Turtles collaboration, where, despite producing an original shirt design for the characters in-game, they only put a picture of the IP on a shirt, without utilizing the aesthetics of the Teenage Mutant Ninja Turtles franchise. *Genshin x KFC* was also checked off, because the end product was only one simple item, a wing glider. By narrowing down the candidates for the case study using these criteria, we chose three samples: *Identity V x B. Duck, Animal Crossing: Pocket Camp x Splatoon 2,* and *Mobile Legends: Bang Bang x Sanrio*. These three candidates all complete the criteria and have varying visual brand identities, thus adding a lot more insight into different genres of games and aesthetics. Additionally, all three cases are categorized into cross-IP collaborations, where they primarily make use of characters from the partnering brand in the designs. These three games also have relatively loyal players, which contributes to the character attachment aspect of the audience motivation, and it also makes it easier to gauge the overall reaction to the collaboration because of their active player community. After the base data collection is enough, we chose the analysis method for the case study, which is making a framework based on Kapferer's Brand Identity Prism, as seen in Fig. 2 [15]. Jean-Noel's Brand Identity Prism is a framework that assists firms in developing solid, lasting brand identities that embody their fundamental principles. Kapferer's brand identity prism has been utilized in multiple research papers to analyze brand identities [30], [31]. Thus, just like those previous studies, this prism will serve as the foundation for analyzing the effectiveness of mobile gaming collaborations in harmonizing their designs and enhancing the brand identities of each participating company.

Kapferer's brand identity prism establishes six fundamental characteristics essential for a solid brand identity: Physique, Personality, Relationship, Culture, Reflection, and Self-Image. In the prism model, the physique and personality of the brand define the sender, usually the company, which in turn defines how the recipient's reflection and self-image, usually the consumer, is perceived. And then the relationship and culture connect the path between the two [25]. While Physique, Relationship, and Reflection are the externalized concepts that are visible, Personality, Culture, and Self-Image are the internalization concepts that are incorporated into the inner world of the brand [24]. Therefore, a

strong brand identity fully utilizes external and internal world connections while preserving a strong relationship between the sender and the recipient. Kapferer described the 6 characteristics as such: First, the physique refers to the tangible, physical elements of the brand. Visual characteristics help consumers recognize the brand. Some examples include logos, colors, and packaging. The second element, personality, refers to the traits or characteristics of the brand in the eyes of the consumer, as if imagining the brand as a human being. Third, relationships can be defined by what the brand can offer to its consumers or what attitude the brand wants to convey to its consumers. Fourth, culture refers to the values and philosophy the brand follows. The fifth element, reflection, is how the brand wants its consumers to be portrayed. This differs from the sixth element, self-image, which is how consumers may visualize themselves after using the brand's product.
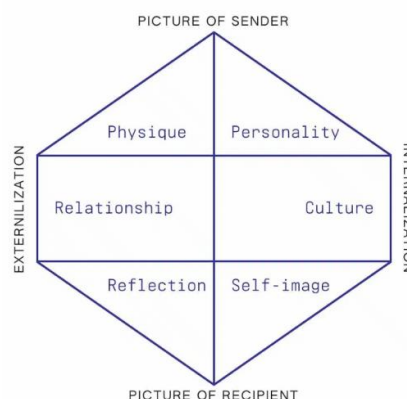

Fig. 2. Kapf*e*rer's Brand Identity Prism (Source: https://howbrandsarebuilt.com/the-brand-identity-prism-and-how-it-works/)

These characteristics are important to mobile game designs as well, since mobile games earn profits largely through microtransactions sustained by player loyalty. First, the visuals will be one of the first things players will consider when downloading a mobile game. The visual characteristics will also help with brand memorability and attract potential players through aesthetics. Personality will help players who look for specific mobile games. Visuals have a big impact on the "personality" of the game. For example, people who like relaxing, cozy games will gravitate toward games with a soft, pastel, or earthy color palette, as it implies the "calm" personality of the game. Relationships are what the brand wants to convey within its image and visuals, thus directly affecting the players it will attract. Culture also directly affects the players the game will attract, as players will avoid games that oppose their values. For example, religious players will tend to avoid horror games, as horror games tend to use satanic imagery and visuals within their settings. Reflection affects the design in how it portrays the players to potential consumers who might be interested in the game. For example, the modern, tech visuals in *Valorant* indicate that the designers want their player base to be portrayed as cool, active, and determined. This, in turn, would attract players who enjoy high-adrenaline games with sleek visuals. How the designers portray the players will also affect the players' self-image, given that playing a game with modern and sleek visuals, such as *Valorant,* will make players feel trendy. Self-image also promotes individuality; Individuality can be defined as the degree to which a person's behaviors, preferences, or self-expressions differ from group norms or expectations, as measured by responses to a standardized self-report questionnaire or by observing distinctive personal choices in a given task or setting. Using the prism model as a base and previous studies as a guide [24], [25], we will now create a framework to fit our needs for this research paper. First, we will divide the prism model into 3 sections based on the subjects, which are the sender, product, and recipient. In our case, the sender is the designer while the recipient is the player. And then we analyze them based on the implications of each section and place them in the results. From that base, "physique" and "personality", which are factors that were fully controlled by the designer, are going to be used to analyze the brand's identity and how it's portrayed. Next, "reflection" and "self-image" are going to be used to analyze the value of the collaboration product towards the players, while "relationship" and "culture" are used to identify the characteristics of collaborative products within the mobile game industry, because it represents the connection between the designer and player and how their interests affect the product. The resulting analytical framework is seen in Fig. 3.
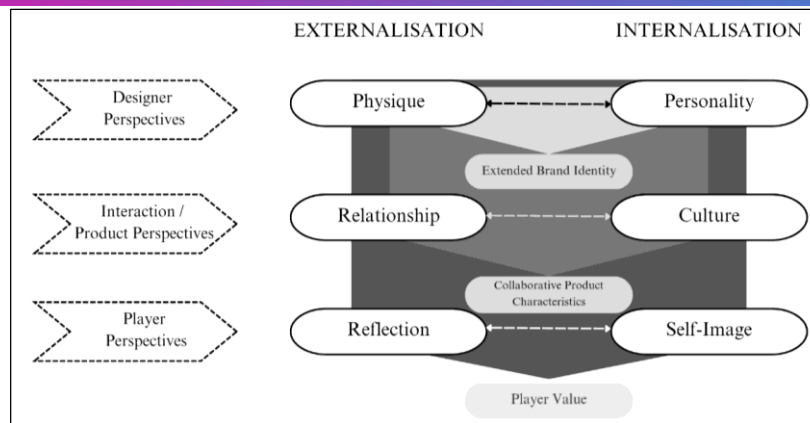
Fig. 3. Analytical Framework for Case Study

While they were divided, this does not mean that each section exists in isolation, but rather how the 3 subjects of the prism influence one another in the form of the extended brand identity of the product within the collaboration. They will be analyzed based on the visual elements in the design and how they convey the six fundamental characteristics of the prism. For example, how the designer wants to communicate through the visual elements, and how it will affect what the players will feel when using the product. After the framework-based analysis, we will interview relevant subjects to add more weight to the analysis, proving whether the clarity of brand identity within the designs of collaborative game items contributes to the success of the collaboration. The sample population for the interview was also chosen based on the framework made from Kapferer's Brand Identity Prism, the player base from each game in the case study samples. We chose them as the second population sample because these are the consumers the game is targeting for its collaborations. No game will succeed without the dedication of its player base. And for that dedication, you need to offer great value to your consumers. If the designs don't appeal to the players, there is no point to the collaboration. For the player interview, we interviewed one player from each game in the case study samples. In total, we interviewed 3 players and asked them how they feel about the collaboration product designs, their first impressions of the design, whether they buy it for the design or the IP, how well the visual brand identity translates into the designs, and whether they think the collaboration products offer great value to them and other players. Combining the analysis and response from the interviews, we will discuss the overview of the results from both sides and whether the answer from the interviews mirrors the analysis results.

3. Results

3.1 *Identity V x B. Duck*

Identity V is an asymmetrical 1-versus-4 multiplayer online survival horror game. Visual imagery is an important aspect of many horror games to create a sense of unease, dread, and fear. Without distinctive and effective designs, the atmosphere would not be as effective. To make effective horror designs, artists like to elevate designs inspired by existing cultures that revolve around the supernatural, such as Indonesian Ghosts [32]. In *Identity V*'s case, the game is known for its doll-like characters and gothic, Victorian-era "Tim Burton"-esque art direction. In contrast, B. Duck is a character IP-based company, with a wide range of products, but shares a commonality of trendy, modern product designs aimed towards young fashion consumers aged 15-34, with a mid-to-high-end consumer market. B. Duck's character licensing business is vast, covering different customer industries and boasting the title of the "Largest Chinese Independent IP in the Chinese Character Intellectual Property Authorization Market" based on revenue in 2022. On December 23rd, 2021, the collaboration between them was officially launched. Because *Identity V* also has a similar consumer age market, this collaboration was made to further extend each brand by tapping into the different consumer base caused by the contrasting genres and aesthetics of each brand's visual Identities, which are *Identity V*'s gothic horror art direction and B. Duck's trendy, modern products. Using that contrast, they made four different outfits that extend each of the two brands' visual identity in compelling and unique ways within the design. While one of the designs does use the original IP, B. Duck, they incorporated horror elements into the design, fitting it comfortably into *Identity V*'s horror setting.

With the other three garments, they made original designs and utilized their contrasting brand identities to create unique designs that appeal to the majority of the *Identity V* player base, as seen through observation by the overwhelming positive response from various social media and the number of players who own the outfits from this skin line. In Fig. 4, we see two of those original designs, called "Buffy" and "Rice". The iconic duck, while a bit subtle, can be seen within the visuals of the outfit to give a strong image of the partnering brand, integrating the B. Duck IP smoothly into the design. The vivid and colorful design of "Buffy" shows a more fun look, while the sleek white color on "Rice" leans more towards cool. This way, players can choose which self-image they want to portray while still having a trendy, stylish look in both options. Simultaneously, this difference in design choices gives individuality to each character, while still sharing a common personality trait of sporty and active through the simple but solid shapes and angular silhouette, which ties into both *Identity V*'s high adrenaline gameplay and B. Duck's brand identity. This Individuality then also strengthens the brand's culture of having a customer-centric mind, innovation, character, and confidence.

Fig. 4. Promotional Art for The Second Part of The Identity V x B. Duck Collaboration, featuring the skins "Buffy" (left) and "Rice" (right) (Source: https://id5.fandom.com/wiki/B.Duck_Crossover)

For the relationship aspect, other than the time-limited collaboration set offering an exclusive feel to the players who own the skins, the unique modern look of the characters (which are relatively rare in the currently available garments in the game) also gives pleasure to people who enjoy variety. This also gives the players who own them room to flex the product and add a more playful and active feeling to the normal gameplay by equipping sporty skins. Having skins that you enjoy playing with also offers pleasure and improves the game experience. Lastly, this ties into the reflection of the customers, where their visuals will appear trendy and modern to others, attracting players who previously might not be interested in the collaboration. The distinct visuals of this collaboration will also increase B. Duck's brand awareness within the *Identity V* community. The player interview was with a player who owned the skin "Rice". When asked about how they would describe the design, they answered with "cool", thus indicating that the design successfully extended B. Duck's visual brand identity into *Identity V*. This player also said that they bought the product purely because of the design, since they did not have any emotional attachments to the B. Duck IP. When asked about their self-image when they used the product, they stated that they felt very stylish when they were equipped with the outfit in-game, Table 1.

Table 1. Brand Identity Analysis of Identity V x B. Duck

Components of Brand Identity Prism Model		*Identity V x B. Duck*
Externalization	Physique	Duck, Vivid, Techwear, Chic, Angluar
	Relationship	Play, Activity, Flex, Exclusive, Pleasures
	Reflection	Trendy, Young, Cool, Modern
Internalization	Personality	Sporty, Exciting, Daring, Individuality, Active
	Culture	Customer-centric mind, Innovation, Character, Confidence
	Self-Image	Fashionable, Stylish, Trendy, Fun, Cool,

3.2 *Animal Crossing: Pocket Camp x Splatoon 2*

Animal Crossing is a series of social simulation video games created and published by Nintendo. Players play as a human living in a relaxing village with animal neighbors, doing various activities such as shopping, fossil hunting, and insect catching. Animal Crossing is widely known for its cute

style and relaxing gameplay, attracting players who wish to escape for a while into an adorable, dreamlike world within the Animal Crossing universe. This was shown during the peak of COVID-19's lockdown, where Animal Crossing saw a significant rise in sales, as it became the perfect social platform for people to meet without risking their health [33], [34]. Meanwhile, Splatoon is a fast, high-adrenaline third-person shooter video game franchise, also owned by Nintendo. Splatoon has a modern, cool, and colorful look, utilizing a lot of neon colors in both character and environment design, contrasting with Animal Crossing's soft, earthy palette. Despite this, they have similar player demographics, and many Animal Crossing players also play Splatoon. This crossover seems more to please fans of both franchises, as opposed to increasing brand awareness. This shows a customer-centric mindset for the two brands' culture. The Animal Crossing: Pocket Camp x Splatoon 2 crossover event started officially on September 13th, 2018, and lasted several weeks. In the event, they offered a wide variety of items, from outfits, furniture, and new characters based on some of Splatoon's iconic characters, as seen in Fig. 5.
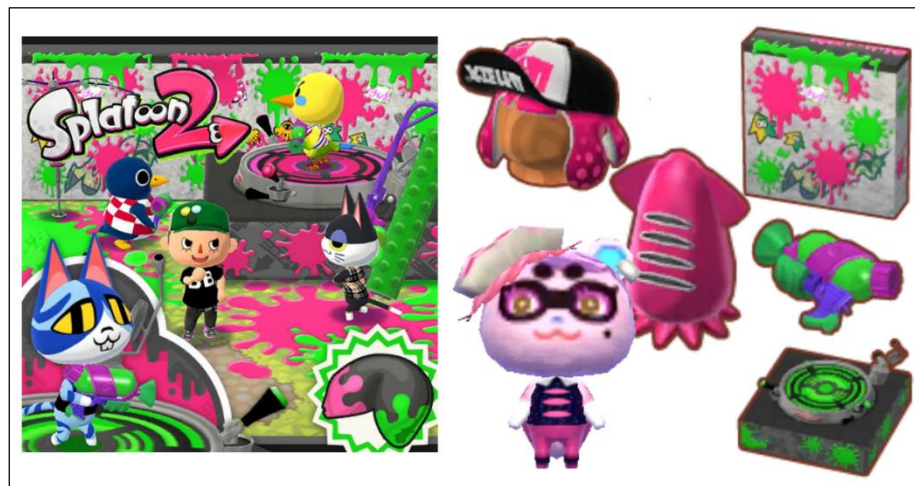

Fig. 5. Some of The Items Offered on the Animal Crossing: Pocket Camp x Splatoon 2 Crossover Event. (Source: https://nookipedia.com/wiki/Splatoon_2_(Fortune_Cookie)_Set)

As seen in Table 2, while Splatoon and Animal Crossing have very distinct color palettes and aesthetics from each other, they share a similar round, cute visual style. With that in consideration, they simply integrated Splatoon's visual style into Animal Crossing's item roster. This was shown in how they used Splatoon's colorful neon paint splashes on almost every furniture item, giving the feeling that you're playing a match in Splatoon. They also kept the squid and octopi imagery, designing tentacle-like hairstyles based on Splatoon's own iconic squid and octopus-patterned hair. The colors of every item are vivid and loud, standing out in Animal Crossing's predominantly soft, earthy village environment. This visual pop translates into Splatoon's zany and colorful personality, as it doesn't hold back its style just to match the environment and portray the confident and traditional culture of the brand. The modern, street-style outfits give the players a trendy, active, and distinct reflection. What the Splatoon brand offers Animal Crossing players is play, activity, flex, and pleasure. Splatoon's crossover implies an activity-packed event that comes with it to match Splatoon's gameplay elements. They offer flex and pleasures in the context of having exclusive and visually unique items not accessible from Animal Crossing's standard item roster. Towards players who are fans of both franchises, this will strengthen the consumer loyalty to both brands. The quirky visual elements also, in turn, feed into the fun, colorful, and distinctive self-image players might have as a reaction to owning the items available in the crossover.

Table 2. Brand Identity Analysis of Animal Crossing: Pocket Camp x Splatoon 2

Components of Brand Identity Prism Model		Animal Crossing: Pocket Camp x Splatoon 2
Externalization	Physique	Squid, Octopus, Neon, Paint, Round, Vivid
	Relationship	Play, Activity, Flex, Pleasures
	Reflection	Trendy, Young, Active, Distinct
Internalization	Personality	Active, Sporty, Colorful, Zany, Individuality
	Culture	Customer-centric mind, Confidence, Traditional
	Self-Image	Fun, Colorful, Distinctive

The Player we interviewed for this section is a casual player of both Animal Crossing and Splatoon, but has only played recently; therefore, they were not aware of the collaboration in 2018. We asked what their first impression was, and they said they immediately thought about Splatoon despite not having seen the collaboration products prior to this interview. This impression from them has the implication that this collaboration succeeded in translating the Splatoon brand into Animal Crossing's environment with clarity. When questioned further about their impression of the collaboration products, they answered with "colorful, whimsical vibe.", which fits with Splatoon's branding. We then asked whether they would buy the collaboration items given the chance, and they answered positively, saying they would most likely get all the Splatoon-themed furniture to put in their Animal Crossing home. When questioned whether they would hypothetically still buy it if they were not a fan of the Splatoon franchise and purely based on the design of the collaborative product, they said they would only buy the wall and the flooring to add variety to their inventory. This indirectly implies that while the collaboration mostly appeals to fans of both franchises, it still has some appeal to casual players through the distinct, fun, and colorful items the crossover offers, using the extension of Splatoon's visual brand identity into Animal Crossing's landscape.

3.3 *Mobile Legends: Bang Bang x Sanrio*

Mobile Legends: Bang Bang is a mobile multiplayer online battle arena (MOBA) developed and published by Chinese developer Moonton. The game was released in 2016 and grew most prominently in Southeast Asia. Mobile legends have a traditional fantasy art direction, with characters like elves, orcs, and demons. They boast a large variety of character designs. Their art direction also pushes detailed character designs, with every character having distinct aesthetics, color palettes, races, body types, and fashion styles following each of their lore or stories. The game's environment design has a tense, high-energy feel, predominantly using duller colors for the ground to make the vivid interactive objects in the map pop out more, thus allowing the players to have better map vision while playing the game. This dark fantasy aesthetic contrasts with Sanrio, which is an IP-focused Japanese entertainment company focusing on the Japanese "Kawaii" culture, which is a popular Japanese subculture that emphasizes cuteness, childlike innocence, charm, and simplicity [35]. Sanrio owns a huge roster of characters with very cute designs, drawn in a minimalistic chibi art style. Sanrio's best-known character is Hello Kitty, but they also have other very popular characters such as My Melody, Kuromi, Gudetama, Bad Badtz-Maru, Cinamoroll, and more. As of current times, Sanrio has been one of the powerhouses within the general brand collaboration landscape [36]. This collaboration most likely fills the brand attachment aspect of audience motivations, since Sanrio is very popular with teens and young adults, who are also Mobile Legends' main target audience. With that said, the *Mobile Legends: Bang Bang x Sanrio* collaboration officially debuted on March 5th, 2022, and featured four new original skins based on four of Sanrio's characters, Hello Kitty, Cinnamoroll, Bad Badtz-Maru, and Pompompurin.

As seen in Fig. 6, the collaboration features four characters from each game and is based on the Mobile Legends characters' skins on their Sanrio character counterparts. The duo matchups are as follows: Angela x Hello Kitty with the "Heartstring" skin, Floryn x Cinnamoroll with the "Fluffy Dream" skin, Claude x Bad Badtz-Maru with the "Bad Bro" skin, and finally, Chang'e x Pompompurin with the "Moon Artist" skin. The physique of the skins exhibits their corresponding Sanrio counterparts in various elements, such as the Hello Kitty bow accessory on Angela's collar and the Bad Badtz-Maru printed shirt on Claude. Additionally, they incorporate the color palettes of each Sanrio character into their respective designs, enhancing the clarity of both the Sanrio visual brand identity and the specific character inspirations behind each outfit. Each character from the Mobile Legends' side also has different clothing styles for their skins, slightly changing the way they incorporate the cuteness of Sanrio's brand identity for each character, accentuating each featured character's personality while keeping the clarity of the Sanrio visual brand identity. This ties into the personality component from the prism model as well, by highlighting the individuality of the characters to mirror the brand. Each of the skins also has a charming and colorful personality, and the unique designs enhance the creative personality of the brand. They used fantasy elements within the outfit designs as well, such as the silhouette of the outfits and the detailed lining on some parts of the fabric to give it a more fantasy feel, while keeping the cute and simple look that defines Sanrio's brand, thus showing the innovation and character in their brand culture. The quality of the skins mirrors the customer-centric aspect of the culture, while the confidence ties with the reflection and self-image, where the brand aims to make visually distinctive, stylish skins, and give confidence to the players

who bought the skins to look fashionable while playing the game. This, in turn, shows the relationship between the brands and the player, where the brand offers style and luxury to the players through the collaborative product, enhancing the gameplay experience and giving satisfaction and pleasure when using the high-quality skins. This will strengthen the community's brand loyalty to the game.

Fig. 6. Promotional Artwork for The Mobile Legends: Bang Bang x Sanrio, With All The Characters Featured in The Collaboration (Source: https://mobile-legends.fandom.com/wiki/MLBB_%C3%97_Sanrio_characters)

The interview for this section was with a player who bought the Floryn x Cinnamoroll "Sweet Dream" skin. We first asked what their first impressions were when they first saw the skins. They answered that they immediately thought about how cute and sweet the designs are, which fits into Sanrio's visual brand identity, proving the clarity of the brand identity in the skin designs. When questioned about whether they bought the skin for the Sanrio IP or the design, they confidently answered that they bought it purely because of the design. Additionally, they also commented that even if they didn't know anything about Sanrio, they would still buy the skin because of its quality and value. As the final inquiry, we sought their perspective on the emotional impact of using skins during gameplay. They had said that employing the skin enhanced their experience, since stylish skin contributed to their enjoyment of the game. Table 3 is the brand identity analysis of Animal Crossing, Pocket Camp x Splatoon 2.

Table 3. Brand Identity Analysis of Animal Crossing: Pocket Camp x Splatoon 2

Components of Brand Identity Prism Model		Mobile Legends: Bang Bang x Sanrio
Externalization	Physique	Sanrio Characters, Detailed
	Relationship	Style, Flex, Luxury, Pleasures, Play
	Reflection	Trendy, Stylish, Romantic, Distinctive
Internalization	Personality	Individuality, Charming, Colorful, Elegance, Creative
	Culture	Customer-centric mind, Confidence, Innovation, Character
	Self-Image	Fashionable, Stylish, Distinctive, Cute

3.4 Discussion

This research examines four cases of heterogeneous brand collaborations within the game industry. Using previous research papers as a guide [24], the results of the case study analysis can be simplified using the framework we made, as shown in Fig. 7. The results of the case analysis show that heterogeneous brand collaborations in mobile games utilize the contrasting aesthetic of the partnering brand to design unique, distinctive items that are not commonly seen in the usual item roster in the host game. This was achieved through extending the visual brand identity of the partnering brand into the designs featured in the collaboration. For example, the *Identity V x B. Duck* collaboration offers a cool, trendy outfit look into the gothic horror game aesthetic using B. Duck's modern visual brand identity, while keeping some horror elements in the design. They also used a sporty look to take advantage of the similarities in their branding. While some of the characteristics are in line with other studies concerning general collaboration characteristics, which consist of originality, aesthetics, and scarcity [37], heterogeneous brand collaborations in mobile games that we have analyzed using the brand identity prism have additional characteristics of satisfaction, individuality, and character. This differs from a similar study on the fashion sector [24]. The details are as follows.

- First, originality. In-game collaborations, it's more common to simply borrow the IP of the partnering brand to use in the game. But in our case study, we analyzed cases where they made original items and designs for the collaborative product. This gives them an advantage in showing the creativity of the brands. Original designs can give the brands more room for creative decisions, and these creative decisions are then used to give more individuality to the designs. For example, the *Mobile Legends: Bang Bang x Sanrio* utilized creative freedom by giving completely different outfit types for each character, incorporating not only the brand identity but also the individual character's personalities into the designs. This is also seen in the *Identity V x B. Duck* collaboration, where they also incorporate different subcultures and outfit types into the designs, showing the different personalities of each character. In the *Animal Crossing: Pocket Camp x Splatoon 2* collaboration, this is seen in the event-exclusive villagers, where they made three exclusive villager designs based on iconic Splatoon characters. These original creative decisions give a unique, fresh, and new look to the game from the players' perspective.

- Second, aesthetics. Aesthetics are very important within game collaborations, as most game collaborative products relate to in-game garments or ornaments for the player's decorative purposes. If the collaborative item doesn't look pleasing, it will not attract consumers. As we can see from the player interviews, the aesthetics of the design play a huge role in the player's purchase intention. The aesthetics also play a role in the brand image, as incorporating the distinctive brand identities into the design gives the impression that the brand associated with the product is stylish and aesthetically pleasing.

- Third, scarcity. Collaboration events in-game are commonly time-limited. Not only because this usually includes special time-limited in-game events related to the partnering brand, but also to give exclusivity and urgency to the collaborative products. Exclusivity feeds into the customer values, and having urgency for the product makes the product seem more desirable to the players. Players who might not have been interested might change their mind if they feel like this opportunity would not come again, and are worried they would regret not purchasing it now. The unique design also adds scarcity, as it would be an uncommon, distinct design within the game and hard to get again once they missed the opportunity. Scarcity creates urgency, and urgency will result in more sales.

- Fourth, satisfaction. Combining the above attributes, satisfaction embodies how having collaborative products can increase the player's overall game experience, even though it might not have any significant meaning to the game system. As seen in the interviews, players noted how using the collaborative items in-game improves their mood and enjoyment while playing the game, even if the product's use is only a decorative aspect of the game and does not influence the gameplay system. Therefore, the product must have a satisfaction element to it.

- Fifth, individuality. From the heterogeneous brand collaborations that we analyzed, they all share a common trait of offering a unique design that is distinct from the majority of their in-game item roster, based on the contrasting visual brand identity of the partnering brand for players to use. This gives players who might not feel represented by the game's predominant aesthetic a chance to feel like they could express themselves more accurately with the distinct, unique designs. This pushes both the individuality of the players and the characters featured in the collaboration.

- Sixth, character. This goes hand-in-hand with individuality, but not only does heterogeneous brand collaboration give character to the players who bought the product and the game characters featured in the collaboration event, but it also gives character to the brands involved in the collaboration. For example, someone who likes cute things and was not interested in Mobile Legends because of its dark fantasy aesthetic might change their mind when they see the quality and design of the Sanrio collaboration skins. This changes how people see Mobile Legends, whereas it might seem too tense and dark to play for some people, this image gets balanced by the Sanrio collaboration, because Sanrio's brand identity is universally seen as very cute and charming, thus giving a deeper character to Mobile Legends' brand identity and image. This will also increase brand awareness among potential players.
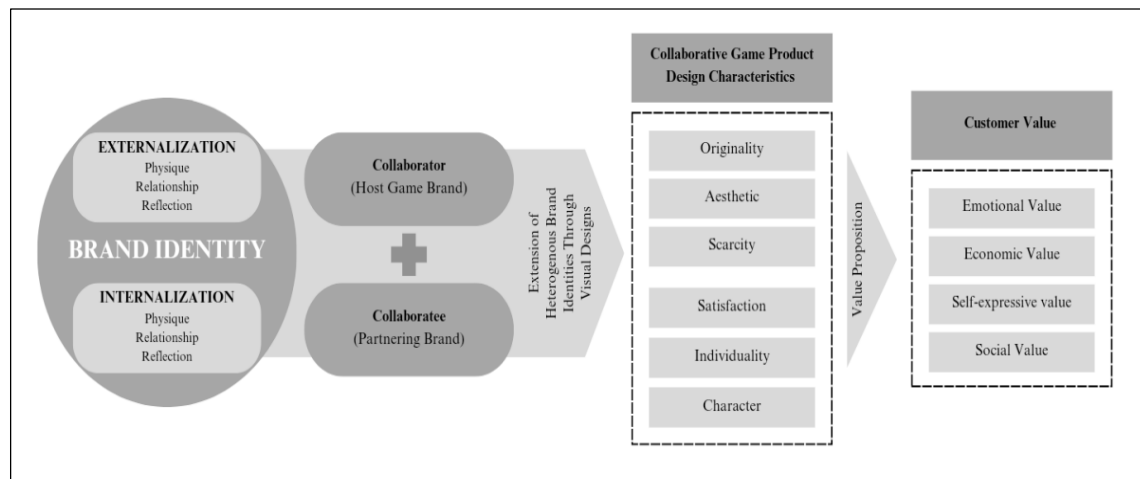
Fig. 7. Framework Made Based on The Analysis Results of The Case Study

As for the customer value, this section represents what the collaborative products can offer to the players, which consists of emotional value, economic value, self-expressive value, and social value. Emotional value embodies how the collaborative products might fulfill the player's emotional needs. While this is possible through the case study analysis as seen in previous studies [24], this study makes use of direct opinions from the target consumer through interviews, as it adds further insight into the values these collaborations offer to the players. From the interview, we have seen how owning the items in the game improves the player's mood when they are actively playing in the game. The pride, pleasure, and joy of owning a product that you love. These types of emotional fulfillment are what this value means to the customers. Economic value is shaped by having brand identity elements from other well-known and loved brands on the designs, increasing their market value and scarcity through the exclusivity and luxury offered in these collaborations. And then, we consider the self-expression value. The contrasting aesthetic of the partnering brand's identity extends to the designs featured in the collaboration event, producing a unique style unseen in the game's usual item roster. The unique individuality and character in the collaborative products give a chance for players to fully express their style, even if the predominant aesthetic in the game does not fit their personal style. And last, we examine the social value of the collaborative products. Owning exclusive items and using them during the game leaves an impression on other players, improving the player's social value. This social impression could mirror how the player wants to express themselves, for example, being seen as "cool" or "elegant" depending on which item they own, and their attitude relating to the game. For example, a lot of players will assume that players who own exclusive items are serious players, improving the societal value of the collaborative products. The value these products offer to the customers or players is in line with similar studies [24]. These characteristics will assist designers in identifying key aspects to focus on throughout the development of the collaborative product.

4. Conclusion

This study seeks to broaden the subject of visual element analysis in collaborative designs by focusing on the entertainment industry, specifically the mobile gaming sector. It examines how leading mobile games integrate heterogeneous visual brand identities from partner brands into their design elements and investigates the reasons these designs achieve their intended impact, as an example for design students and other brands. The results of the analysis showed that the characteristic of heterogeneous mobile games consists of the general existing collaboration characteristics (Originality, Aesthetic, Scarcity), but also have some additional characteristics (Satisfaction, Individuality, Character). These characteristics will be the key aspect for designers to make a successful collaborative product, because while aesthetics and distinct visual elements are important, they also must keep in mind and understand the customer's needs and motivations, and convey them properly in the designs to truly make a great product. The customer value was also analyzed, and it shows how heterogenous mobile game collaborations provides emotional, economic, self-expression and also social value to the players unique to heterogenous brand identity extensions, as these collaborations create designs that are distinct from the host game's usual aesthetic by taking advantage

of the contrasting visual identities and incorporating them into the product designs in a smart and appealing way. This unique value could be utilized in future collaborations to offer a fresh look at all kinds of mobile games, further growing the quality of designs in mobile games and mobile game collaborations. This study is a limited case study analysis of three cases within the mobile gaming industry and might not extend to the general heterogeneous brand alliances. The interviews with players are also limited and might not speak for the entire community. Therefore, it would be interesting if future research could offer deeper insight by interviewing designers and a larger number of customers. Finally, in future research, in-depth design analyses of individual collaborative items could also be conducted, in contrast to the general analysis of this study.

Acknowledgment

Declarations

Author contribution	:	NPA, concept and writing; YR, guidance and review; WS, review and proofread.
Funding statement	:	This work was supported by the Researchship branch of the "Merdeka Belajar Kampus Merdeka" program by the Ministry of Education, Culture, Research, and Technology, at Telkom University.
Conflict of interest	:	The authors declare no conflict of interest.
Additional information	:	No additional information is available for this paper.

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