



EDUTECH

Jurnal Teknologi Pendidikan

Journal homepage <https://ejournal.upi.edu/index.php/edutech>

EduTech
EduTech
JURNAL TEKNOLOGI PENDIDIKAN

Applicating Sensemaking Framework Method In Exploration Of Colorway For Designer Toys: Mirffu

Fauzi Arif Adhika dan Intan Suci Lestari

Visual Communication Design, School of Design, BINUS University, Bandung, Indonesia

Fauzi.arif@binus.ac.id, Intan.suci@binus.ac.id

ABSTRACT

This research examines the use of various colorways by toy designers to develop new lines while keeping the same product form. This approach aims to increase consumer appeal by offering a variety of color choices while reducing production costs. This study explores how toy designers use colorway strategies to adapt (characteristics) popular characters. These strategies are analyzed using the sensemaking framework method by Dincer to understand their impact on marketing and consumer interest. The research results show that using (thematic) coloring variations not only increases productivity but also broadens the market appeal of designer toys, highlighting the significant role of color in design and marketing.

ABSTRAK

Penelitian ini menelaah penggunaan berbagai colorway oleh designer toys dalam upaya mengembangkan lini baru dengan tetap mempertahankan bentuk produk yang sama. Pendekatan ini bertujuan untuk meningkatkan daya tarik konsumen dengan menawarkan berbagai pilihan warna sekaligus dapat mengurangi biaya produksi. Studi ini menggali bagaimana designer toys menggunakan colorway strategies untuk mengadaptasi (ciri khas) karakter populer, merespons acara yang bersifat tematik, hingga menggunakan material pewarnaan khusus. Strategi-strategi ini dianalisis dengan metode sensemaking framework oleh Dincer untuk memahami dampaknya terhadap pemasaran dan minat konsumen. Hasil penelitian menunjukkan bahwa penerapan

ARTICLE INFO

Article History:

Submitted/Received 05 Agst 2024

First Revised 25 Agst 2024

Accepted 10 Sept 2024

First Available online 01 Okt 2024

Publication Date 3 Okt 2024

Keyword:

Colorway, designer toys, sensemaking framework, Colorway, Designer Toys, Sensemaking Framework

variasi pewarnaan (tematik tersebut) tidak hanya meningkatkan produktivitas tetapi juga memperluas daya tarik pasar designer toys, menyoroti pentingnya peran warna dalam desain dan pemasaran.

© 2024 Teknologi Pendidikan UPI

1. PENDAHULUAN

Designer toys are a type of toy that is produced on a limited basis (ranging from 10 to 200 pieces) and created based on illustration concepts from artists and designers (Priyantoro, 2018). These toys, which are the creations of a product designer, artist, or graphic designer, display real aesthetic beliefs and sometimes unique stories of the designer. These three-dimensional sculptures are usually produced from wood and surface materials made from vinyl or resin (Atilgan, 2014). The designer toy industry has proliferated in the last few decades, with the emergence of a variety of characters and designs that have captured the attention of collectors and fans around the world. So, toy companies always try to develop new and innovative toys (Mahanta, 2023). In some ways, this industry changed and updated the realm of character design and encouraged consumers to become collectors, creating a connection between the fields of marketing and art (Atilgan, 2014). Designers turn the characters they design into three-dimensional shapes, reproduce them, and then sell them. Thus, this profession not only shows their artistic side and craftsmanship, but they must also position themselves as consumers who like to collect the designer's work (Atilgan, 2014).

Most innovative designer toy products are developed based on an unmet market need, a solution to a problem, or an opportunity to improve the consumer experience. In general, most time and attention spent on the function and style of a product and selecting the right colors will make the product easy to sell and lead to the product being commercially successful (Becker, 2016).

Every designer, artist, and marketer ultimately have their own colorway palette for their products, which sometimes has nothing to do with a trend (Becker, 2016). In certain cases, some specific colors cannot be used due to the instability of the dye type. In other cases, the color of a product experiences a chroma change even though it is the same hue. A product designer is sometimes asked to find a lower-cost alternative to a product that is popular (Becker, 2016). Likewise, in the designer toy industry, coloring in products is an integral part of a marketing strategy because it can influence consumer behavior and belief, their moods, and emotions, and help a company in positioning and differentiating from competitors (Rathee & Rajain, 2019).

This research aims to explore the impact of using colorway strategies in the designer toys industry, especially how this strategy influences marketing and consumer interest. It is hoped that the research results will offer in-depth insight into the importance of color in design and marketing in the designer toys industry, as well as find best practices that can be implemented by designers to increase production efficiency and the appeal of their products.

2. METODE

By using the sensemaking framework method, this study will analyze various aspects of colorway strategies, including adaptations of popular characters. Marketing environment & competitiveness analysis can be explored by adopting a sensemaking perspective at the organizational level. This study presents a sensemaking framework with three different steps for evaluating market innovation. The stages covered are discovery, sensemaking, and prediction. In this context, a sense maker carries out a thorough assessment of the market and tries to gather the necessary information to achieve a comprehensive understanding of the market structure (Dinçer & Yüksel, 2021).

To dissect the sensemaking framework method in the work of a toy designer, the author conducted an in-depth interview with an Indonesian toy designer, Mirffu.

Furthermore, the author also made observations on the products produced by Mirffu to analyze the relationship between the sensemaking framework and colorway.

Business actors often reuse existing resources for new functions. This practice converts old and unused resources into new materials with improved quality and/or higher value (Ramirez-Pasillas et al., 2020). Designing toys is a professional endeavor that requires substantial commitment and ability. The choice of color for a particular game or toy is decided by the purpose and proposed age group. Color can also be used to increase the visibility and quality of objects that attract attention (Bleicher, 2023).

Color choices can enhance or even ruin a design. Several earlier studies have shown that color can be a major determinant when consumers choose and buy products. It functions as a magnet, attracting attention, and can be used to present a point of interest. Color trends are always dynamic and constantly changing. Designers should regularly update their colorways to match market demand, and all items should be developed with color in mind carefully. As general consumers have become more knowledgeable about design and color, designers must continue to innovate to make their work distinctive and attention-grabbing (Bleicher, 2023). Oftentimes, innovation arises when someone has an awareness of market movements or current trends. To survive, every company must show innovation. Sometimes, this encouragement arises from company owners who continually develop innovative ideas that have never been thought of before (Tennant, 2022).

3. HASIL DAN PEMBAHASAN

Dinçer & Yüksel (2021) divide three stages in the sensemaking framework method;
Discovery Stage

The Discovery stage in consumer research involves four primary areas of research: (i) Identifying consumer attributes through market segmentation (ii) Evaluating consumers' overall attitudes towards certain attitudes, (iii) Exploring consumers' overall reactions in a particular market context, and (iv) Setting standards or norms for consumer reactions and finding anomalies in these patterns.

Sensemaking Stage

The sensemaking stage is usually eased by data mining techniques and various approaches such as sentiment and network analysis which help in making comprehensive observations. Sentiment analysis: Given that today's market environment is digital and text-based content is a key part of the content created, evaluating text content is essential for making marketing decisions. The first phase of the framework allows companies to evaluate the overall market response to their products. However, the identification of positive or negative polarity and understanding of various consumer moods are related to sentiment analysis. For example, the number of shares on a social media post promoting a film's debut can serve as an indicator for companies in the entertainment industry. Additionally, there were other tweets expressing feelings such as "I enjoyed the movie, but...", "I ignored the main actor in the movie," and "I liked the opening scene." Emphasized words show the underlying emotions conveyed in the text, and analyzing this data can yield percentages of positive/neutral/negative responses and different feelings such as love/hate towards the film.

Network analysis is a field of study closely related to social network theory in the social sciences. It is used to visually stand for a network's structure, which includes the individuals or entities involved in a particular setting. Krause, Croft, and James (2007) in

Dinçer & Yüksel (2021) argue that networks visually stand for connections between individuals and their relationships in a community. In addition, they suggest that an individual's network position is also significant.

To illustrate, the micro dialogue involving brands, industry influencers, and consumers can be described as follows: The central actor is the trademark itself, the influencer actor stands for the brand (either directly or indirectly), and the individual actor stands for the market for the brand. In this network setting, relationships can be described as behavior in which actors retweet each other. There is a source, which is the actor who originally tweeted, and a distribution actor, who retweets the main tweet. In this microenvironment, multiple network structures can appear from different activities carried out by actors. Meanwhile, the macro environment, consisting of many actors and relationships, can produce diverse societal structures and influential individuals.

Prediction Stage

The final stage of the framework is related to the data mining stage to predict future market behavior and is related to the strategic aspects of decision-making.

Data mining approaches can help businesses understand the complexity of the market environment. For example, negative mobile user reviews can be analyzed and studied using sentiment analysis and text mining techniques to find their features. These characteristics use existing attributes of the material and set up a framework for categorizing groups or categories related to the review. This formula incorporates key criteria for categorization, such as the number of words in the review text, which can serve as an indicator of review polarity. Negative comments tend to be longer, while positive ones are usually shorter. Based on this basic example, integrating many features and large datasets will improve the accuracy of categorizing reviews. The next "unknown" data for a company can be predicted through the process of mining prior knowledge (Dinçer & Yüksel, 2021).

As explained by Priyantoro (2018), the production of designer toys is usually limited to around 10 to 200 pieces. Apart from that, designer toys are not toy products that can be played with and are "art and design-related toys" that are stored and displayed (Heljakka, 2019). Mirffu in developing its toy products divides the product quantity into several colorways to produce a limited release (5-10 pieces for 1 colorway edition). This is done to prevent major risks that are closely related to production costs and time efficiency because designer toy production is not made in mass. Dividing production quantities into several colorways has become a common thing to do even though at first it was efficient in adapting. This condition then creates a scarcity effect culture in the toy designer community and attracts the attention of distinct types of collectors. In conclusion, there are three types of collectors in the designer toys community:

- collectors who like different shapes or characters but with similar colorways (Type A)
- collectors who like the same shape or character in various colorways (Type B)
- collectors who buy based on accidental preferences (Type C)

Before deciding the colorway, Mirffu makes observations whether responding to events that will be held, color trends, or even adapting existing pop culture, and of course, making observations of the target audience. Adapting or being inspired by pop culture makes toy products fan art. An explanation of the bricolage method by (Lynch, 2021) can define the method used by Mirffu in his work, as 'doing what is easy to do'. In this research, the author tries to map Mirffu's observation process in searching for colorways as an efficient innovation.

In this research, the author applies the sensemaking framework method to 3 designer toy products by Mirffu with a structured discussion through the stages of discovery, sensemaking, and prediction. The 3 designer toy products that will be discussed are Yo Face (original), Polkaface, and McYoFace.

Sensemaking Framework Yo Face

Table 1. Discovery Stage of Yo Face (original)

Market segmentation	Attitude Evaluation	Reaction Exploration	Standard & Anomalous Reactions
Type B and C Collectors Young adults - adults who love popular culture, toy collectors, collect attributes of popular icons	Studio Ghibli's fanbase in Indonesia increased when Netflix rebroadcast Ghibli films. So, the character Kaonashi in 'Spirited Away', where he was introduced, became iconic.	Enthusiasm in taking part in popularizing Kaonashi, as well as the desire to own merchandise related to this icon, is remarkably high.	Various fan interpretations of Kaonashi, sales of fanart merchandise, and cosplay with Kaonashi masks are often found at various anime and toy events in Indonesia.

Discussion (1) starts with Yo Face (original), which is an early edition of the creation of the Yo Face character which was then developed into combining the character with other popular icons. The discovery stage was created using tables to help market segmentation categorization, attitude evaluation, reaction exploration, standard reactions, and anomalies to see the background of the first observations made.

In developing the Yo Face character, a network analysis approach was carried out in the sensemaking stage to look for connections or relationships in observations through social media as the author explains in Table 2

Table 2. Sensemaking Stage of YoFace

<i>Network Analysis</i>	
@netflixid, actor center	Announcing the release of a Ghibli film on Instagram, received enthusiasm from followers through reposts, likes, and comments. Spirited Away, one of Ghibli's popular films, received a lot of responses in the comment column.
@kincirdotcom, actor influencer	film information portal on Instagram announced its enthusiasm when Netflix screened Ghibli films, followed by comments and likes from followers.

At the prediction stage, it can be concluded that 'Spirited Away' has a large fan base, especially thanks to the iconic character Kaonashi (No-Face in the English version). Kaonashi's interpretation to add to the list of characters in FFU Space is a good market opportunity, becoming the basis for Yo Face's character design. Mirffu then mapped out

the colorway for the Yo Face (original) character based on these things and adapted Kaonashi's facial parts into the product to be made as in Table 3.

Table 3. Prediction Stage of Yo Face

Kaonashi character	Adapted visual	colorway
		

After passing the prediction stage, the Yo Face character is produced as in Figure 1. This Yo Face product is sold out and has been reproduced in 3 batches. The success of the Yo Face character in the designer toy community market has given birth to other adapted characters such as Polkaface and McYoface.



Figure 1. Yo Face character

Sensemaking Framework of Polkaface

Table 4. Discovery Stage of Polkaface

Market segmentation	Attitude Evaluation	Reaction Exploration	Standard & Anomalous Reactions
Type A and C Collectors Young adults - adults who like	The Macan Museum held the exhibition of Yayoi Kusama: Life is the Heart of a Rainbow, and the	Several influencers posted on Instagram about Yayoi Kusama's exhibition at the Tiger Museum in 2018, which	The spike in likes & comments when Yayoi Kusama's poster was

contemporary art, are active users of social media, responsive to popular culture, and visit museums for selfies.	public response was positive.	was then followed by reposts by followers	published on Instagram @museummacan
---	-------------------------------	---	-------------------------------------

The successful sales of Yo Face character have opened opportunities for other characters with the same character but in different editions. Polkaface character was created and developed based on the results of the discovery stage by seeing market segmentation interests. Mirffu chose to make observations on the popularity of Yayoi Kusama's work in Indonesia which is present through the work that shown at Macan Museum. The discovery stage of Polkaface character development is mapped in Table 4.

Table 5. Sensemaking Stage of Polkaface

Sentiment Analysis	
Average in 20 posts before Yayoi Kusama's publication on Instagram @museummacan:	Likes: 1,132.35 Comments: 30.2
At the time of Yayoi Kusama's publication:	Likes: 6050 (up 534%) Comments: 459 (up 1,519%)
#kusamaxmacan reached 5,681, showing high public enthusiasm compared to the earlier exhibitions First Sight (435 posts) and Art Turns World Turns (2,235 posts)	

In the Sensemaking stage, the sentiment analysis type is produced from observations of Yayoi Kusama's works exhibited at Macan Museum and shows enthusiasm and interest in the community as in the results summarized in Table 5 which shows engagement on Macan Museum's Instagram before and after the publication of the work.

In the Prediction stage, the 'Pumpkin's Love' sculpture and black polka dot motif on a yellow background became Yayoi Kusama's most popular objects. These works can be a colorway representation of welcoming enthusiasm for Yayoi Kusama and can inspire the design of the Mirffu version of the colorway which can be seen in Table 6.

Table 6. Prediction Stage of Polkaface

Pumpkin's Love artwork	Adapted visual	colorway
------------------------	----------------	----------



The character with the name Polkaface was then presented as shown in Figure 2, after going through the development process, in the form it was still the same as the Yoface character with a colorway edition inspired by Yayoi Kusama's Pumpkin's Love.



Figure 2. Polkaface character

Sensemaking framework of Mcyoface

Table 4. Discovery Stage of McYoface

Market segmentation	Attitude Evaluation	Reaction Exploration	Standard & Anomalous Reactions
Type A and B Collectors Young adults - adults who love popular culture, toy collectors, collect attributes of popular icons	Loyal to a particular icon, they tend to buy products related to that icon, even if it is not an official release.	Will be very enthusiastic and have a fervent desire to have toys that are relevant to the icons they collect.	He likes posting the latest toy collections on his Instagram but will be more sentimental if he gets toys related to the icons he collects.




The last edition presented of the Yoface character analysed in this research is McYoface character. Just like the earlier two characters, to develop the character design the author mapped out the creation process using the sensemaking framework method.

Table 8. Sensemaking Stage of YoFace

<i>Network Analysis</i>	
@jonathantunas, actor influencer	Collector of the icon Ronald McDonald made a private commission to Silvia Tampi, a toy designer to create custom FattyBones toys with a Ronald McDonald theme
@yakouburotedjo, actor influencer	a toy photographer, actively looking for various color variants of Ronald McDonald to then photograph and share on his personal Instagram

The sensemaking stage for McYoface character was carried out by network analysis in the Designer Toys community. The author divides the two chronologies in the network analysis of two influencer actors in the Designer Toys community in Table 8. The two influencers shared their costume toy posts with the Ronald McDonald theme which attracted the interest of followers and received a positive response in the Designer Toys community.

Table 9. Prediction Stage of McYoface

Ronald McDonald character	Adapted visual	<i>colorway</i>
		

From Ronald McDonald's character in the table 9, Mirffu concludes that the colorway that will be used adapts the hair shape as well as the visuals of the popular McDonald's product, namely French fries. Designing an interpretation of the Ronald McDonald icon is not only aimed at targeting loyal collectors but also general consumers. Because this icon is already very well known, it is estimated that it will easily attract market attention.



Figure 3. McYoface Character

McYoface character is slightly different from the Yoface (original) and Polkaface characters. As can be seen in Figure 3, McYoface's body anatomy is the same as the two previous characters but with added hair and French fries on his hands.

4. SIMPULAN

The application of the sensemaking framework method can be used by toy designers to map out comprehensive observation stages starting from deciding the target audience, and limiting the scope of searching for references that are closely related to adapting popular characters. So, you can then decide the colourway and even the visuals to adapt. This proves Ramirez's opinion that the practice of converting old and unused resources into new materials and Bleicher's opinion about colour can be the main determinant when consumers choose and buy products that are worth considering.

Colourways, which involve applying diverse colour combinations to a solitary product design, have gained significant popularity across a variety of industries, including designer toys. This strategy reinvigorates the product's appeal without incurring significant costs for redesign. Colourways in the field of designer toys offer real benefits, namely, Emulation of Famous Characters where designers can attract the interest of fans and collectors with these themes by using colour schemes that draw inspiration from famous characters.

This research reveals several important insights:

1. Productivity: The use of different colourways helps shape and design optimization, resulting in reduced production costs.
2. Market appeal: By providing a wide choice of colourways, products cater to a variety of consumer preferences, increasing their appeal to a wider range of consumers.

3. brand loyalty and engagement: special edition colourways and partnerships with well-known brands or artists can increase brand loyalty and increase consumer engagement.

5. PERNYATAAN PENULIS

Penulis menyatakan bahwa tidak terdapat konflik kepentingan terkait penerbitan artikel ini. Penulis menegaskan bahwa naskah artikel bebas dari plagiarisme.

6. REFERENSI

- Atilgan, N. Ş. (2014). Designer Activity through Open Source Knowledge: Designer Toys Movement. *Procedia - Social and Behavioral Sciences*, 122, 35–39. <https://doi.org/10.1016/j.sbspro.2014.01.1299>
- Becker, D. (2016). *Color Trends and Selection for Product Design: Every Color Sells a Story*. William Andrew.
- Bleicher, S. (2023). *Contemporary Color: Theory and Used 3rd Edition*. Cengage Learning.
- Dinçer, H., & Yüksel, S. (2021). *Strategic Outlook in Business and Finance Innovation: Multidimensional Policies for Emerging Economies*. Emerald Publishing.
- Heljakka, K. (2019). *Toys and Universal Guidelines for Design: A Designerly Perspective on Playability of Character Toys*.
- Lynch, R. (2021). *Strategic Management*. 9th Edition. Sage Publication Inc.
- Mahanta, A. (2023, June 14). *The Toy Industry: A Fast Fashion Problem?* Medium.Com.
- Priyantoro, E. (2018). *Desainer Toys sebagai Identitas Gaya Hidup Urban*.
- Ramirez-Pasillas, M., Ratten, V., & Lundberg, H. (2020). *Social Innovation of New Ventures, Achieving Social Inclusion and Sustainability in Emerging Economies and Developing Countries*. Routledge.
- Rathee, R., & Rajain, P. (2019). *Role Colour Plays in Influencing Consumer Behaviour*.
- Tennant, D. D. (2022). *Product Development An Engineer's Guide to Business Considerations, Real-World Product Testing, and Launch*. Wiley.