

Color Representation in Promotional Design on Indonesian E-commerce Website Interface

Lisa Odillia

Faculty of Computers and Design, Selamat Sri University, Indonesia
Corresponding email: lisaodillia99@gmail.com

Abstract:

E-commerce is an effective channel for buying and selling goods and services via the internet. E-commerce can generally be accessed via smartphones and websites. As a visual product, the use of unaesthetic colors will affect the visual appearance of a website. In addition, the design features displayed must also be in accordance with the company's identity. Promotional banners are one of the features that are always updated (updated) in visual appearance, which of course must also be adjusted to the company's identity. Therefore, promotional media in the form of banners is used as an object of analysis to find out whether the colors in the promotional banner design represent the company's identity. This analysis in its elaboration uses the theory of color psychology which is then related to the company profile. The results of the analysis show that there is a match between the color of the banner design and the company profile.

Keywords:

E-commerce, color theory, corporate identity

JEL: C90, C93, C99

INTRODUCTION

In the midst of intense business competition, E-commerce comes with promising potential as a space for business people to reach a wider market. Supported by the development of digital technology, E-commerce has become an effective channel for buying and selling products without being hindered by space and time.

The definition of E-commerce according to Adi Nugroho, is a way to sell and buy goods and services via the internet network (Nugroho in Rehatalanit, 2016). Research results from the Association of Internet Service Providers (APJII), released in November 2020, noted that the main reason consumers chose to shop for necessities online was 15% because prices were cheaper and 23.5% because it could be done anywhere, was fast and practical. In addition to navigation which facilitates consumer buying activities, color also plays a very important role in influencing consumer perceptions (Annur, 2020). Kissmetrics states that 93% of consumers choose visual appearance as the main reason consumers buy a product.

Basically, humans are visual creatures. 90% of the information sent to the brain is visual data, because it stimulates the brain 60,000 times faster than other types (Wulandari, 2021). In addition to websites, Kissmetric also concluded that 52% of shoppers would not return to a website due to poor overall aesthetics. As part of a website, E-commerce must of course improve its UX and UI..

In the law of UX and UI design, good navigation without good visuals will not be a good product and vice versa. The use of unaesthetic colors will affect the visual appearance of a website. Therefore, an E-commerce website must of course display an interface that is comfortable in the eyes of consumers by applying the right color psychology because color psychology has a real impact on human emotions. In its application, visual communication through color also provides brand identity, logo and motivation as a chain link between producers and consumers.

Color is the main way consumers recognize brands. Quoted from E-commercenation.com, this website writes that deep colors can increase 80% brand recognition among consumers. That is, the color is significantly very influential on consumer emotions.

The influence of color on emotions and behavior is causing more and more designers to look to color psychology to help them create websites. Thus, the role of color can become an identity for a company to show its vision and mission to the target audience. Color helps maximize E-commerce website design, so it can help put consumers in a frame of mind that compels consumers to take action immediately. Color has the power to enhance a company's image by capturing the attention of consumers and triggering emotions that can increase sales.

In this analysis, we will examine how a color in E-commerce visual design represents corporate identity. The method used in this study is qualitative using a color theory approach. The population in this study are all promotional banners on Indonesian e-commerce sites, namely Tokopedia, Shopee, Lazada. The decision to select E-commerce was based on the results of the Top Brand Indonesia survey displayed on the website www.topbrand-award.com. While the samples taken were 2 promotional banners that appeared on the main page of each E-commerce. Color identifiers use the Colormeter application purchased through the Play Store. Next will be an analysis using the theory of color psychology.

TOP BRAND INDEX FASE 2 2022		
SITUS JUAL BELI ONLINE		
BRAND	TBI 2022	
Shopee.co.id	43.7%	TOP
Tokopedia.com	14.9%	TOP
Lazada.co.id	14.7%	TOP
Blibli.com	10.1%	
Bukalapak.com	8.1%	
* Kategori online dan offline		

Figure 1: Indonesia's Top E-commerce Brands

Source: www.topbrand-award.com

RESULTS AND DISCUSSION

In the context of this advertisement, the sign at the first level or also called the denotation, is a solution to mediate the problem between tradition and disease. The meaning of a sign at the first level is a solution or procedure for dealing with a certain condition. The meaning of the sign at the second level is called a myth, namely a sign that refers to or interprets something other than the meaning of the first level. Myth creates a new object (social meaning) which is based on a certain dominant ideology of the sign maker. In the context of this advertisement, the myth that lies at the second level is branding.

1. Tokopedia

Tokopedia.com is one of the largest digital-based buying and selling companies in Indonesia. Tokopedia carries a marketplace and online mall business model. Tokopedia was officially launched to the public on February 6, 2009. Tokopedia's vision is to build a better Indonesia, through the internet, while its mission is to provide opportunities for every individual in Indonesia.

The values adopted in his business are always standing on the ground (humble) like a tree, never giving up (determination) like the flow of water, passion (passion) that burns like fire, speed (speed) like the wind and courage (courage) to dream of reaching the sky.

a. Tokopedia Banner Color Analysis

The analysis was carried out by identifying the colors found on the two Tokopedia promotional banners which were downloaded from the official Tokopedia website. Identification results as follows:



Figure 2. Tokopedia banners 1

Source: Tokopedia

Table 1: Identification of Tokopedia Banner Colors

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Black	0,0	2,1	-42,0	42,08	218.2	0	12	33
Midnight Blue	0,0	-0,1	-40,5	40,53	210.0	6	22	38
Dark Green	25,5	-21,7	29,5	36,61	90.0	39	68	10
Olive	48,4	-34,3	52,5	62,72	83.0	79	128	0
Olive Drab	55,5	-30,3	57,9	65,38	75.9	108	145	5
Olive	51,6	-33,5	54,9	64,32	80.6	90	136	2
Forest Green	47,1	-40,4	46,4	61,49	99.1	58	127	21
Midnight Blue	0,0	0,6	-40,2	40,25	213.1	9	22	38
Olive	45,6	-8,2	50,9	51,58	56.3	117	110	3
Yellow Green	75,1	-33,6	73,1	80,44	72.6	161	199	18
White Smoke	94,9	-4,3	-0,4	4,33	170.0	231	243	241



Figure 3. Tokopedia Banners 2

Source: Tokopedia

Table 2: Tokopedia Banner Color Identification 2

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Black	0,0	-0,6	-1,6	1,71	205.7	6	10	13
Silver	78,8	-7,6	7,0	10,31	105.9	186	199	182
Silver	82,8	-3,9	6,5	7,53	77.1	204	208	194
Dark Gray	75,6	-4,1	7,1	8,20	76.0	184	188	173
Navajo White	92,6	-2,5	37,7	37,82	46.0	255	233	161
Sandy Brown	81,0	12,5	66,6	67,78	38.9	255	190	70
Dark Chocolate	9,4	-3,4	39,0	39,19	57.3	28	27	6
Black	0,0	2,3	-38,7	38,76	223.6	9	15	31

b. Tokopedia Banner Color Representation

In presenting colors sourced from digital sources such as websites, color models are used in the form of numbers. These color models are the RGB, CMYK, HSB and CIE-XYZ color models.

From the results of this identification, 11 colors were found that were different from banner 1 and 8 colors in banner color 2. In banner 1, the majority of colors used were colors in the green category, namely in the olive table. Whereas in banner 2, the majority of the colors used in the promotional design are gray.

Green (Green) is the main color that hints at our primitive relationship with the first creation of the natural world. Considered the main color representing purity, health and freshness. Green is traditionally associated with brands that promote growth, vitality and productivity, and is gentle, refreshing and relaxing. In addition, green also represents connection, namely our relationship with humans, nature and others (Colorpsychology.org)

In this case green is combined with yellow gold (Gold) and dark blue (Midnight Blue). From a psychological point of view, yellow is a color that stands out, seen but not noticed. Yellow is not associated with any particular emotion and does not trigger strong reactions in people. But yellow is able to activate the activity of the left side of the brain, which represents analytic thinking and reasoning.

While the use of blue, from a psychological point of view, represents serenity above intensity or passion. Blue can also be described as wisdom and serenity. Blue represents inner reflection.

Whereas in the Tokopedia 2 banner, the use of gray from a psychological point of view is a color that can evoke emotions. Gray expresses a detached attitude or a fear of moving too much towards extremes. Impartial, neutral and emotionless.

Based on the description above, it can be concluded that the colors of the Tokopedia promotional banner represent a business with business growth that prioritizes vitality and productivity at work, creates business strategies based on analytical thinking and logical reasoning, runs a business with calm above intensity or passion, and uphold the value of wisdom and be impartial or neutral.

Table 3. Tokopedia Vision and Mission and Banner Representation Results

Tokopedia Vision and Mission	Banner Representation Results
Tokopedia's vision is to build a better Indonesia, through the internet, while its mission is to provide opportunities for every individual in Indonesia. The values adopted in his business are always standing on the ground (humble) like a tree, never giving up (determination) like the flow of water, passion (passion) that burns like fire, speed like the wind and courage to dream of reaching the sky.	Business growth that prioritizes vitality and productivity at work, creates business strategies based on analytical thinking and logical reasoning, runs a business with calm serenity above intensity or passion, and upholds the values of wisdom and impartiality or neutrality.

2. Shopee

Shopee is an online marketplace application for buying and selling on cellphones easily and quickly. Shopee is a subsidiary of Sea Group which was launched in 2015. Shopee's vision is to become the number 1 mobile marketplace in Indonesia while its mission is to develop an entrepreneurial spirit for sellers in Indonesia.



Figure 4. Shopee banners 1

Source: Shopee

Table 4: Identification of Shopee Banner Colors 1

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Teal	41,4	9,0	-51,0	51,79	208.0	2	98	182
Midnight Blue	11,1	5,9	-24,4	25,05	215.2	5	29	63
Cadet Blue	66,5	-33,9	-0,3	33,95	170.1	75	178	161
Saddle Brown	34,8	40,3	74,4	84,63	19.5	148	48	0
Dark Golden Rod	61,3	7,3	65,6	66,03	45.0	187	141	3
Black	0,0	-2,3	-2,2	3,16	192.0	11	19	21
Cloudy Brown	65,6	9,0	-0,8	9,00	340.0	175	154	161
Chambray Blue	41,2	-9,7	-17,9	20,38	198.9	53	103	126
Wine Red	21,6	37,3	60,0	70,63	9.7	105	17	0
Navajo White	88,4	3,6	42,2	42,40	40.0	255	217	141
Dark Red	31,3	37,3	70,9	80,15	19.3	134	43	0
Nobel Grey	67,9	-5,3	3,4	6,28	126.0	158	168	159
Peru	64,5	32,9	50,4	60,22	23.8	230	131	66
Yellowish Brown	79,9	-9,1	39,7	40,71	55.7	207	201	123



Figure 5. Shopee banners 2

Source: Shopee

Table 5. Identification of Shopee Banner Colors 2

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Davy's Grey	60,4	-22,3	13,6	26,16	132.3	112	156	121
Light Slate Gray	56,1	4,4	-14,8	15,50	232.3	129	133	160
Linen	94,9	-1,4	3,8	4,09	60.0	241	241	233
Gold Orange	59,7	36,8	49,2	61,45	21.3	220	115	57
Ship Cove Blue	63,5	-0,7	-12,7	12,73	215.0	140	155	176
Dark Gray	73,0	-11,3	5,4	12,54	140.0	161	185	169
Light Slate Gray	54,5	2,4	-24,9	25,00	218.8	108	131	173
Dark Golden Rod	49,5	36,4	57,9	68,38	27.7	189	89	3
Cadmium Orange	54,4	41,0	63,3	75,41	27.6	211	97	0
Saddle Brown	47,0	43,8	52,5	68,40	19.9	190	75	18
Black	0,0	2,4	0,8	2,50	0.0	9	0	0

Shopee Banner Color Representation

From the identification results, 14 colors were found on the Shopee banner 1 and 14 colors on the Shopee banner 2. On banner 1, the majority of the design colors used were Turquoise, namely in the Cadet Blue and Orange tables. Whereas in banner 2 the majority of the colors used are Periwinkle, namely in the Slate Gray table.

Turquoise is the language used for Caribbean waters. The reason for this is because the waters are nice, bright and striking, the colors are between blue and green and are often included in the shades of yellow which give the meaning of turquoise which is a toska opaque mineral (Colorpsychology.org).

The hue that emerges from this color is a striking blend of green and blue that evokes a feeling of peace and balance. The use of light blue color represents healing between thoughts and feelings thus leading to a balanced life. This color is associated with introspection. In addition, colors can promote focus on needs, thoughts, and feelings. While the color Orange, represents brightness and persuasiveness because of the combination of yellow and red.

Orange is a powerful color that increases motivation and encourages people to freely lift their personal boundaries. Orange is associated with taking action, wanting to create new relationships, seeking challenges, and being adventurous in taking care of yourself. Apart from that, this color is also associated with confidence, sociability, enthusiasm and new beginnings. For companies, the use of orange tends to lead to growth through group work and employee collaboration ((Colorpsychology.org))

Periwinkle represents a soft and light color. This color is one of the softest blues. Periwinkle consists of a combination of purple and blue and white to form pastel colors. This color represents a number of meanings which permeate the whole concept of memory like attracting good memories of the past. Periwinkle is associated with sentimentality so it can inspire friendship, affection, fond memories and celebrations of friendship.

Based on the description above, it can be concluded that the colors of the Shopee banner represent balance and peace. A business focus built on needs, thoughts and feelings. In addition, the use of orange represents motivation and encourages business actors to freely lift their personal boundaries.

This motivation encourages business actors to immediately take action to create new relationships, seek challenges, and create a better economy. On the other hand, the use

of Periwinkle color is used as a concept in the company's efforts to build relationships with consumers, namely by elevating the concept of friendship, happy memories and affection.

Table 6. Shopee Vision and Mission and Banner Representation Results

Shopee Vision and Mission	Banner Representation Results
Shopee's vision is to become the number 1 mobile marketplace in Indonesia, while its mission is to develop an entrepreneurial spirit for sellers in Indonesia.	Represents balance and peace. A business focus built on needs, thoughts and feelings. In addition, the use of orange represents motivation and encourages business actors to freely lift their personal boundaries

3. Lazada

Lazada is a company engaged in online buying and selling services and E-commerce retail, the result of the development of a technology company from Germany. Lazada hopes to make it easy for people to buy various types of products from various categories. Lazada's vision is to become a trusted online shopping place and provide the best quality in terms of quality and service to consumers. Lazada's mission is to serve all the needs of good buyers.



Figure 6. Lazada Banners 1
Source: Lazada

Table 7: Lazada Banner Color Identification 1

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Teal	49,4	5,0	-52,6	52,81	205.2	0	120	207
Royal Blue	47,7	8,8	-55,4	56,07	207.0	0	114	207
Pale Turquoise	94,5	-20,9	1,3	20,93	164.2	194	251	236
Flirt Red	38,5	44,8	-2,5	44,89	334.9	153	55	96
Olive	53,0	-8,8	53,3	54,03	55.8	137	129	22
Dodger Blue	62,4	0,2	-54,2	54,21	205.8	35	156	247
Alice Blue	97,7	-4,3	0,7	4,37	158.2	240	251	247
Lavender	93,7	-2,0	-0,7	2,11	180.0	232	238	238
Silk Brown	69,5	2,0	5,9	6,26	28.4	178	168	159
Golden Rod	71,6	7,6	55,6	56,13	40.3	216	168	70
Teal	46,9	-8,2	-34,1	35,10	200.0	18	118	168
Steel Blue	55,8	-25,4	-4,7	25,84	176.2	67	146	141



Figure 7. Lazada Banners 2
Source: Lazada

Table 8: Lazada Banner Color Identification 2

Sample Color	CIE L	CIE a*	CIE b*	Chroma	HUE	R	G	B
Pale Violet Red	60,0	53,5	-10,8	54,62	329.0	223	103	165
Dark Blue	31,1	18,1	-52,8	55,83	213.6	0	69	157
Pink	81,4	29,1	-7,0	29,94	330.4	250	183	216
Blanched Almond	93,0	-2,3	18,7	18,85	47.0	245	235	199
Pink	83,5	27,0	-11,8	29,50	318.6	249	191	231
London Hue	60,4	35,9	-24,4	43,42	299.1	188	123	189
Slate Gray	52,3	-8,7	-12,7	15,45	198.1	93	130	146
London Hue	67,5	15,0	-0,2	14,98	343.3	191	155	165
Yellowish Brown	76,0	6,0	27,5	28,12	34.2	216	182	137
Sandy Brown	74,0	4,1	46,1	46,30	40.8	215	177	96
Grey	72,7	3,2	-5,2	6,10	256.4	180	177	188
Olive	48,7	-0,9	54,8	54,80	49.9	137	114	0
Royal Blue	49,0	7,4	-54,3	54,83	207.3	9	118	209

Lazada Banner Color Representation

From the identification results, 12 colors were found in the Lazada 1 promotional banner design and 13 colors in the Lazada 2 banner design. In the Lazada 1 banner design, the majority of the colors used were Blue, namely Royal Blue. In the Lazada 2 banner design, the majority of the colors used are Pink and Magenta gradations, namely London Hue.

Blue, from a psychological standpoint, represents calm above intensity or passion. Blue can also be described as wisdom and serenity. Blue represents inner reflection. Blue is generally associated with intelligence and competence. The presence of blue can help with concentration and mental clarity.

Magenta sits between purple and red on the color wheel. Magenta is known as the color of harmony, both on a personal and universal scale. Magenta is considered a spiritual color and balance so it doesn't focus on one aspect of life. Magenta creates a sense of symmetry with one's physical, mental, emotional and spiritual concerns.

Pink from the point of view of psychology is one of the softest, but the most contradictory colors. The existence of pink is highly dependent on context, both cultural and otherwise. This color represents femininity, tenderness and care.

Based on the description above, it can be concluded that the colors of the Lazada promotional banners represent calm business calm above intensity or passion. Upholding wisdom and supporting intelligence and competence in the work environment by providing a working environment that improves concentration and clarity of thought.

The use of magenta represents efforts to improve a better quality of life, namely to balance all aspects of worldly and spiritual life. Upholding cultural life by creating equality.

The use of pink color indicates a business strategy that promotes calm and clarity of mind with confidence and a high level of energy and affection among its employees. Creating a sense of symmetry with physical, mental, emotional and spiritual problems both in internal and external relations of the company and creating good relations with consumers.

Table 9. Lazada Vision and Mission and Banner Representation Results

Lazada Vision and Mission	Banner Representation Results
Lazada hopes to make it easy for people to buy various types of products from various categories. Lazada's vision is to become a trusted online shopping place and provide the best quality in terms of quality and service to consumers. Lazada's mission is to serve all the needs of good buyers.	Represents calm business calm over intensity or passion. Upholding wisdom and supporting intelligence and competence in the work environment by providing a working environment that improves concentration and clarity of thought.

CONCLUSION

From the results of the explanation and description above, the following conclusions can be drawn:

1. The Tokopedia promotional banner represents a business with business growth that prioritizes vitality and productivity at work, creating business strategies based on analytical thinking and logical reasoning. This representation has some similarities to a company profile.
2. The Shopee banner represents balance and peace. A business focus built on needs, thoughts and feelings. The orange color represents giving motivation and encouraging business actors to lift their personal boundaries freely. This representation has some similarities to a company profile.
3. Lazada promotional banners represent a quiet business calm over intensity or passion. Upholding wisdom and supporting intelligence and competence in the work environment by providing a working environment that improves concentration and clarity of thought. This representation has some similarities to a company profile.

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