



UNP SIGAP Logo Design as an Earthquake and Tsunami Disaster

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Abstract. A brand is an intangible asset that summarizes the experience of an entity. The asset value of a well-built brand is very high, it can even exceed all the physical assets of the entity concerned. One of the most important brand building activities is designing a visual identity, such as a logo. A logo is the entrance that reflects a brand. Considering how important a logo is for a brand, it is appropriate that the logo design process is well designed and fulfills the design principles and logo principles. The purpose of this research is to produce a product in the form of a logo and test the feasibility of a logo that meets the design and logo principles. This research uses the Research and Development (R&D) research method, which is used to produce certain products based on its stages so as to produce a feasible product. In the validation test conducted by design and media experts using validation sheets, it shows that the feasibility of the UNP SIGAP logo as one of the visual identities of the UNP visual branding process as an earthquake and tsunami disaster response university meets the "very good" category for the design principle category with a percentage of 92.30% and 94.11% for the logo principle category.

Keywords: brand, branding, logo, eligibility

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1. Introduction

Universitas Negeri Padang (UNP) has played an active role in disaster response, both to the community around the university environment both to the academic community and the community around UNP, as evidenced in the provision of lecture buildings at UNP which are already accompanied by disaster management shelters.

This was done by UNP to assist the government's efforts in avoiding casualties in the event of natural disasters such as earthquakes and tsunamis, which reflected on the earthquake off the coast of West Sumatra on September 30, 2009 which had claimed many lives. For this reason, UNP has taken an active role in mitigating earthquake and tsunami natural disasters by providing shelters in buildings located in the UNP area such as the Gedung Rectorate and Researched Center UNP, Gedung UNP Hotel and Convention, Gedung Ilmu Terpadu A, Gedung Ilmu Terpadu B, SD Laboratorium Pembangunan UNP, SMP Laboratorium Pembangunan UNP, SMA Laboratorium Pembangunan UNP, Gedung Pusat PPG, 2 pieces of Gedung UPT-MKU UNP, Gedung Serbaguna FMIPA, Gedung Labor Micro Teaching, Gedung Labor

Ilmu Pendidikan, Gedung Pasca Sarjana, Gedung Labor Terpadu Ilmu Ekonomi, Gedung Fakultas Bahasa dan Seni, Gedung Perpustakaan dan Masjid Raya Al-Azhar [1].

This is in line with the 2020-2024 Research Strategic Plan, to realize the vision and mission of UNP, the formulation of strategic goals for 2020-2024 which describes the size of the implementation of the mission and the achievement of the vision. For this reason, a number of strategic goals are needed that describe the conditions that must be achieved by 2022, including increasing the relevance and productivity of research and development by producing innovative research, scientific work, and creative work by transforming research results to improve the quality of life and the welfare of society as researchers will do in this research program. Therefore, it is necessary to design an effort to brand UNP so that it is known as an earthquake and tsunami disaster response university, one of which is by designing a visual identity (logo) for UNP as an earthquake and tsunami disaster response university.

To support this research, it is necessary to conduct a feasibility test regarding the design of the UNP SIGAP logo as one of the branding efforts for UNP as an earthquake and tsunami disaster response university, in order to obtain an effective and efficient logo obtained from analyzing the development process, feasibility and response of the academic community to the UNP SIGAP logo design itself.

So that this research has an impact on the vision and mission of UNP which is not only concerned with education. However, it is also concerned with public services by increasing public trust in the mitigation efforts that have been carried out by UNP by providing earthquake and tsunami natural disaster mitigation shelters. Indirectly, this also supports the local government's efforts to reduce the impact of casualties due to earthquake and tsunami natural disasters.

Brand and Branding

“A brand is a long journey that based on perceptions, experiences and evaluations of customer satisfaction with services associated with the brand” [2]. In addition, brands are often seen as the identity of the product itself. However, it is not only the brand that needs to be considered, but also product quality and satisfactory service. The more consumers who are satisfied with the quality of the product, the higher the sales value of the product itself [3].

Branding as an effort to introduce a product until it is known, recognised and used by the public [4]. According to Kotler, “branding activities are closely related to various communication activities and concepts that organisations undertake as branding efforts. For organisations or institutions, the understanding of branding, according to him, boils down to the public perception that the organisation or institution is the best compared to similar organisations or institutions” [5].

Montoya & Vandehey say that “it is important to understand the concept of personal branding as a way of increasing one's 'selling point'. Through personal branding, the most important things in an individual can be brought together, including skills, personality and character, which are packaged as a strong identity compared to other people's self-identities” [6]. Macdonald & Sharp (2000) explain: "Brand awareness can help consumers make purchase decisions [7]. A brand is a company's most valuable asset. In fact, a brand is worth more than all of a company's property, plant and equipment combined. What exactly is a brand? A brand is an intangible asset that encapsulates the experience of a company [8].

Logo

“Logos comes from the Greek word logos, which means word, thought, talk of reason” [9]. In addition, it can be interpreted that a logo is a sign or image that contains meaning to symbolize the positive purpose of the product or service it represents. Through the appearance of an image or writing on a logo, people will be invited to easily and quickly understand the implied meaning or vision without having to study in detail all the explanations through long writing because logos are a language of images or writing that is very communicative so that it is understood and easy to remember [10], and the logo itself is one part of brand identity.

“A logo is a graphic element in the form of an ideogram, symbol, emblem, icon, sign used as a symbol of a brand. A logo is the gateway that reflects a brand. Therefore, a logo must be able to reflect the personality and soul of the entity it represents. Considering how important a logo is to a brand, it is appropriate that the process of designing a logo is taken seriously” [8]. Through the appearance of an image

or writing on the logo, people are invited to easily and quickly understand the implied meaning or vision, without having to study in detail all the explanations in a long text, because the logo is a language of images or writing that is very communicative, so it is understood and easily remembered [10] and the logo itself is part of the branded identity..

Sularko revealed that a logo is a symbol that does not sell directly, but provides a visual identity that ultimately acts as a significant marketing tool, that a logo can help differentiate a product or service from its competitors. A logo has the meaning of a quality that is symbolised through the approach of the company's culture, positioning, history or aspirations. Overall, "a logo is an instrument of self-esteem and values that can create a positive and trustworthy image" [11]. A logo is a brand's visual identity. It can influence the brand's positioning and contribute to its success [12]. "A logo is simply a visual and identification mark used by business organisations to assist consumers in the recognition and identification of their product or products or brand" [13].

In addition to the definition of a logo above, here is the definition of a logo according to experts:

- a) According to Kusrianto, "a logo or picture mark is an identity that is used to describe the image and character of an institution or company or organization. Logotype or word mark is the name of an institution, company or product that appears in a special form of writing to describe commercial characteristics" [14].
- b) The identity of a company is a reflection of the vision, mission of a company that is visualized in the company logo. Logo is a real thing as a reflection of non-visual things from a company, such as behavioral culture, attitude, personality, which is poured in visual form [15].

"Logos can use any element, in the form of text, logograms, images, illustrations and others. Many also say that a logo is an image element or symbol in a visual identity" [9], with the logo's function as a) self-identity, b) a sign of ownership, c) a sign of quality assurance and d) prevent imitation or piracy [9].

In creating a logo, there are 5 principles that need to be considered, namely:

- a) Simple, a good logo is a simple logo. A simple logo will make it easier for the audience to recognize it.
- b) Memorable, an effective logo is a logo that is easy to remember. This is obtained from the previous logo principle, namely a simple logo.
- c) Timeless, a good logo is a timeless logo. How long will the company logo be able to last 10 years, 20 years or 50 years.
- d) Versatile, an effective logo must be able to be applied in various mediums. Therefore, the logo should be functional, can be placed both vertically and horizontally. It can also be placed in print or electronic media.
- e) Appropriate, last but not least, the logo must be appropriate. What is meant by appropriate here is whether the logo is able to represent the company in accordance with the company's objectives [16].

Knowing the anatomy and types of logos will make it easier to determine what logo to make and which type best represents the product or entity. A logo can be an image, text, or a combination of both. Logo anatomy can help understand the types and visual elements that make up a logo. For this reason, efforts must be made in research to discover, develop and test the truth of knowledge or a research method. What must be considered is that the method used must be adjusted to the object of research and the objectives to be achieved, so that the research can lead, run well and systematically.

2. Method

This research was designed using the Research and Development (R&D) method. The R&D method can be interpreted as a scientific way of researching, designing, producing, and testing products that have been produced. The R&D method used in this research is to create a logo that is tested feasible and effective

as a visual identity of UNP's visual branding process as a disaster and tsunami emergency response university.

In research, after determining the method to be used, it is also necessary to determine the form of research to be used. Methodologically, the R&D method is divided into 4 levels (levels of difficulty), including:

- a) Level 1 research and development, research conducts research to produce a design, but does not proceed with making the product and testing it.
- b) Level 2 research and development, researchers do not conduct research, but directly test existing products.
- c) Level 3 research and development, researchers conduct research to develop existing products, make products and test the effectiveness of products.
- d) Level 4 research and development, researchers conduct research to create new products and test the effectiveness of products [17].

As said that the questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer [17].

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Table 1. Expert questionnaire score based on Likert Scale

Source: adapted from [18]

STATEMENT	SCORE			
	D	A	G	E
.....	1	2	3	4

This type of research data is quantitative data and the data is analyzed by descriptive statistics. Quantitative data was obtained from the assessment scores of design and media experts, regarding the responses of design and media experts to the design principles and logo principles. Processing the expert questionnaire score is to calculate the results of the expert response questionnaire using the following equation:

$$\text{Questionnaire score} = \sum (X_i \times N)$$

Source: adapted from [18]

Where X_i is the Likert scale score and N is the number of validators. To calculate the percentage of expert response, the equation is used:

$$\text{Expert Percentage} = \frac{\text{Questionnaire score}}{\text{Maximal score}} \times 100\%$$

Source: adapted from [18]

Based on the calculation of the results of the expert response questionnaire, the criteria for interpreting the expert response questionnaire score on the UNP Sigap logo design as an earthquake and tsunami natural disaster response university in the following table:

Table 2. Percentage rating based on Likert Scale
Source: adapted from [18]

INTERPRETATION CRITERIA	ASSESSMENT
Deficient	0% - 24,99%
Average	25% - 49,99%
Good	50% - 74,99%
Excellent	75% - 100%

3. Result and Discussion

3.1. Results

This R&D method aims to design UNP's visual branding as an earthquake and tsunami disaster response university, in the design process, the feasibility and effectiveness of one of the visual identities in the form of a logo is tested to get results in the form of a logo product that has design principles in logo making. This research process falls into the level 4 category in the R&D method, where researchers create new products and test the effectiveness of these products.

The R&D method, which starts from researching, designing, producing, and testing the products that have been produced, is further elaborated in three stages, namely: 1) the defining stage, 2) the design stage, and 3) the development stage, which can be described in the design design framework as shown below.

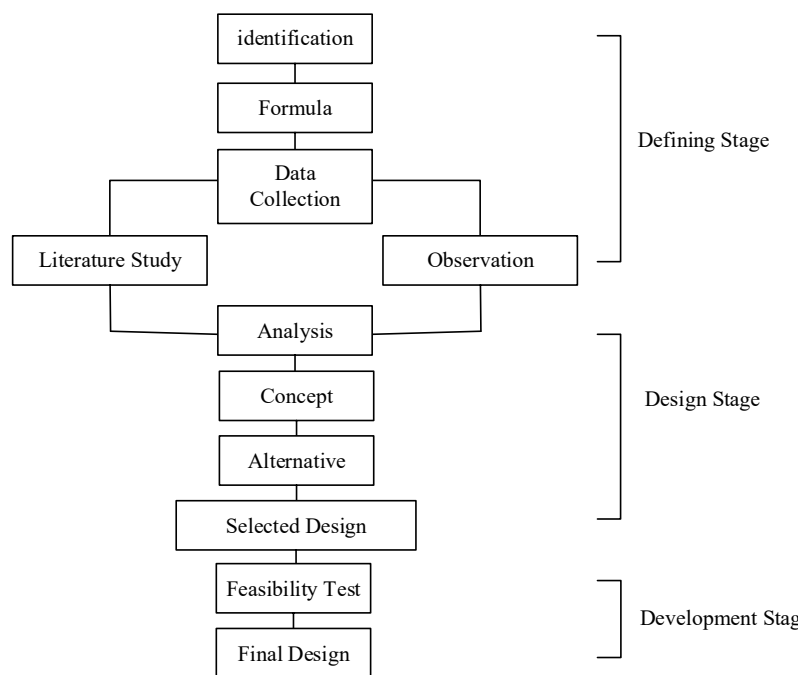


Fig 1. Design framework



Fig. 3. Rough layout
Source: Author, 2023



Fig. 4. Execution layout
Source: Author, 2023

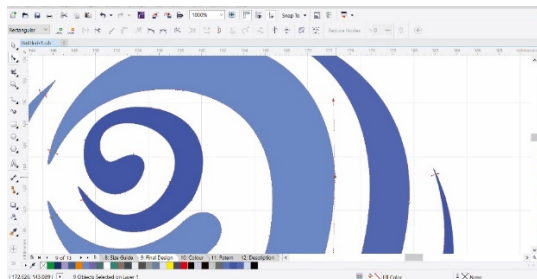


Fig. 5. Comprehensive layout
Source: Author, 2023



Fig. 6. Selected Design
Source: Author, 2023

Development stage

After obtaining the selected design from the existing logo execution alternatives, the next step is to test the feasibility of the UNP SIGAP logo design as one of the visual identities in the UNP visual branding process as an earthquake and tsunami natural disaster response university by design and media experts. The goal is to determine whether or not the logo that has been developed is valid with the suitability of the concept, design principles and logo using a validation sheet. Validation was carried out by lecturers from the Faculty of Language and Arts, Padang State University. The following is a table of assessments from design and media experts.

Table 3. Assessment with Design and Media Experts

Source: Author, 2023

NO	ASPECT	INDICATOR	ASSESSMENT			
			1	2	3	4
Design Principles						
1	<i>Hierarchy</i>	Visual hierarchy of scale Visual hierarchy of color Visual hierarchy in the form of typography				
2	<i>Balance</i>	Balance in composition				
3	<i>Alignment</i>	Alignment of elements with the entire composition with each other				
4	<i>Emphasis</i>	Emphasis of design that can attract user attention				
5	<i>Proportion</i>	Scale or relative size of objects in a design				
6	<i>Movement</i>	Focus in the design composition				
7	<i>Negative Space</i>	Elements in the composition space to breathe				
8	<i>Contrast</i>	The difference between one element and another				
9	<i>Repetition</i>	Unity and continuity in design				
10	<i>Variety</i>	Unique and interesting elements				
11	<i>Unity</i>	Unity and harmony of design				
Logo Principles						
1	<i>Simple</i>	Brand name Logogram shape Logotype shape Shape of logogram and logotype Color				
2	<i>Communicative</i>	Able to convey the message				
3	<i>Relevant</i>	The logo is in line with the company				
4	<i>Memorable</i>	Logogram shape Logotype shape Logogram and logotype shapes				
5	<i>Timeless</i>	Able to last for a long time				
6	<i>Versatile</i>	Can be applied in various mediums Functional, can be placed vertically or horizontally Can be printed in large or small sizes Versatile				
7	<i>Appropriate</i>	Adjusts to the company's goals In accordance with the target audience				

Then the results of the assessment that have been described are converted into scores based on the question items, then summed up to find out the total score of the assessment, and also calculated the highest score of the assessment. Then the percentage index is sought based on the following formula:

$$Index (\%) = \frac{Total\ score}{Highest\ score} \times 100$$

Source: adapted from [18]

From the calculation formula above, the validation results received a percentage of 92.30% for the design principle category and 94.11% for the logo principle category, then interpreted the value based on the predetermined interval, thus showing the results that the UNP SIGAP logo as one of the visual identities

in the UNP visual branding process as an earthquake and tsunami natural disaster response university is categorized as "very good" for the design principle category and the logo principle for further presentation as a medium for production. There are notes from the validator for improving the product, namely in the form of derivative variations of the logo model, as shown below.



Fig. 7. Enhanced design
Source: Author, 2023

4. Conclusion

In general, it can be concluded that this R&D research has produced a logo design for UNP SIGAP as an earthquake and tsunami disaster response university that is used as a visual branding logo to support UNP as a university that concentrates on public services, one of which is by giving confidence to the public that UNP also participates in local government efforts to mitigate earthquake and tsunami natural disasters.

In particular, this research can be concluded that: the results of the validation test from design and media experts as validators with a percentage of 92.30%, which means that this logo meets the design principles with the predicate "excellent" and a percentage of 94.11% or the predicate "excellent" for the logo principle category.

So that it is in line with the definition of the logo that has been described that the UNP SIGAP logo is a sign or image that contains meaning to symbolize the positive goals of UNP as an earthquake and tsunami natural disaster response university, where the logo product is a reflection of non-visual things from UNP's vision and mission in the form of public services by providing confidence to the target audience to form a positive image of UNP in terms of earthquake and tsunami natural disaster mitigation. Indirectly, this also supports the local government's efforts to reduce the impact of casualties caused by natural disasters such as earthquakes and tsunamis.

References

- [1] D. M. Sari, H. Afriwan, E. Purnomo, and M. Kharisma, 'Perancangan Infografis Shelter Bangunan Di Kawasan Universitas Negeri Padang Sebagai Mitigasi Bencana Alam Gempa Dan Tsunami', *Gorga Jurnal Seni Rupa*, vol. 10, no. 2, pp. 287–294, Desember 2021.
- [2] Muhamad Nastain, 'BRANDING DAN EKSISTENSI PRODUK (KAJIAN TEORITIK KONSEP BRANDING DAN TANTANGAN EKSISTENSI PRODUK)', *Channel*, vol. 05, no. 01, pp. 14–26, Apr. 2017.
- [3] Sri Dewi Setiawati, Maya Retnasari, and Diny Fitriawati, 'Strategi membangun branding bagi pelaku Usaha Mikro Kecil Menengah', *JURNAL ABDIMAS BSI*, vol. 2, no. 1, pp. 125–136, Feb. 2019.
- [4] Dewi Haroen, *Personal Branding*. Jakarta: PT. Gramedia Pustaka Utama, 2014. [Online]. Available: https://books.google.co.id/books?hl=en&lr=&id=iKBLDwAAQBAJ&oi=fnd&pg=PP1&dq=branding+adalah&ots=tAmdf5B261&sig=INyRM4zxGYwM9MNoduUBD0mJ3CA&redir_esc=y#v=onepage&q=branding%20adalah&f=false
- [5] L. V. Ferbita, Y. Setianti, and S. Dida, 'Strategi Digital Branding Lembaga Ilmu Pengetahuan Indonesia (LIPI) Melalui Media Sosial', *JAD*, vol. 16, no. 2, Nov. 2020, doi: 10.20884/1.actadiurna.2020.12.2.2865.
- [6] Ascharisa Mettasatya Afrilia, 'Personal Branding Remaja di Era Digital', *Mediator: Jurnal Journal of Community Research and Service*, 8(1), 2024

- Komunikasi*, vol. 11, no. 1, pp. 20–30, Jun. 2018.
- [7] C. Sugiarto, ‘Pelatihan Branding Sebagai upaya Meningkatkan Efektivitas Pemasaran Nugget Lele Desa Mojogedang’, *JS*, vol. 8, no. 2, Feb. 2020, doi: 10.20961/semar.v8i2.40203.
- [8] A. Oscario, ‘Pentingnya Peran Logo dalam Membangun Brand’, *Humaniora*, vol. 4, no. 1, p. 191, Apr. 2013, doi: 10.21512/humaniora.v4i1.3429.
- [9] S. Rustan, *Mendesain Logo*. Jakarta: Gramedia Pustaka Utama, 2009.
- [10] M. Dian and J. Diana Kartika, *Feng Shui untuk Logo*. Jakarta: Elex Media Komputindo, 2013.
- [11] M. R. Pratama and Y. Pusparani, ‘PERANCANGAN LOGO SEBAGAI IDENTITAS VISUAL PADA ILALANG CRAFT’, *Jurnal PANTAREI*, vol. 5, no. 03, Sep. 2021, [Online]. Available: <https://jom.fikom.budiluhur.ac.id/index.php/Pantarei/article/view/793>
- [12] Ruiqin Li, Yan Wang, and Hongli Zhang, ‘The shape of premiumness: Logo Shape’s effects on perceived brand premiumness and brand preference’, *Journal of Retailing and Consumer Services*, vol. 75, Nov. 2023, doi: <https://doi.org/10.1016/j.jretconser.2023.103516>.
- [13] W. R. B. W. Ismail, M. Othman, R. A. Rahman, N. H. Kamarulzaman, and S. Ab. Rahman, ‘Halal Malaysia Logo or Brand: The Hidden Gap’, *Procedia Economics and Finance*, vol. 37, pp. 254–261, 2016, doi: 10.1016/S2212-5671(16)30122-8.
- [14] A. Kusrianto, *Pengantar Desain Komunikasi Visual*. Yogyakarta: Penerbit ANDI, 2007.
- [15] D. W. Suwardikun, ‘Perubahan Logo Perusahaan, Sebuah Analisis Visual (Studi Kasus : PT. Astra Internasional, Garuda Indonesia, Unocal 76)’, Program Magister Senirupa dan Desain, Institut Teknologi Bandung, Bandung, 2002. [Online]. Available: <https://adoc.pub/perubahan-logo-perusahaan-sebuah-analisis-visual-studi-kasus.html>
- [16] Y. Ayu Kusumawati, ‘5 Prinsip Logo’. [Online]. Available: <https://binus.ac.id/malang/2017/09/5-prinsip-logo/>
- [17] S. Sugiyono, *Metode Penelitian dan Pengembangan*. Bandung: Alfabeta, 2016.
- [18] R. Riduwan, *Skala pengukuran variabel-variabel penelitian / Riduwa*. Alfabeta, 2013.