

VISUAL LITERACY OF INFOGRAPHIC REVIEW IN DKV STUDENTS' WORKS IN BINA NUSANTARA UNIVERSITY

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ABSTRACT

This research aimed to provide theoretical benefits for students, practitioners of infographics as the enrichment, especially for Desain Komunikasi Visual (DKV - Visual Communication Design) courses and solve the occurring visual problems. Theories related to infographic problems were used to analyze the examples of the student's infographic work. Moreover, the qualitative method was used for data collection in the form of literature study, observation, and documentation. The results of this research show that in general the students are less precise in the selection and usage of visual literacy elements, and the hierarchy is not good. Thus, it reduces the clarity and effectiveness of the infographic function. This is the urgency of this study about how to formulate a pattern or formula in making a work that is not only good and beautiful but also is smart, creative, and informative.

Keywords: *visual literacy, infographic elements, Visual Communication Design, DKV*

INTRODUCTION

Desain Komunikasi Visual (DKV - Visual Communication Design) is a term portrayal of the process of media in communicating an idea or delivery of information that can be read or seen. DKV is related to the use of signs, images, symbols, typography, illustrations, and color. Those are all related to the sense of sight. In here, the process of communication can be through the exploration of ideas with the addition of images in the form of photos, diagrams, illustrations, and colors. In addition to the use of the script will affect those who see it. The effect depends on the objective that is conveyed by the messenger and the ability of the recipient to decipher it.

Infographic is a visual representation of information, data, and science graphically. The used graphics show complex information that is changed to concise, solid, and clear information. With intricate information, infographic presents it into simpler visual forms such as maps, journalism, technical writing, the process of an event, the flow of tests, and others. This is the most powerful way to represent information so that it can be more easily understood by the audiences. By using good infographics, a designer can easily provide explanations and all the needed information into a more simple language. Currently, infographic exists in all forms of media from static media such as printed media to interactive media such as social media, television, and other media.

There are many visual designs displayed. It can be social campaigns about the traffic, culinary, tourist attractions, the identity of residential areas, apartments, hotels, and others. Thus, it is very interesting to review the visual literacy or in other terms, the ability to sort, choose, and apply it in a visual form. The topic of this research focuses on the study of visual literacy and creativity with the diversity and uniqueness. Thus, it is expected to obtain unique and creative findings. Moreover, it is very interesting to study the material of DKV Brand Identity course.

The researcher will study the visual literacy in the infographic works by DKV Bina Nusantara (BINUS) University students as the enrichment and development of science. Infographic works by DKV students in Binus University will be used as a case study. The various students' works show the diversity in displaying visual ideas and visual communication. Thus, it is interesting to study more deeply the visual literacy and metaphor language as a means of conveying the message. The purpose is to provide theoretical benefits for students and practitioners of infographics as the enrichment. The scope of this research is about visual literacy and creativity in infographic issues. It aims to solve the occurring visual problems. Thus, it can have a positive impact on the creativity of an infographic precisely and effectively.

Nowadays, in the era of information, organizations use infographics to deliver information and understanding to internal and external audiences (Mark, 2012). Infographic is a form of data presentation with visual concepts that consists of text with attractive visual illustrations. The process of making infographic is commonly referred to several different terms; it can be data visualization, information design or information architecture and others. Infographic can also be the image that integrates data with design. It helps individuals and organizations to communicate or deliver a message to the audiences concisely. The organization will have an opportunity to bridge the knowledge gap with their audiences by using infographics to communicate the ideas and information (Mark, 2012). In general, the result of an infographic has more images than text. Currently, infographic exists in all forms of media. It is from ordinary print media such as billboard boards, road signs to digital interactive media.

Infographic is an image or illustration that can be accompanied by text. Visual data or picture information is the right word to describe infographic briefly. As a visual representation of information, infographic summarizes some data uniquely and universally. If the information is presented monotonously, it can make the audiences bored. Boredom keeps the audience out of focus and will not understand the conveyed message from the media. Many things can be done to present the data to be more interesting and eye-catching. One solution is to present it in the infographic. Other than communicating a particular message, the other desired results of the infographic can inform, persuade, educate, or have people take action. The infographic media communication flowchart can be seen in Figure 1.

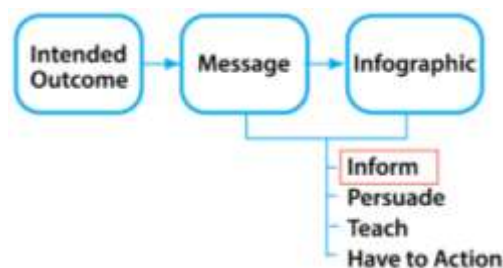


Figure 1 Infographic Media Communication Flowchart
(Source: Few, 2011)

Infographic is not only displays beautiful visuals alone, but it also contains data, facts, and reality. Tables, lists, charts, diagrams, maps are some of them. For example, if people look at weather forecasts with sun or cloud symbols that are accompanied by numbers, so it indicates temperature. It means people are reading the infographic. For people who live in the modern era, they are very familiar with the information. Often, the conveyed information is too much and complex. For that reason, easy-to-understand forms of visual communication are needed to overcome the complexity of information. One method of compiling interesting information is by designing an effective and efficient infographic. Currently, the infographic is widely used for various purposes such as the

delivery of concepts and ideas from a study, the concept of design, moral messages in social campaigns, the preparation of reports, annual books, and company profiles. In print media, it can be newspapers or magazines. In addition to descriptive news, the infographic is also presented to clarify the information or to condition the audiences to the actual event.

In general, the infographic is divided into two types; informative graphics and visual graphics. Informative graphics describe events, processes, research results, and facts artistically. Moreover, the elements contained in the art are colors, shapes, rhythms, unity, and composition between the placement of infographics and manuscripts. It also attracts the attention of the audiences (Obed, 2006). The goal is to inform, influence, and be persuasive argumentative or recreational for the audiences. There is a definition of data information such as declaring a number, multiplication, showing the time or period or a percentage of each component of information. It is important to show those in the form of statistics or data numbers, and words in the form of display. Each element is not to obscure the shape of the message. However, the readability and clarity of the data are more important. In addition, visualization techniques can be developed much more complex and creative. For example, it can use both manually and computer-generated dimensions.

In line with the development of computer technology, the development of diagrams in the form of static begins to change. The visual processing in printed media has evolved into a dynamic diagram, visual processing with motion and sound. The development of moving diagrams is more visible in the application of mobile phone technology. The infographic basics system is widely used as navigation or guidance of a certain amenity or the technology. Moreover, the visual infographic in the dynamic form is categorized into two. The first is the infographic in the offline category that the dynamic form is widely used as the media of film, video, PC program, presentation, and others. The second is in the online category. It is in the form of interactive media such as apps for email, web, Instagram, line, WhatsApp, and others.

In the dynamic infographic, many interactive simulations are used both offline and online. This type of infographic is used to show a way, simulation, or guidance that conveys more detailed information. Then, there is the structure and mapping of each subject against other subjects. It is arranged into a layer of each information submitted. In interactive dynamic visual media, infographic becomes a certain way of bridging the complexity of a concept into a hierarchical form. Thus, it is more easily understood, and people know how to use it. Through good infographic, messages by using the right visual literacy can bridge the audiences, so there is no ambiguity in receiving the conveyed message.

METHODS

The descriptive qualitative research is used. It makes a description systematically, factually and accurately about the facts, properties, and the relationship between the phenomena investigated. The descriptive method aims to obtain accurate data collection to facilitate the process of analysis. The steps are to collect and review various types of infographic works and then conduct comparative studies with infographic works in accordance with good graphic design principles.

Moreover, supporting theories are used; one of them is the theory by Dwi (2006). The theory mentions that the culture of reading in the context of visual literacy has not been taken seriously, so the visual codes expressed in infographic have not provided objective based on facts. Similarly, according to Newfield (2011), visual literacy refers to a person's ability to comprehend (read) and use (write) images. It includes the ability to think and express oneself in visual terms, and the ability to learn and interpret visual messages in making an infographic accurately.

RESULTS AND DISCUSSIONS

In principle, the infographic is built from basic graphic shapes such as charts, bar charts, pie charts, and tables. However, the infographic can be clear and accurate in conveying information with other visual forms like photos and illustrations. The use of appropriate infographic media can be faster and easier in conveying the message to the audience. Moreover, it can even reinforce people to remember an event. The data visualization is designed with a reporting style as it aims to generate impact. Similarly, data visualization presents the data graphically and makes the infographic and the connections between the perceived events in a new and different way (Banu, 2012).

The uniqueness of the infographics is that audience can quickly extract a long story into a more concise and clear visual form. It means that it can further summarize and save reading time. In addition to extending the memory of an event, the infographic can also be a visual form that is capable of arousing and attracting attention. Furthermore, the infographic aims to facilitate the delivery of information through all levels of intelligence, so it is expected that everyone can understand the information. It is because it uses a lot of visual forms rather than the use of language and text. Thus, people will more easily get the information through the infographics. The essence of infographic work is that information in visual form will be the representative of the concise, clear, interesting, and aesthetic message.

DKV can be interpreted as a process of delivering messages or information from the sender to the recipient scientifically by using a symbol directly or indirectly through the media to get feedback and responses. Next, in the infographic, there is a system, namely a collection of elements of visual and text which are interrelated and become one unity. A system usually consists of components or elements that are connected to facilitate the flow of information. In infographics, it can use illustrations in the presentation to add visual appeal. Information includes knowledge regarding words, numbers, or concepts that can be communicated. Moreover, data must be accurate and is a summary or core of the conveyed problem. The data sets are categorized and have been filtered through, so it is easy to visualize. Then, it can proceed to the design plan. The concept, functionality, and graphics output should be a visual solution to solve a problem. Finally, it is the stage of visualization or illustration as a visual representation of a visual element manually or vector digitally. The possibilities for publishing the graphic depend mostly on the purpose, artistic elements, and technology. The audiences for infographic have changed considerably in the past decade (Beegel, 2014).

The infographic that contains a lot of visuals than verbal information has the advantage, so it can make the audience quickly understand the conveyed message. It is very influential to encourage people emotionally to understand more deeply about the message or information. This is what makes the audiences tend to be more attached and remember the conveyed information or message. The visual metaphor is visual representation with a more unique style of metaphoric illustration. The audience will tend to think and try to understand the information it conveys. Moreover, in symbols and iconography, the use of symbols and icons should consider who the main target is. Thus, the sorting and selection of icons will be precise and effective. The use of iconic and symbolic can be a bridge of understanding the substitute of verbal material. However, improper design can have a negative impact on false and wrong understanding. Therefore, it must be considered in detail before applying it to infographic design. Avoiding ambiguity is also important, so it does not mislead the audiences regarding the message.

In the infographic, it usually has the structure of the main title, subtitles, images, and information in the form of a script. The title of an infographic is important to provide a boundary between the narrative text and the image, and to show that the infographics can be interpreted as visual news. Therefore, the infographic can stand alone. The infographic is the development of the diagram

form with the same function and purpose. It represents the delivery of the message in the form of graphics information. There is information about the count in the form of numbers, volume variation, percentage, comparison of the problem such as political, social, and cultural aspects; the economy and trade on stocks of goods, budgets, travels in the form of maps, or a rating in the form of services or goods.

Determining the most appropriate type of diagrams among the four types in each subject matter will adjust to the relevant form. The use of bar charts will be more appropriate if it is used to represent a number development based on the count of time. Figure 2 is the example of the infographic by the students.

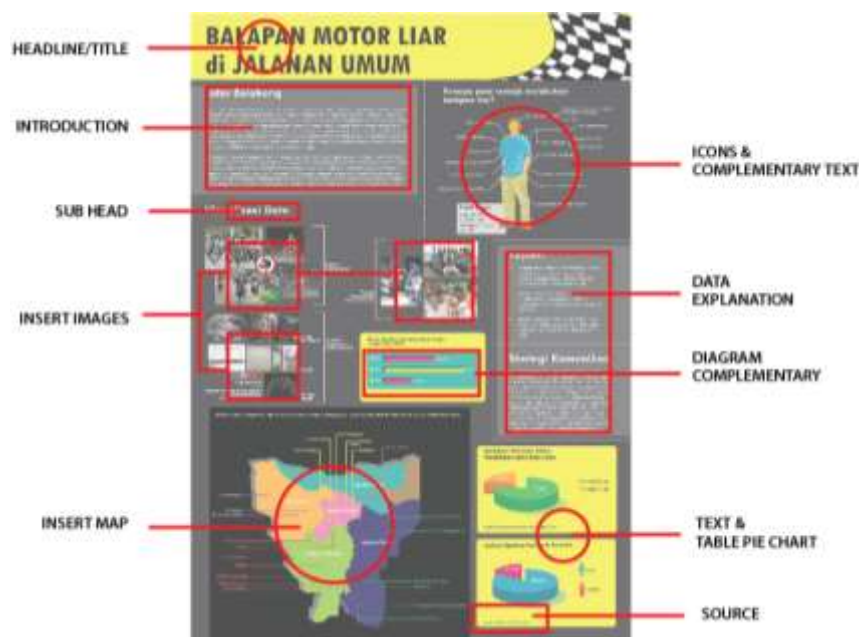


Figure 2 Anatomy Infographic Artwork by Students
(Source: Author)

Visual exploration in the form of diagrams is the least easy. It can be various basic ideas as a form of illustration applied in the form of images or photos. Visual presentation in the form of diagrams is needed in choosing objects. It requires a relationship that explains the frame of the mind of the audiences. Visual interpretation of the diagram must be precise in choosing representative objects, so there is no ambiguous interpretation. Each section of the diagram in the infographic is inseparable from the basic visual elements. From the simplest to the most complex, the visual element shows a non-aesthetic technique between data and each visual element. It must show accurate and precise relationships in the form of visual messages.

Graphical information consists of a combination of word, text, script, and image. There is also layout in the infographic design. It is a part of the instructions relating to the structure of how to read a mapping. The layout becomes the part of the navigation system related to the grid. Then, the audiences can easily understand what it means. Therefore, in every third infographic design, the visual elements become the basis for showing the type of used diagram.

In Figure 3, there are visual elements such as text accompanied by supporting visuals that can represent the conveyed message. The infographic visualizes what will happen if people are not wise in

using the fuel or oil. It is shown by data using earth map icons, daily fuel usage data, daily consumption data of fuel drums, and vehicles that people use every day. Figure 3 divides the infographic into two different sides. The left side illustrates the existing problem, while the right side is the solution offered by 'Save Future'. It consists of various vehicle solution options. This is the exposure of research results as a reference in the campaign on 'Save fuel, Save Energy'. The texts and the images are the exposure or information that aims to summarize the commentary in a narrative text or information that is not contained in the narrative text. In this case, the infographic stands alone, but it remains united with the discussed topic.



Figure 3 Infographic of Save Fuel Save Future by Novita Theresia
(Source: Author)

Meanwhile, the visual graphics are graphics that are illustrations of all visual contents. The opinions are described by analogy, symbols, and metaphors artistically. Visual graphics are not only as an illustration of a mere appearance, but it is also as a multi-interpretation of art. Graphically, the use of visual literacy is only as an illustration of all the visual contents and opinions described by analogy, symbols, and metaphors artistically. The dominant typography is big enough. If the selection and utilization of visual literacy are more appropriate, the visual graphics will be stronger and more appropriate in representing the message. Visual literacy should aim not only as an illustration of merely decorative look, but it is also as a multi-interpretation artwork.

The infographic in Figure 4 is the depiction of the importance of keeping distance when driving on toll roads. By reading the headlines, the audiences can quickly grasp the purpose of the infographic. Infographic content is descriptive in describing how important it is to keep a distance on the toll road when driving that is covered in detail. The data is also related to the target of the campaign and what message or the big idea that the designer wants to convey. Indirectly, the infographic provides solutions that will be offered in creating a campaign design.

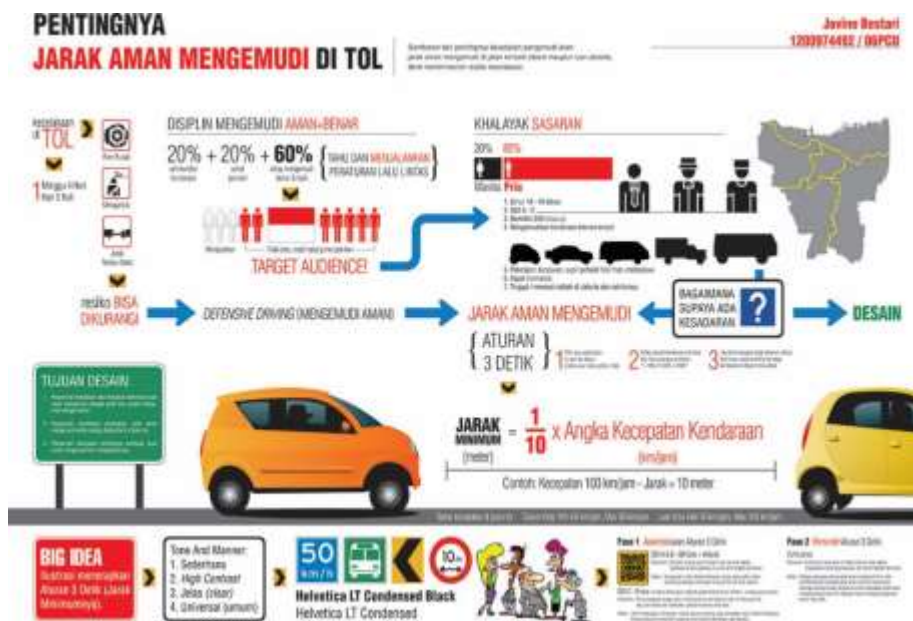


Figure 4 Infographic of the Importance of Keeping a Safe Distance Driving on Toll Roads by Jovine Bestari (Source: Author)

In Figure 5, the infographics are the summary of research conducted by some students to get the essence of the problem and to find the solution. In DKV Brand Identity Duty, before creating a logo or design of brand identity, the students need to collect as much data as possible. Then, it can be summarized in the study of brand identity. All the data is sorted and selected. Then, for data that is considered most important can be displayed in the infographic. The infographics in Figure 5 are made with a more compact yet dense display. The use of visual elements depends on each student. Generally, the students strive to provide a unique and different visual appearance to the others.



Figure 5 Infographics of Tokopedia Brand Identity (left by William Chailwinata and right by Claudia Hamijoyo) (Source: Author)

Infographic (short for information graphics) is important for the research because the designer must plan and produce a good and appropriate infographic works. It is to reduce errors in making an infographic design. The urgency of this research is to find how to make a work that is not only good and beautiful but also smart, creative, and informative. Infographic is a visual that tells the story of the content. It displays the data, information, or knowledge clearly without bias and with meaning and context (the pattern of the visual, the message, and the target audience). Infographic helps audiences to understand and process the information quickly. A good infographic will not only tell people the story, but it will also create interest and induce people to read the article (Siricharoen, 2013).

Although the visual language only consists of three main elements (words, images, and forms), it has power and full of interpretations. Infographic as a visual language is important to note that the visual presentation is easily understood as a message. The structure and flow of each diagram created can control the eyes of the audiences in exploring the infographics into a separate interpretation. For example, it shows the use of the framework or grid with the vertical and horizontal layout to form the illusion of lines and blocks indirectly. Then, for audiences, it has become the part of the mapping or diagram. According to Beegel (2014), the graphic should be considered well such as the designer know the target audience and the goal. The designer should consider the intent of creating an infographic first if it has a defined audience.

In infographics, there are elements such as data, information, images, text, and knowledge in graphic design. In the infographic, it uses a good design concept, the selection of colors, fonts, illustration styles, and others to make the infographic good. Then, the infographic becomes interesting. Then, it expects that the information displayed can be understood. Exploring infographic design and workflow should be the foundation for understanding what infographics is (Giardina & Medina, 2013).

CONCLUSIONS

The key to make infographics is the determination of the correct and precise visual literacy. It can use interesting illustrations and photography and the validity of the data presented. There are several types of infographics that can be used according to different purposes. Information made by visual literacy is one application in the design of visual communication. Translating the news into the image is expected to give more understanding to the audiences about the message. Then, the infographic is important in helping target audience to understand the message through the infographic media. It is the job of a graphic designer to help the community to understand the information better.

The use of visual literacy in the infographic is limited to the form of visual elements such as diagrams with text, images, and shapes. However, present-day to the future infographic will be a particular phenomenon by adding sound elements and things. It has proven to be the most sought-after media such as games. Moreover, the former infographic in the form of static visual has now turned into visual cinematic. The infographic will be a solution (problem solver) in visual form. In short, the infographic is one way in which complex data can be represented through visuals. There is a limited way to represent information, and it depends on the skill of the designers and their imagination. The development of infographic until now is no longer just in the form of diagrams. However, it has changed into research activities developed in the field of information. Infographic on the media is an important contribution to information on how to simplify and modify news sources in a rich, meaningful, and informative visual form. Infographics as a visual language in the media can create a simple visual literacy, but it is not just limited to content material. There is information that explains the message as a whole and helps to understand a complex data.

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