Distributing information through infographic on tempodotco to build understanding and awareness about COVID-19 virus outbreak in Indonesia

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Abstract. Infographic as a form of presenting information that is designed combining visual with text has become a form that allows the reader easily understand series or complex information. This research aims to examine the use of infographic by @tempodotco Instagram account to deliver information about the corona virus outbreak in Indonesia and how to survive from the situation. The research methods begin with brief explanation about the outbreak and how Infographic become media to deliver information. Then will briefly explain the media, Tempo and @tempodotco, the digital media where the infographic placed, that nowadays has commonly accessed as the replacement of the printed media. The qualitative data will be analysed using visual language and Information visualisation theory, then will be discussed how infographic on tempodotco providing information on instagram as an effort to guide the audience to prepare for the pandemic. The results provide a clearer picture about how Infographics contributed in providing knowledge and build awareness to wide range of audiences in order to deal with the pandemic.

Keywords: infographic, awareness, COVID-19, Tempo

1. Introduction

According to the data from World Health Organisation (WHO), the corona virus COVID-19 by March 2020 has affected more than 150 countries and territories around the world. The General Director of WHO, Dr Tedros Adhanom Ghebreyesus, at a press conference on March 11th 2020 used the term “pandemic” to describe the outbreak. Despite the fear the word evokes, "pandemic" refers to the spread of a disease, not its potency or deadliness [1]. The WHO defines the term as "an outbreak of a new pathogen that spreads easily from person to person across the globe". By April 2020, the pandemic has spread to over 200 countries, over 2,500,000 people have been infected around the world, and the confirmed death cases have reached more than 170,000. Since the first case in the early of March in Indonesia, by April 2020 it has reported over 7700 cases and more than 600 is the number of confirmed deaths [2]. Since that time, all media have not stopped reporting the updated situation and appeals from the government regarding what should be done to all levels of the society that can be easily found and available on digital media, including social media.

Tempo is one of the trusted news media that continues to deliver news and information about government appeals and decisions regarding this outbreak. First published in 1971 as a weekly news...
digital media have an important role in communication, such as, able to communicate quickly, suitable to a wider audience, not limited to strong to communicate delivering the messages which are: 1) possibilities. The visual language comprises the visual details. Illustration in hierarchy, anatomy, be remembered and understood. One component can be more dominant than others, depends on the strength of picture such as, able to communicate quickly, suitable to a wider audience, not limited to age and location, can be enjoyed repeatedly that might build emotion, memories and experiences, and pictures can be placed in order to produce a sequence. While words are very strong to communicate accurately, and amusing through language and sentences.

In general, the form of Infographics can be distinguished based on its content. All visual forms contained in an Infographic can be including data visualization, process, hierarchy, anatomy, chronology and others, as long as represent the information in a visual. The content could be the combination or one of the visual approach which are: 1) Qualitative Graphic Elements to visualise anything that not related to numbers but containing information and illustration; 2) Quantitative Information to visualise Information involving the measurement or quantitative data that presented in the form of numbers; 3) Narrative to visualise information through a narration or storytelling.

However, all forms of visualisation on Infographics require components that determine the success of delivering the messages which are; 1) Appeal, which attract the audience attention, 2) Comprehension, where the information or messages should be conveyed clearly so that it is easily understood by audience, and 3) Retention, where the message or information should be easily remembered by the audience. One component can be more dominant than others, depends on the purpose of the infographic itself.

Visual appeal does not only fulfill an aesthetic function but built the audience’s emotional connection towards the information, so the message will be remembered and understood. An appealing image with a visual language makes illustration has an important role in providing a clearer picture to the audience and to give a clear visual explanation through visual details. Illustration in infographic is applied to communicate a specific contextualized message to an audience. Certain visual language is applied to manipulate emotions, feelings and behavior of the viewer through numerous creative possibilities. The visual language comprises conceptual illustration described as metaphorical applications to the subject or visual depictions of ideas, and literal representation language to visualizing reality or pictorial truth.

Conceptual illustration can be applied to visualize symbolic idea which the object that illustrated often simplified and focused on clarity in delivering the message since illustration become part of the
message itself. The other visual language applied on infographics is literal representation visualizing an object as its form of being to accurately visualizing a certain object or describing an event or process as the actual situation [8]. Illustrations in this visual language are commonly used as a visual guidance or to explain a work flow of a certain process that can also be presented in any illustration style, on hyperrealism illustration style which recreated pictorial compositions for intense detail and reality, or even on cartoon. Furthermore, stylised illustration has an ability to visually explain complex subject or to make it look more popular and easier to convey by target audience.

Related to the outbreak, Tempo Media Group, through its Instagram account, has conveyed various contents including news updates, data, and technical implementation of the government appeals through infographics. Although Tempo is not the only news media that deliver it through Instagram, Tempo's experience in presenting infographics becomes interesting to study, looking at how the information visually tailored to the characteristics of readers (followers) and the media itself.

3. Methodology
This research using a qualitative research approach. Firstly by collecting infographic on @tempodotco Instagram account from March to April 2020 that related to COVID-19 pandemic, from the first case in Indonesia to the first implementation of the Large-Scale Social Restrictions. Then the infographic is categorised based on the content which are, general information such numerical information and government policy; and guidance such as health protocol for daily life activities. After that, the design elements including images, shapes, illustration style, color, typography, and layout on the infographic are analysed using visual language and information visualisation theory so that the visualisation formula can be found in order to delivering information and knowledge, at the same time build awareness to wide range of audiences about COVID-19 pandemic.

4. Results and discussions
The first case of Corona Virus infection was reported in Indonesian was on March 1, 2020, followed by the first official release from President Joko Widodo about the first case and also mention domestic mask stock was still available for 50 million. The government feels it is necessary to emphasize it to avoid panic buying or stockpiling to obtain economic benefits from this condition. The president's release is as a response to the public's concern about the transmission of the virus, while detailed information about potential level of cutout about the outbreak has not yet been delivered.

The first infographic on @tempodotco related to this outbreak entitled Corona Virus Fatality, Those who are vulnerable to COVID-19 posted on the 3rd of March seemed want to give the early picture about fatality caused by the virus which later became more popular called COVID-19. The infographic contains a report on corona virus disease released by Chinese health officials, sourced from the Chinese Center for Disease Control and Prevention, visualising data findings about the rate of fatality from the virus that increases align with the age group and poor health conditions. The main information is visualized by horizontal bar graphs to support the number of age groups as well as provide a visualization of how far the range of differences between each age group. In this infographic, 8 age groups originating from infected cases data in China, ranging from the least to the risk of fatality, aged 10-19 years to the most risky, the 80+ age group, are also equipped with presentation data on average fatality rates based on gender and from the total cases in China at that time. This infographic is presented in cool color tones, with predominantly black and dark blue, with contrasting colored text to provide ease of reading, coupled with an image of the enlarged microscopic size of the virus reinforcing a serious impression, according to the level of importance of the information conveyed.

This visual approach on the infographics combines Qualitative Graphic Elements by placing the image of enlarged viruses to provide a picture of the true form of the COVID-19, at the same time Quantitative Information as the main part to inform the measurement or quantitative data that is presented in numbers. The visual approach does not only focus on comprehension, where the
information or messages are conveyed clearly, but also has visual appeal to attract the audience's attention.

The next infographic on @tempodotco related to the outbreak appeared on the next day, entitled "In the Grasp of the Corona Virus" which described the virus outbreak when it had reached 50 countries and potentially to become pandemic. The dominant visualization on the infographic is the world map with points scattered to show the location of the country and the number of cases, which at that time were mostly in China. The two infographics are conveying information based on updated data related to the outbreak.

The next day, March 5, @tempodotco posted for the first time a “survival guide” infographic about how to avoid the virus outbreak. The infographic in titled “COVID-19 Symptoms & Prevention” consisting of two swipe able pages. The first page contains symptoms to watch out for, and the next page is a guide for prevention. With the same color tone as the first infographic, which is presented with cool color tones, with dominant black and dark blue, with contrasting colored text to provide ease of reading, the visual approach to this infographic combines Qualitative Graphic Elements with Narrative to visualize information through a narration or storytelling. Components applied on the infographic combine visual appeal through implementing certain illustration style to attract the audience attention, at the same time keeping the information conveyed clearly so that it should be easily understood and remembered by the audience. The first page displaying information about the 5 initial symptoms that can be suspected of being infected with COVID-19. Information delivered with sub-titles which are 380 Celsius Fever, Colds Cough, Sore Throat, Respiratory Disorders, and Tiredness, accompanied by a brief narrative explanation and simplified human figure illustration with attributes and gestures to support the written information so that the reader more focus to the content. Unlike to the first page, the infographics on the second page are about procedures and instructions so that the clear visualisation becomes very essential. The information conveyed are also emphasizes with red-circled cross symbols to indicate what should not be done and green-circled checks to indicate what should be done on every visual narrative. For the example, "Sneezing", is illustrated by someone with a sneezing gesture while trying to cover his facial area with the palm of his hand that added with a red-circled cross symbol to emphasize that this gesture is not suggested, while on the next picture, illustrated by someone with a sneezing gesture trying to cover his mouth with the inner side of the upper arm to prevent the virus to spread out that added with green-checked check. In addition to "Sneezing", the sub-titles for the infographic on this page consist of “Masks”, with suggestion bout who should wear it; “Face”, visualized with red-circled cross symbol and brief suggestion to avoid touching facial area; “Food”, suggestions about eating clean and healthy food; “Hands”, instructions to washing hands more often; “Crowd”, instruction to avoid crowded place; “Medicine and Vaccine”, about suggestions to go to the hospital for further examination. The information is also validate with a written quote from a Pulmonary Specialist.

At a press conference on March 11th 2020, Director general of WHO, Dr Tedros Adhanom Ghebreyesus, has remind all countries to activate and scale up the emergency response mechanisms; communicate with people about the risks and how to protect themselves; find, isolate, test and treat every Covid-19 case and trace every contact; ready the hospitals; protect and train all health workers. In line with what was instructed by WHO, the Indonesian government made an announcement to public to increase awareness to the spread of the outbreak, including the possibility of Lockdown, a new term for quarantine during an outbreak. Infographic on tempodotco that posted on March 18 containing terms and explanations related to Pandemic. The narrative explanation on the infographic consisting of Lockdown, Social Distancing, Work From Home, Imported Case and Local Transmission, Epidemic, Pandemic, People Under Surveillance, Patients Under Observation, and Suspect. This terminology is increasingly being used in various mass media. In this case this infographics, trying to equip the audience with new knowledge related to outbreak through Instagram, a social media, that easily accessible to a large target audience.

The following day, @tempodotco posted an infographic explaining the 4 types of quarantine that had been regulated by the law, along with the points of consideration for its implementation. The
visual approach to the infographics "What are the Lockdown Conditions in the Quarantine Law?" combines Qualitative Graphic Elements with Narrative to visualize information through narration or storytelling to explain 4 types of quarantine consisting of home Quarantine, Hospital Quarantine, Regional Quarantine, and Large-Scale Social Restrictions. In line with the increasingly widespread outbreak in Indonesia, the implementation of Large-Scale Social Restrictions was finally implemented in Jakarta as the first city, starting from April 10, following several surrounding cities and areas.

Before the implementation of the Large-Scale Social Restrictions, @tempodotco has been presenting infographics that related to daily activities in order to stop the spread of COVID-19 virus, such as an infographics containing advice when using two-wheeled public transport with a visual approach that combined Qualitative Graphic Elements with Narrative. Illustration of the style on the infographic is still the same as the style on the previous infographic which shows the simplified illustration that prioritizing the clarity of information, illustrating two people on a motorcycle, an activity commonly carried out by the people on big cities, especially Jakarta. The suggestion is about the hygiene riding that narrated combining visual and written text on certain parts of the illustration which are hands, helmets, mask, attributes, and money. In particular the hands are recommended to clean with a hand sanitizer, a cleaning fluid that is needed despite limited amount available in the market. The infographic contains guide to everyday life in order to stop the spreading outbreak was also posted to deliver more detailed content. Infographic posted on March 23 with title “Quarantine & Self Isolation to Prevent Corona” clearly explains the need for quarantine and isolation, along with nine steps that are important to carry out. This infographic uses a more narrative approach with dominant written text, while simple cartoon style illustration seems to give a lighter impression as a complementary aesthetic element. The details are also written in bullet points about handling in health facilities and health protocols issued by the government. A similar visual approach is also implemented in “Handling the Bodies of COVID-19 Patients” which this infographic explain the protocol and correct procedure for handling the body to avoid further misunderstanding in public, following concerns about transmission from casualties.

Since the number of infected people keeps increasing in Indonesia, especially Jakarta, self-isolation becomes an important step to prevent wider spread. As an addition from the previous post, as if to make sure the information can be understood and carried out, infographic with title "Sick or Exposed? Do the Self Isolation" was posted following the DKI Jakarta Governor's call to implement work from home. The content of this infographic emphasizing on the importance of maintaining cleanliness. The procedure for washing hands and using disinfectants is repeated. However, this condition has another impact which is difficult to find personal protective equipment, including disinfectants, although there has been an appeal from the government regarding to prioritising the equipment for hospitals and medics and. As a respond to this condition, tempodotco post an infographic "Easy Recipe to Make Disinfectants at Home" to provide practical knowledge to make cleaning solution with ingredients that can be easily found at home.

Tempodotco Instagram has delivered information about quarantine regulation, four weeks before the government finally applies the Large-Scale Social Restrictions in the capital city on April 10, followed by the surrounding area a few days later. An infographic posted on April 1 with title "World Lockdown, Indonesia PSBB", following the approval of the government regulation on Large-Scale Social Restrictions (Pembatasan Sosial Berskala Besar), is presented with a map of the world with color codes refer to countries in the world with COVID-19 infected cases that applying Lockdown. The colors applied on the infographic are predominantly black and blue black, and red color to gives the impression of cautious to show the country with the case and apply lockdown, visually trying to build awareness for the audience. This infographic with a simple visual approach is able to clearly give information about how many countries with the case and cities having the lockdown. In addition, it gives an idea of how far the outbreak has occurred in the world. Visualization of this infographic indirectly illustrates what the world is dealing with as a result of this pandemic.
5. Conclusions

Infographics at the time were published not only as a supplement to the news but also create understanding of the COVID-19 outbreak. The information provided can be general, such as the number of cases, as well as guidance and preparation to face the pandemic followed by government policy and appeals. Infographics that combine a visual approach with written text are presented by emphasizing their main function of providing an understanding. It is believed that aesthetic elements are needed, so audience may understand and remember the whole message. Various information on the infographic does not only provide new insights and understanding about the outbreak but also acts as a guidance that can be applied in the smart society independently, such as isolation and quarantine, in accordance with the concept of Society 5.0 where technology is part of humans, and information technology is used to live life. Since the first case was announced, @tempodotco tends to support the government in raising awareness through information which is believed as useful, complete, interesting and easily understood.

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