Motion Graphics as a Medium of Knowledge Transfer in Creating Awareness Campaign Towards River Pollution in Selangor

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Abstract

Situated in Southeast Asia, Malaysia is rich in natural resources including its extensive river systems. The river's delights serve as a mean for locals to engage in their daily routines. Nevertheless, the contamination of these waterways due to human activities poses significant threats to both human populations and wildlife. Selangor, one of the states in Malaysia, has a significant influence on the sustainability of rivers in the region due to its large population. Numerous initiatives were carried out to enhance public awareness about the importance of maintaining clean waterways. Given the effectiveness of motion graphics as a contemporary marketing tool, integrating it into awareness campaigns could prove beneficial. The aim of this study is to examine the cause and effect of river pollution in Selangor, the cause of motion graphics is not utilised as a knowledge transfer medium and the elements of motion graphics to communicate effectively. The methodology employed in this study is a mixed-method approach, incorporating a preliminary investigation, literature review, questionnaires, and document analysis. The significance of this project lies in its potential to increase public awareness in keeping rivers in Selangor clean through motion graphics.

1. Introduction

Water is a necessary resource for life on Earth, and variations in its natural distribution and quality can have disastrous effects on the environment. One of the most significant natural resources in the world is water, and everyone has the fundamental right to access safe and clean drinking water (Oliveira, 2017). As one of the parts of nature that the Almighty God created, the river is a treasure that we must protect for it to continue playing a role in the lives of the different kinds that inhabit our planet. Even though people's lifestyles have changed over time, Malaysia is fortunate to have numerous rivers available for the local community's use. However, the amount and quality of water in our country have gradually declined over time (Hashem et al., 2021). The River Water Quality Monitoring Report 2022 states that 148 rivers were classified as moderately contaminated, 29 were classified as polluted, and 495 out of 672 rivers had a Water Quality Index classified as clean. According to the Department of Statistics Malaysia, Selangor has the highest population in Malaysia with a total of 7,093,440 people. One of the polluted rivers with dangerous chemical substances in Malaysia is Klang River (Rozlan, 2024), which is located in Selangor. A total of 59 tons of waste were removed from the river within a span of six months

in 2021 (Nadzri et al., 2023). This indicates that the ongoing pollution is in a concerning state. The river's current state is severely degraded that it has become uninhabitable even for the most resilient organisms, such as worms (Aziz, 2023). Motion graphics have taken a significant position in the current industry market. This kind of animation, which lies halfway between graphic design and animation, primarily consists of text. The simplest definition of motion graphics is images that move. To further grasp it, consider the similarities to animation (Khamis, 2021). These days, information is readily available, yet an abundance of information can also be confusing and cause viewers to become distracted. Motion graphic video, may offer a way to communicate information effectively and aesthetically. Motion graphics video is the best marketing medium as viewers find it very interesting.

2. Literature Review

The purpose of this literature review is to investigate the problem of river pollution in Selangor and the potential of motion graphics as a method for knowledge transfer through the process of raising awareness. This section will bring to a close the investigation of the previous research on river pollution in Selangor, as well as the studies that have been conducted to investigate the efficiency of motion graphics in the process of knowledge transfer. The researcher intends to evaluate the potential of motion graphics to bridge the gap between scientific evidence and public awareness regarding the issue of river pollution in Selangor by conducting an analysis of this combined body of literatures.

2.1 River Pollution at Selangor River

Selangor, with its extensive river basins, serves as the primary water source for nearly 4 million people living in the state of Selangor and Kuala Lumpur, the capital of Malaysia. These river basins account for more than 60% of the region's water supply (Wong et al., 2021). Selangor has the greatest population in Malaysia, as reported by the Department of Statistics (DOSM). Nevertheless, certain negligent individuals fail to acknowledge the value of this water supply. Since late December 2020, there has been an increase in water outages in Selangor, Malaysia, primarily caused by water contamination (Shahrir & Hayder, 2022). Newspaper reports indicate that in 2020, Selangor experienced nine cases of raw water source contamination and eight water supply interruptions that impacted a large number of consumers in the state and the Klang Valley (Halim, 2020). This issue is deeply concerning since it will significantly affect the residents of the state. Pollution poses a significant risk to the long-term viability of water resources, even with an ample supply of water available for everyone (Malek et al., 2022). Despite being the largest river basin in Malaysia, it is unable to provide water to the entire population of the state. The contamination of the raw water supply will lead to the closure of the Water Treatment Plant (WTP), which will thereafter disrupt in the water supply (Ahmad, 2023; Halid, 2020; Azaman, 2020).

Nevertheless, the government's Movement Control Order (MCO) fails to deter irresponsible individuals from the raw water sources in Selangor (Halim, 2020). According to a study conducted by Shahrir and Hayder (2022), human attitudes and actions have an impact on alterations in water quality. The researchers identified several factors contributing to pollution, including industrial activity, urbanisation, intensive farming, excessive use of fertilisers in agriculture, and the discharge of untreated effluent and sewage. This can be associated with the individual's attitude. Numerous slum residents engage in the improper disposal of solid waste and construct toilets along the riverbanks (Nadzri et al., 2023). Figure 1 shows garbage accumulates at some part of Klang River.

Fig. 1 *Garbage accumulates in the Klang River*

2.2 Motion Graphics a Method of Knowledge Transfer

Knowledge transfer is a process of delivering knowledge from sender to receiver, and this process includes identifying existing information and using it to develop strategies that give the beneficiaries a competitive advantage (Cheng, 2020). Motion graphics are a medium that facilitates the connection between visual experience and the content they provide and they can become a good knowledge transfer medium. This is because motion graphics considered the core psychological process that attracts the attention of the audience effectively, especially in branding (Das, 2024). Motion graphics have the potential to enhance emotional response, cognitive processes, and engagement through psychological means by altering the manner in which viewers perceive, understand, and respond to visual information.

Villa et al. (2020) effectively demonstrated in their research that there is a correlation between visual experience and motion graphics. The outcome of the research was that motion graphics have a significant impact on sensory experience and possess the ability to influence any individual psychologically. It will establish an emotional connection with the audience, ultimately influencing their feelings (Hussain, 2022). Hussain (2022) clarified further that this is a biological response known as the affective contagion phenomenon. Affective contagion refers to the intricate phenomenon in which an individual unintentionally and intentionally transmits and receives emotional sensations (Clarkson et al., 2024; Goldenberg & Gross, 2020). Adapting storytelling in motion graphics to suit a particular demographic will result in greater engagement (Das,2024), because it will highlight the essential information of the product (Fang et al., 2021). Storytelling is seen as effective due to its role as an information transfer activity. Generally, several knowledge transfer methods are employed, including storytelling, communities of practice, succession plans, coaching, job rotation, knowledge repositories, and mentorship (Mazorodze & Buckley, 2020). Designers have complete control over creating a storyline in motion graphics because they have the ability to explore the art of visual storytelling. Motion graphics cam create animated environments that allow for the manipulation of objects, places, depth, and time aspects through the utilisation of advanced computer software (Ibrahim, 2023).

3. Method

The study employed qualitative method. The data collected through pre-liminary study and literature study. However, this research study focused on the first phase of the research execution. There are three stages of the phase which the first stage is problem identification, second stage is literature review and the third stage is data analysis. Figure 2 explained the journey of how the research is being conducted.

Fig. 2 *Research method flowchart*

3.1 Stage 1: Problem Identification

The implementation process is divided into three steps, the first of which is to identify and investigate the issue of river pollution in Selangor. First, the researcher reviewed publications and reports on river pollution, specifically in Selangor. Following that, the researcher did a thorough literature review to determine areas where current research is insufficient or inconclusive. This review assisted in identifying specific areas where the study could have significant consequences. Review papers offer readers a comprehensive and up-to-date comprehension of the research topic, aiding in the identification of research deficiencies and indicating potential future research directions (Paul & Criado, 2020). A literature review assists the researcher in gaining a comprehensive understanding of the subject area under study, thus enabling the identification of gaps in the existing body of literature and the significant (Kraus et a., 2022). The research will relate the awareness of individuals in identifying the disparity in their understanding of the preservation of river cleanliness based on these cases and findings. The essential data were gathered from newspaper articles, reports, web pages, and television broadcast reports.

3.2 Stage 2: Literature Review

The second stage involved conducting a literature review to gather data that will be used to address the research objectives. The literature review was chosen due to its substantial contribution to the conceptual, methodological, and thematic advancement of several fields (Paul & Criado, 2020). In this stage, the researcher referred to data collected in the first stage to conduct a literature review. When examining the data about the current issue of river pollution, it was essential to integrate both scholarly literature and contemporary media sources. Modern media such as newspaper articles, reports, web pages, and television broadcasts provide information about current river pollution cases. On the other hand, scholarly publications extensively provide the issue while delving into its historical context, relevant concepts, and connections to broader environmental issues. The data from scholarly publication were analysed in relation to the research objectives by using evidence from existing literature. The researcher will conduct an in-depth evaluation of case studies that pertain to the implementation of motion graphics in public service awareness campaigns in order to gather data for the third objective. The researcher analyses the approach of motion graphics used to increase public awareness as a means of knowledge transfer. In order to determine the efficacy of motion graphics as a tool for knowledge transfer and promoting awareness of the effects of river pollution in Selangor, the researcher will also draw conclusions and establish connections between the data collected from the source.

3.3 Stage 3: Data Analysis

The primary objective of this study involves using content analysis to thoroughly analyse the information collected on the causes of river pollution in Selangor. The approach involves the categorization and extraction of data acquired from multiple sources to categorise it into groups, aiming to identify differences, patterns, and relationships (Kleinheksel et al., 2020). This technique enables the identification of the predominant causes of river pollution in Selangor through analysis of several sources. In addition, it offers a systematic approach in obtaining crucial information from the literature review and enables the creation of a comprehensive overview of the primary elements that contribute to river pollution. This is because the method is relevant to data acquired from diverse sources (Lindgren et al., 2020).

For the second objective, this study will use content analysis to categorise qualitative data gathered from a literature review. The content analysis method was chosen since the obtained data, which about the effects of river pollution towards the sustainability of rivers in Selangor, would be analysed and classified into multiple categories, including effects on human health, aquatic ecosystems, water quality, and the economy. This classification is critical for developing a more targeted resolution during the third phase of the research.

In order to achieve the third objective which is to evaluate the effectiveness of motion graphics as a medium of knowledge transfer and raising awareness towards the impact of river pollution in Selangor, the researcher will utilize content analysis to sort and classify the data. The data was acquired from a prior case study that utilized motion graphics in a public service awareness campaign. The researcher will analyse the approach employed in the case study to determine how effective it is in reaching the target audience. Subsequently, the data would be utilized to support the implementation of an awareness campaign addressing river pollution in Selangor.

4. Results and Discussion

4.1 First Phase: Pilot Study

A pilot study or preliminary study, is carried out in order to accomplish the objectives of the first phase of the research. The first objective of the research is to identify the basic causes contributing to river pollution in Selangor. The secondary objective involves the classification of the gathered data into a data table and subsequently summarising. Pilot study was selected to assess the efficacy of the techniques employed in data collection and analysis (Shakir & Rahman, 2022)

4.1.1 Objective 1: To Identify The Cause of River Pollution in Selangor

The researcher has identified the reasons for river pollution in Selangor. Firstly, it is about individuals who lack of awareness of the need to maintain the cleanliness of the river. A study conducted by Nadzri et al. (2023) revealed that inhabitants residing in slums within the Klang River basin exhibit a lower awareness level than those in housing estates. The gap in awareness can be attributed to the higher pollution levels observed in the Klang River. Furthermore, the river is afflicted by the deliberate disposal of oil by individuals, leading to it being the most heavily polluted watercourse with residual oil (Rozlan, 2024). The findings indicate that the standard of living influences the amount of awareness of the person's responsibility in preserving nature. This disparity in exposure to distinct living levels directly influences individuals' behaviour towards the environment.

Next is unethical industrial waste management. The primary risks to the provision of clean water in the state are industrial, commercial, housing, animal husbandry, and aquaculture activities that have been identified as the main causes of regular river pollution, which in turn affects the quality and availability of raw water (Halim, 2020). In 2020, there was a case in Gong River where the water emitted a smell resembling organic solvents. Consequently, four Water Treatment Plants (WTP) ceased their operations (Halim, 2020; Halid, 2020). Since it contains organic materials, the industrial solvent used to maintain heavy machinery has a strong smell, which increases the risk of river pollution (Halid, 2020). Another similar case involves the existence of illegal catfish farming reservoirs, which has caused smell contamination, resulting in the closure of four Water Treatment Plants (WTP) in Selangor (Azaman, 2020).

Finally, it is believed that the high operational expenses associated with treating scheduled industrial waste, which can cost tens of thousands of Ringgits, contribute to the frequent occurrences of river contamination (Muhamad, 2020). As a result, the impacted industries often opt for the easier route of disposing of their industrial waste. This phenomenon is commonly observed in small and medium-sized industrial enterprises that are compelled to decrease operational expenses. While the perpetrator may view these actions as cost-effective and profitable, the effect will occur in the long term. The pollution does not remain localised, but rather it has the potential to propagate and affect other individuals who rely on the same water source. This indirectly affects other unwary users of water supplies.

To summarise, according to the preceding data, pollution primarily encompasses individual behaviours. Individuals residing in more wealthy conditions generally embrace greater educational opportunities and access to resources that foster cognitive development. Conversely, individuals in less privileged circumstances may inadvertently prioritise immediate survival necessities, inadvertently neglecting environmental concerns. Consequently, this gap in awareness also contributes to unethical waste management practices. People may not fully comprehend the enduring consequences of improper waste disposal, resulting in behaviours that inflict harm upon the environment. This irresponsible action is frequently more prevalent in regions with loose regulations and limited public consciousness, thereby demonstrating the correlation between living standards and environmental accountability.

4.1.2 Objective 2: To Classify The Effect of River Pollution That Affect The Sustainability of Rivers in Selangor

River pollution has numerous adverse effects across various fields. Polluted rivers have the potential to adversely affect human health, alter the balance of the ecosystem, and hinder economic development. The researcher has discovered and categorised the implications of river contamination into distinct categories which are human health, aquatic ecosystem, water quality and lastly the economy. Initially, water pollution will exert immense impact on human health. Toxins present in the water are transferred from animals to humans when humans consume the meat (Afroz & Rahman, 2015: Poon et al., 2016). Afroz & Rahman (2015) stated that microbiological water pollution refers to the intake of contaminated water, which can lead to the transmission of infectious diseases such as cholera and typhoid fever. Waterborne diseases like cholera, dysentery is caused by the bacillus, giardia infection, typhoid fever, and infectious hepatitis (Al-Taai, 2021). The sickness that will be contracted depends on the specific chemical composition that is present in the contaminated water. Elevated concentrations of arsenic in water can result in dermatological symptoms and the onset of arsenicosis (Poon et al., 2016). The presence of mercury pollution can lead to several neurological problems, including psychological depression, sleeplessness, gingivitis, amnesia, and kidney inflammation (Al-Taai, 2021). According to a survey conducted by Afroz et al. (2016), diarrhoea is mostly a condition resulting from the ingestion of water contaminated with harmful substances, accounting for 45.2% of cases. The second most prevalent ailment is dengue fever, accounting for 13.3% of cases, followed by malaria at 12.9%, typhoid at 12.1%, hepatitis at 9.3%, and the least common being hair disease at 2% (Figure 3)
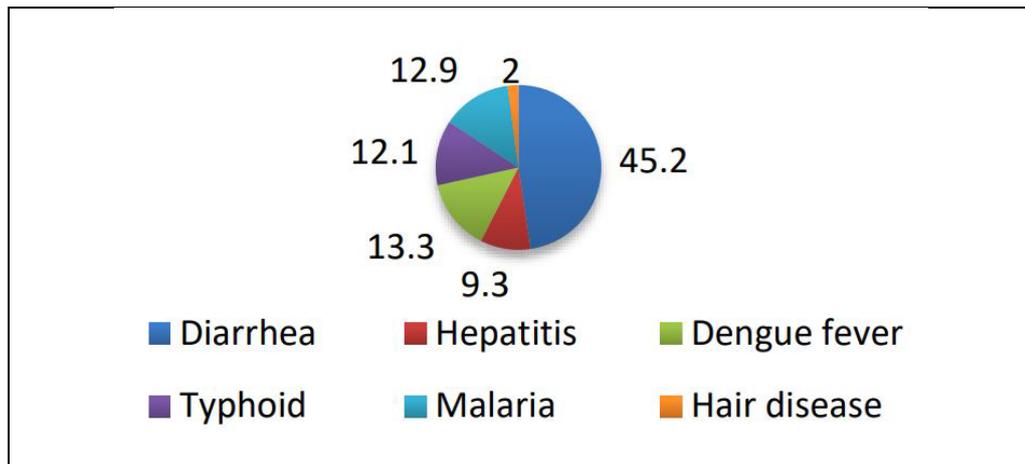
Fig. 3 *Waterborne diseases percentage by Afroz et al. (2016)*

Water, being a vital element of the environment and essential for supporting life, will certainly cause harmful consequences to both plants and animals if it becomes contaminated (Qadri & Faiq, 2020). Aquatic organisms will be similarly impacted by toxins present in polluted water, just as humans are affected. Aquatic organisms, including fish, are also included in this category. The discharge of significant sewage pollution will result in a decrease in the level of dissolved oxygen (Malik et al., 2020: Al-Taai, 2021). The presence of pollutant compounds in the water might obstruct or damage the gills' opening and weaken the ability to resist certain infections and parasites (Malik et al., 2020). The researchers perceived that the toxins expressed to the fish resulted in their illness and mortality. Additionally, even if the fish managed to live, their growth and blood profiles were adversely affected. As the primary source of protein (Okereafor et al., 2020; Malik et al., 2020), fish will serve as a carrier for the transfer of chemicals if they are afterward consumed by humans. Toxic metals can have a detrimental impact on plants by inducing oxidative stress, disrupting cell structures, and reducing photosynthesis (Okereafor et al., 2020). Macrophytes, or aquatic plants, are bioindicators that are susceptible to fluctuations in environmental conditions, such as total suspended sediment. This can have a detrimental effect on macrophytes and phytoplankton by restricting photosynthesis and reducing light penetration (Malik et al., 2020). The researchers further stated, the solid pollutants will cause injury to the photosynthetic structure as a result of friction when they are transported by the water flow. This demonstrates that the pollutants have an effect on aquatic plants by reducing the efficiency of their photosynthesis.

It is imperative to address the urgent issue of river water quality and pollution control, as rivers are the source of 98 percent of the total water consumption (Huang et al., 2015). The stagnation of human daily activities will result from the contamination of water resources, as the primary use of river water resources is to satisfy daily needs (Goi, 2020). The Water Quality Index (WQI) has been announced by the Department of Environment (DOE) to assess the safety of a water source by measuring the quality of the river (Poon et al., 2016; Huang et al., 2015). In 2020, the DOE reported that 443 rivers, or 66% of the 672 monitored rivers, exhibited a pure water quality index. Additionally, 195 rivers (29%) were moderately polluted, while 34 rivers (5%), were polluted. The following Figure 4 illustrates the trend in river quality in Malaysia from 2008 to 2020, as reported by the DOE.

The economic sector is also affected by river pollution. The closing of water treatment facilities that leading to water scarcity, is one of the unfortunate consequences of river pollution (Halim, 2020). Water scarcity is a global challenge that affects economic growth, environmental quality, sustainable human existence, and social activities (Raihan et al., 2023). Property value, sustenance, and business, including small and medium enterprises (SMEs), are affected by water supply disruptions (Selelo et al., 2017). Entrepreneurs of small and medium-sized enterprises will be impacted by the reduction in business productivity as a result of their insufficient resources to sustain the business. The water that has been contaminated only can be fully used after it has been treated. Nevertheless, the cost of purifying polluted water is prohibitively expensive (Hashem et al., 2021). In 2016, the government allocated RM8 million to the reprocessing of the water source in Sungai Semenyih (Yusop, 2021). Conversely, the Selangor government has allocated a substantial sum of RM200 million to the implementation of substantial measures that are designed to address and resolve river pollution incidents (Aminnuraliff, 2020). According to a local newspaper, the Klang Valley's economic losses could exceed RM2 billion as a result of a month-long water supply disruption, which could be attributed to a decrease in production, cost increases, and productivity losses (Raihan et al., 2023). This suggests that the country is obligated to incur substantial expenditures as a result of the actions of certain negligent parties. Consequently, river contamination has the potential to disrupt the economic sector, not only for SMEs but also for the entire nation.
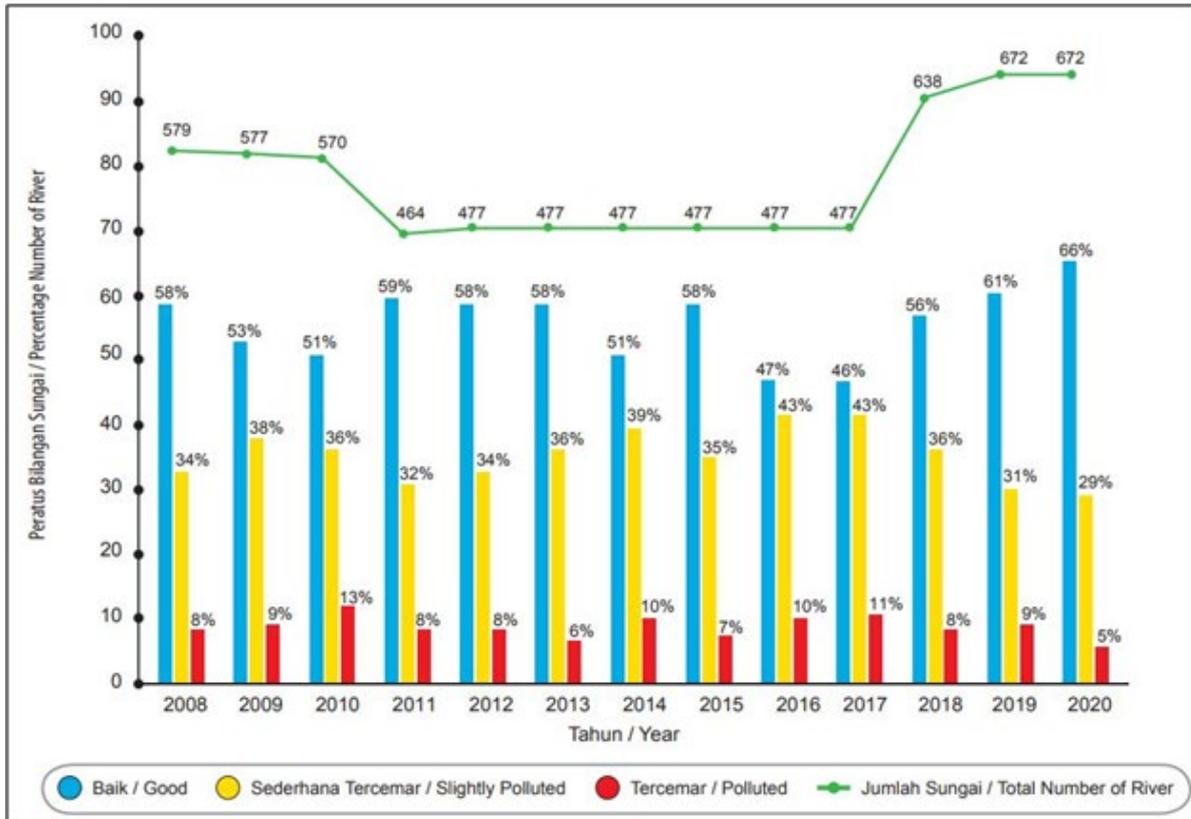
Fig. 4 *River quality trend (2008-2020)*

4.1.2.1 The Effects of River Pollution Classification That Affect The Sustainability of Rivers in Selangor

Data regarding cases and reports about river pollution in Selangor were collected and recorded. The data were filtered and classified into different categories, which are the effects on human health, aquatic ecosystem, water quality and economy. Referring to Table 1, there are a few cases with the same consequences listed in the same column.

Table 1 *Classification of the effects of river pollution that affect the sustainability of rivers in Selangor*

Category	Impact	Case
Human Health	Sanitary	The closing of water treatment plants was a direct consequence of river contamination (Halim, 2020).
		The shutdown of the water treatment plant would result in decreased water pressure and interruptions in water supply (Ahmad 2023).
	Drinking water safety	The polluted water will be monitored by other stations because the water treatment plant is incapable of removing the contaminated compounds present in the water (Halid, 2020).
Aquatic Ecosystem	Wildlife	The Selangor Water Management Board (LUAS) has cleaned a total of 33 sacks containing deceased fish from the rubbish trap in Kundang River (Jaafar, 2024).
		A different case involved a factory that was held responsible for discharging untreated waste into a drainage system, resulting in the death of fishes in the Penchala River (Noh, 2021).

Category	Impact	Case
Water Quality	Water Overall Health	The cause of this incident is the influx of stored oil, which is causing harm to the aquatic ecosystem (Jaafar, 2024). Water treatment plants are unable to effectively treat the raw water due to the excessive quantities of chemicals present in the water (Ahmed et al., 2022).
Economy	Infrastructure costs	In 2016, the government allocated RM8 million on the purification of the Semenyih River, aiming to enhance the quality of its raw water for potential utilisation (Yusop, 2021). Selangor government has budgeted a substantial amount of RM200 million to implement significant measures aimed at addressing and resolving occurrences of river pollution (Aminnuraliff, 2020).

As per shown in Table 1, it is found out that pollution will cause the river water to contain highly concentrated chemicals. As a result, the water cannot be consumed without extensive water treatment (Hashem et al., 2021). Untreated water has an impact in various categories, including impact on sanitary, drinking water safety, wildlife, water health, and infrastructure costs. However, the contaminated water can be treated, but the cost of treating contaminated water is excessively high (Hashem et al., 2021).

4.1.3 Objective 3: To Evaluate The Effectiveness of Motion Graphics as a Medium of Knowledge Transfer and Raising Awareness Towards The Impact of River Pollution in Selangor

According to the Department of Statistics (DOSM), Selangor has the highest population in Malaysia, with approximately 7.4 million people, accounting for 21.6% of the country's total population. Selangor, with its extensive system of river basins, functions as the primary water supply for over 4 million individuals residing in the Selangor State and Kuala Lumpur, the capital of Malaysia. The river basins mentioned contribute to over 60% of the water supply in the region (Wong et al., 2021). The primary utilization of river water resources includes fulfilling everyday necessities, supporting agricultural activities, generating electricity, and facilitating recreational pursuits (Goi, 2020). Water supply breakdown leads to a disturbance in human everyday routines. Hence, comprehending the adverse impacts of pollution on these aquatic systems can lead to collaborative efforts in safeguarding these crucial ecosystems. Hussain (2022) found that just 65% of video viewers are able to complete watching a video, indicating that text-based successes have never been achieved under these circumstances. Hence, the researcher proposes that this opportunity be taken advantage of by including motion graphics. Utilizing motion graphics as a means of knowledge transfer medium is an initiative that capitalizes on its advantages. This indicates that motion graphics have a greater potential to attract a bigger percentage of views. Regardless of the specific sort of motion graphics employed, it frequently ends up in increased website traffic, enhanced user engagement, and improved sales (Nhat, 2020). The viewer's interest increases by the diversified information and innovative presentation of the motion graphics.

Motion graphics offer numerous advantages in comparison to other forms of media. Occasionally, media formats like posters or still image infographics have not been able to convey a significant amount of information. Combining complex information in the media might lead to audience misunderstanding and confusion. For instance, complex charts or lengthy sentences. Motion graphic video offers an invaluable benefit in that it enables the designer to incorporate a variety of media into a presentation, including text, images, drawings, animation video, sound, and diagrams (Shaarani et al., 2021). Furthermore, motion graphics have the ability to engage both the visual and auditory senses (Song, 2021), captivating attention through the use of sound. The auditory component will be aiding in enhancing the visual presentation, providing a distinct experience to the viewers in contrast to consuming non-interactive media. Consequently, designers have the liberty to create their products in a manner that aligns with the campaign's subject (Lestari & Munib, 2022).

From a visual acceptability standpoint, the viewer may find realistic footage uncomfortable and gruesome, leading to their rejection of it. In the Ahl Masr Foundation advertising motion pictures, the inclusion of an actual burn victim evokes a sense of cruelty and discomfort in the audience, leading them to avoid further viewing (Ibrahim, 2022). In a formal business context, cartoons are sometimes perceived as overly childish (Hussain, 2022). However, Hussain (2022) added that motion graphics serve as a bridge that closes the gap between

entertainment and professionalism, making them visually appealing to individuals of all age groups. They utilize the fascinating essence of animation while customizing it to effectively convey serious subjects in a straightforward and persuasive way. Motion graphics, as a form of visual communication design, not only aims to fulfil the audience's requirements but also takes into account their psychological demands (Song, 2021).

Motion graphics is a highly successful technique for a business to distinguish itself from competitors and establish a unique presence in the marketplace. It embraces the aesthetic appeal of visual presentation through innovative animation methods and storytelling (Das, 2024). This approach can also be utilized to promote social campaigns, as it functions as a 'brand' despite not being technically classified as a brand itself. Its objective is to establish recognition among the general public and the intended audience. According to Gartner's (2020) report, 77% of marketers saw an effective brand as an essential element for a company's achievement. This discovery emphasizes the need of creating carefully planned methods for distinguishing a brand. Utilizing motion graphics to raise awareness, similar to how it is used in brand promotion, is a commendable initiative.

5. Conclusion

In general, this research aims to come up with a guideline of motion graphics elements that is effective in creating awareness campaigns towards river pollution in Selangor. While developing the guideline, researchers need to conduct a study to determine the causes and effects of river pollution in Selangor, why motion graphics are not being used as a medium for knowledge transfer, and how the aspects of motion graphics may be effectively utilised for communication purposes. This information will be utilised as a reference to create the guideline. Therefore, this project will benefit from exploring the effective utilisation of motion graphics as a medium for increasing public awareness on the significance of conserving rivers in Selangor. This study also aims to optimise the utilisation of motion graphics in society and provide recommendations on efficiently educating the public about environmental issues through communication.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

*The authors confirm contribution to the paper as follows: **study conception and design:** Muhammad Aqil Safwan Adnan, Nur Faizah Mohd Pahme, Cindy Robert; **data collection:** Muhammad Aqil Safwan Adnan; **analysis and interpretation of results:** Nur Faizah Mohd Pahme; **draft manuscript preparation:** Muhammad Aqil Safwan Adnan, Nur Faizah Mohd Pahme, Cindy Robert. All authors reviewed the results and approved the final version of the manuscript.*

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