

CHAPTER I

INTRODUCTION

1.1 Research Background

Plastic has become an integral part of human life. Its characteristics have brought over the adoption by various industries, doubling the global plastic production in the past two decades alone – 459.75 million tons by 2019 – and projected to surpass over half a billion tons by 2050. The mismanagement of plastic has led to the destruction of countless ecosystems and contributed to a total of 3% of the global greenhouse gas emissions. The plastic problem has put itself to be one of the biggest global environmental concerns of the 21st century (IEA, 2018; Ritchie, 2023; Ritchie et al., 2023).

In recent years, the United Nations (2022) had formed the Intergovernmental Negotiating Committee with 175 participating nations targeting to form a global regulatory instrument for plastic management by 2024. Preceding this, the majority of world nations – 127 countries – have formulated national environmental plastic policies by 2018. Some countries have also promoted the usage of reusable carrier bags as a replacement for single-use plastic (UNEP, 2018).

As part of the initiative, the Indonesian Ministry of Environment and Forestry (KLHK) have pledged to spearhead the commitment in the Southeast Asia region by forming national and regional regulations on plastic usage, production, and disposal, aiming for a plastic-free Indonesia by 2030 (Hadi, 2018; PermenLHK No.75, 2019). Since 2018, each sub-region in the Jakarta Metropolitan Area has enacted single-use plastic reduction policies and promoted the use of reusable carrier bags as their replacement. Several studies done in Bogor city – a sub-region of the Jakarta Metropolitan Area – have consistently shown the success of anti-plastic policy campaigns in raising awareness, influencing sentiments, and encouraging eco-friendly behavior – particularly in the adoption of reusable carrier bags – among Bogor citizens (Kris Indriati & Agustina, 2022; Tafsia et al., 2022).

However, life cycle assessments done in Spain, Singapore, and Denmark have brought to light the reality of reusable carrier bags: it requires a certain “desired number of uses” to offset the environmental impacts they produce from cradle to grave (Ahamed et al., 2020; Bisinella et al., 2018; Civancik-Uslu et al., 2019). The Danish LCA lists said “desired number of uses” for each material types they included. For instance, Polypropylene (PP) bags need 52 instances of reuse before being recycled. Other assessments done in the United States and the Gulf Cooperation Council (GCC) region had suggested for the development of a “greener” raw material composition on the production of polypropylene-based products, further emphasizing the environmentally detrimental nature of reusable carrier bags (Alsabri et al., 2021; Greene, 2011).

A preliminary survey done in this study involving 100 respondents living in the Jakarta Metropolitan Area aged 18—24 shows the adoption of reusable carrier bags as a replacement for single-use plastic to be evident. As many as 89% of the respondents claim to use reusable carrier bags with varying frequency, verifying the efforts of single-use plastic replacement to be successful. However, the findings of the survey strongly indicate that the underusage of reusable carrier bags is common among the respondents and is predominantly constituted upon the lack of knowledge. The survey further uncovers that 70% of all respondents were uninformed about the environmental impacts caused by the underuse of reusable carrier bags, thereby continuing such practice under the largely generalized knowledge that it is positively impactful toward the natural environment.

Ten online articles were reviewed, showing that a form of information media can be accessed and found. Yet despite the existence of information media that provides information about the largely overlooked side of reusable carrier bags, the survey has found a lack of knowledge among the respondents. As many as 62 % of the respondents have observed the infrequency of the topic’s discussion, revealing the possible cause for the anomaly: lack of awareness.

An online observation was also conducted to understand the characters of existing informative media relevant to the topic, many of which were text-

dominated online articles published by news portals both renown and obscure with only a small portion of them being dedicated toward environment-related topics. A research report by the IDN Research Institute (2024) have also found that merely 3% of Generation Z Indonesians – a population category in which the survey was done – prefer text-based content, further proving the ineffectiveness of the current existing media.

The lack of awareness among the Indonesians may prolong the current practice of underusing reusable carrier bags among the Jakarta Metropolitan Area population, potentially scaling up the detrimental effects that the practice produces toward the environment. Therefore, the development of a persuasive media is prudent for increasing public awareness and education on the use of reusable carrier bags in the Jakarta Metropolitan Area.

1.2 Problem Formulation

This paper is written to solve the design problem as derived from its general counterpart. The lack of an effective media for the education and of reusable carrier bags and its impacts threatens to leave the public unknowing of the potential environmental impact they could produce and unwilling to alter their behavior, thereby prolonging the current practice of underusing the bags. Such practice poses a seemingly unforeseen environmental problem caused by the detrimental effects in the production, use, and disposal of reusable carrier bags, potentially defeating the very purpose of its adoption.

Therefore, this study and all potential output shall be done to solve the design problem by establishing the following as a research question:

How is a campaign design able to increase awareness toward reusable carrier bags in the Jakarta Metropolitan Area?

1.3 Scope Limitations

To ensure the effectiveness of the project, a scope must be established. The target audience of the campaign is defined by three categories of confines: demographic, geographic, and psychographic. The table below shows the target

audience of the campaign. Further explanation for the target audience is discussed in chapter 4.

Table 1.1 Target Audience

Target Audience		
Demographic	18—24 years old	
Geographic	Jakarta Metropolitan Area	
Psychographic	Values	Cares about the conservation of the natural environment.
		Advocates responsible consumption for sustainability.
	Beliefs	Believes the underuse of reusable carrier bags is environmentally friendly.
	Lifestyle	Having replaced the use of single-use plastic bags with reusable carrier bags.
Practicing the improper usage of reusable carrier bags due to the lack of awareness and information.		

1.4 Research Objectives

This study aims to design a campaign to increase awareness toward reusable carrier bags in the Jakarta Metropolitan Area.

1.5 Research Benefits

This paper was written with the hope of being able to provide benefits for the parties listed below:

1) Author

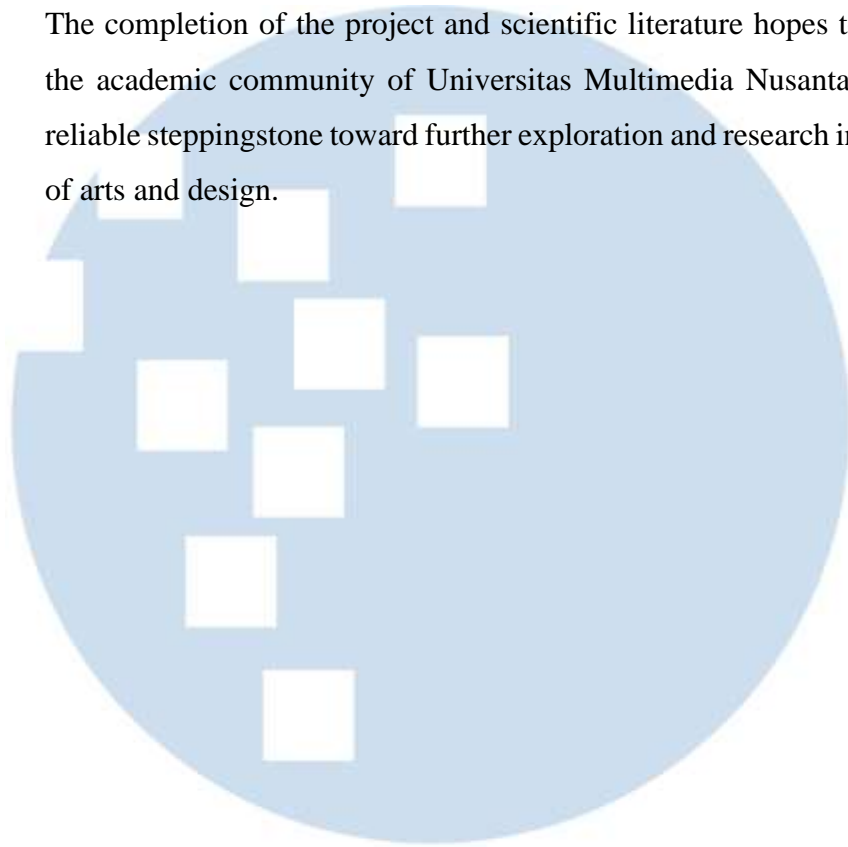
This paper – along with all outputs – was written and created as the means of educational implementation. The author stands to gain academic competence in the practice of scientific authorship through hands-on research, literature development, and thesis defense. Furthermore, the project provides an opportunity for the refinement of technical expertise in the arts and design discipline.

2) Community

The project output is expected to provide educational benefits for the community by informing relevant knowledge that allows for real-life application and positively impacting future generations regarding the influence of human activities toward the natural environment at large.

3) Alma Mater

The completion of the project and scientific literature hopes to provide the academic community of Universitas Multimedia Nusantara with a reliable steppingstone toward further exploration and research in the field of arts and design.



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