CHAPTER I

INTRODUCTION

1.1 Background

Indonesia, located along the Pacific Ring of Fire, occupies a unique position at the convergence of four major tectonic plates: the Australian Plate, the Eurasian Plate, the Pacific Plate, and the Indian Plate. This geographical condition results in the presence of a significant number of active volcanoes throughout its territory. Indonesia contains 16 percent of the world's active volcanoes (Marbun, 2024, p. 2). This makes Indonesia one of the most popular destinations for mountain climbers. Data from Bromo Tengger Semeru National Park (TNBTS) shows that Mount Semeru, the highest peak on the island of Java, attracted 853,016 climbers in one calendar year, from January to December 2018. This number includes 24,769 international climbers and 828,247 domestic climbers (Wicaksono, 2019).

The growing popularity of mountaineering has been followed by an increase in accidents. Data collected by the National Search and Rescue Agency (BASARNAS, 2019) shows that mountain climbing accidents increased over the past four years. From 2015 to 2019, there were 72 reported cases. In 2015, there were 12 accidents. In 2016 and 2017, there were 17 cases each year. In 2018, there were 23 cases, six of which were fatal. In the same year, an earthquake struck Lombok, forcing BASARNAS to evacuate 548 climbers, with two fatalities. In 2019, three climbers under the age of 17 died during their ascent to the summit of Mount Tampomas in West Java (Aprelianto, 2022).

Data from Mounture (2020) records 88 fatalities from mountain climbing accidents between 1 January 2013 and 14 August 2020. The highest number of fatalities occurred among climbers aged 18–24, with 34 deaths. The 25–35 age group recorded 23 deaths. The main causes of death were hypothermia (20 cases), getting lost (14 cases), and falling (14 cases) (Sangsoko, 2020).

This makes late adolescents the group with the highest proportion of fatalities, reaching 39 percent of total deaths. BASARNAS (2020) identifies several causes: lack of knowledge about outdoor activities, insufficient physical and mental readiness, reluctance to seek available information, unfamiliarity with mountaineering SOPs, and excessive enthusiasm and ego, as mountaineering has become a trend.

Santrock (2014) explains that adolescence is a critical stage of development marked by physical, emotional, and social changes. Teenagers at this age often seek new experiences as part of identity formation. Their brains are not yet fully mature, particularly in decision-making functions, making them more prone to impulsive and risky behavior. This is reflected in the strong interest among young people in physically challenging activities such as mountain climbing. For this reason, clear education is essential to help them understand potential risks.

Efforts to educate and raise awareness among young people about mountain safety require an effective and efficient communication medium to connect the target audience with relevant information. Social media is considered the most appropriate medium. According to data from We Are Social (January 2024), Indonesia had 185.3 million internet users, equivalent to 66.5 percent of the total population. Social media users numbered 139 million, or 49.9 percent of the total population. This large figure shows how deeply social media has been integrated into society, becoming part of daily life (Sampurno et al., 2020).
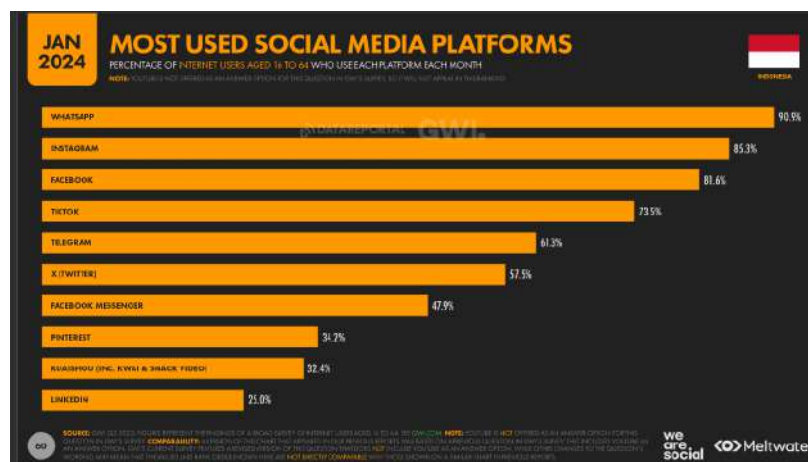

Figure 1. 1 The most used social media

(Source: https://wearesocial.com/id/blog/2024/01/digital-2024/, October 10, 2024)

Instagram will be used as the platform for delivering educational messages. Based on data from We Are Social, Instagram ranks as the second most widely used social media platform in Indonesia after WhatsApp, with 100.9 million users as of January 2024, representing 36.2 percent of the total population. Research also shows that visual content on Instagram enhances users' cognitive engagement by helping them better understand and retain information (Nur Anisah, Sartika, & Kurniawan, 2021). Thus, Instagram is highly suitable for delivering engaging educational content to young audiences, including safety information related to mountain climbing.

To capture the attention of adolescents, educational messages need not only a popular platform but also a visually appealing medium. This aligns with the role of visual communication design, which delivers messages in a way that attracts attention and is easily remembered (Anggraini & Nathalia, 2020). The use of persuasive, distinctive, and humorous visual content is an effective strategy for communication.

Comic strips are considered one of the most appropriate media for communication and education in the digital era, especially on social media. Saputro and Haryadi (2023) state that comics on Instagram are often referred to as comic strips due to their simple format, consisting of several panels arranged horizontally or vertically. Their concise narrative style makes them easy to consume on digital platforms. Comic strips focus on visuals and short text, enabling efficient message delivery in limited space.

Rahmadhanty et al. (2024) emphasize that comic strips are particularly suitable for educating adolescents via Instagram because of their simple design and ability to present information in an engaging and concise visual format. Adolescents tend to have short attention spans and prefer content that is quick to consume, which makes comic strips an effective educational medium (Ananda, 2020).

Visual media such as comic strips increase the appeal of educational content by combining text and images, facilitating efficient communication (Purwanto, 2020). By using Instagram as the distribution platform, educational comic strips can be delivered more effectively to audiences responsive to visual information. This approach not only entertains but also raises awareness about the importance of safety in mountain climbing.

From the data and issues outlined, starting from the rising number of accidents to the lack of knowledge among novice climbers about preparation and accident prevention, it can be concluded that the proposed project, titled *"Designing Comic Strips as an Educational Medium on Mountain Climbing Safety for Beginners through Instagram"*, will focus on preparation and accident prevention.

1.2 Problem Identification

Based on the background described earlier, the problems can be identified as follows:

a. The number of mountain climbing accidents has continued to increase each year. According to data from BASARNAS, accidents rose during the last four years. Between 2015 and 2019, there were 72 cases. In 2015, 12 cases were reported. In 2016 and 2017, there were 17 cases each year. In 2018, there were 23 cases, six of which resulted in death.

In the same year, an earthquake occurred in Lombok, and BASARNAS evacuated 548 climbers, two of whom died. In 2019, three climbers died while ascending Mount Tampomas in West Java. As the number of climbers increases, this trend will likely continue (Aprelianto, 2022).

b. Most accident victims were young people aged 18–24, with 34 fatalities. The second highest group was aged 25–35, with 23 fatalities. The leading causes of death were hypothermia (20 cases), followed by getting lost in the mountains (14 cases) and falling (14 cases) (Sangsoko, 2020).

c. Teenagers often lack knowledge about preparation for mountain climbing and how to handle emergencies. BASARNAS (2020) identified several factors: insufficient education about outdoor activities, weak physical and mental readiness, reluctance to seek readily available information, lack of understanding of mountaineering SOPs, and excessive enthusiasm, ego, and euphoria, as outdoor activities have become a trend.

d. Based on observations conducted by the author through social media, particularly Instagram, between 28 September 2024 and 1 October 2024, there are accounts that publish comic strips with educational content about hiking. However, no comic strip was found that specifically focuses on preparation and accident prevention.

1.3 Problem Statement

Based on the background and problem identification above, the research question is: how to design a comic strip as an educational medium on mountain climbing safety for beginners aged 18–24 through Instagram?

1.4 Research Boundaries

The following boundaries are applied in this project:
a. The result of this project is a digital comic strip uploaded on Instagram.b. The content focuses on education related to preparation, risks, and accident prevention.c. The target audience is adolescents aged 18–24.

1.5 Research Objectives

The objectives of this project are:

a. Raising Awareness and UnderstandingTo help the public understand the importance of safety and the risks of climbing.

b. Reaching a Wider AudienceTo reach more people in the hope of improving awareness and reducing the number of climbing accidents.

c. Providing an Alternative MediumTo provide an alternative medium in the form of a simple comic strip that is easily accessible, especially for adolescents, to broaden knowledge about mountain climbing.

1.6 Research Benefits

The expected benefits of this project are as follows:

a. For the Public

- To increase public knowledge about the causes, consequences, and risks of mountain climbing.

- To motivate readers of the comic strip "MenujuPuncak" to be more aware of mountain climbing safety, reducing the number of accidents and fatalities.

b. For Visual Communication Design Students

- To serve as a platform for demonstrating skills acquired during study.

- To provide a reference for students interested in illustration and storytelling in comic strips, and to support future projects with similar topics.

c. For the Target Audience

- To provide education and knowledge about the dangers, causes, consequences, and handling of mountain climbing accidents.

- To help the audience understand mountain climbing accidents and ways to respond to them.

- To increase adolescents' interest in safety practices during climbing, reducing the risk of accidents and fatalities.
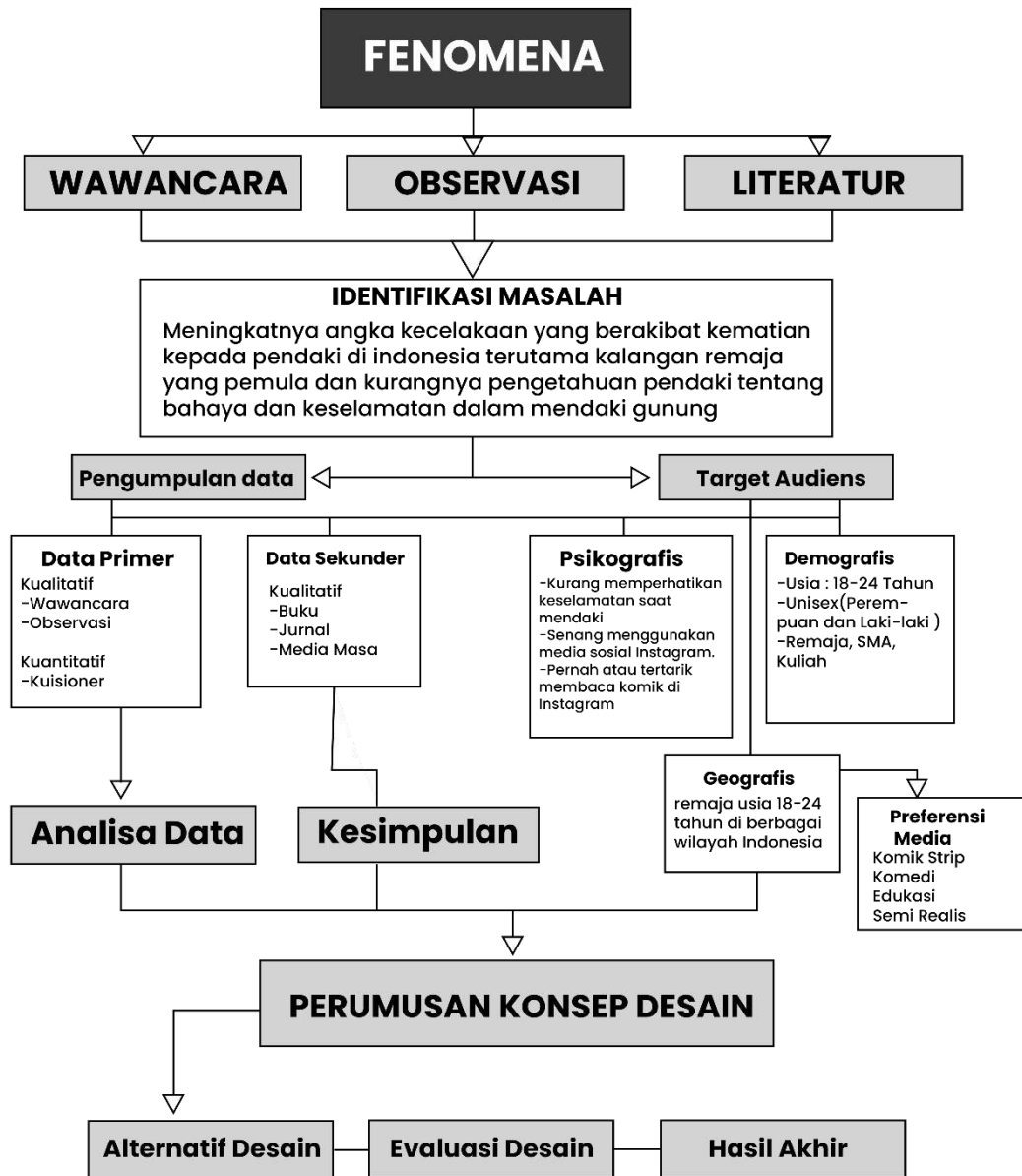
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1.7 Design Framework

Figure 1. 2 Planning Framework
Source : Personal Documents