

CHAPTER I

INTRODUCTION

1.1 Research Background

The economical significance of the Jabodetabek area (Jakarta, Bogor, Depok, Tangerang Bekasi) has created ever escalating demands to accommodate public transit needs. Efficient public transit can ensure the maintenance of traffic flow and continuity. This continuity, in return, safeguards the growth of a city's economy, as well as accessibility for its citizens. Trains, especially KRL (electric rail) Commuterline is considered one of the public transportation choices of people who live within Jakarta's reach to commute for work, especially the punctuality, affordable ticket fare, and the facilities near the train station. KRL Commuterline is operated by PT Kereta Commuter Indonesia, a subsidiary company of Indonesian national railway company PT Kereta Api Indonesia (KAI). According to the Kereta Commuter Indonesia's official website, KRL Commuterline, Jabodetabek line provides transportation services for more than 950.000 people per day.

The increase in the use of KRL Commuterline is predicted to continue every year based on research conducted by KRL Commuterline along with the ITB Research and Industry Affiliated Institute (LAPI), in January 2023. During the period from 2021 to 2023, the five most bustling stations on Rangkasbitung to Jakarta and vice versa were Rangkasbitung, Rawabuntu, Kebayoran, Sudimara, and Palmerah stations. The significant growing numbers in KRL Commuterline passengers need to be accompanied by improvements and adequate facilities for all users, including users with disabilities. In 2019, there were a total of 14.459 individuals with disabilities residing in Jakarta. As the number of KRL users increases, at the end of 2019 a Disability Service Center was finally formed with the aim of helping users with disabilities, but this has not yet been implemented optimally. The author conducted brief interviews with two people with different disabilities who said they had never heard of the service. Meanwhile, accessibility,

accommodation and equality are stated in Law No. 8 of 2016 Article 1 about Persons with Disabilities which discuss in depth about accessibility, convenience and appropriate accommodation for persons with disabilities to obtain the same and equal rights as other people in using public transportation.

As reported by BBC News Indonesia in 2016, individuals with disabilities, including those who are deaf, blind, or use wheelchairs, face challenges due to the inadequate infrastructure and signage of the KRL Commuterline. Many rely heavily on auditory announcements, making the system largely inaccessible to them. There's a widespread consensus among people with disabilities about the difficulties they encounter in identifying and navigating within train stations and carriages. They highlight a lack of clear visual cues indicating which train is arriving or departing, exacerbating navigation challenges.

Furthermore, a 2023 report from Tempo featured Rina, a visually impaired woman and Vice Leader of the Indonesian Women of Disabilities Community. She shared her unfavorable experiences with public transportation, particularly the KRL Commuterline. Rina emphasized that individuals with disabilities would be more inclined to use public transport if there were improvements in infrastructure and regulations tailored to their needs.

Alternatively, many statements about the non-inclusiveness of KRL Commuterline emerged from guardians/companions of people with disabilities, especially when the author conducted short interviews with two parents of children with disabilities. Based on Nur Ali's statement, the father of both children had cerebral palsy which affects the eyesight of his two children, said that the signage on the KRL Commuterline was still too high and small, making it difficult for his two children also himself to read, not only that, when on the train there were also no clear indications of the location, route, or what station they were on. Other information obtained from Abdul Wahab, his daughter has a mental disability called Down Syndrome and his wife is blind, said that the KRL is still not inclusive, there

is no other media available to help navigate while at the station or train and they still rely on the help of officers or sound announcements.

From the large amount of information that the author has obtained so far, it can be concluded that the signage located at both stations and trains has not helped resolve accessibility problems because the signage is uninformative, uncommunicative, and not easy to find for people with disabilities, especially those with wheelchair along with their guardian or companion. So there is pressing needs of improvements in accessibility for people with disabilities in public transportation.

As a final project student of Visual Communication Design and studying the sciences of Visual Communication Design, looking at the accessibility problems, the author sees opportunities and chances to apply the knowledge that has been learned as one or many ways to solve the problems described above. It is necessary to design accessible signage at stations and trains for users with disabilities.

1.2 Research Question

Based from the research background, the following are three identified issues:

- 1) The increasing number of individuals with disabilities, particularly wheelchair users, relying on the KRL Commuterline.
- 2) The current signage does not adequately cater to individuals using wheelchairs
- 3) There is a pressing need to update and renew the signage to be more accessible for people with disabilities.

Therefore the question as follows:

How is the KRL Commuterline accessible signage designed, for people with disabilities, especially people who uses a wheelchair?

1.3 Research Scope

The author is aware of limitations and scope in designing this accessible signage such as:

- 1) The author focuses on designing accessible signage at KRL Commuterline transit stations and non-transit stations in Jakarta.
- 2) Signage design for identification, direction, orientation, and regulatory.
- 3) Outdoor and Indoor signage design.
- 4) Target Audience
 - a. Geographic : Jabodetabek (Jakarta and its satellite cities; Bogor, Depok, Tangerang, Bekasi)
 - b. Demographic
 - Primary
 - Age : 20 – 40 years old is the productive age found using KRL Commuterline
 - Sex : Male and Female
 - SES : B – C
 - Occupation : Student, employee, entrepreneur
 - Group : People with disabilities, especially KRL Commuterline user with wheelchair
 - Secondary
 - Age : 20 – 40 years old
 - Sex : Male and Female
 - SES : B – C (Ranges from Rp. 1.000.000 up to Rp. 5.000.000/month)
 - Occupation : Student, employee, entrepreneur
 - c. Psychographics
Regular KRL Commuterline users, utilizing KRL Commuterline to commute between work and home. For people with disability

especially wheelchair user, who commute around Jabodetabek by KRL alone or with guardian/companion.

1.4 Research Objective

Designing signage and wayfinding that is accessible, inclusive, informative, and communicative for KRL users with disabilities.

1.5 Research Contribution

1.5.1 Benefit for the Author

1. The author hopes that the design of this accessible signage will make it easier for KRL Commuterline users with disabilities and/or guardians and companions to navigate themselves while at the station and on the train, without needing assistance from the officers on duty.
2. The author learns about the design process in companies under government agencies and learns about the provisions that need to be heeded when designing a design.

1.5.2 Benefit for Others

1. This signage design provides learning for the author to deepen and apply design knowledge, as well as problem-solving skills on accessibility on KRL Commuterline.
2. There is an indirect effect of this design, namely opening up opportunities and equality of opportunity for wheelchair user to get work, entertainment and social activities with accessibility in transportation

1.5.3 Benefit for the University

It is hoped that this design can help and guide Multimedia Nusantara University students, as well as parties who need information regarding accessible signage for electric rail transportation modes.