



Education: **ELONGATE**

The Development of Reading Interest in Indonesia through Libraries

Capstone Project Proposal

DA_ED3

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Problem Statement

The National Library of Indonesia (Perpusnas) stated that literacy positively contributes to building creativity, innovation and improving skills that are indispensable in the industrial revolution 4.0. Literacy is an essential must-have skill for everyone. It is inseparable from the world of education. Most of the educational process depends on literacy skills and awareness. Literacy is a means for people to recognize, understand, and apply knowledge. Reading is one of the activities in literacy. Reading is a crucial language skill and also an essential factor in learning. Through reading, people can obtain so much information.

From the latest data in January 2020, UNESCO stated that Indonesia ranks second from the bottom in terms of world literacy, meaning that people's reading interest is very low. According to UNESCO data, the reading interest of the Indonesian people is very concerning, only 0,001. This means that out of 1.000 Indonesians, only one person likes reading. Different research entitled World's Most Literate Nations Ranked conducted by Central Connecticut State University in March 2016, Indonesia was ranked 60th out of 61 countries regarding reading interest, just below Thailand (59) and above Botswana (61), though, in fact, in terms of infrastructure assessment to support reading, Indonesia's ranking is above European countries.

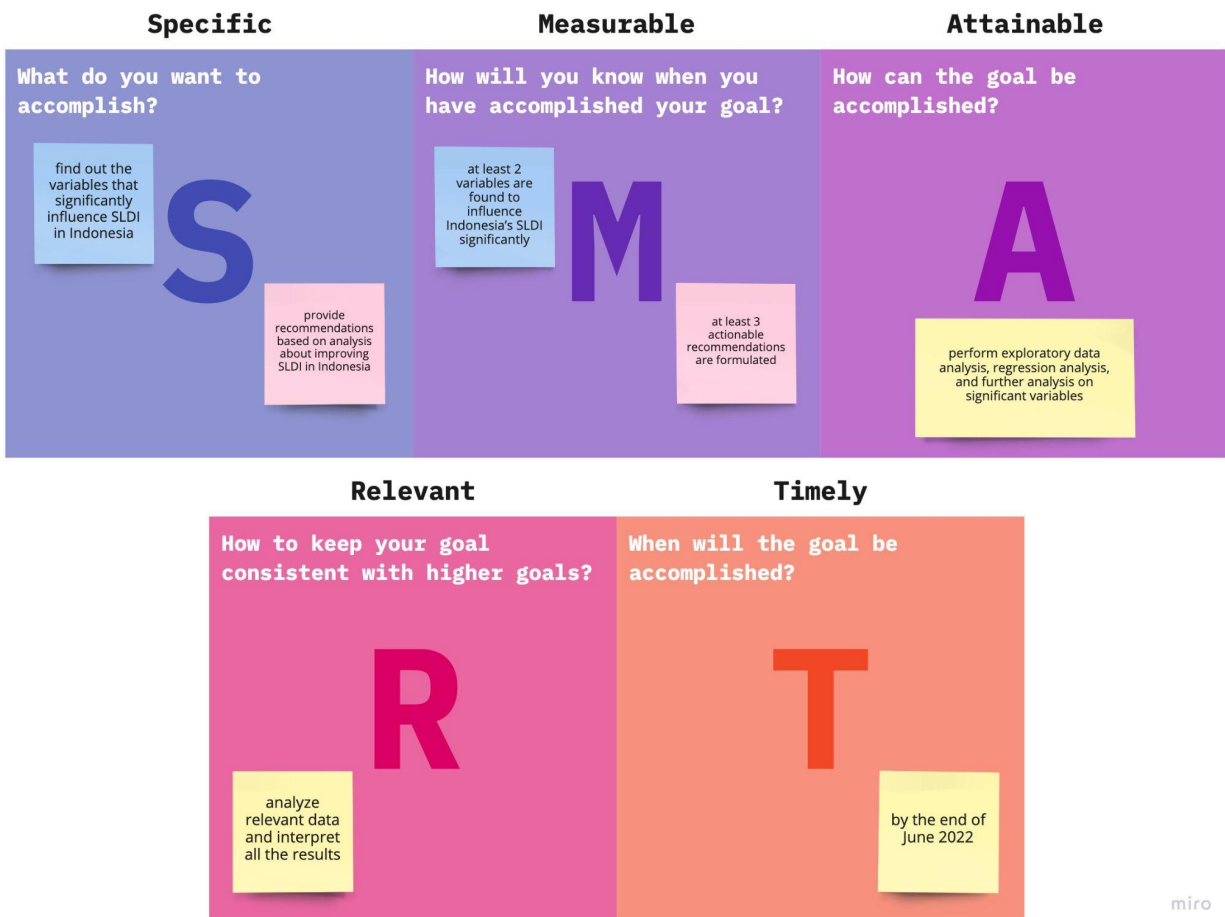
The Central Statistics Agency (BPS) recently released a publication titled Indonesian Statistics 2022. One aspect of education assessed in this case is the level of people's interest in reading. Based on these statistics released on February 25, 2022, Indonesian people's overall level of interest in reading is 59,52, with a reading duration of 4-5 hours per week and 4-5 books per quarter. Of the 34 provinces in Indonesia, only 9 provinces are included in the moderate literacy activity, 24 provinces are included in the low literacy category, and 1 province is in the very low literacy category. Meanwhile, the level of interest in reading for Indonesian people in 2021 is 59,52 or is in the medium category. This figure is an increase of 3,78 points compared to 2020. BPS noted that the level of interest in reading from 18 provinces in Indonesia is in the high category, while the remaining 16 provinces are in the medium category.

In the 2021 Library Coordination Virtual Meeting from the Jakarta National Library Service Building, the Head of the National Library (Perpusnas), Muhammad Syarif Bando, targeted that by 2022, **the Level of Reading Interest (LRI)** of the Indonesian people will reach 63,3 with **the Society Literacy Development Index (SLDI)** reaching 13. The synergy between ministries, agencies, and other stakeholders is needed to achieve this target.

As stated by the Head of the Ministry of Home Affairs, Tito Karnavian, at the National Coordination Meeting in February 2020, the low literacy level in Indonesia is not only due

to low interest in reading but also because the public's access to libraries is minimal, especially in villages. Therefore, the government demanded that the village head use village funds to build a library. Based on the data, out of 83.441 villages, only 33.929 villages, or 40,66%, have libraries. Thus, the relationship between Indonesian people's reading interest and existing library facilities needs to be explored to figure out ways to increase the level of reading interest through developing libraries in Indonesia.

Based on the description above, our problem statement using the SMART method is formulated as follows.



Our SMART Problem Statement

Find out 2 or more variables that significantly influence the Society Literacy Development Index (SLDI) in Indonesia and provide at least 3 actionable recommendations that can be followed up based on the results of the SLDI and the Level of Reading Interest data analysis by conducting Exploratory Data Analysis and Regression Analysis, completed at the end of June.

Project Goals & Success Metrics

Project Goals

Reflecting on the problem statement we formulated, our project goals are as follows.

- **Insights.** Our project aims to provide an overview of Indonesia's literacy, specifically on the Level of Reading Interest (LRI) and the Society Literacy Development Index (SLDI). One of our goals is to determine what aspects should be developed more to increase both indexes by analyzing data about Indonesian people's reading habits and library development in Indonesia.
- **Recommendation.** After finding out the aspects that significantly influence the Society Literacy Development Index (SLDI), we aim to give suitable and actionable recommendations, such as development plans to be implemented by related parties.

Success Metrics

The success metrics are a set of criteria defined alongside the project development as key factors that will define the success of the project and its final implementation. Therefore, our success metrics for this project are as follows.

- The project proposal is finished within 7 days based on the timeline and submitted for review and evaluation by the mentor.
- The data dashboard as the resulting solution gives an overview of the literacy condition in all 7 Indonesia's main islands, namely Java, Sumatra, Kalimantan, Sulawesi, Lesser Sunda Islands, Maluku Islands, and Western New Guinea.
- There are at least 3 charts in the data dashboard to make suitable target users easily understand the visualization of the data dashboard.
- At least 2 variables are found to influence Indonesia's literacy significantly and at least 3 recommendations are delivered.
- All required capstone project submissions, such as the project proposal and the showcase slides, are done within approx. 2 months and submitted to be graded by Generasi GIGIH 2.0.

Product Description

Uses and Features

Our product is a data dashboard that is useful for providing visualization of the data and its analyses so that the targeted users can draw conclusions and solutions related to the Society literacy Development Index (SLDI) and the Level of Reading Interest (LRI) numbers and the low reading interest of Indonesian people.

Several features in the following will be available in our data dashboard to make it easier for the targeted users to understand the data visualization based on our problem statement.

1. A filter feature to select islands/regions in Indonesia that users want to get an overview about.
2. The visualization displays the factors that influence SLDI significantly based on our data analysis results.
3. The charts visualize the values in each province so that users can check the SLDI and LRI in each province based on the data we analyzed.
4. The feature displays indicators of Indonesia's literacy in each province based on the data we analyzed.
5. The feature shows the variables that are found to influence Indonesia's SLDI significantly.

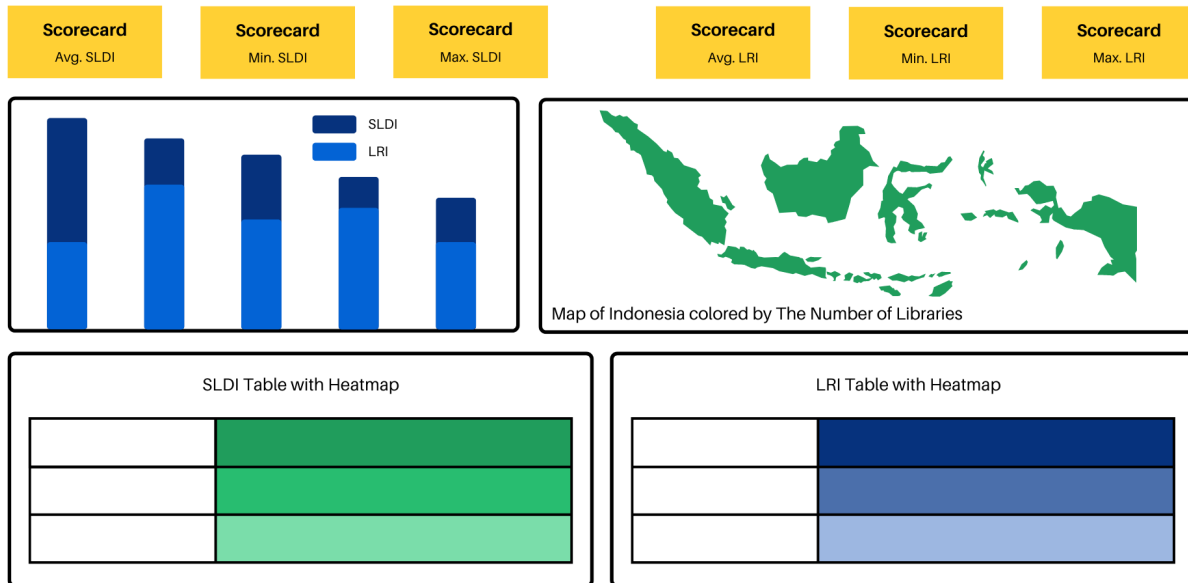
Technology

We will use *R Studio* or *Python* to analyze our data and *Google Data Studio* to build the data dashboard as supporting technologies in working on this project.

Mock-Up

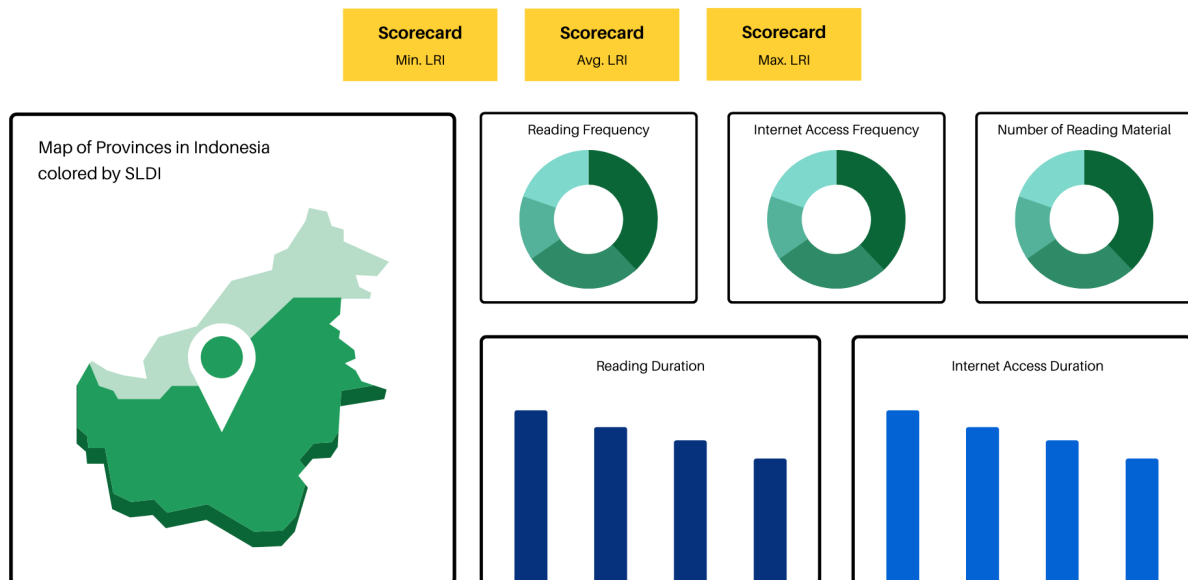
Before our actual project development begins, we first illustrate the layout of our project output, which is a data dashboard mock-up as shown below. We create this as a form of any depiction of how our data dashboard will look and feel that can soon be showcased.

THE OVERVIEW



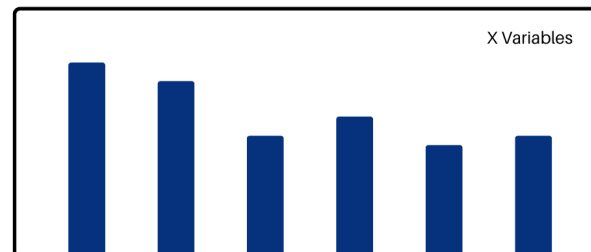
THE LEVEL OF READING INTEREST

Filter by Island



THE SOCIETY LITERACY DEVELOPMENT INDEX

Filter by Island



Analysis Results on The Society Literacy Development Index (SLDI) and its Factors

Target User & User Journey



Target User

Our target users are the Indonesian government, especially those working in education and library institutes on a national scale, who are authorized to take action and will follow up on related problems regarding the data we have analyzed. Nevertheless, the data dashboard will also be suitable for the public as it will show an overview of Indonesia's literacy.

User Journey

A user journey is a path a user may take to reach their goal when using a data dashboard. The user journey map below is used in designing our data dashboard to identify the different ways to enable the user to achieve their goal as quickly and efficiently as possible.



	AWARENESS	CONSIDERATION	USER SERVICE	LOYALTY
	ACTIVITIES <i>Find out the Level of Reading Interest (LRI) and the Society Literacy Development Index (SLDI) in Indonesia</i>	<i>Browse through the library institute of Indonesia</i>	<i>Open the data dashboard</i> <i>Filter the dashboard by Island</i>	<i>Users use the dashboard as a reference to increase the level of literacy in Indonesia.</i>
	USER GOALS <i>Gain insights that Indonesia's literacy rate does not meet the standards.</i>	<i>Find data from the library.</i>	<i>Users can view analyses related to the Level of Reading Interest (LRI) and the Society Literacy Development Index (SLDI) in Indonesia</i>	<i>The dashboard is used as a reference by related institutions in increasing the LRI and SLDI rates in Indonesia.</i>

Potential Difficulties

In working on this project, we encountered several difficulties, such as the Society Literacy Development Index (SLDI) data that we used is limited to the year 2021 only. Moreover, we still aren't sure about the proper method to use in our analysis. Other than that, we are still learning to use R Studio and Python to process our data.

We believe that we can tackle every challenge in the difficulties we stated in the previous paragraph by applying the problem-solving skills we learned from Generasi GIGIH 2.0 soft skill class. For the real action, we plan to contact The National Library of Indonesia (Perpusnas) to request more data other than 2021. We also would love to further brainstorm together in meetings and consult the problems that we may face with our mentor.

Detailed Work Plan

Work Division

- **Collect Data** : Bagas, Faiz, Mia
- **Process Data** : Mia, Farin
- **Analyze Data** : Reza, Faiz, Bagas
- **Create Data Dashboard** : DA_ED3 Group
- **Create Showcase Presentation** : DA_ED3 Group
- **Showcase Preparation** : DA_ED3 Group

Work Timeline

- **Collect Data** : 30 May - 7 June 2022
- **Process Data** : 8 June - 12 June 2022
- **Analyze Data** : 13 June - 23 June 2022
- **Create Data Dashboard** : 24 June - 1 July 2022
- **Create Showcase Presentation** : 2 July - 3 July 2022
- **Showcase Preparation** : 4 July - 9 July 2022

JUNE						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JULY						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31