

Connecting Communities and Local Governments to Co-create Circular Economy Approaches in Indonesian Cities



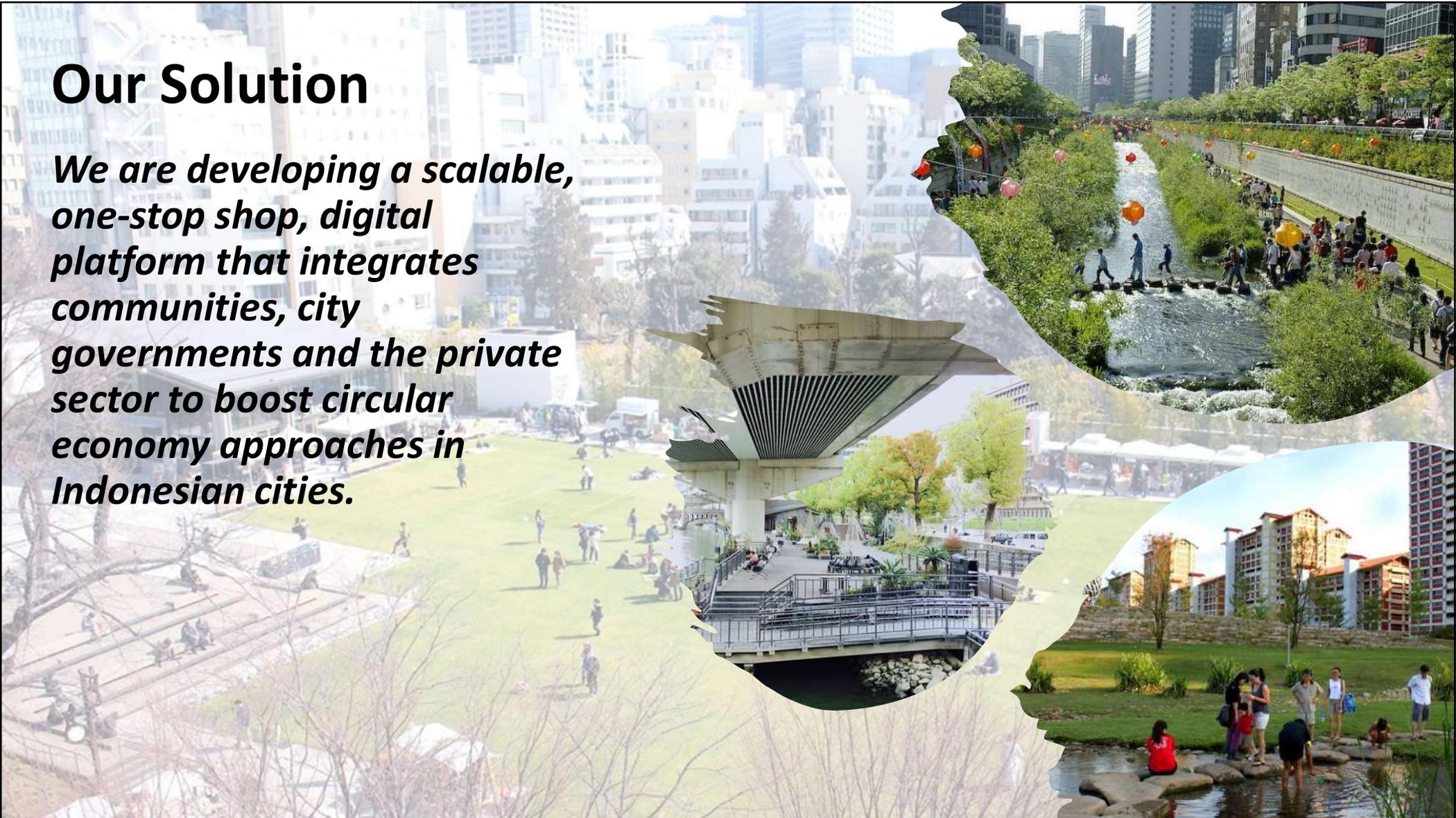
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Problem and Motivation

Our Solution

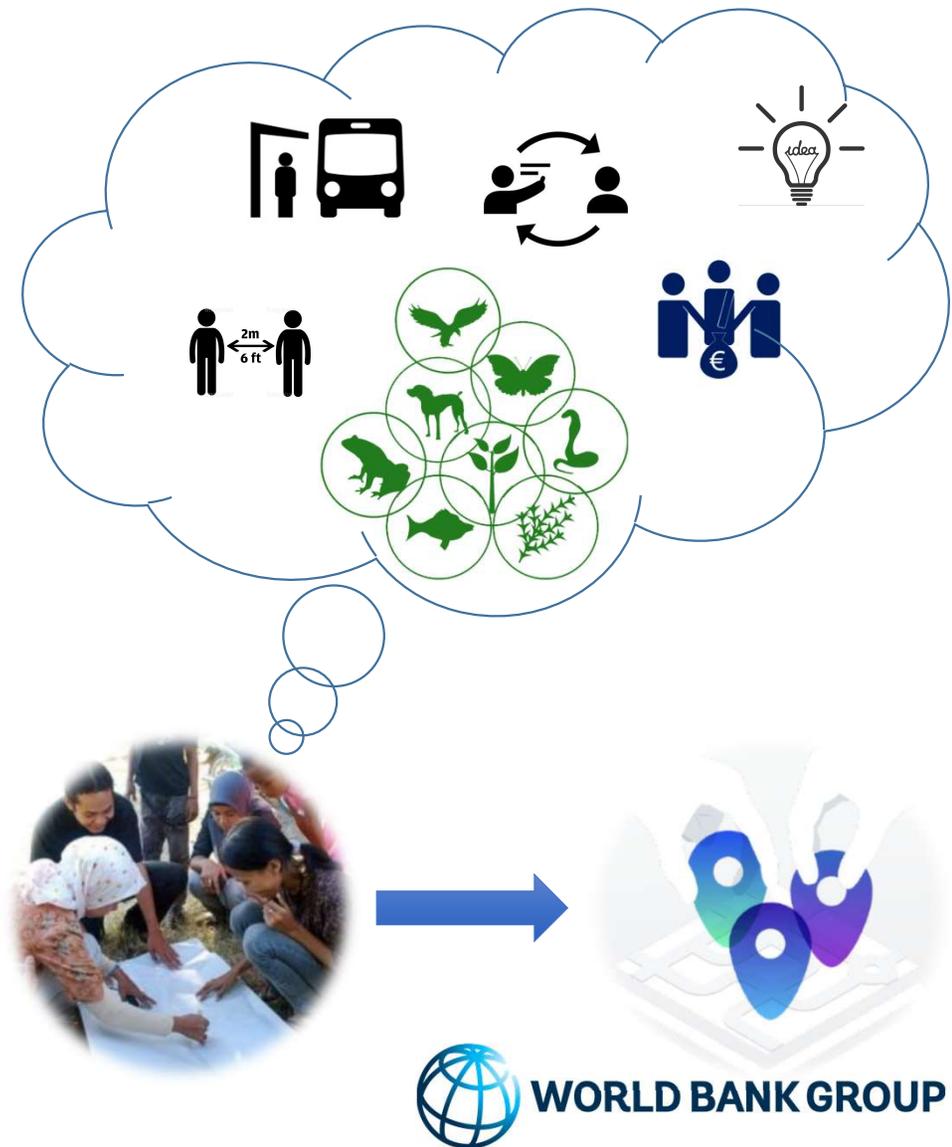
We are developing a scalable, one-stop shop, digital platform that integrates communities, city governments and the private sector to boost circular economy approaches in Indonesian cities.



Our Solution

- A new digital platform that will allow a **one-stop access** to a variety of information that points to the development potential of the identified public space.
- Collab Data¹⁾ open-source mapping tool as the baseline technology, which a **proof of concept exists and tested in multiple Indonesian cities**.
- Use of **AI-powered data analysis algorithms to translate textual data from communities** (anecdotal information, resident interviews, tweets from residents, etc.) to actionable insights.
- Unique approach integrating 1) off-the-shelf **satellite imagery data that is globally available** and 2) **in-situ data that is locally collected from a community body of citizens, residents and the private sector**.

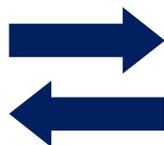
1) Developed through the Indonesia Sustainable Urbanization MDTF (IDSUN) under City Planning Labs and supported by the Data Innovation Fund.



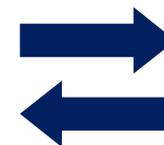
Building on Collab Data - Citizen Feedback Function



Citizens will be able to provide place-based information/reports to the government



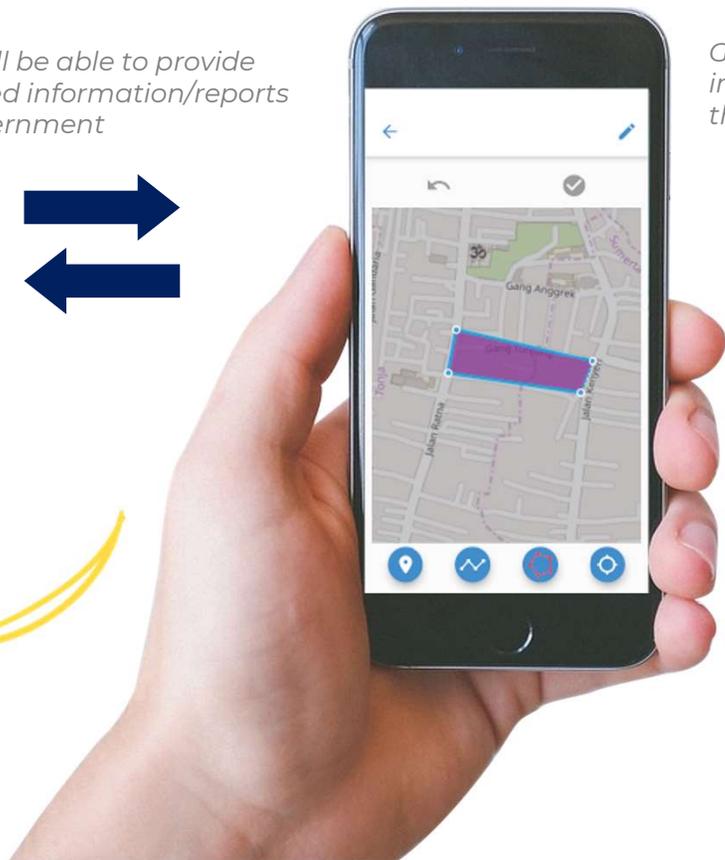
Government can receive information from citizen through the platform



The collected data (including selected analytics) and updates from the government will be displayed in the platform



The platform will generate analytics of the collected data, including NLP, for large-scale textual data analysis in a dashboard

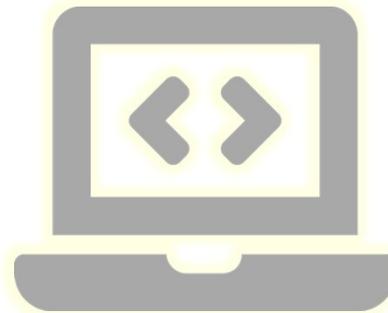


Natural Language Processing (NLP) Feature

Citizens will be able to provide comments, inputs through the platform.



The textual data will be processed and analyzed using the Natural Language Processing (NLP) feature of the platform.

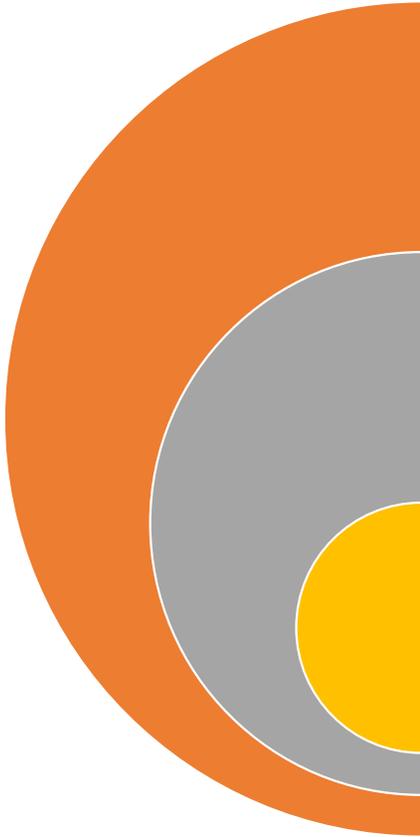


The result of the analytics will be useful for the government to better understand the sentiment of the citizen about public areas, as well as identifying key words/phrases that are important in prioritizing investment/intervention

The NLP feature can also be used to analyze existing textual database (such as from google review) to enrich the information for analysis



Power of Incremental Innovation and Added Value of Our Solution



“Geo-spatialization of waste” by providing valuable information on sanitation and waste issues including point data on informal dumping, which will be important data points for the operationalizing circular economy approaches in cities.

Ability to inform national programs, ongoing Bank projects and projects under preparation **on locations where physical investments can be made to transform underutilized locations into valuable public spaces.**

Power to combine **robust community-driven data collection methods with advanced AI algorithms and GIS mapping**, to convert large quantities of diverse textual data into actionable insights which can inform project, infrastructure or service planning, design and evaluation.

"There is no power for change greater than a community discovering what it cares about." – Margaret J. Wheatley

