Project 3.02 | Crowdsourcing a Spatial Data Infrastructure

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Objectives   To explore the potential of crowdsourcing and open source technologies in addressing SDI development challenges in resource   constrained contexts, such as developing nations

Outcomes   A prototype of SDI components for supporting the crowd in developing geospatial solutions to their problems

Geospatial problems:

Development of regional plans | Hazard response management | Supply chain management of resources

Introduction

A Crowdsourced Spatial Data Infrastructure (SDI) based on free and open source technologies, emerging from grassroots (bottom-up), seems to hold promise for a more affordable, efficient and sustainable alternative of handling geographical information for resource management and hazard response.

The building of government led (top-down) conventional SDIs in developing nations, has been fraught with a number of challenges which could be overcome by a crowdsourced solution using open source software.

Reseach Question

To what extent can crowdsourcing and open source technologies be used to address the challenges of SDI development in developing nations?"
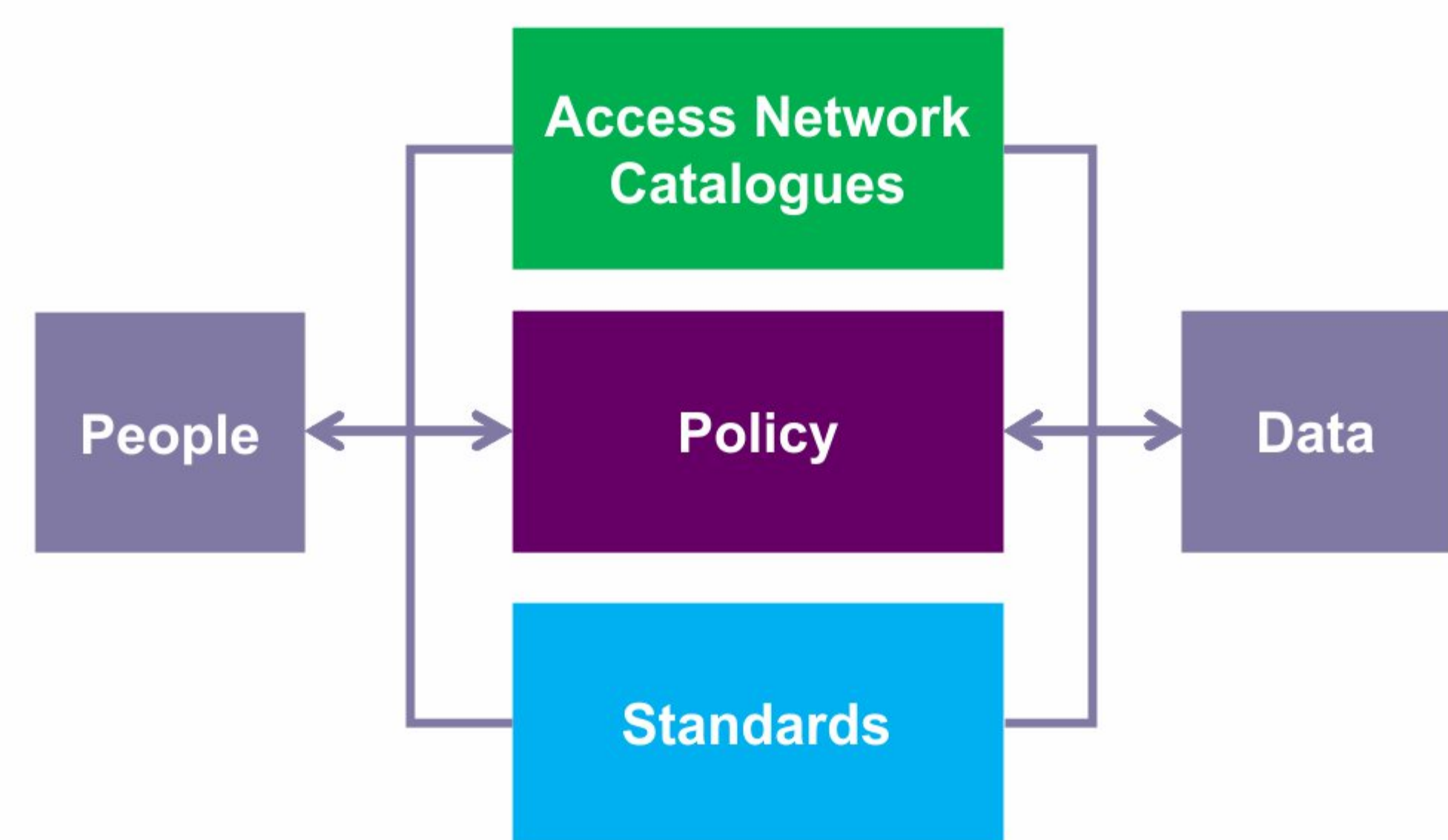
PhD Goals

- Review available Open Source Software
- Identify gaps in technology
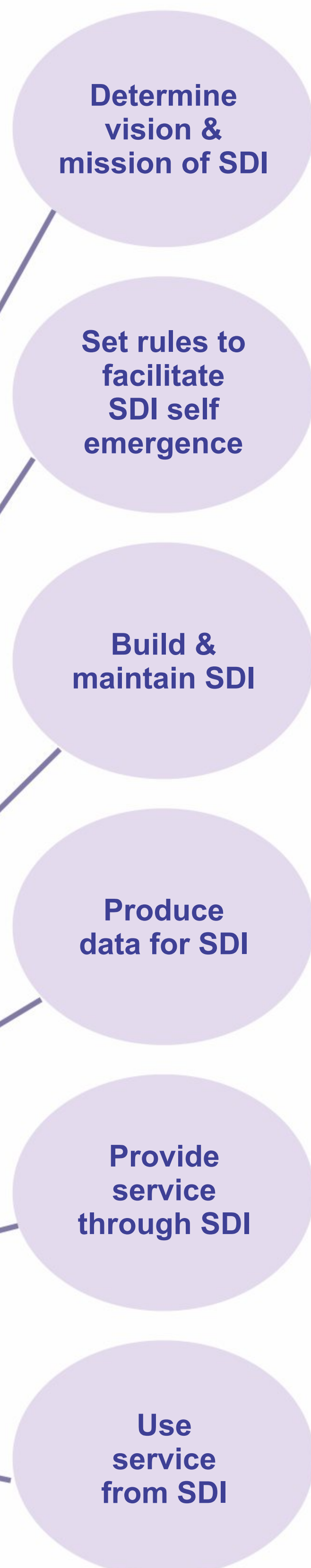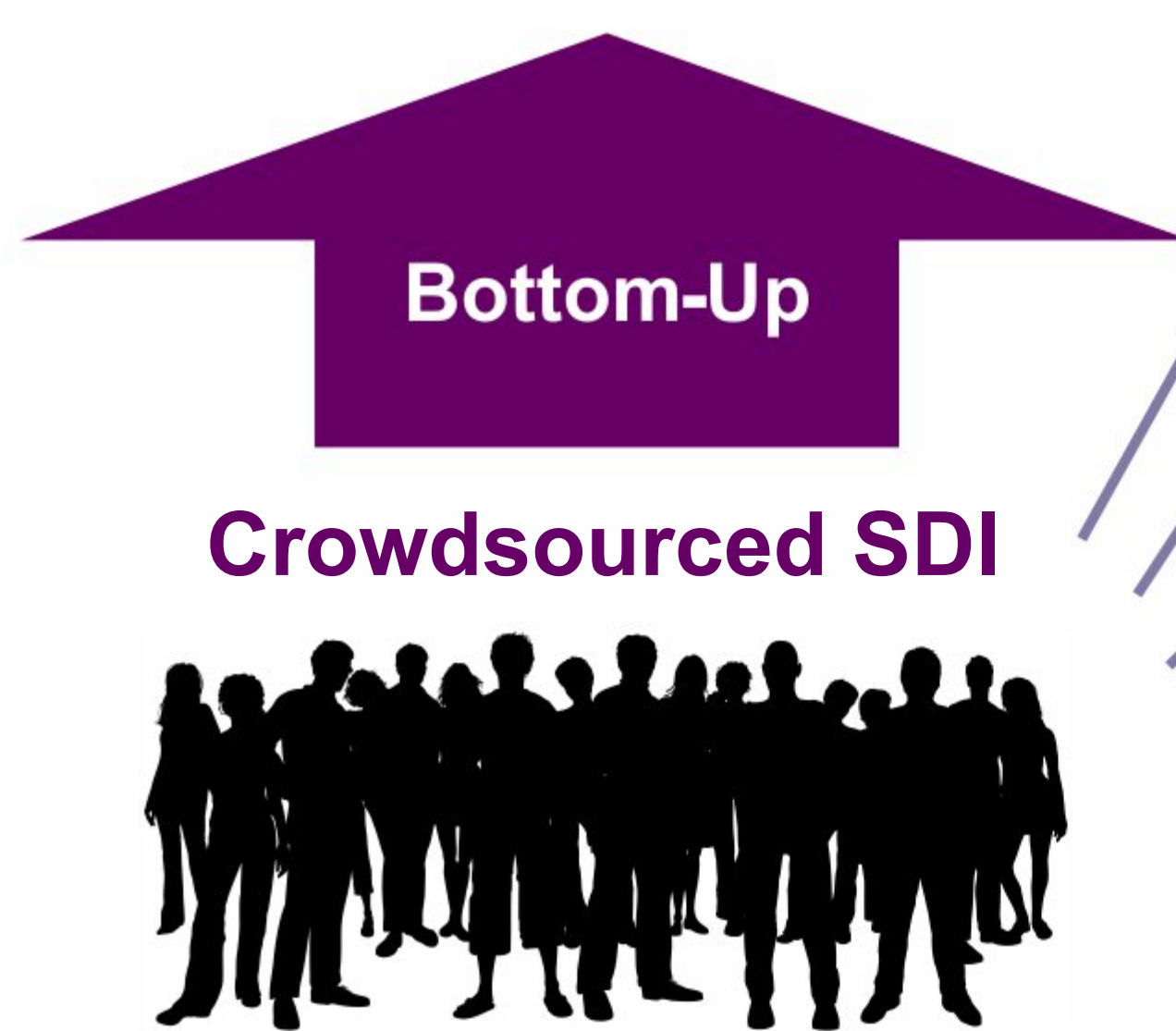- Create prototype of SDI components to support the crowd
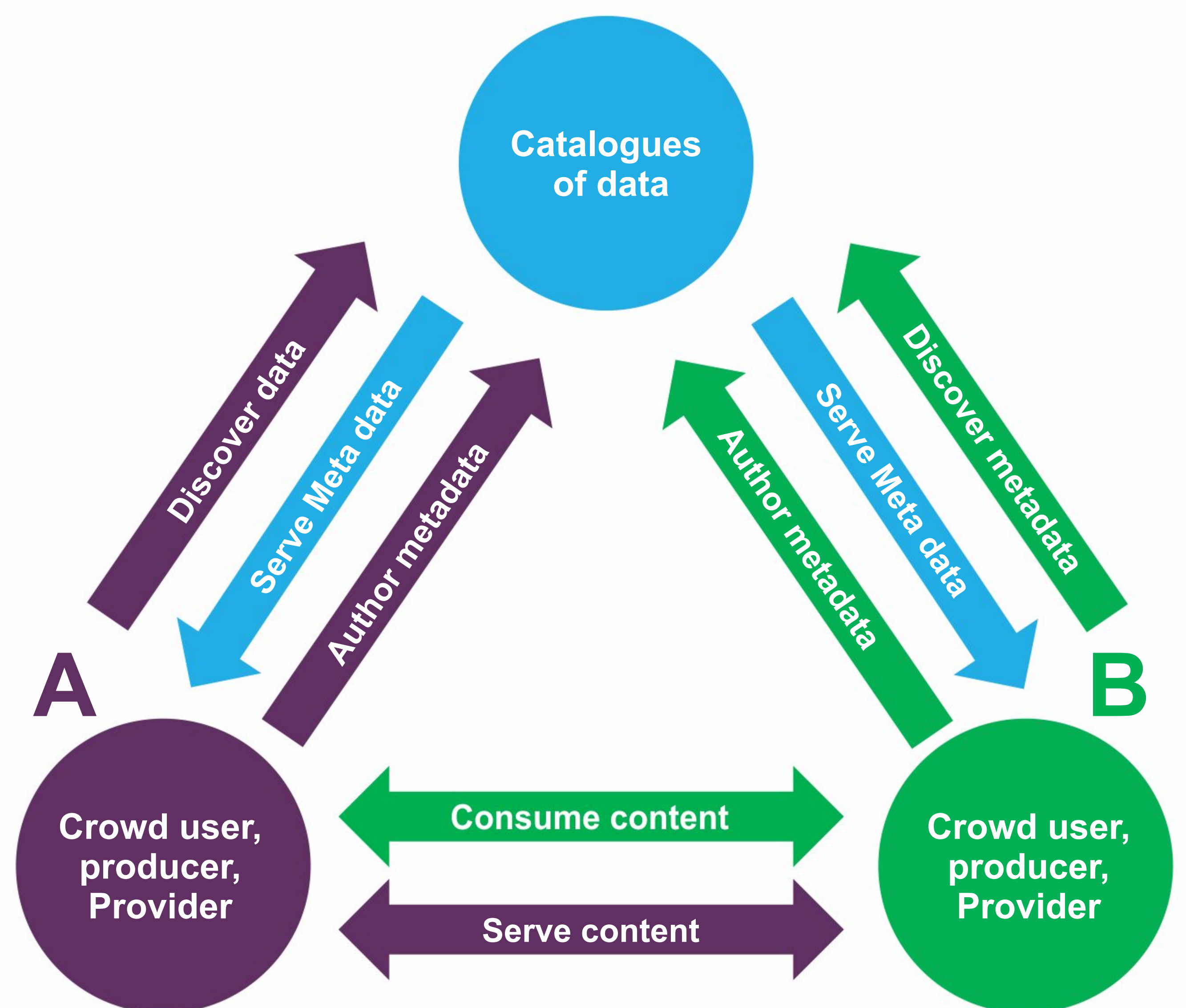
Community geospatial solutions

- Development of regional plans
- Hazard response management
- Supply chain management of resources

SDI Components

Crowdsourced SDI roles

Summary

A Crowdsourced SDI built with Free and Open Source Software is aimed at supporting communities with tools to enable them develop geospatial solutions to their problems.