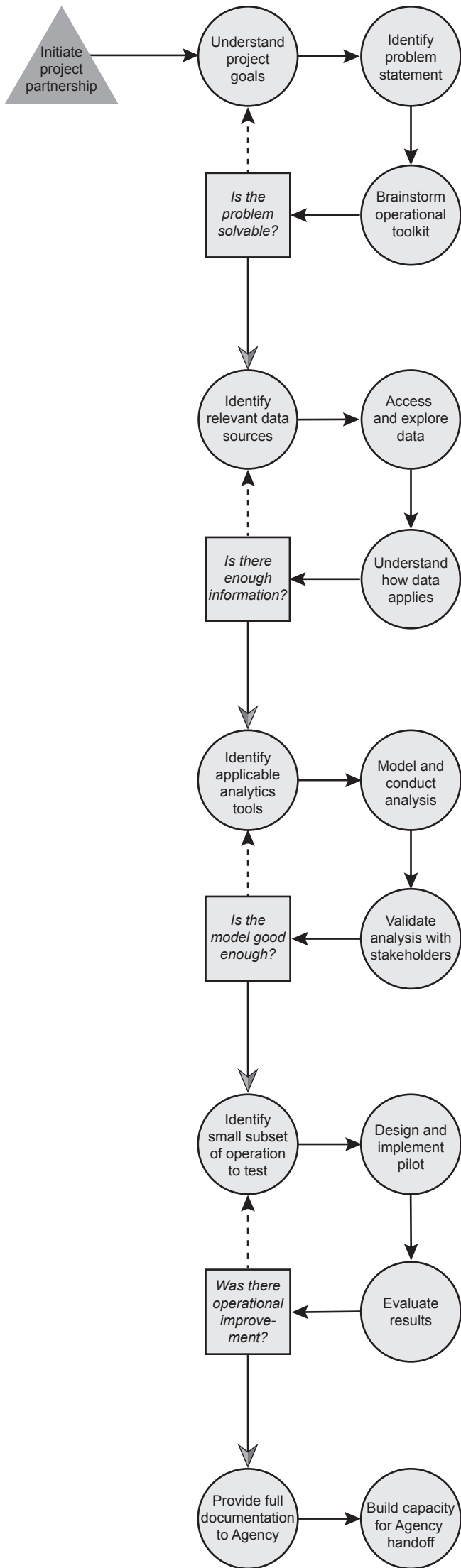


MODA Process Map

This process map charts the start to finish of a full operational analytics project that culminates in operational implementation. Note that a given project may jump around from phase to phase, and not all projects reach the pilot phase.



I. SCOPING

What is the analytics question?

The core of a good analytics project is a clearly defined question which can be answered using data. The project should be tied to a specific City operation that analytics can help improve. In the scoping phase, MODA works closely with the implementing agency and other stakeholders to map out project goals and possible operational strategies for meeting them. Scoping is the most open-ended phase: it is the analyst's opportunity to ask questions to understand the agency's operational priorities and processes.

II. DATA

What data is required?

MODA works with the implementing agency partner to understand what data is available and how it can be used to address the problem. This includes working with the people who use the data, understanding the source of the data, why and how it was collected, and building a data dictionary if none exists.

III. ANALYSIS

What data analysis is applicable?

Using the project goals and operational toolkit as a guide, brainstorm multiple analysis approaches. Where appropriate, the analysis should have a falsifiable hypothesis that is clearly aligned with operational goals. Results are presented to the implementing agency and subject matter experts for feedback in a straightforward way. MODA analysts use open source tool such as R and Python to promote transparent and reproducible analysis.

IV. PILOT

How can the analysis improve the operation?

MODA works with the implementing agency to put the results of the analysis into action. Once the operational pilot is identified, MODA provides assistance in establishing baseline metrics and a way to track the effect of the model. After the initial results are attained, this becomes an iterative process where we reassess the hypothesis and assumptions, and make adjustments as necessary.

V. HANDOFF

Is the model sustainable?

In this phase, MODA hands off the project to the partner agency, providing full project documentation and capacity building support as needed. This includes training agency analysts, presenting to agency leadership, or assisting in procurement discussions.