

Data Opportunity Canvas

Title:

Date:

Iteration:

Service stakeholders

How does the service involve stakeholders?



Who benefits from services based on the data? How? **Primary beneficiary**
What decision do they take to benefit?
What service is needed to take a decision?
Who collects relevant data and who needs access to it?

Goal: focus on the atomic service

Any other beneficiaries from derived services? **Secondary beneficiaries**

Data specs

What is needed to transform data into services?



What sensors, which sources and what resolution does your data need? **I/O**
What resolution and aggregation does each service need?
Do services require an API or dashboard? Is privacy an issue?

What algorithms are needed to process the data? **Algorithms**
Any predictions/classification/resampling needed?
Is decision transparency or traceability required?

Goal: find sufficient requirements

What is the expected data volume flowing through your system? **Usage**
How frequently are services used?
When do processes need to run?
Add to each service a required Quality of Service: if it breaks, how fast should it be fixed?

System view

A useful high-level perspective.



Sketch the main system components needed (e.g. database / API / UI / pipeline / algorithms / documentation) with their inputs, processes and outputs.
Are dashboards/interfaces/portals connected to specific users?
How often is each component used?
Where do processes run?

Goal: connect beneficiary to the data

Benefits

Benefits to each relevant stakeholder.



Which benefits are more immediate and which follow later?
How do you regularly measure achieved value?
Sketch plots of how you expect the value to scale with service demand over time.

Goal: plan for incremental success

Costs

Investments to build and maintain services.



Think at least of e.g. analysts / engineers / developers / support staff.
Any third-party services / hardware / computation costs?
Sketch plots of how you plan to accrue costs over time.

Goal: prepare for your mode of operation

Risks

What threatens success the most?



Describe the uncertainty in your benefits (e.g. achievable scale).
Describe the uncertainty in your costs (e.g. lock-in with tech suppliers).
Describe the uncertainty in your technological solution (e.g. enough data collected).

Goal: express uncertainty