ML Project Assessment

Approach

◯ **One-off analysis** *or* ◯ **Continuously running software**

Input data & where it comes from

ML outputs & how they are utilized

→ ML →

Impact (vertical axis)
Feasibility (horizontal axis)
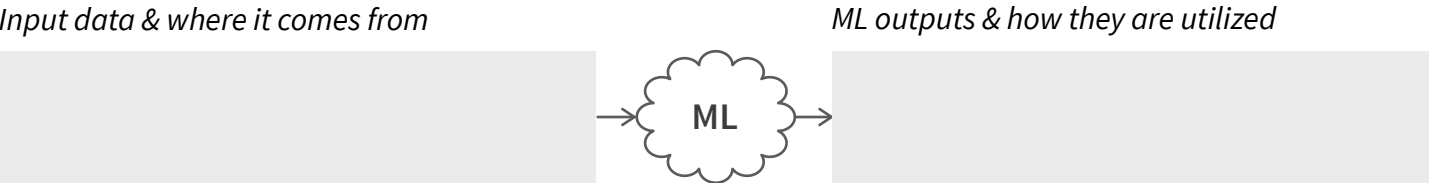
Impact

KPI:

Status quo

With ML

unacceptable   *perfect world*

Why is the status quo problematic?
Tedious & repetitive manual task?
Insufficient information to make a decision?
Poor user experience?

What improvements can we expect?
How will this reduce costs (e.g., speed, fewer errors)?
Increase revenue (e.g., new product feature, retention)?
What is the scale (number of users, volume)?
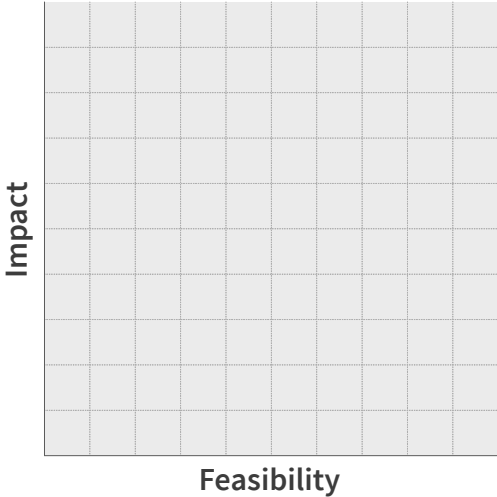
Feasibility

Can it be done?

required data difficult to collect — **Data** — *data easily accessible; high quality & quantity*

no known solution — **ML solution** — *open source library / pretrained model*

edge device with poor hardware & no internet — **Deployment** — *existing MLOps infrastructure*

Should it be done?

legally prohibited; users don't want it — **Risks** — *world would be a better place even if the model makes some mistakes*

Build or Buy?

Does this create a strategic advantage?
Does this require our domain knowledge?
Do we have the technical / ML expertise?

Risk mitigation strategies

E.g., human-in-the-loop?

Impact
Status quo
with ML
Difference

Feasibility
Data
ML solution
Deployment
Risks
Minimum

Impact (vertical axis) / **Feasibility** (horizontal axis)