

<div><div>PREDICTION TASK</div><div><div>?</div></div><div>Type of task? Entity on which predictions are made? Possible outcomes? Wait time before observation? Basic classification task. Binary for website and breast cancer datasets, multiclass (imbalanced) for arrhythmia. Target is "Class" for all datasets.</div></div>	<div><div>DECISIONS</div><div><div>↔</div></div><div>How are predictions turned into proposed value for the end-user? Mention parameters of the process / application that does that. Website phishing predictions inform website traffic shaping by ops + security posture. Condition predictions identify individuals and PHOs to be targeted by marketing</div></div>	<div><div>VALUE PROPOSITION</div><div><div>🎁</div></div><div>Who is the end-user? What are their objectives? How will they benefit from the ML system? Mention workflow/interfaces. Organisation unsure what project to prioritise next. Ops wants to address website phishing issues while marketing are pushing for a targeted campaign around a major health issue (arrhythmia or breast cancer).</div></div>	<div><div>DATA COLLECTION</div><div><div>⬇</div></div><div>Strategy for initial train set & continuous update. Mention collection rate, holdout on production entities, cost/constraints to observe outcomes. N/A</div></div>	<div><div>DATA SOURCES</div><div><div>🗄</div></div><div>Where can we get (raw) information on entities and observed outcomes? Mention database tables, API methods, websites to scrape, etc. Provided by ops. Blending external sources and feature engineering not permitted. Must use as provided.</div></div>	
<div><div>IMPACT SIMULATION</div><div><div>✓</div></div><div>Can models be deployed? Which test data to assess performance? Cost/gain values for (in)correct decisions? <u>Fairness constraint</u>? N/A - not evaluating deployment</div></div>	<div><div>MAKING PREDICTIONS</div><div><div>⇒</div></div><div>When do we make real-time / batch pred.? Time available for this + featurization + post-processing? Compute target? All 3 use cases are batch predictions done nightly. Data prep nightly by 11.30pm with occasional delays. Predictions must be ready before midnight to be picked up in next day processing.</div></div>	<div><div></div><div>Project committee want a summary of the accuracy achievable for these three options before deciding priorities.</div></div>		<div><div>BUILDING MODELS</div><div><div>⚙</div></div><div>How many prod models are needed? When would we update? Time available for this (including featurization and analysis)? N/A</div></div>	<div><div>FEATURES</div><div><div> </div></div><div>Input representations available at prediction time, extracted from raw data sources. As provided. All inputs are numeric. Some missing values expected. No direction on imputation.</div></div>
<div><div>MONITORING</div><div></div><div>Metrics to quantify value creation and measure the ML system's impact in production (on end-users and business)?</div></div>		<div><div></div><div>Identify dataset with best prediction accuracy and present significance of performance differences</div><div><div>📶</div></div></div>			