

# Machine Learning Canvas

	PREDICTIONS	OBJECTIVES	DATA
GRO	<div><b>End-user</b></div> <div>Who will use the predictive system / who will be affected by it?</div> <div>Sellers, marketplace and customers</div>	<div><b>Value proposition</b></div> <div>What are we trying to do for the system's users? (e.g. spend less time on X, increase Y...)</div> <div>Increase the accuracy of filling in product information. Spend less time filling in information.</div>	<div><b>Data sources</b></div> <div>Where do/can we get data from? (internal database, 3rd party API, etc.)</div> <div>Public dataset</div>
	<div><b>Problem</b></div> <div>Question to predict answers to (on behalf of user)</div> <div>Sellers set up an incorrect product category.</div> <div>Input (i.e. question "parameter")</div> <div>information about product</div> <div>Possible outputs (i.e. "answers")</div> <div>category</div> <div>Type of problem (e.g. classification, regression, recommendation...)</div> <div>classification</div> <div>Baseline: simple, alternative way of making predictions (e.g. manual rules)</div> <div>logistic regression, decision trees, boosting</div>	<div><b>Performance evaluation</b></div> <div>Domain-specific / bottom-line metrics for monitoring performance in production</div> <div>accuracy weighted, precision, recall, f1-score, confusion matrix</div> <div>Prediction accuracy metrics (e.g. MSE if regression; % accuracy, #FP for classification)</div> <div>- % accuracy - F-measure - #FP - F1-score</div> <div>Offline performance evaluation method (e.g. cross-validation or simple training/test split)</div> <div>cross-validation</div>	<div><b>Data preparation</b></div> <div>How do we get training data (inputs, and outputs if supervised learning)? How many data points?</div> <div>Kaggle dataset. Encode categorical data. Split data to label and Xs data. Label is category. So we predict some label by some Xs.</div> <div>464433 data points.</div> <div>Input features (extracted from data sources). If too many, list types of features and mention key ones.</div> <div>itemid, shopid, item_name, item_description, item_variation, price, stock, category, cb_option, is_preferred, sold_count, item_creation_date</div>
E SF			
GRAT	<div><b>Using predictions</b></div> <div>When do we make predictions and how many?</div> <div>While filling out product information. One category.</div> <div>What is the time constraint for making those predictions?</div> <div>During the course of filling out the product card.</div> <div>How do we use predictions and confidence values?</div> <div>Tell the user which category to use when filling out a product.</div>	<div><b>Learning models</b></div> <div>When do we create/update models? With which data / how much?</div> <div>Updating the model after integration can take place manually when a certain volume of new items is accumulated. Usually each 3 months.</div> <div>What is the time constraint for creating a model?</div> <div>6 hours</div> <div>Criteria for deploying model (e.g. minimum performance value — absolute, relative to baseline or to previous model)</div> <div>Baseline on all metrics by at least</div>	

Reset Form