

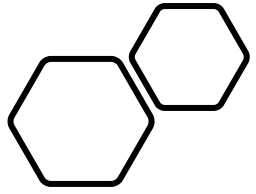
Operational Challenges in Machine Learning Model Life Cycle

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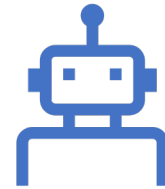
Agenda



Background



Architecture



Analyzer



Results



Background

Machine Learning Platform
was built 2 years ago



Aid Data Scientists in
developing ML models
effectively and efficiently



Supports an end to end life
cycle of model development
and deployment



Data scientists can easily
launch data science tools like
RStudio or Notebook and use
libraries and run time of their
choice to build the mining
models



Allows collaborative work on
a machine learning project
and have access to all project
artifacts



Problem Statement



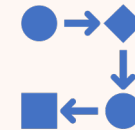
Less adoption of users to platform



Based on the survey results, the major challenge was platform complexity



It is hard to deduce actionable items or accurate details to make the system simple

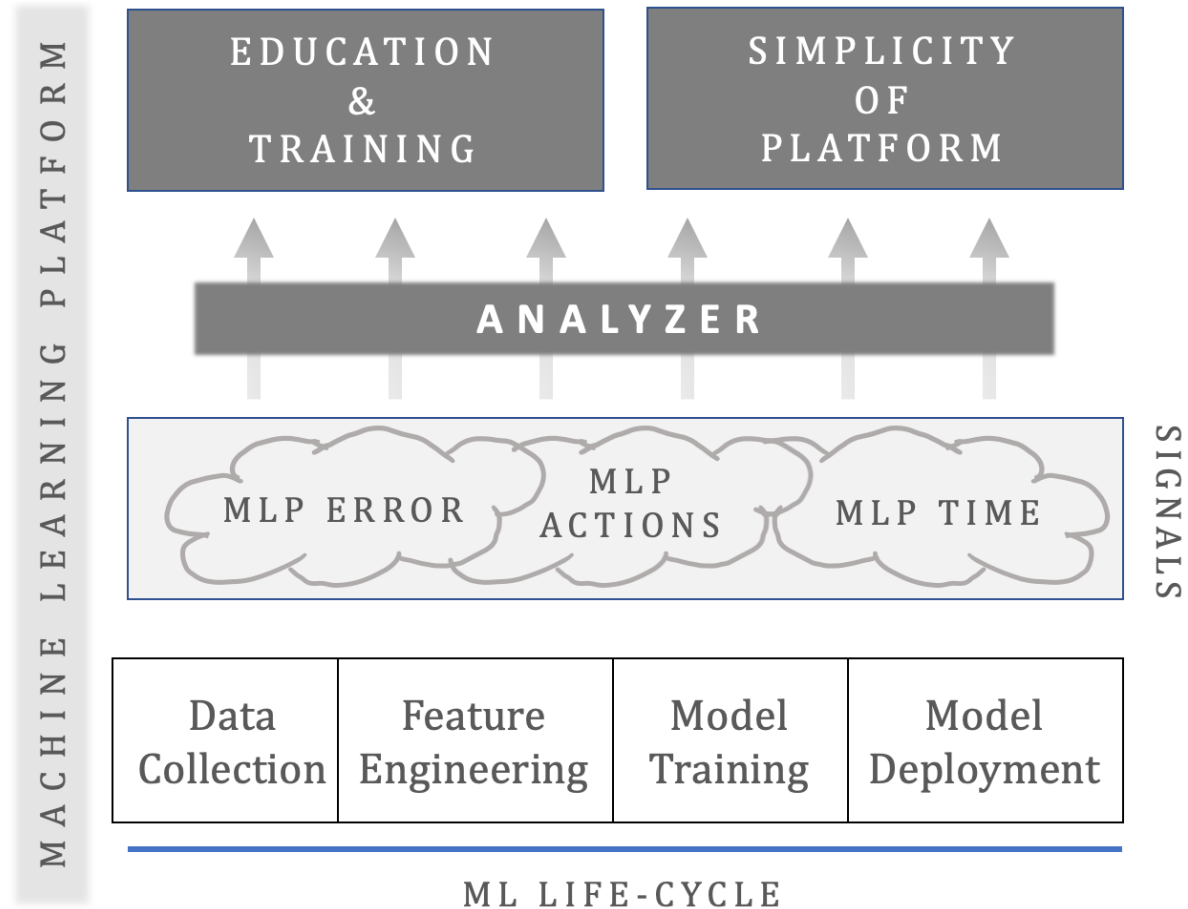


The complexity feedback was very generic, so we decided to break it down into two logical challenges:

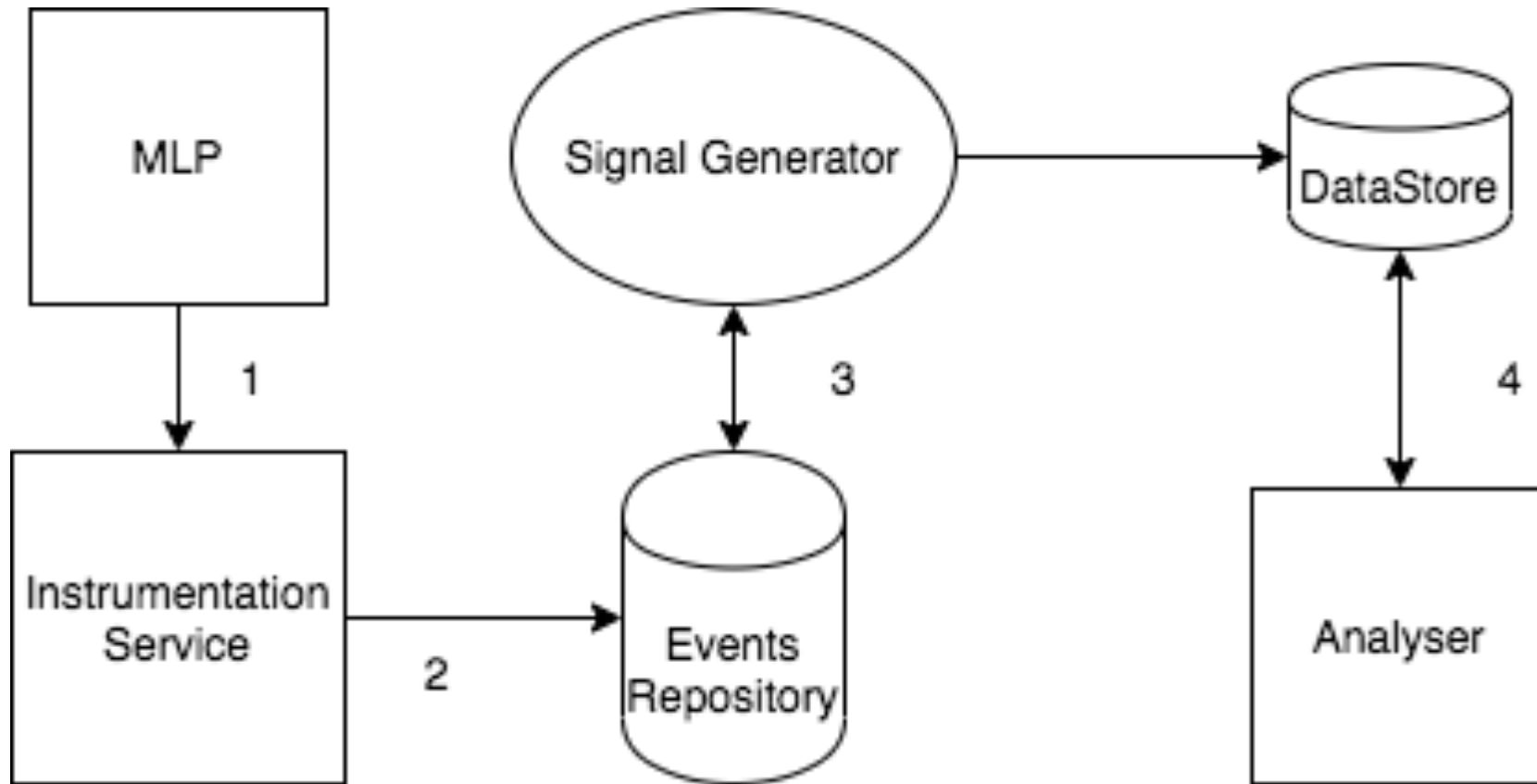
- Education & Training
- Simplicity-of-Platform



Architecture



Signal Collections



Analyzer

- uses a user-behaviour-segregation-model and set of rules to evaluate challenges of using MLP
- The model uses clustering technique, which groups the users based on action and time signals
- Users in the group are labelled as: Beginner, Intermediate and Expert
- Our model has suggested 85 Expert, 118 Intermediate and 190 Beginner users of our platform





Rule Engine

- If more than 50% expert and 65% intermediate and 80% beginner users see the error signal then it is mapped to SoP challenge
- If less than 10% expert and more than 65% intermediate and 80% beginner users see the error signal then it is mapped to ET challenge
- If more than 50% expert does redundant actions more than 5 times in a week/month then it is mapped to SoP challenge
- If less than 10% expert and more than 50% intermediate and 75% does redundant actions more than 5 times in a week/month then it is mapped to ET challenge



Results

Challenge	Count
Education & Training	17
Simplicity-of-Platform	6





Questions?

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