Supervised Learning

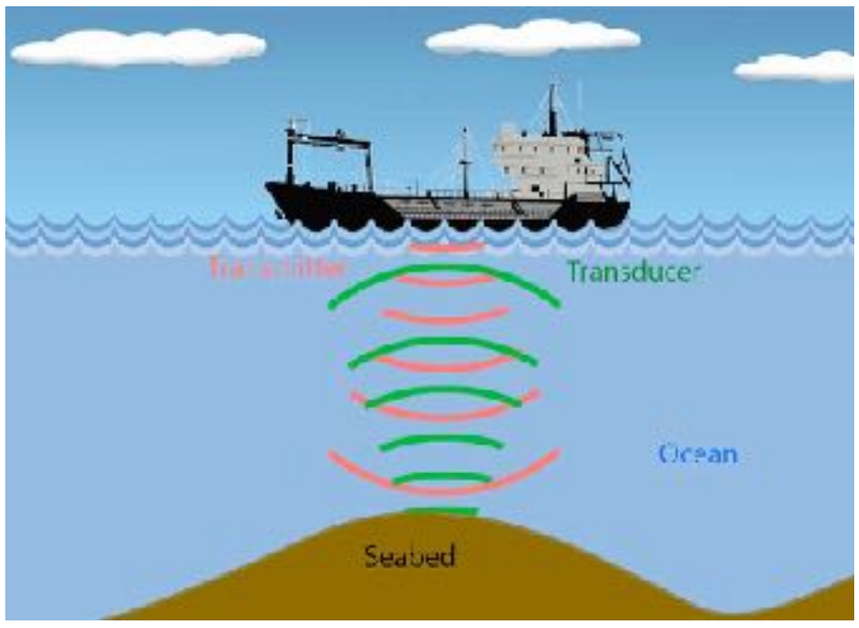
Algorithms:

1. **Logistic Regression**
2. **Naive Bayes**
3. **XGBoost**
4. **SVC**
5. **Decision Tree**
6. **Random Forest**

Case study 1:

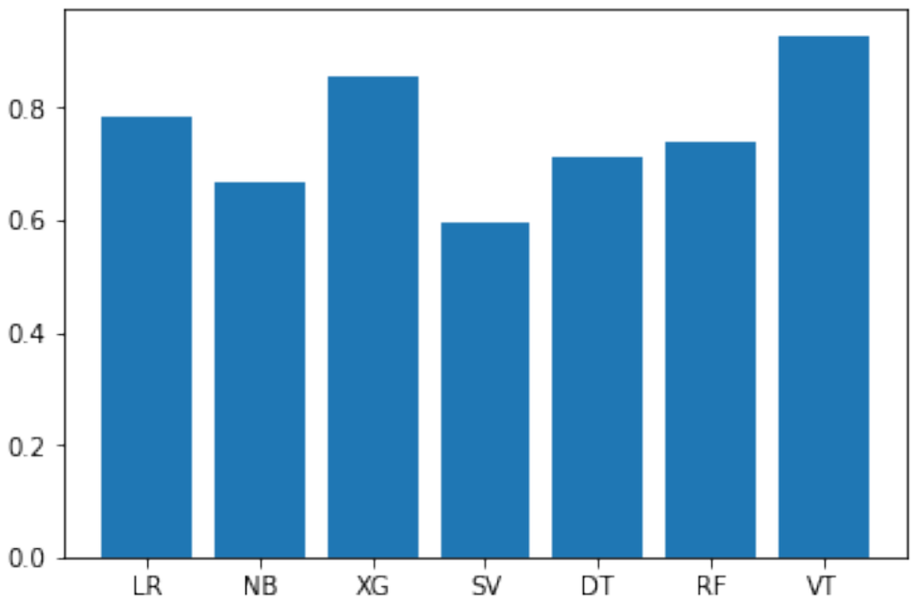
Glencore is a mining company. While mining in the ocean it was very difficult for them to identify whether floor is good for mining or not. They used traditional way of analysing the sonar data whenever there is a slight distress/ turbulence while mining. This procedure was very time consuming and sometimes led to the catastrophic disasters.

Given the past sonar data about what they have observed how would you help them?



Case study 1
Implementations

Case study 1
Results

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Logistic Regression = 78.5
Naive Bayes         = 66.67
XGBoost             = 85.71
SVC                 = 59.52
Decision Tree       = 71.43
Random forest       = 73.81
VotingClassifier.   = 90
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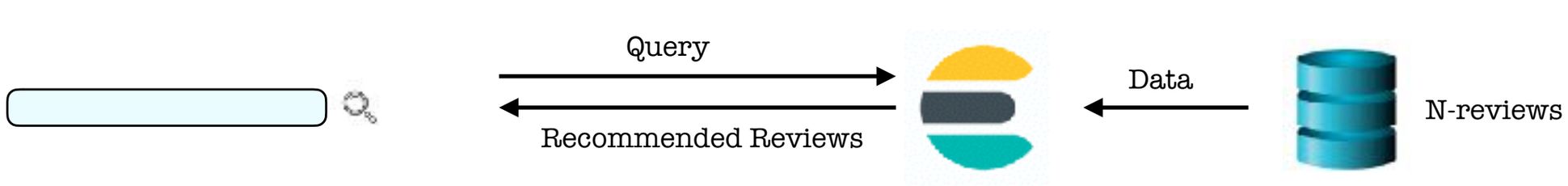
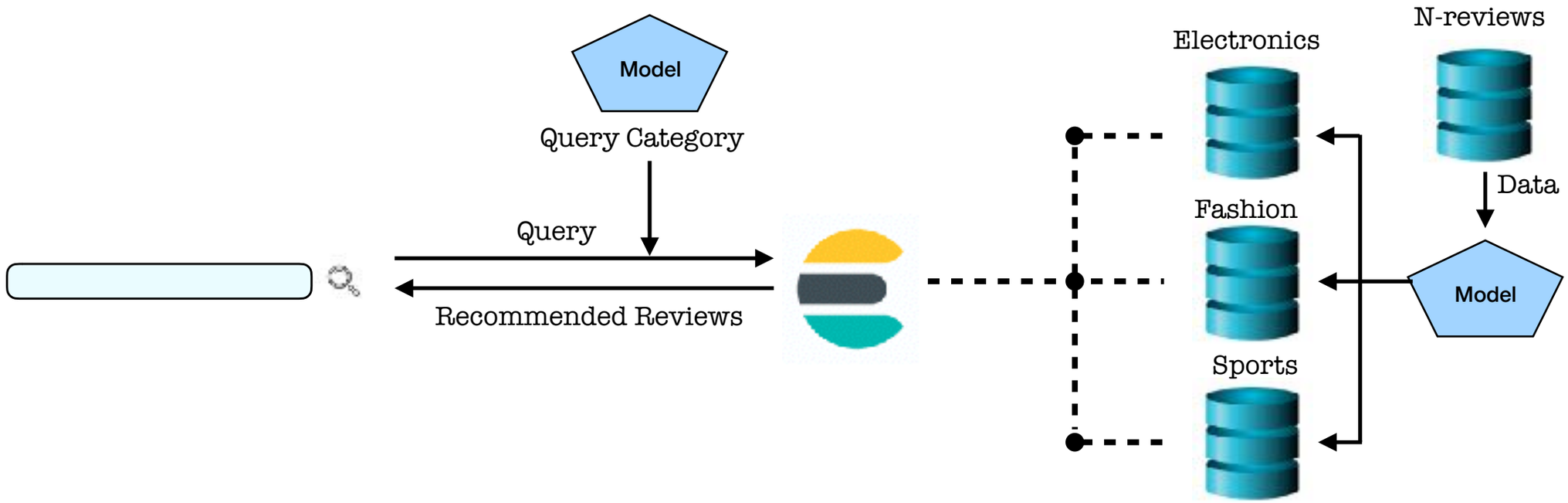
Case study 2:

Over the years amazon has collected abundant reviews about different products. Amazon wants to build a review search engine. While building this search engine they are using elastic search to rank all the reviews for a particular query.



Elastic search is taking lot of time to rank all the reviews for a query. Hence the response time of the search engine is very low. How would you help them to reduce the response time of a query?

Case study 2 solution:



Case study 2
Implementations

Thank you