

What is Subsalt?

Data is the new oil. It's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc to create a valuable entity that drives profitable activity; so must data be broken down, analyzed for it to have value."

— Clive Humby, 2006

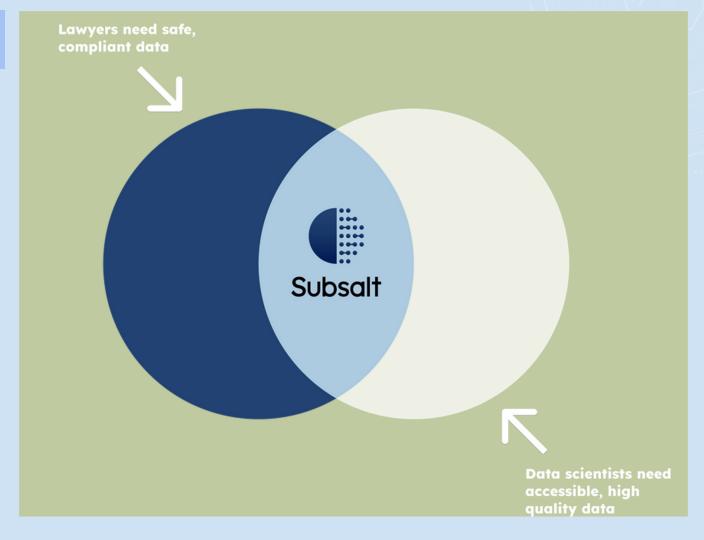
Background

Healthcare

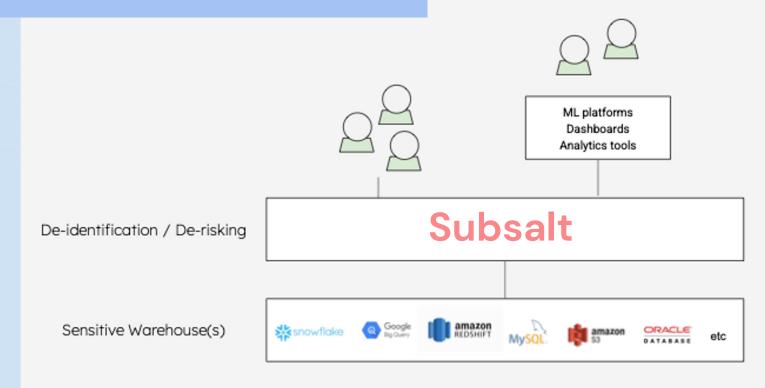
Consumers

Finance

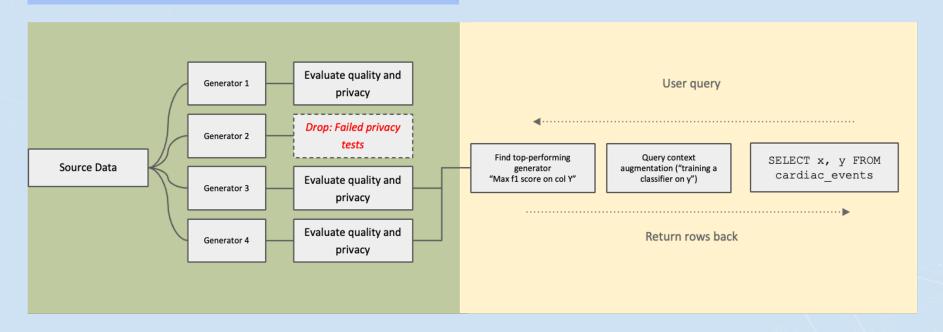
Defense



Production Process



Developmental Cycle



The Problem

"High computational costs and repetitive privacy testing make large-scale data training slow and costly, reducing the product's value by hindering fast, efficient access to sensitive data."

Current Pitfalls

- Timings for training and privacy
- Computational costs
- Privacy tests still running post failure
- No filtering process before training
- Have to train repetitively to check privacy



PRIVACY LAWS







Privacy Testing

Risk Assessment for Attribute Inference

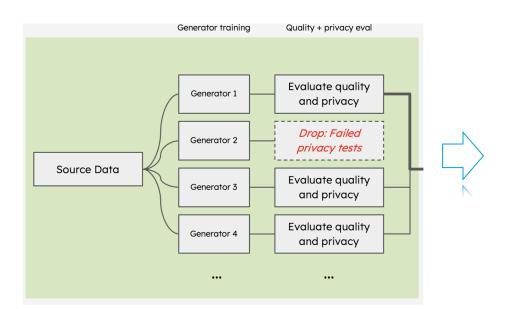
 Attacks that target the features in the data as a group in order to gain insights

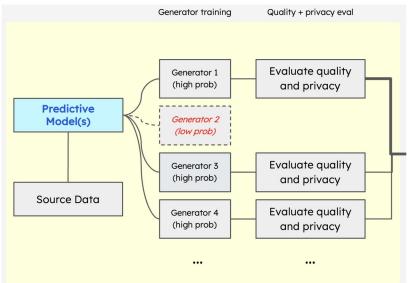
Precision in Membership Inference

Target specific data points



Proposed Solutions





Proposed Solutions

 Row count Product version Metadata Indirect identifier Null ratio Schema Unique value Model type Epoch Generation Configuration Learning rate Threshold Score **Privacy Tests** Passed

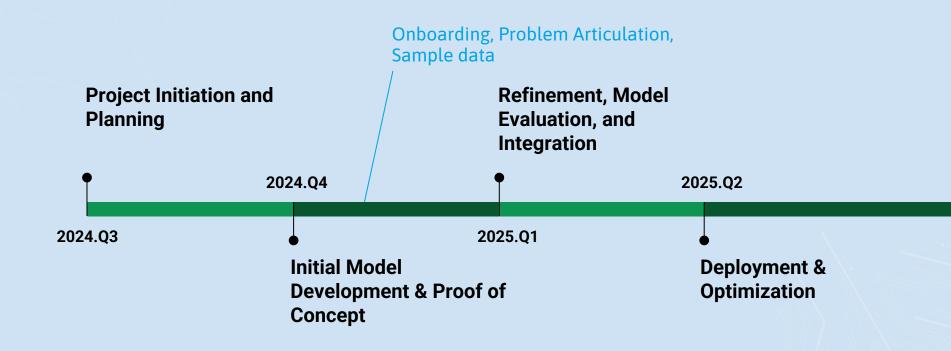


Predictive Model(s)

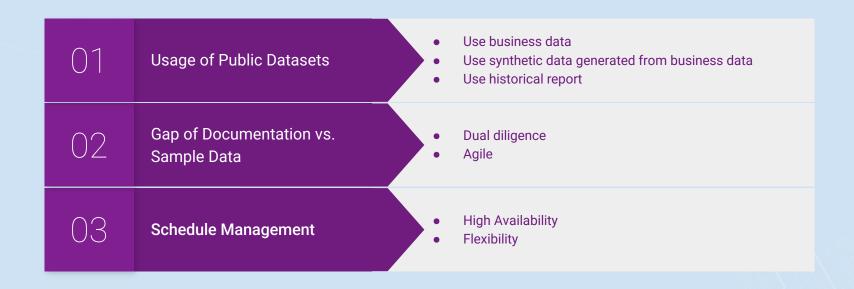


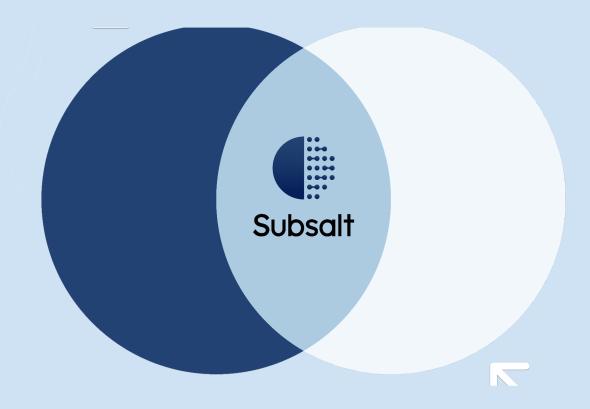
Probabilities of Passing Privacy Tests

Project Timeline



Potential Risk





THANK YOU FOR LISTENING. PLEASE DONT GRILL US OR WE WILL COME AFTER YOU!