The Quant Workbench
Excel

Is

King
Trial And Error

Data Ingestion
The Project
1. People all over the country take out mortgages. Financial institutions group hundreds of subprime mortgages into Mortgage Backed Securities (MBSs).

2. The securities are grouped into tranches by levels of risk and earnings potential for bond holders. When everybody can pay their mortgage in full each month, each group of bond holders gets paid.

3. The mortgage payments are collected by a financial institution and payments distributed to bond holders. Higher rated tranches are paid first. When monthly mortgage payments are not made, payments may not reach holders of lower rated tranches.
Security  
Monitoring
The Solution?

DS X Workbench
Use Case

Customer Churn

- All industries are effected by churn.
- Being able to predict churn helps companies take action and keep customers longer.
- The more historical data, the better the model.
- Data collected and labeled over time based on churn.
- Using a Random Forest we will predict future churners.

Architecture
Demo Scenario
Assessing Customer Churn Probability in Real Time

- Stored long term data on customer churn behavior
- New real time data coming in
- Predict a customer’s churn probability before they churn
- Alert the proper departments | manager
- Business monitors customer retention outlook & performance
Demo Flow

Insights from Data Science to Production

Data Scientists
Where is the data I need to answer the business questions?

Business Users
Where is the insight & predictions from the data?

Admins
How do I meet SLA, Performance, .., Feature needs?
What Have We Learnt
It Wasn’t My Fault
Model Data Lifecycle
Collaborative WorkSpace
Bring Your Own Tool
Built-In Security
Real Time Monitoring
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