

Equipment Finance Credit Risk Modeling

A Case Study in Creative Model Development & Nimble Data Engineering

2/8/2022



CHANNEL

YOUR PARTNER IN FUNDING

Channel Partners Capital

Here today from Channel's Risk Analytics & Decision Sciences (RADS) ~~to~~ three from the SDSU Math/Statistics graduate program

- Ed Krueger – with Channel since 2018
- Landon Thompson – with Channel since 2020
- Josh Moore – with Channel since 2021 & first of the Channel internship program
 - *Currently at SDSU finishing his MS in Statistics*
- Currently searching for candidates – ***2 open paid internships, summer 2022***

A little about Channel

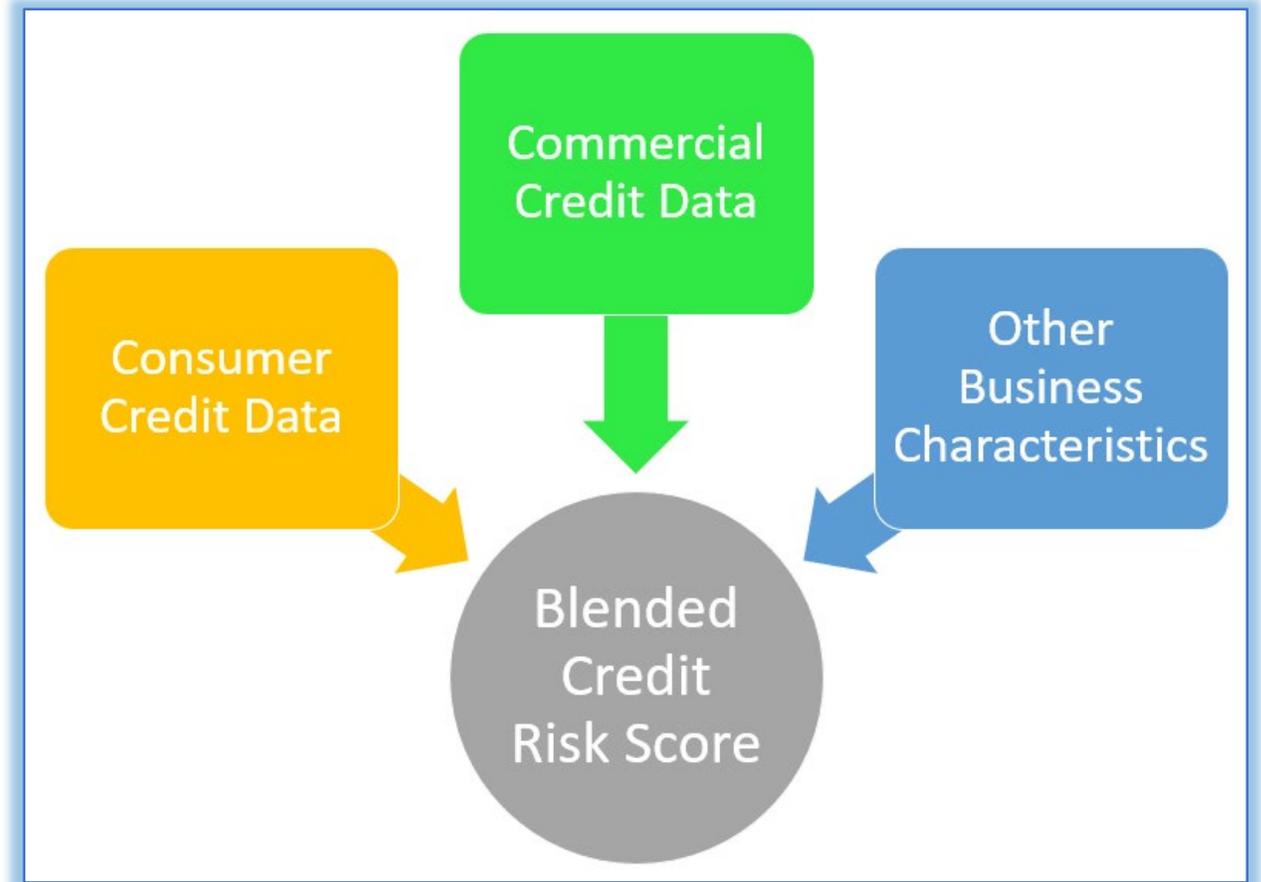
- Established in 2009
- Small business lender
 - *Equipment Finance & Working Capital; \$10,000\$250,000*
- Headquarters in Minnetonka, MN
 - *Brookings office location at Brookings Innovation Center currently being furnished*



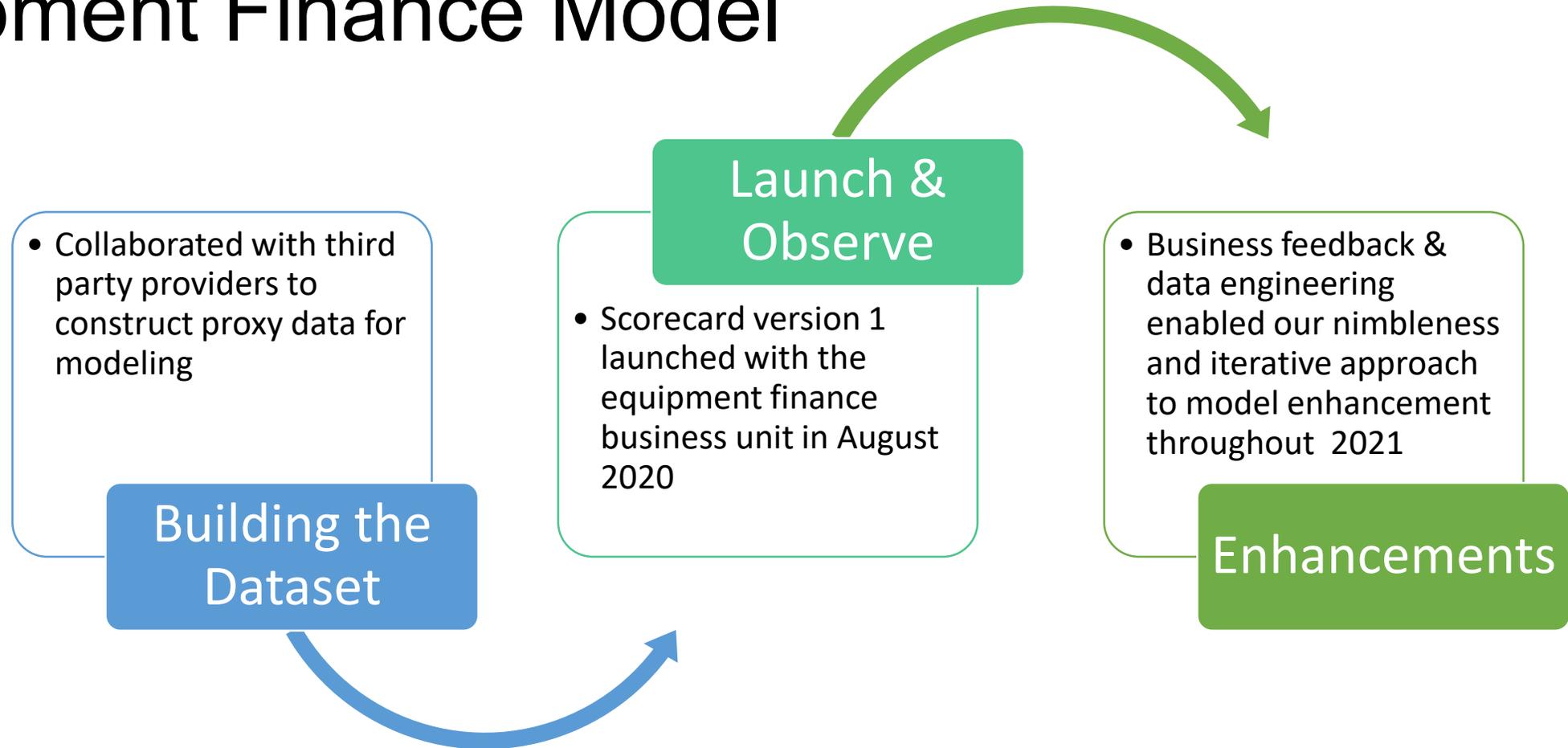
Channel Credit Risk Scoring

Current Model Versions

- Working Capital – version 4.0
 - *3-model ensemble*
- Equipment Finance – version 1.4
 - *8-model ensemble*
- Simple interpretation – like FICO
 - *3-digit scores*
 - *Higher scores are less risky*
- Targeting probability of default



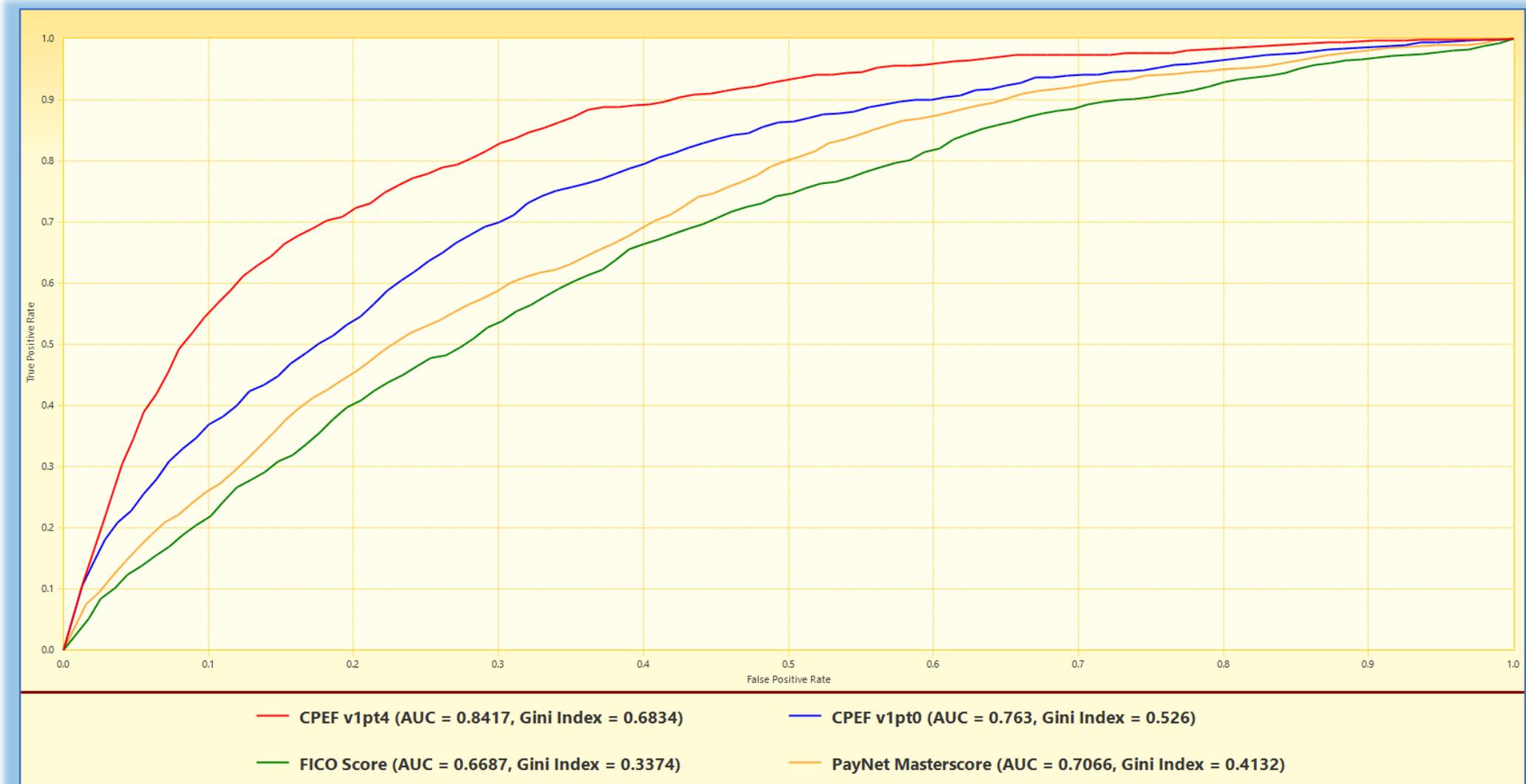
Equipment Finance Model



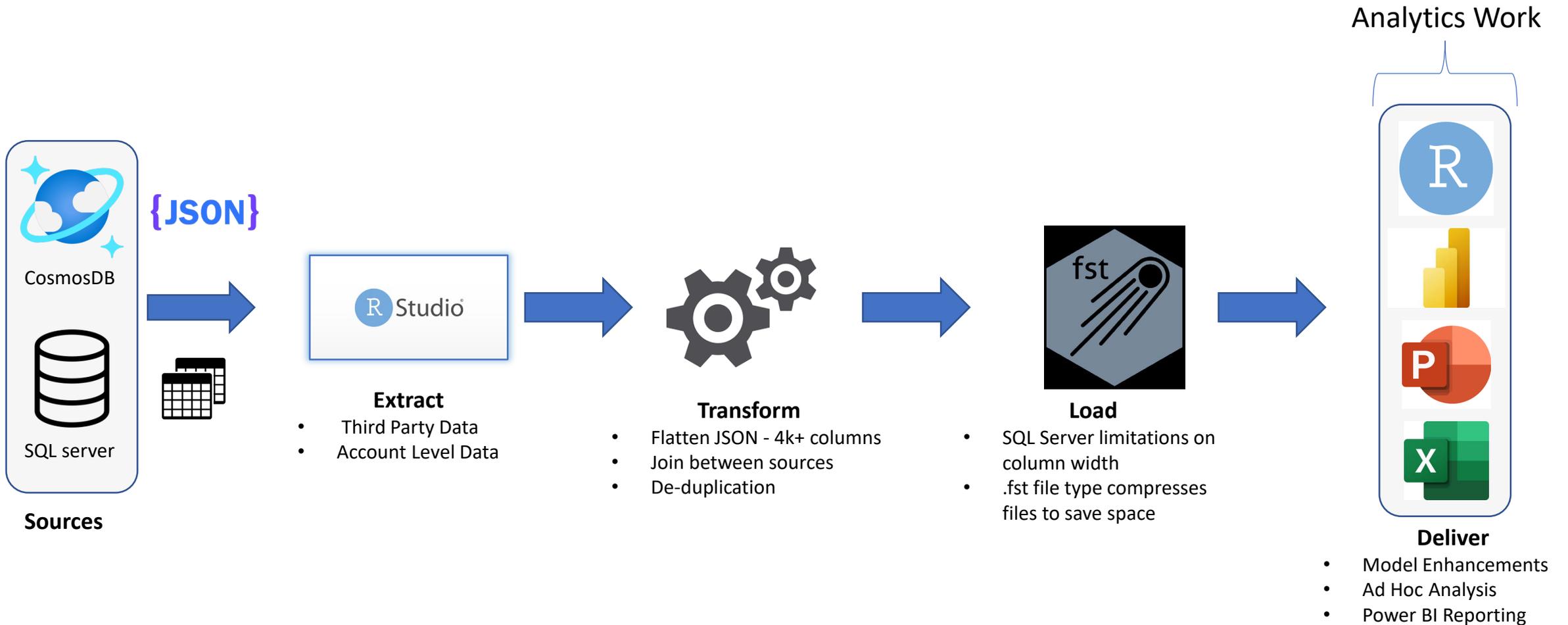
Description of the problem

- Wanted to launch an equipment finance product at Channel – with a model driven approach to pricing (risk-based)

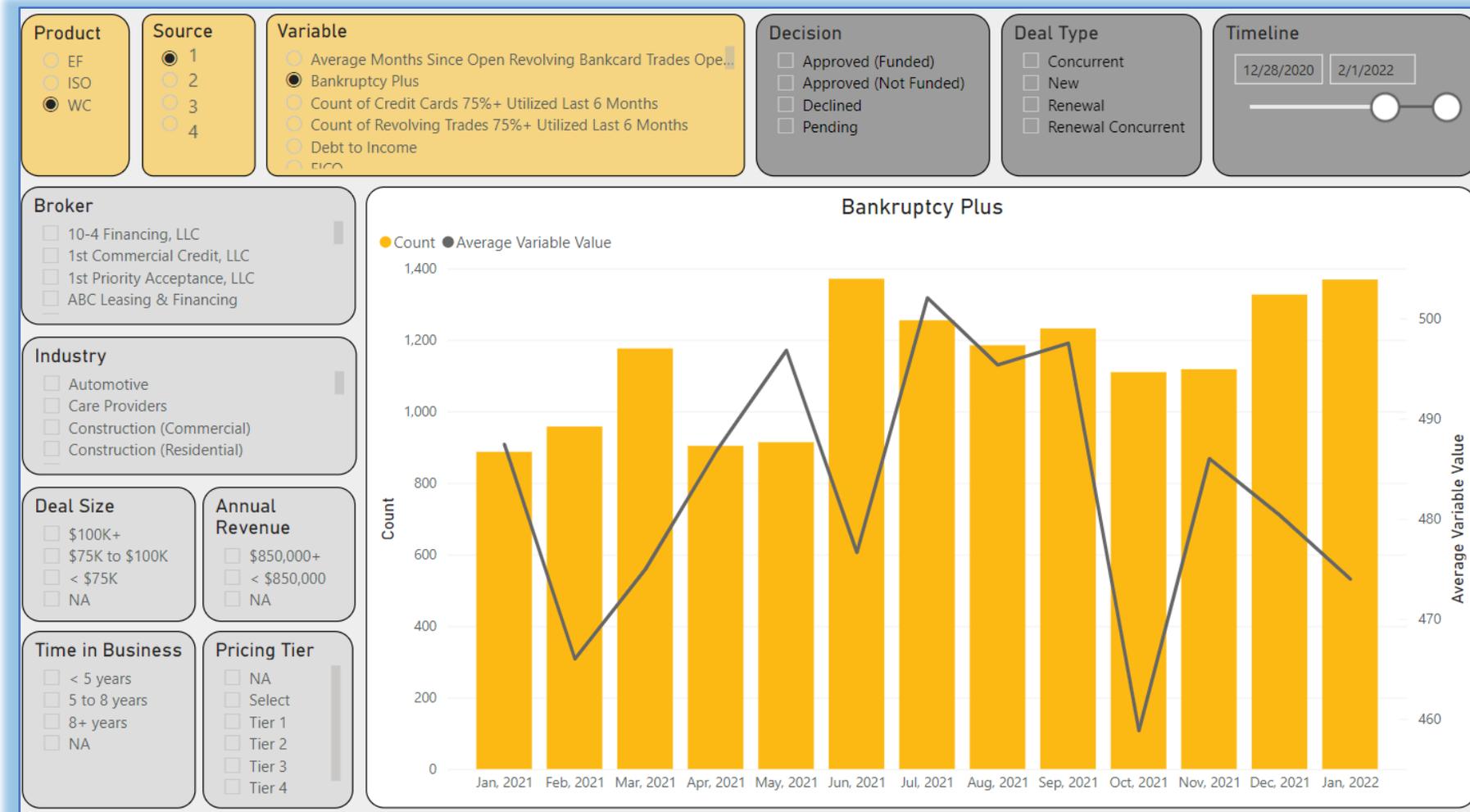
ROC Performance Benchmarks



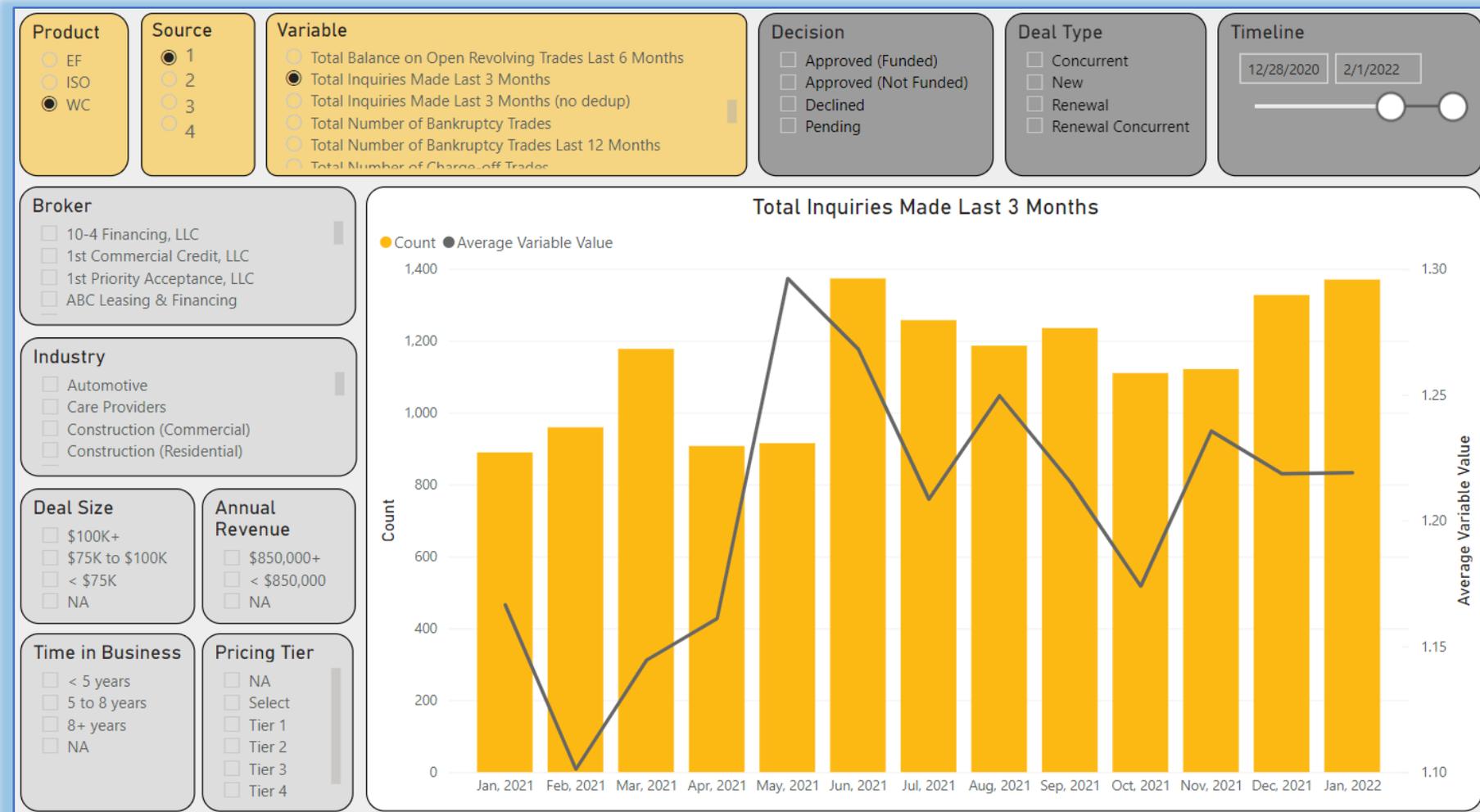
Data Engineering – Building the Pipeline



Data Pipeline Enabled Solutions



Data Pipeline Enabled Solutions



Questions



Summer 2022 paid internships available on Channel's career page!



CHANNEL