

# Great American Insurance:

Organizational change when moving to NoSQL

Donnie Maddox

Assistant Vice President, Data Architecture & Development



# Donnie Maddox

AVP – Data Engineering, P&C IT  
18 Years in Insurance IT

25 Minutes

The following presentation is for information and discussion purposes only. Any views or opinions expressed are the speaker's; shall not be construed as legal advice; and do not necessarily reflect any corporate position, opinion or view of Great American Insurance Company, or its affiliates, or a corporate endorsement, position or preference with respect to any contractual terms and provisions or any related issues. If you have any questions or issues of a specific nature, you should consult appropriate legal or regulatory counsel to review the specific circumstances involved.

The Great American Insurance Group eagle logo and the word marks Great American<sup>®</sup> and Great American Insurance Group<sup>®</sup> are registered service marks of Great American Insurance Company.

© 2019 Great American Insurance Company, 301 E. Fourth St., Cincinnati, OH 45202

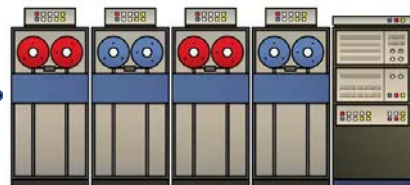


## About Great American Insurance Group

Great American Insurance Group's roots go back to 1872 with the founding of its flagship company, Great American Insurance Company. Based in Cincinnati, Ohio, the operations of Great American Insurance Group are engaged primarily in property and casualty insurance, focusing on specialty commercial products for businesses, and in the sale of traditional fixed and fixed-indexed annuities in the retail, financial institutions, registered investment advisors and education markets. Great American Insurance Company has received an "A" (Excellent) or higher rating from the A.M. Best Company for more than 100 years (most recent rating evaluation of "A+" (Superior) affirmed August 17, 2018). The members of Great American Insurance Group are subsidiaries of American Financial Group, Inc. (AFG), also based in Cincinnati, Ohio. AFG's common stock is listed and traded on the New York Stock Exchange under the symbol AFG.

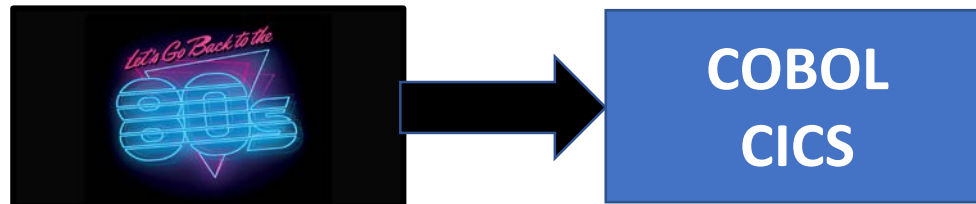
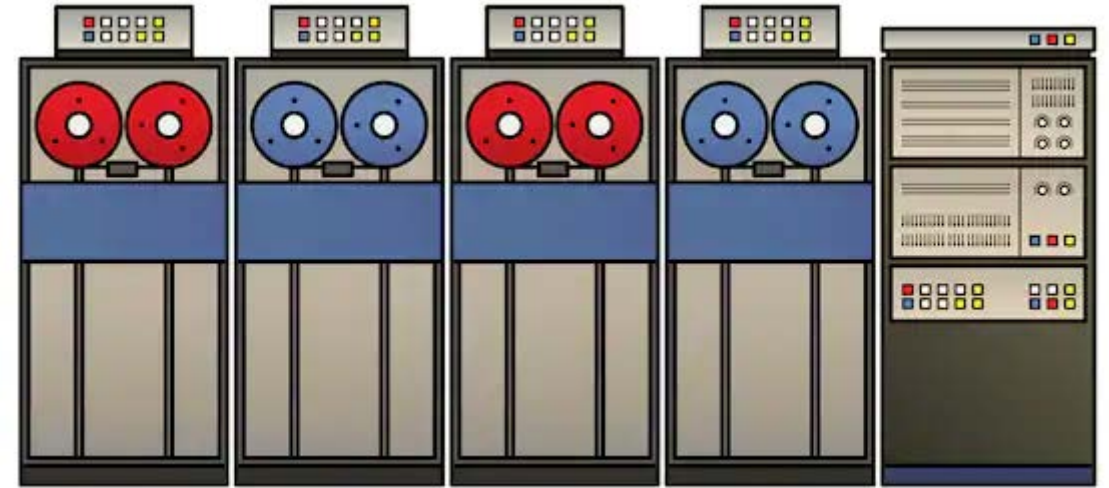
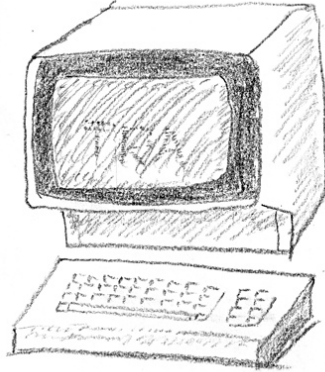
# *Great American's Data Integration Story*

# 1975 - Things used to be so simple for the insurance industry...



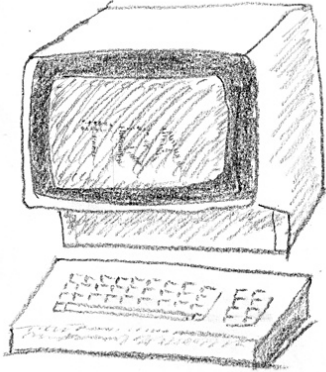
# 1985 - Electronic Typewriter...this is huge!!!

Assembler  
Dumb Terminals

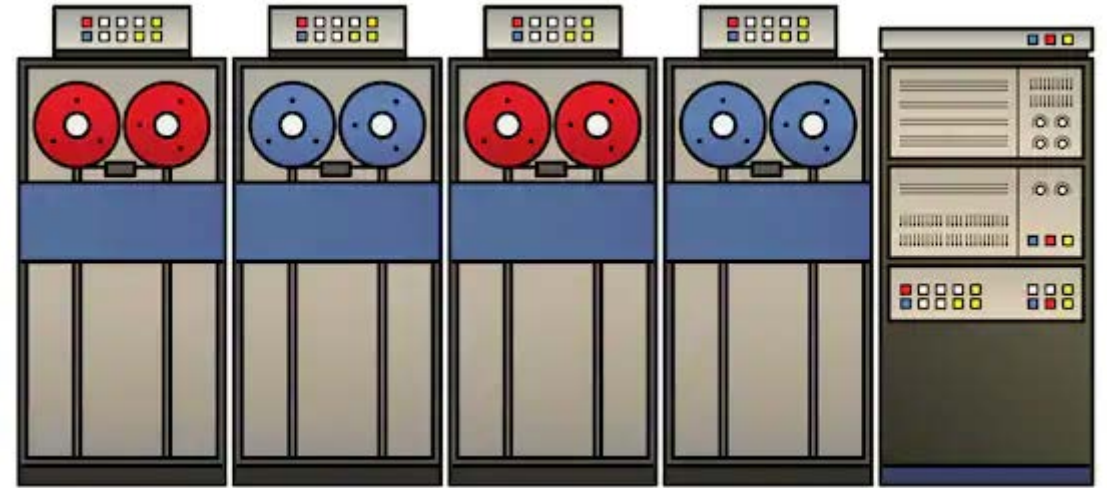
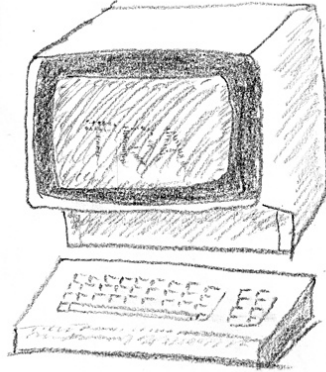


# 1995 - Let's add UI fields and rules...of course, we will reuse existing batch processing

CICS



COBOL  
DB2



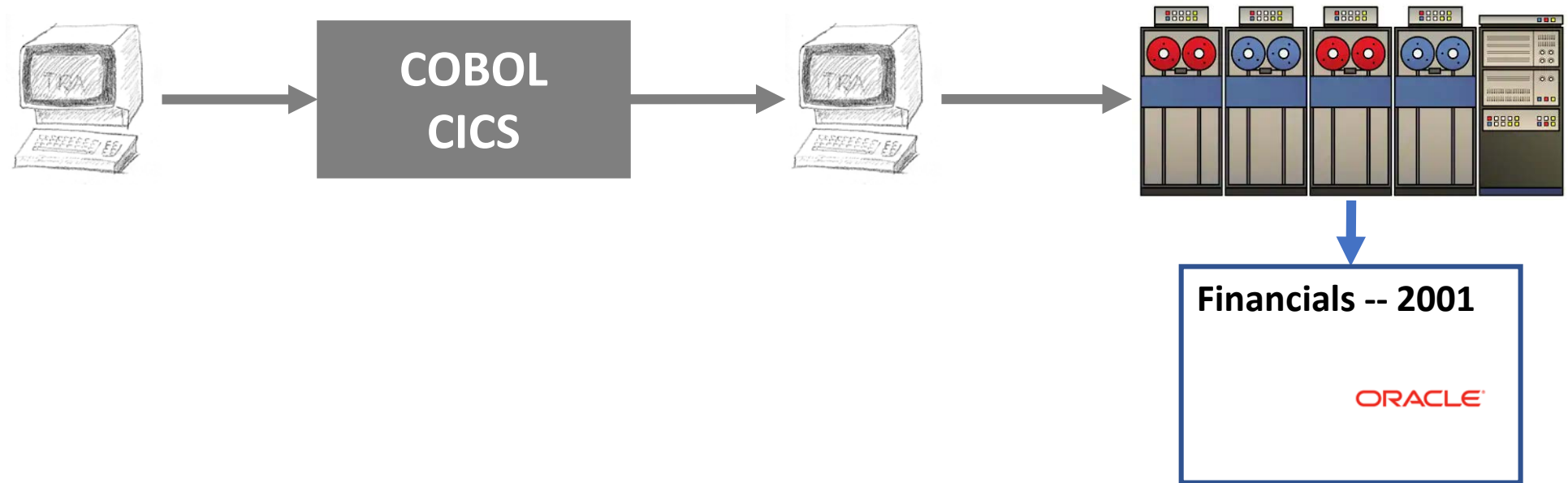
Java™



ORACLE®



# 2001 - Time to retire some of those mainframe functions...



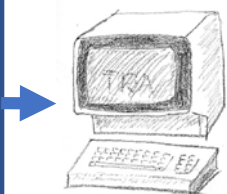
# 2002 - Web Apps !!!

Don't rebuild the rules and batch processing...that's CODE REUSE

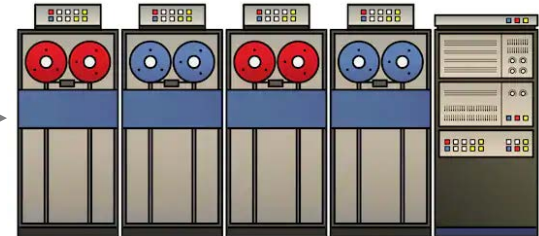
**1st Web App  
STRUTS -- 2002**



ORACLE  
Java



**COBOL  
CICS**



**Financials -- 2001**

ORACLE

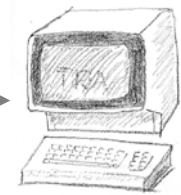


# 2006 – Design 1 Perfect Super Schema

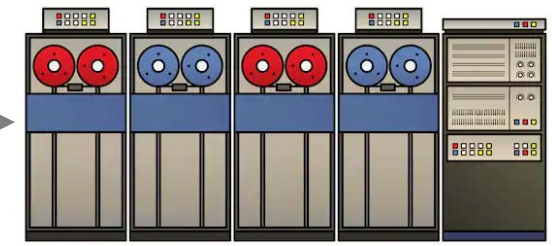
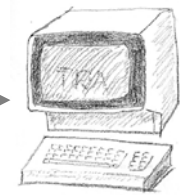
**1st Web App  
STRUTS -- 2002**



ORACLE



**COBOL  
CICS**




## 1 Super Schema

**“Rebuild Architecture”  
JSF -- 2006**



ORACLE



*“Hit this target and everything will work”*

Web Services  
SOAP

**Enterprise Data – 2006**



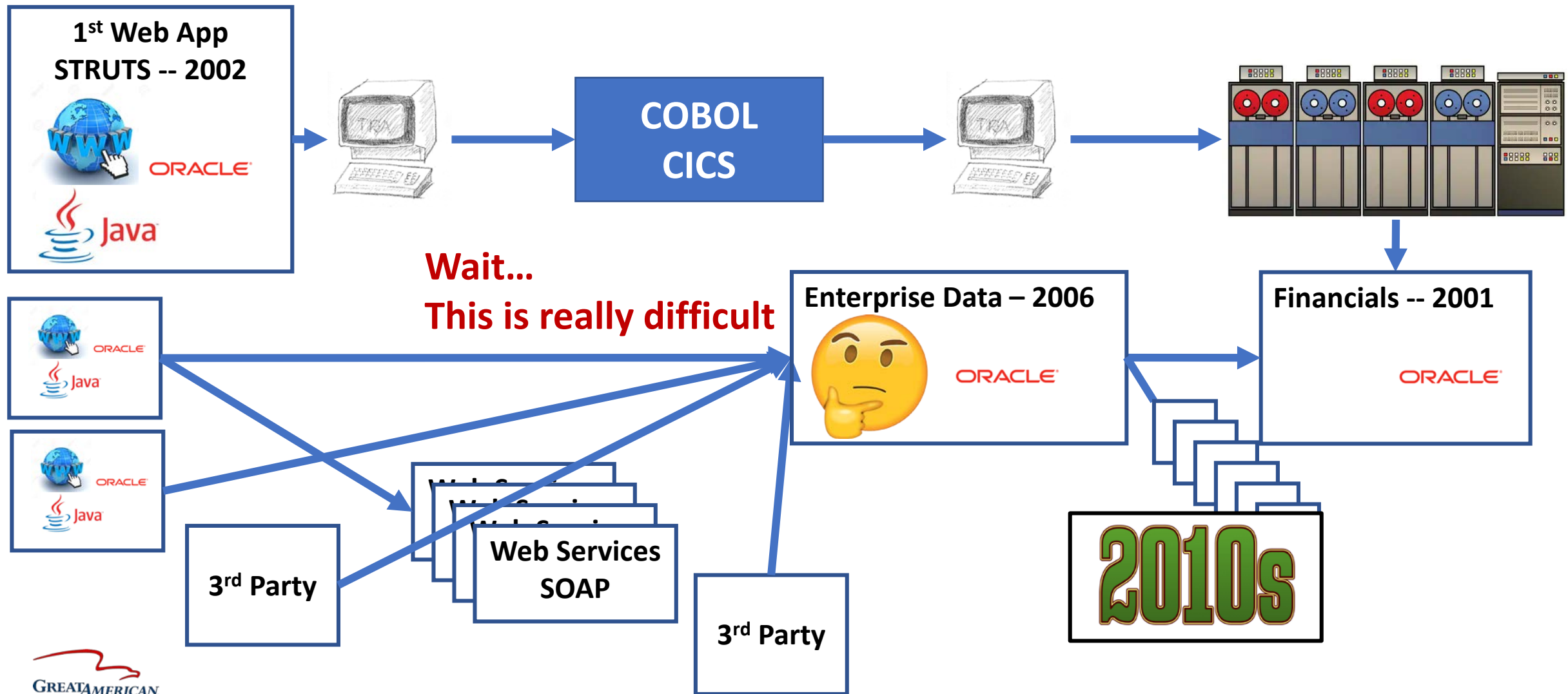
ORACLE

**Financials -- 2001**

ORACLE

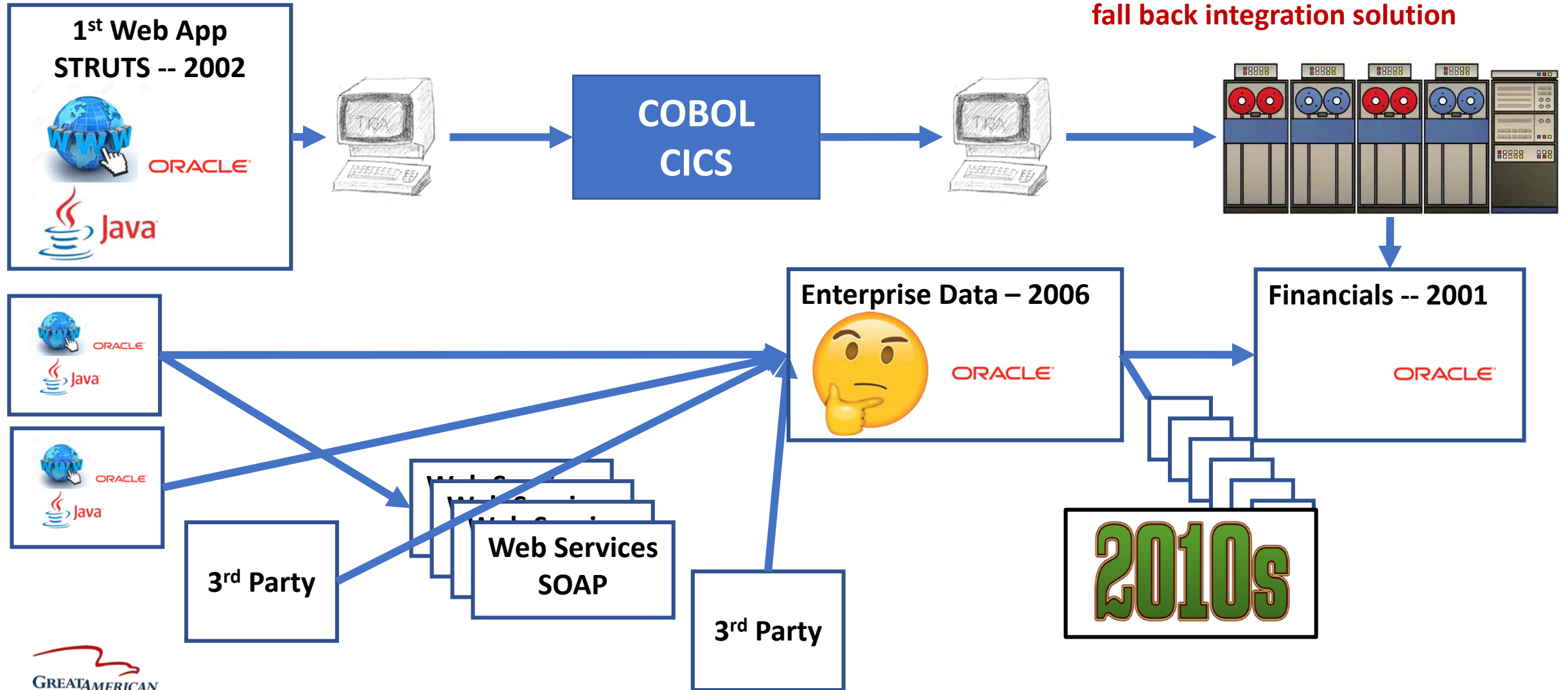


# 2015 - Why is it taking so long?



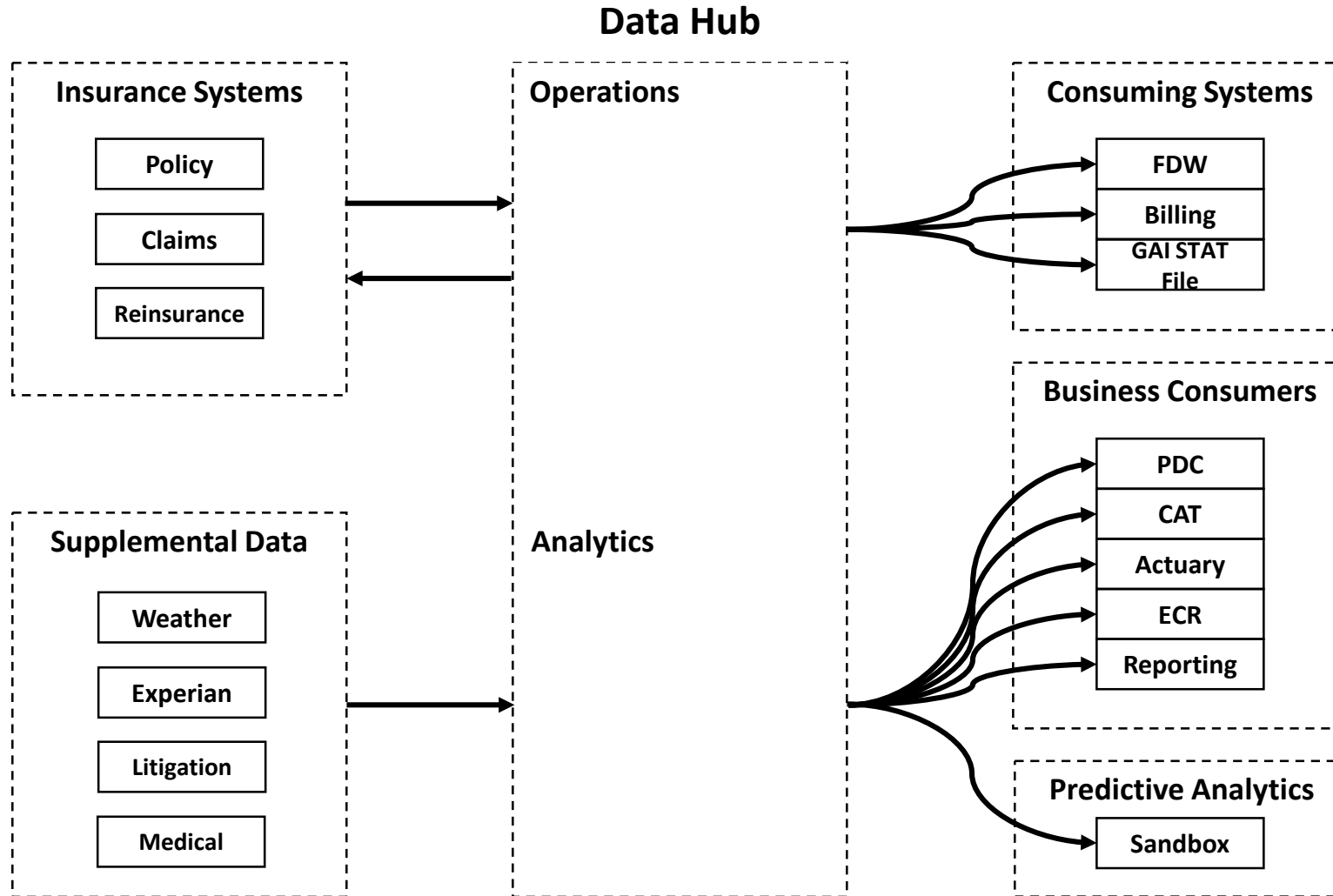
# 35 Years Later...

Often times, the "electronic typewriter" is still a fall back integration solution

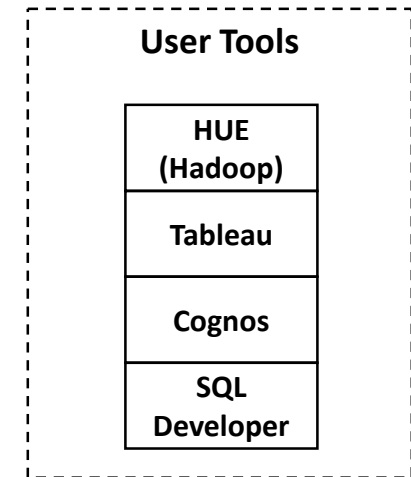


# *The Technical Change...*

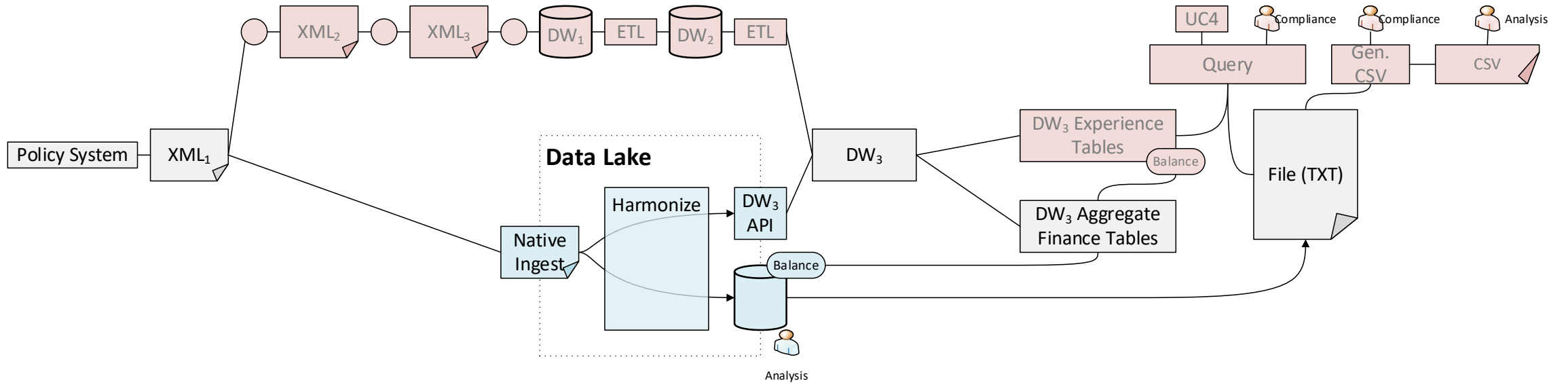
# Flexible Ingestion, Consumer-based Integrations



- ✓ Allows us to focus on our actual data consumers...
- ✓ Don't have to be an insurance expert to understand each individual consumer...

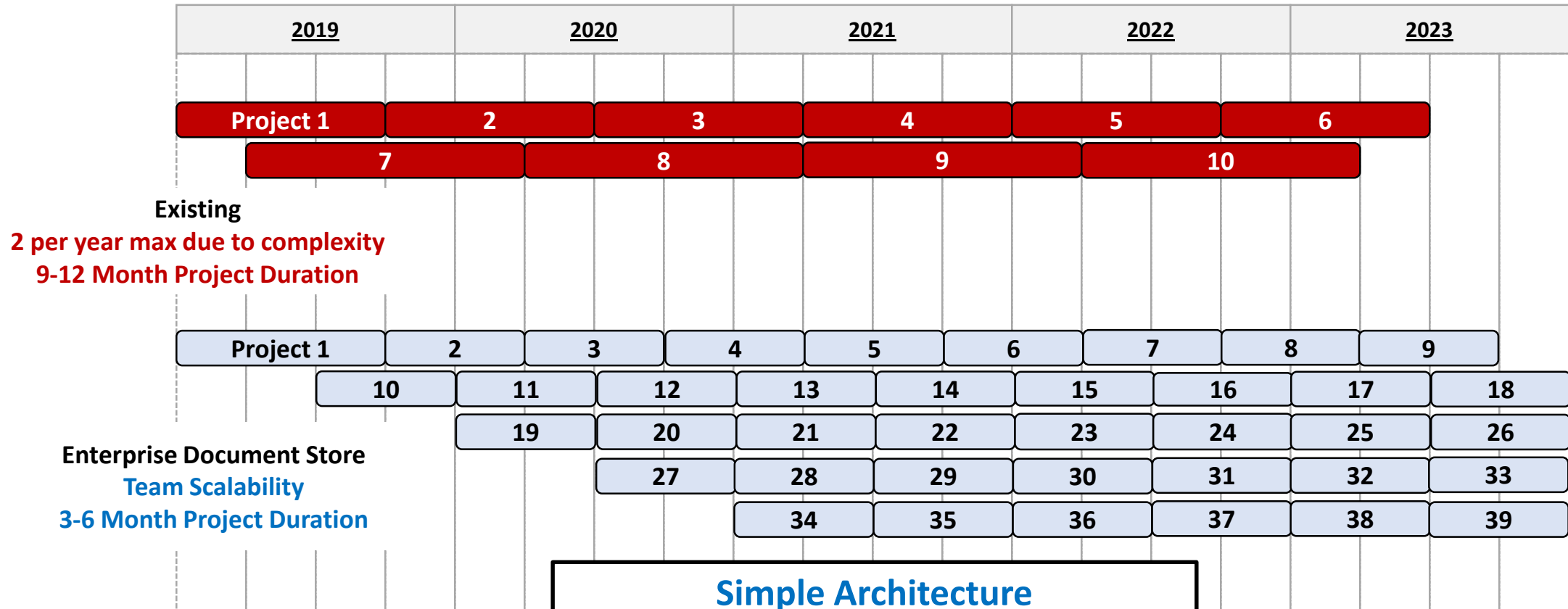


# Complex vs. Simple: Just One Data Flow Example





# More than just Project Acceleration...Organizational Acceleration



**Simple Architecture**  
*Allows more people to play...  
 Onboarding developers in 2 weeks vs. 3 months  
 Start grooming consumer focused technicians*

*Culture change is more difficult than technical change...*

# Things that helped us...

## #1 – Hold legacy systems in high esteem

They solved amazing problems under pressures and circumstances that we don't understand

## #2 – Know where to focus and ask for help on long-standing components

We debated re-architecting financials, but decided against it due to critical nature

## #3 – Find other projects that could be accelerated...

For us, it was the Mainframe Retirement Initiative

## #4 – 360° Executive Support

Top Down Needed: Ask a database modeler if a document store is a good idea...

Bottom Up Needed: Find front-line leaders that have the credibility to hold the microphone

## #5 – Stakeholder Engagement

SMALL GROUPS!!!

## #6 – Solve the real problem & measure success

For us, it was Complexity and SME Scarcity...not effort or cost

Example: On board new developers in weeks rather than months

Example: Shared Ownership – Full Stack Development Responsibilities vs. specialty skillsets

*Discussion...*