



Jason Smith, CEO

# Priming Data for Deeper Insights





Fabric <sup>TM</sup>

# How is ML used to develop and manage business strategies?

Prime existing data for ML

Derive new insights from my data

Use ML insights to help team meet business imperatives

Develop imperatives and business decisions

with real-time data that improves outcomes over time

# Example types of ML models are leveraged for insights?

## Knn (k-Nearest Neighbor)

HCPs who are similar to other  
HCPs based on one or more  
classifying criteria

## SVD (Singular Value Decomposition)

Determining which HCP to  
recommend when  
data is sparse

## SNA (Social Network Analysis)

HCP Influence  
Mapping

# What various types of pharma data is used for ML?



## Research

Omics  
Publications  
Trials



## IP

Patents  
Grants  
Publications



## Sales

Scripts  
Distributions  
IMS



## Engagement

CRM  
VoKOL  
Digital Feeds



## Behavioral

Insights &  
Actions Taken

# What quality issues exist with historical and new data?



Missing or  
Incomplete Data

ETL pipeline  
inconsistency;  
lack of volume



No Access  
to Data

Consistency &  
proprietary formatting



Biased  
Data

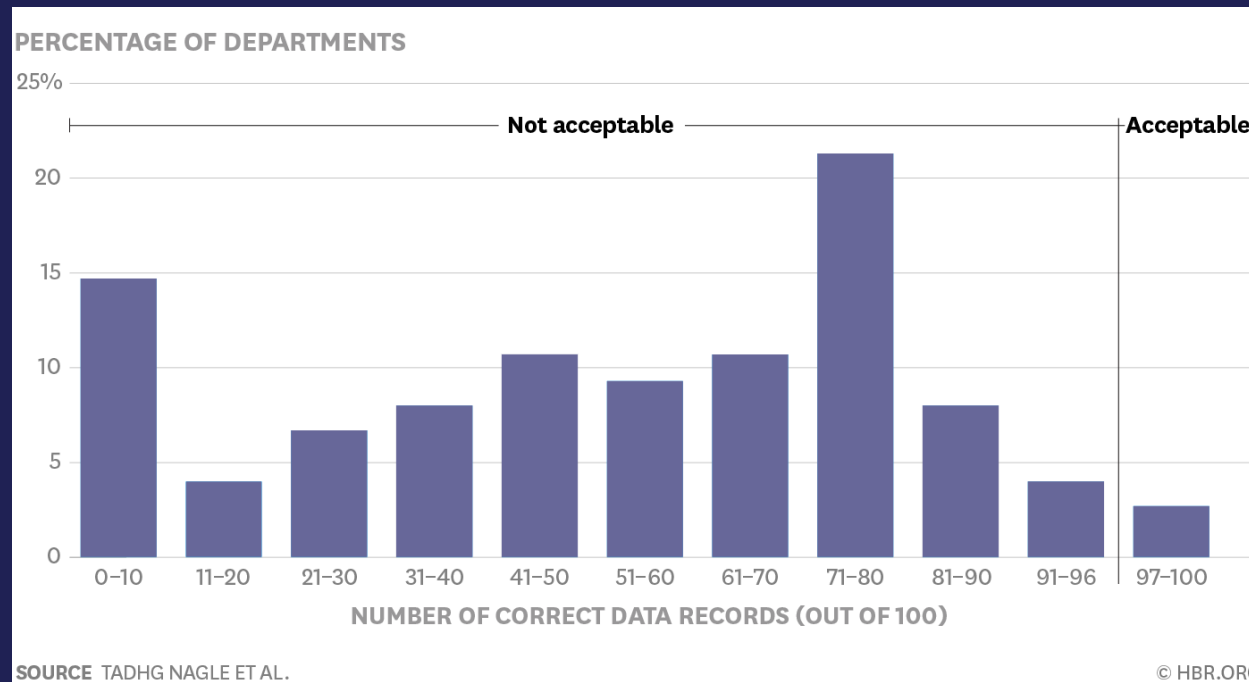
One kind,  
one answer



Inaccurate  
Data

Inconsistent & not  
enough volume for  
training

# “Only 3% of companies’ data meets basic quality standards.”



In a study involving 75 executives, only 3% found their departments fell within the minimum acceptable range of 97 or more correct data records out of 100.



# What are the potential effects flawed data has with ML?

Mistaken  
Analytics

Erroneous  
Predictions

Poor, Biased  
Insights

# Case Study:

## HCP Engagement and Outcomes

### Goals

- Identify which Speakers created largest change in prescribing behavior of HCPs that attended a Speaker event
- Identify which content created largest change in prescribing behavior of HCPs that attended a Speaker event

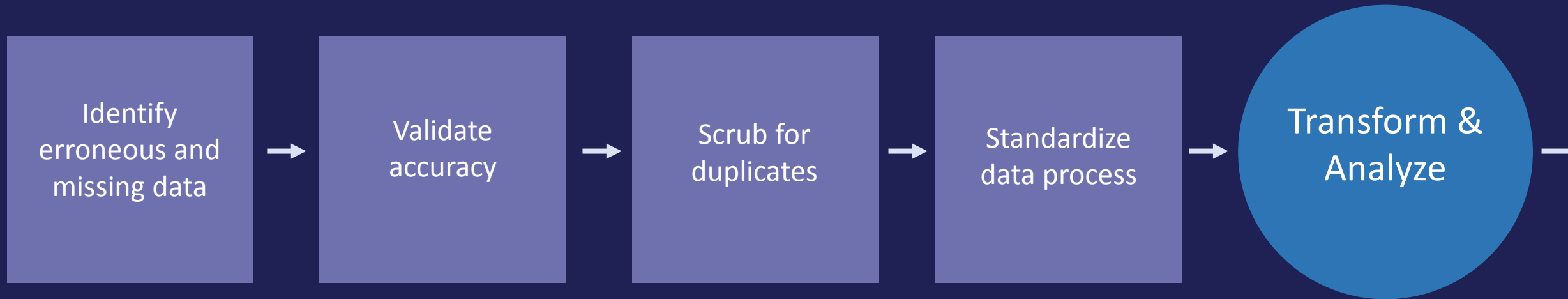
### 2+ years of data for training

- CRM/Meetings
- Sales/Rx Volume/Claims Data
- Competitor Rx
- Speaker Program
- Industry Engagements

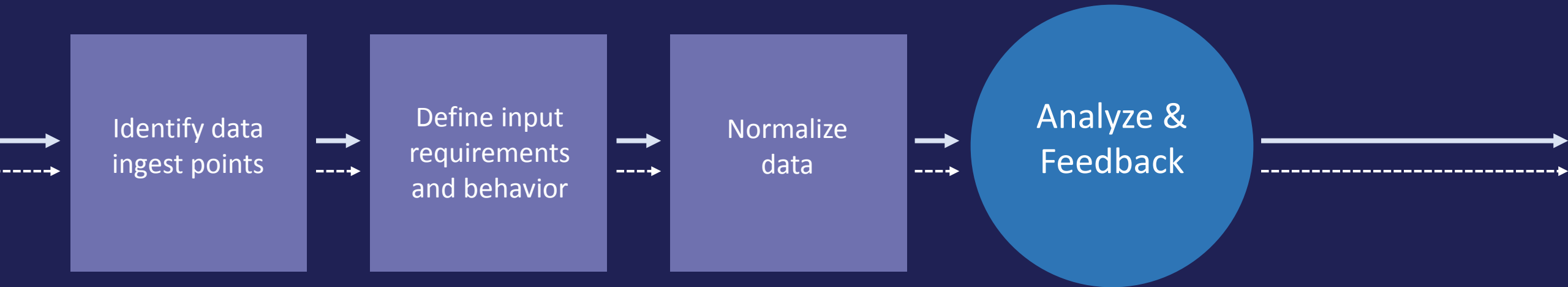
### Problems

- Not every engagement had details of the meetings, presentation and feedback
- Improper filters on exports from customer led to initial biases in the data
- Constraints; Speaker versus Content

# How do you prime historical data for quality and deeper ML insights?



# How do you prime real-time data for quality and deeper ML insights?



# What benefits priming data has on ML have?

Long-lasting data quality standards

More efficient implementation

Deeper, more accurate insights

One size does not fit all (future-proof)

# Parting Thoughts

**Invest in narrow ML/AI models, then expand**

Not a silver bullet

**Changing behavior is hard**



# Thank you.

