



# Unified Data Reliability

with iceDQ: identify & Fix Data Issues Early

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# What's common between them?

UK bank TSB botched migration for 5 million customers.



April 2018-2022

 Financial Conduct Authority  
<https://www.fca.org.uk/News>

TSB fined £48.65m for operational resilience failings

 The Independent  
<https://www.independent.co.uk/.../Business-News>

TSB IT meltdown cost bank £330m and 80000 customers

Feb 1, 2019

The Titan had a catastrophic implosion 13,000 feet under



June 18, 2023

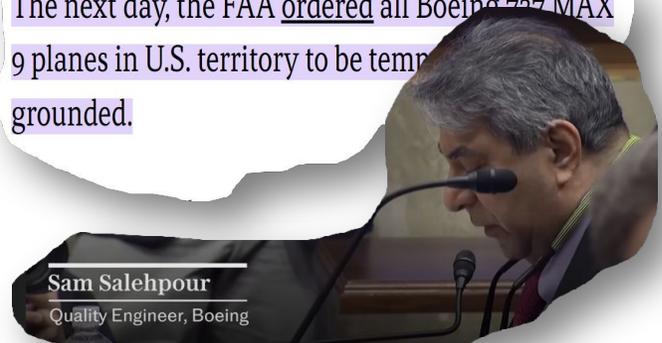
the community even wrote letters to the company, saying that what they were doing was too experimental to carry passengers and needed to be certified

Boeing Max lost door at 16,000 feet in air.



January 5, 2024

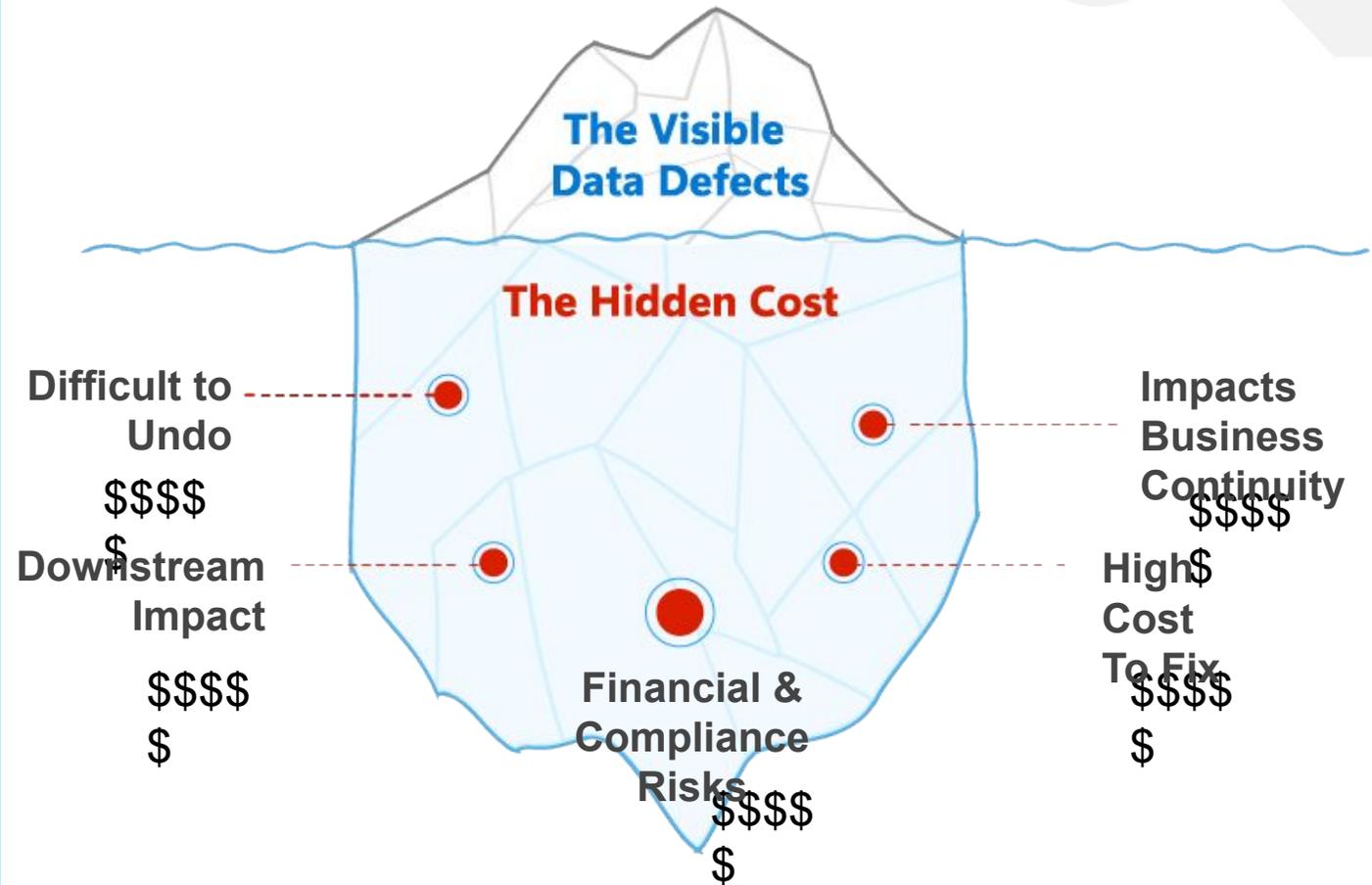
The next day, the FAA ordered all Boeing 737 MAX 9 planes in U.S. territory to be temporarily grounded.

  
Sam Salehpour  
Quality Engineer, Boeing

Defects were  
Observed, but  
**after the fact.**

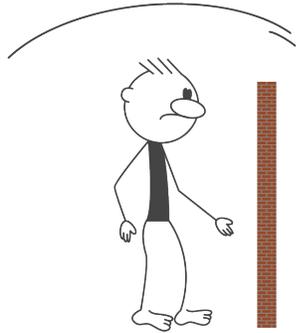


# The Cost of Defects in Production...





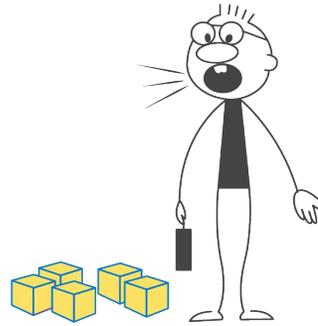
Developer



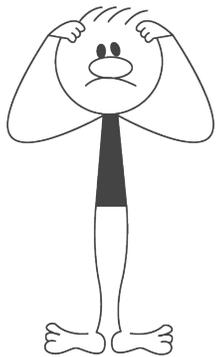
Tester



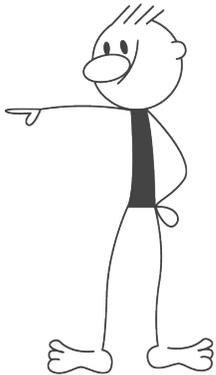
Operations



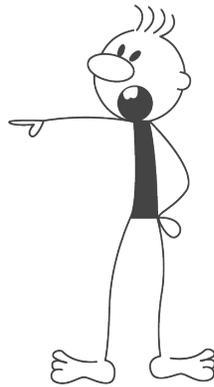
Business User



Developer



Tester



Operations



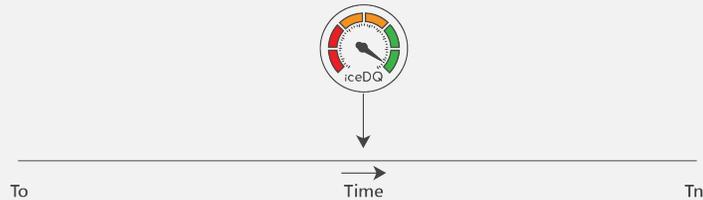
Business User

# Time to Rethink?

1. Evolve to Data Reliability Engineering (DRE)
2. Data Factory Approach
3. Unified Data Testing, Monitoring & Observability

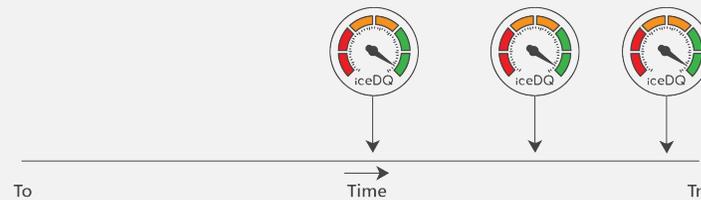
# 1. Evolve to Data Reliability Engineering (DRE)

## DQ - Data Quality



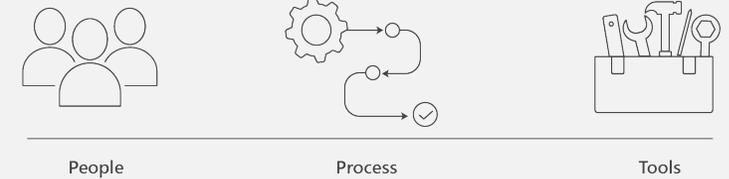
Data Quality is an instance in time.

## DR - Data Reliability



Data Reliability is consistent data quality over time.

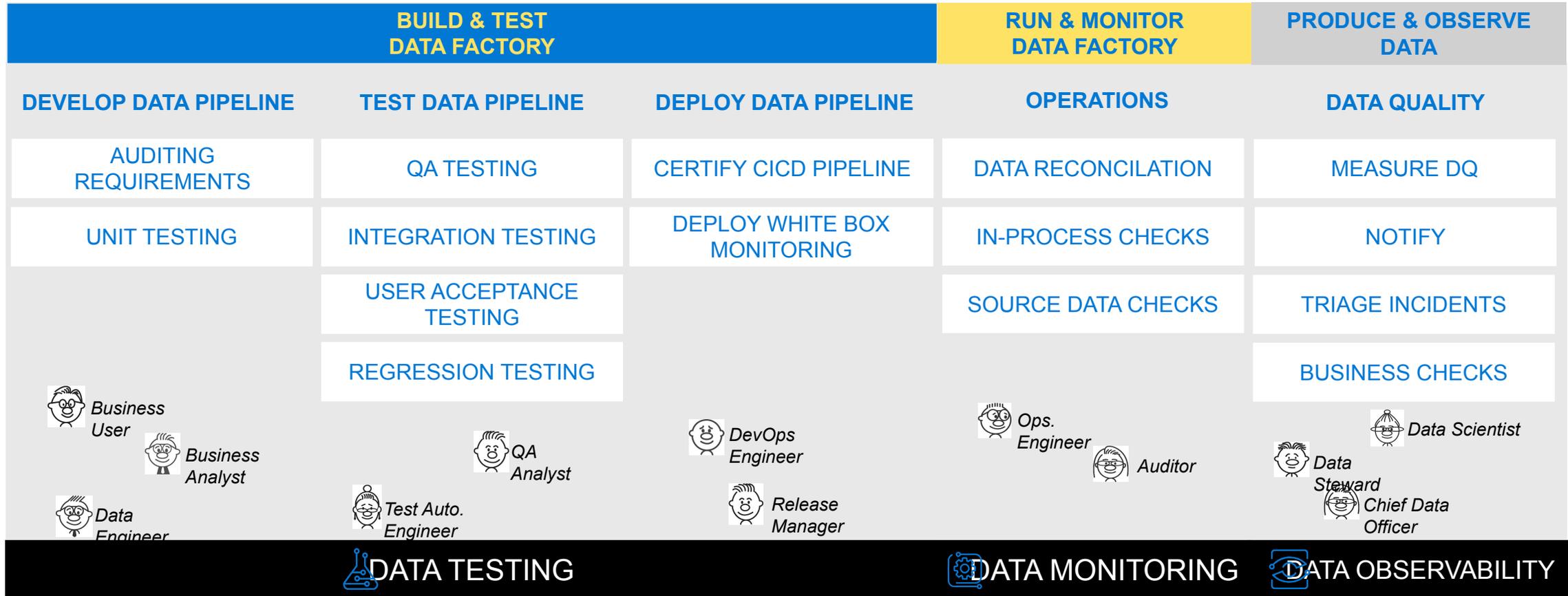
## DRE - Data Reliability Engineering



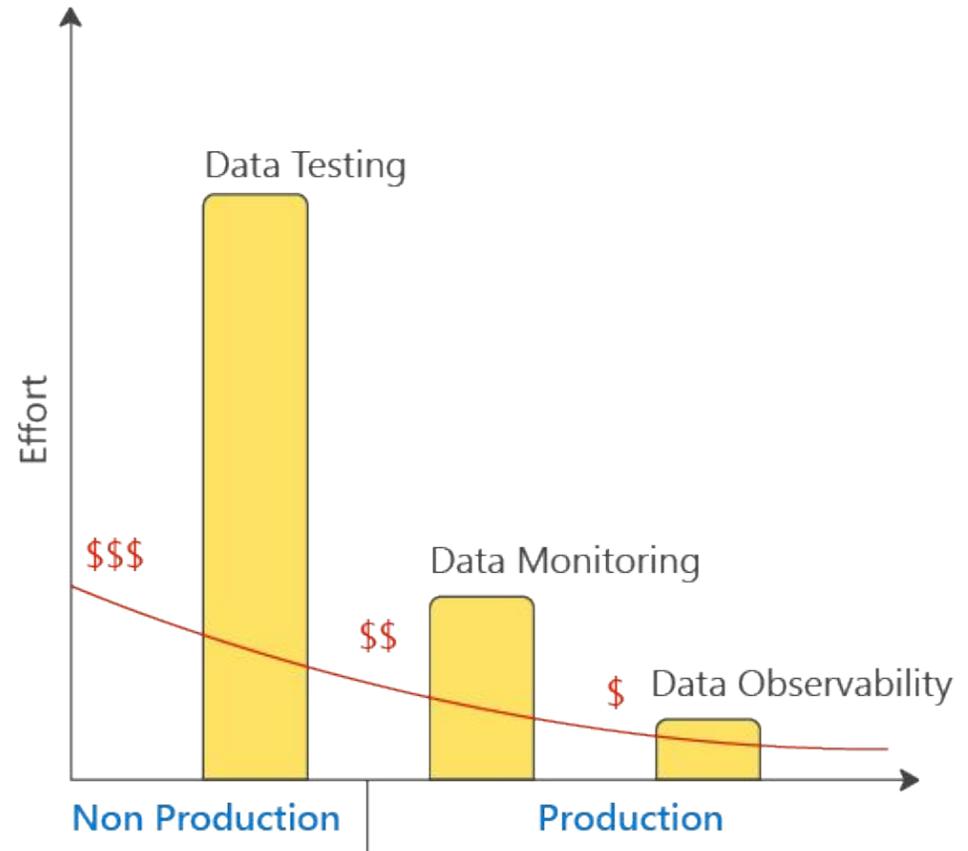
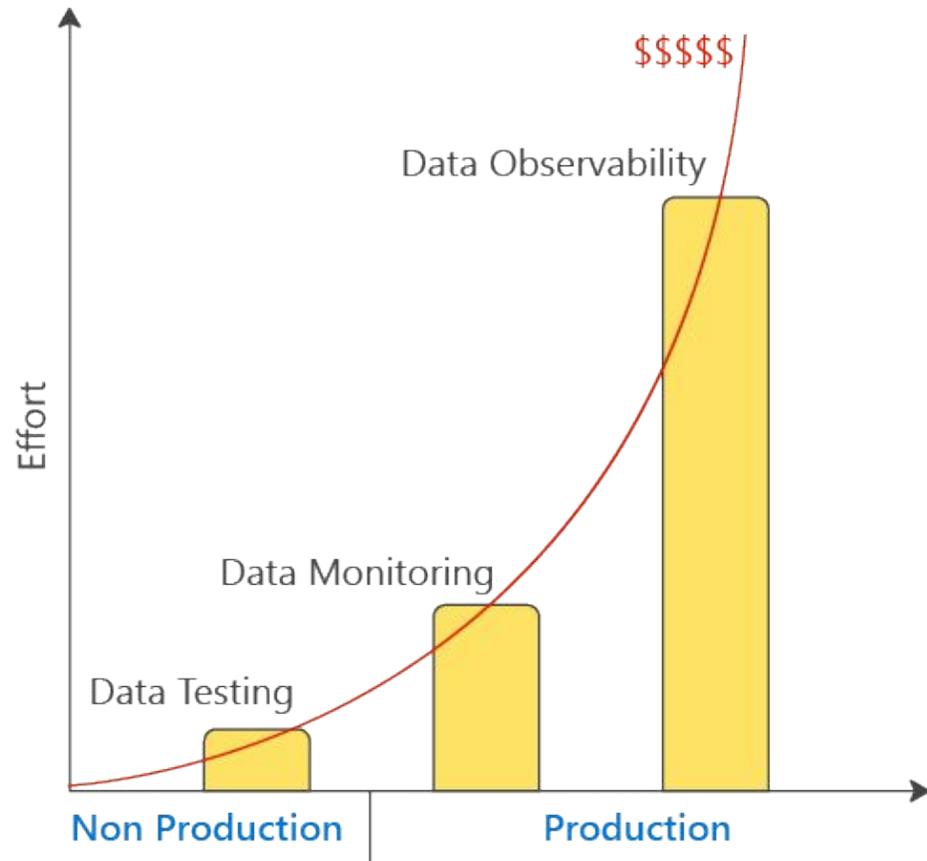
Data Reliability Engineering is a practice of integrating people, processes, and products to deliver reliable data.

## 2. The Data Factory Approach

# 3. Unified Data Testing, Monitoring & Observability



# Shift Efforts Left, Cut Costs Right!



# Your Road to Zero Data Defects



Produce

Data Observability

Run

Data Monitoring

Build

Data Testing



Unified Data Testing, Monitoring, & Observability.

Thank you  
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