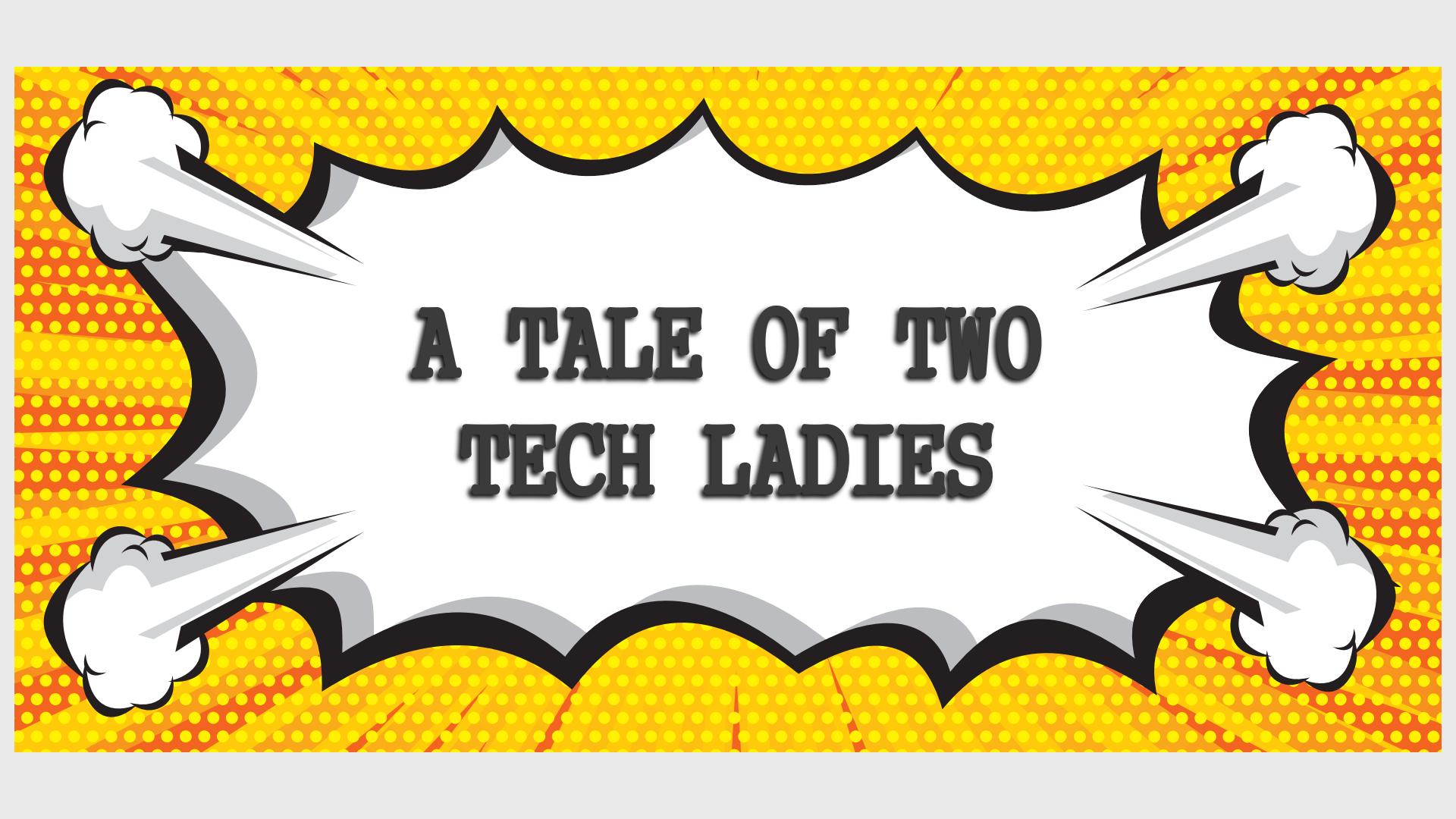


DATA DEMOCRATIZATION

Enabling Citizen Data Scientists



A TALE OF TWO TECH LADIES

Starring



Laura Ellis
STSM, Analytics Architect



@littlemissdata



Tiffany Cross
Program Director, Analytics & UI



tiffany-cross

A Citizen Data Scientist is

*“a person who creates or generates models that use advanced diagnostic analytics or predictive and prescriptive capabilities, but **whose primary job function is outside the field of statistics and analytics**”*

- Gartner



**ONCE UPON
A TIME**

Tiffany Cross

The UX Developer Looking For Feedback

- Primary responsibility is to release features
- Wants to know if the feature is successful
- Wonders how her work fits in with the big picture
- Weaves in the stats she does have which is just page stats, nps... silos!



Laura Ellis

The Lonely Data Scientist

- Provides reporting and insights for the business owners
- Often looking for patterns in a vacuum
- Has difficulty finding “the right person” to vet potential data insights or issues
- Would love to partner with the development and business teams more proactively



THE DREAM



THE DREAM REALIZED

- Notices a spike in account creations
- Getting influx of messages asking about an increase in fraudulent flows
- Notices that user onboarding patterns have changed

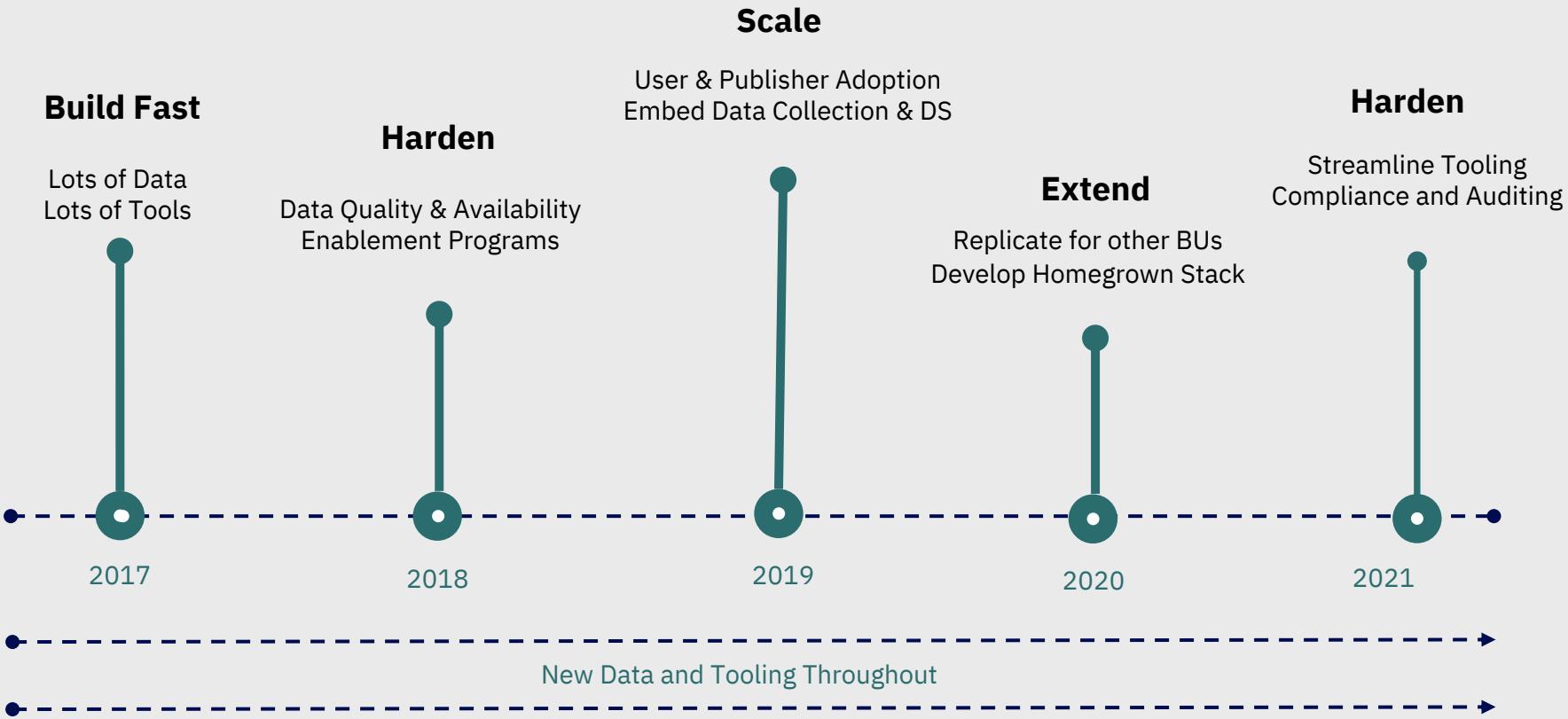


- Notices a spike in her page views
- Investigates conversion rates on page
- Digs into referrer and notices a trend



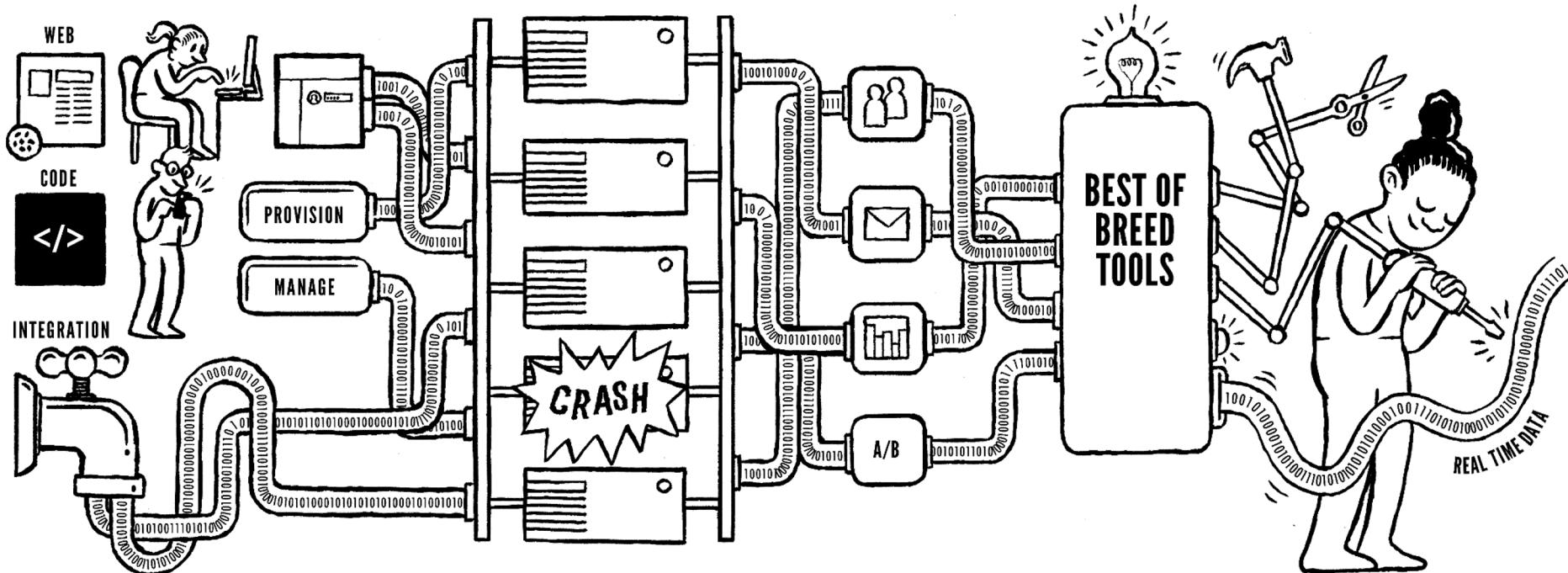
**EVERYONE FEELS RESPONSIBLE AND
INVESTED IN THE DATA**

Timeline of IBM Cloud Data



Tools.
Data.
Culture.

Tools.

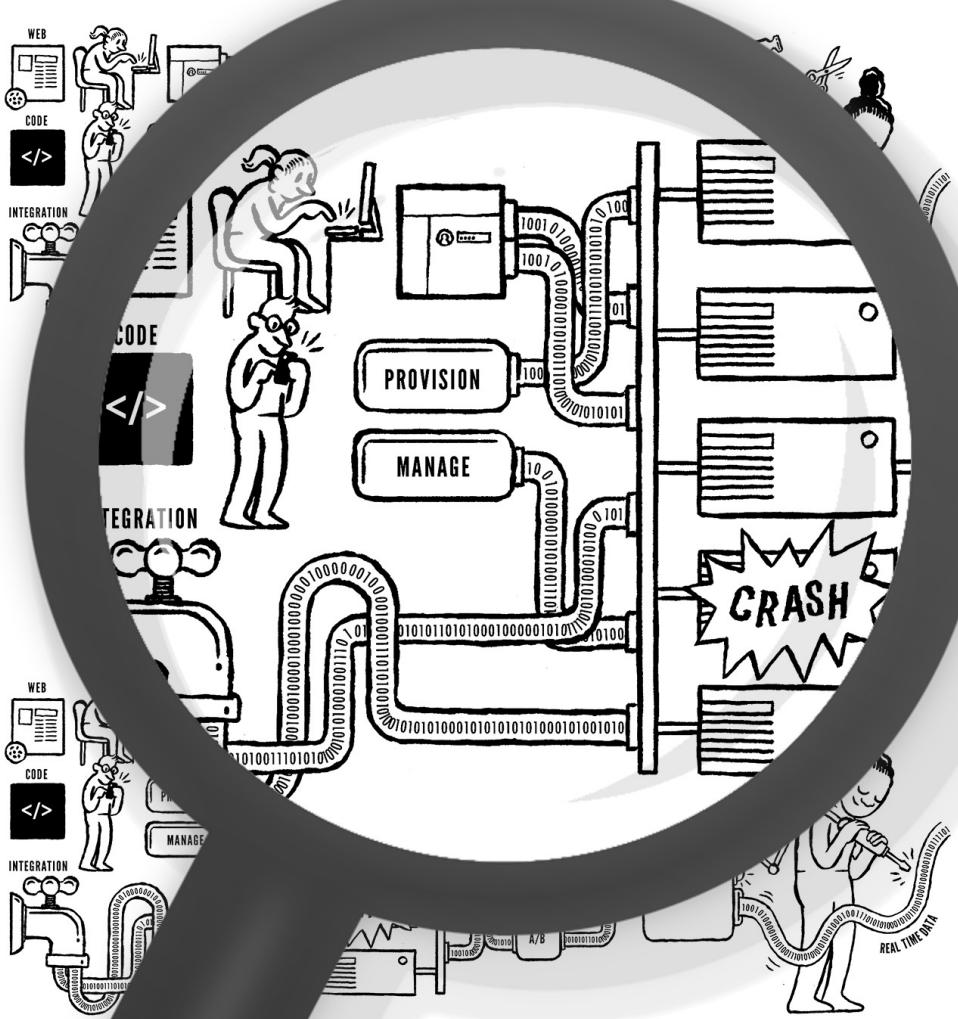


Challenges

Need for broad instrumentation

Too many tools & pipelines

Performance Impacts



Solutions

Need for broad instrumentation

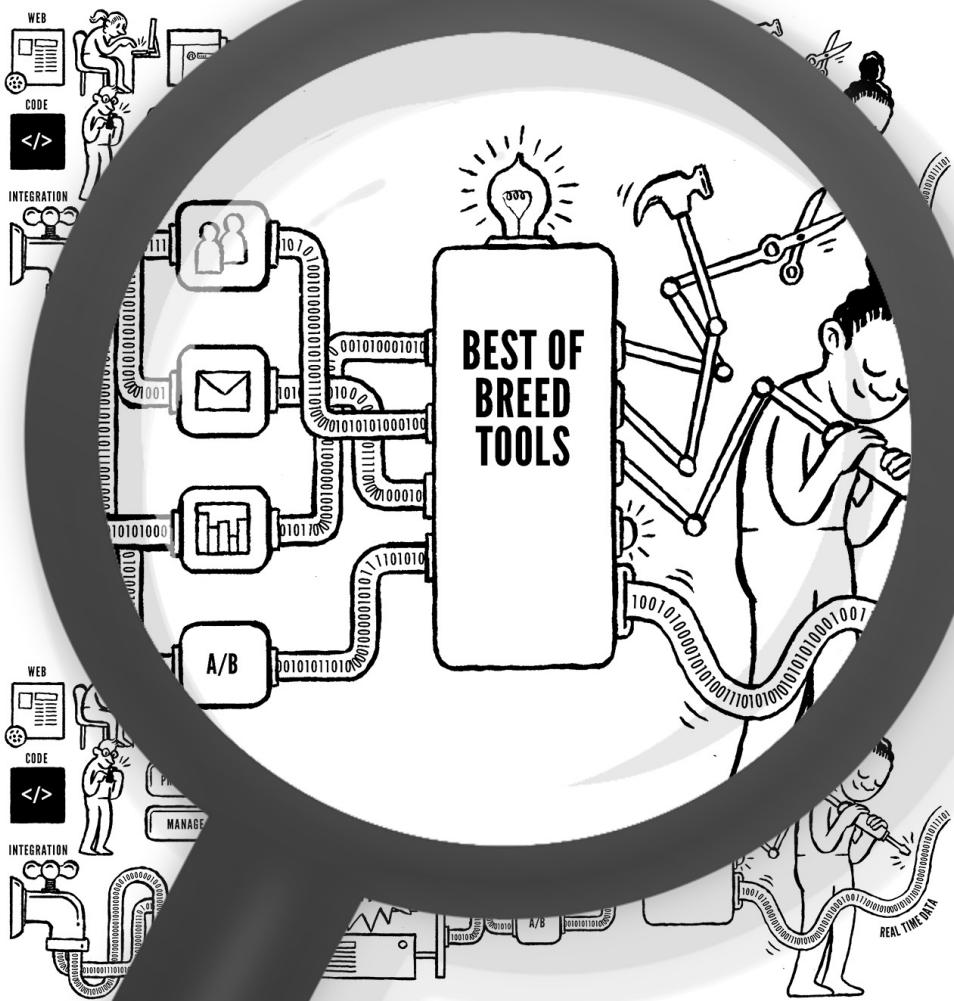
- Common libraries
- Publisher enablement material

Too many tools & pipelines

- Meta tools

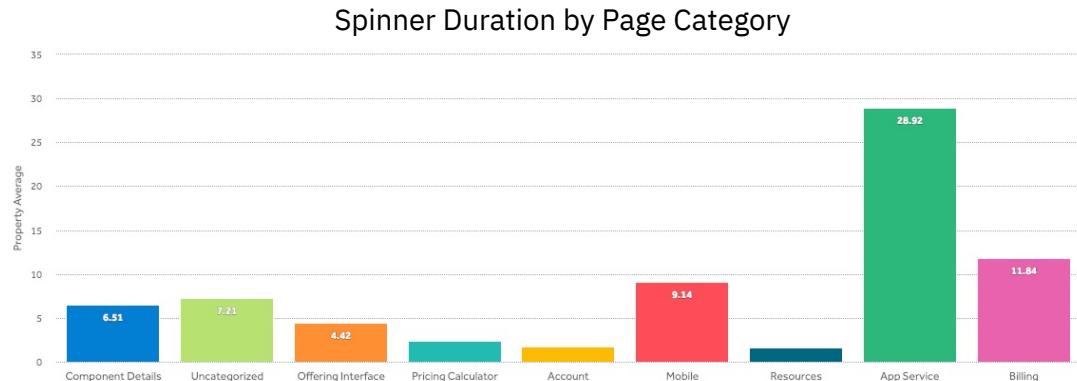
Performance Impacts

- Continuous tuning and monitoring
- Fit for purpose integration options

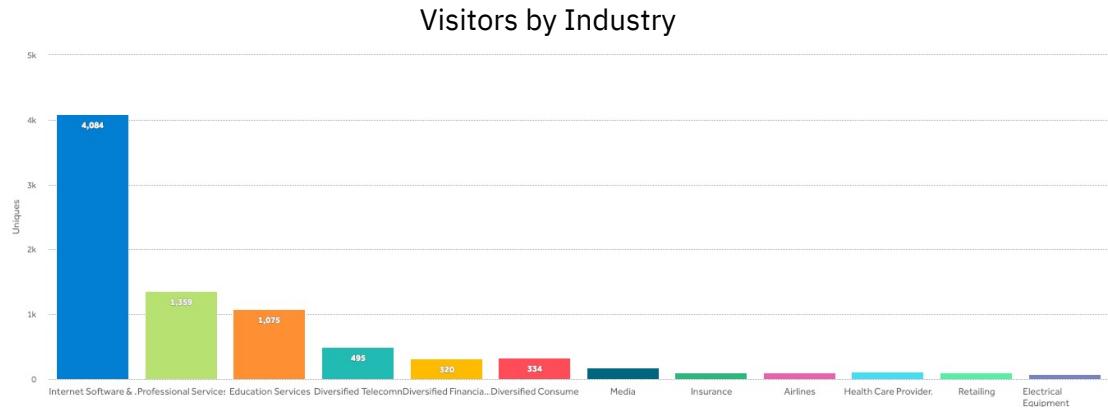


Use Case

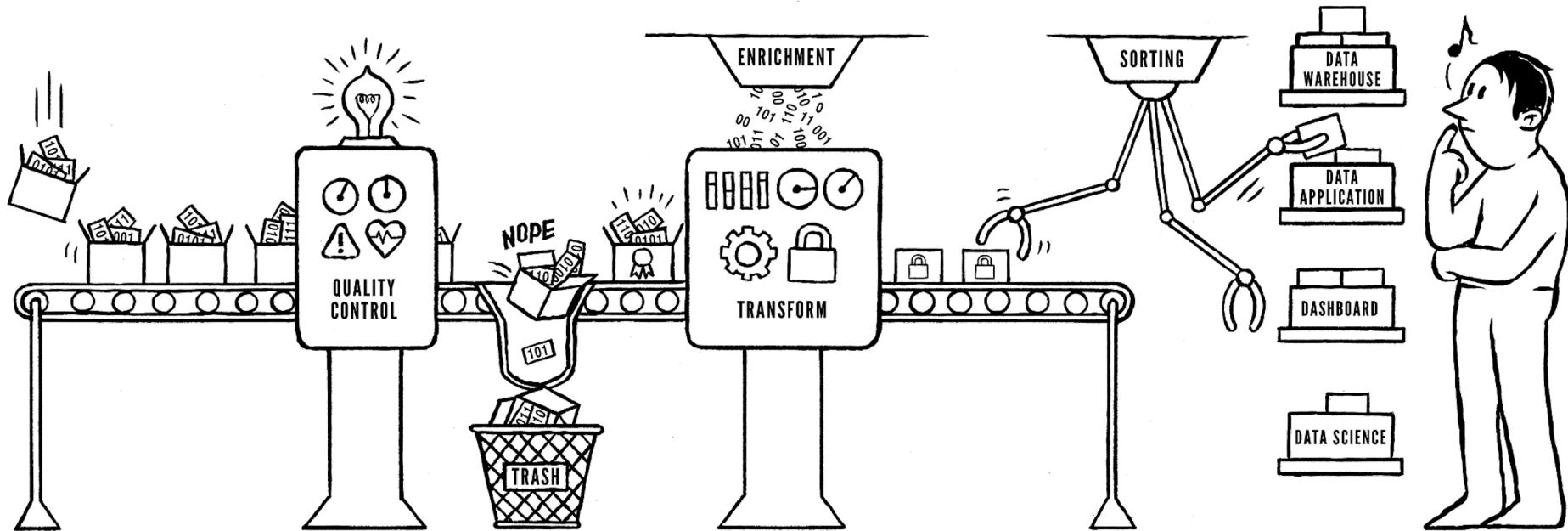
Code injection for very granular analytics.



Data Enrichment



Data.

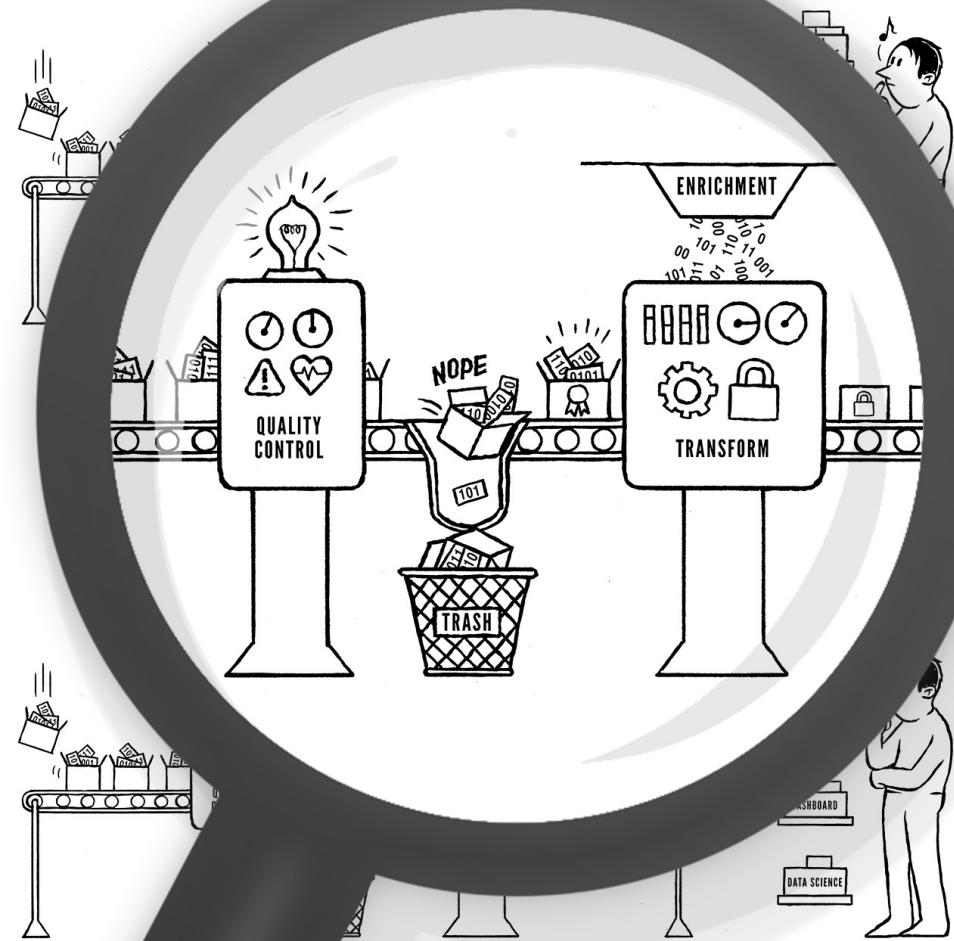


Challenges

Strict vs Flexible

KPI “Flavors”

User confidence



Solutions

Strict vs Flexible

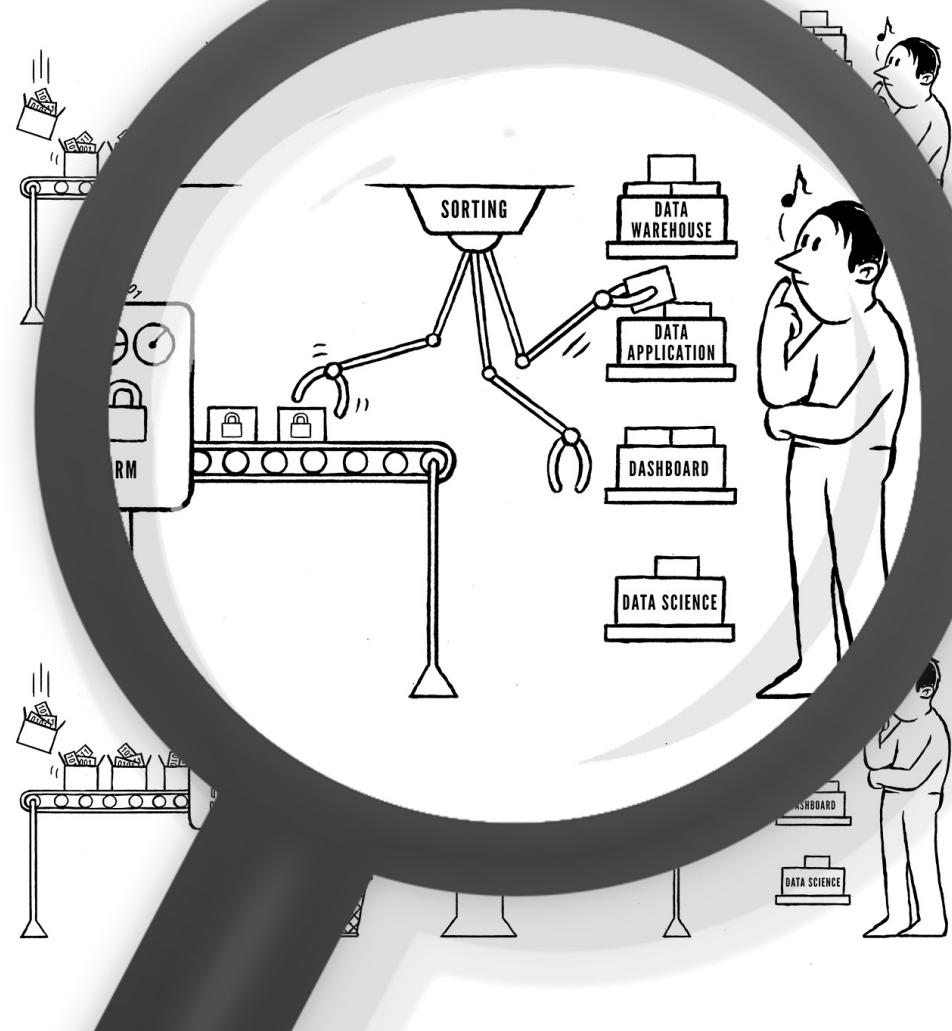
- Open publishing system
- Centralized filtering and enrichment

KPI “Flavors”

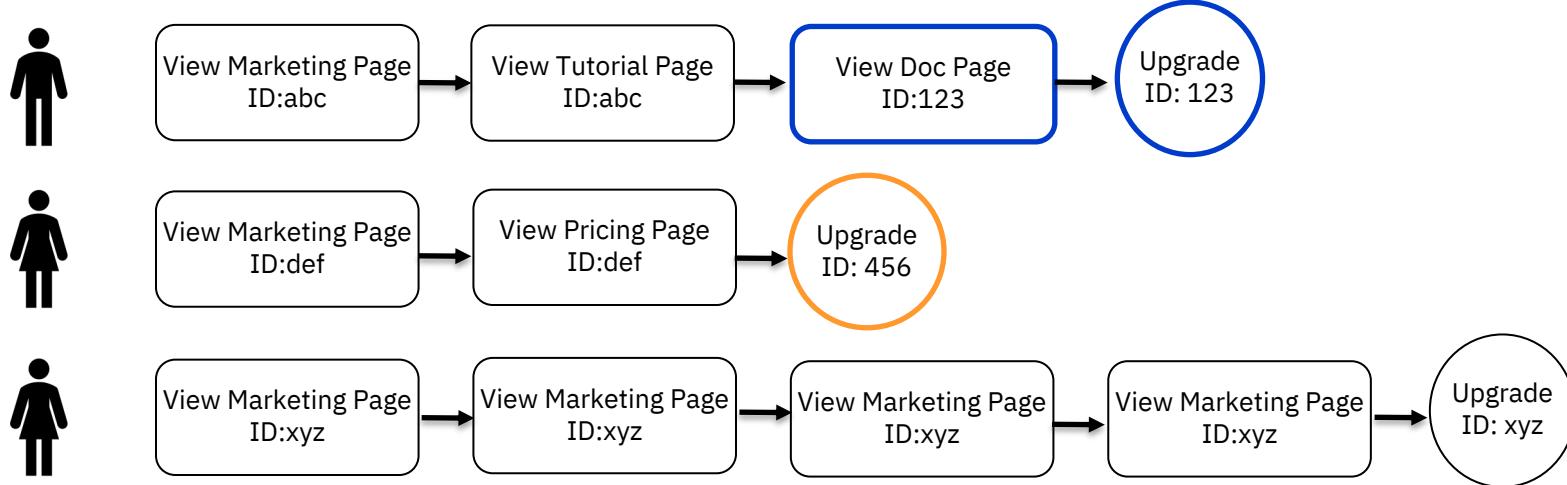
- Open KPI definition access across tools

User Confidence

- Strong data release process
- Data quality alert and monitoring



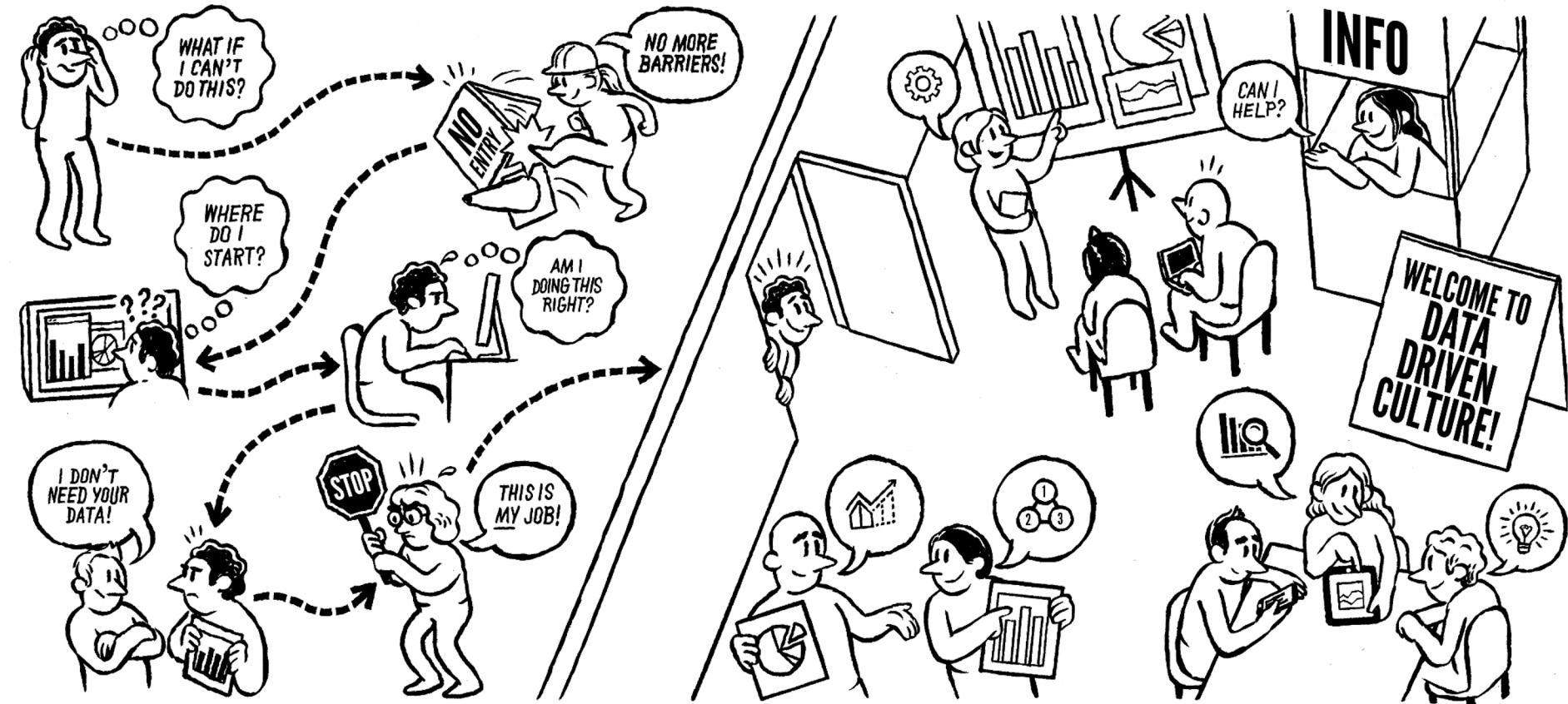
Use Case



Correct Data: 3 users, 100% conversion rate

Data Shown: 5 users, 60% conversion rate

Culture.

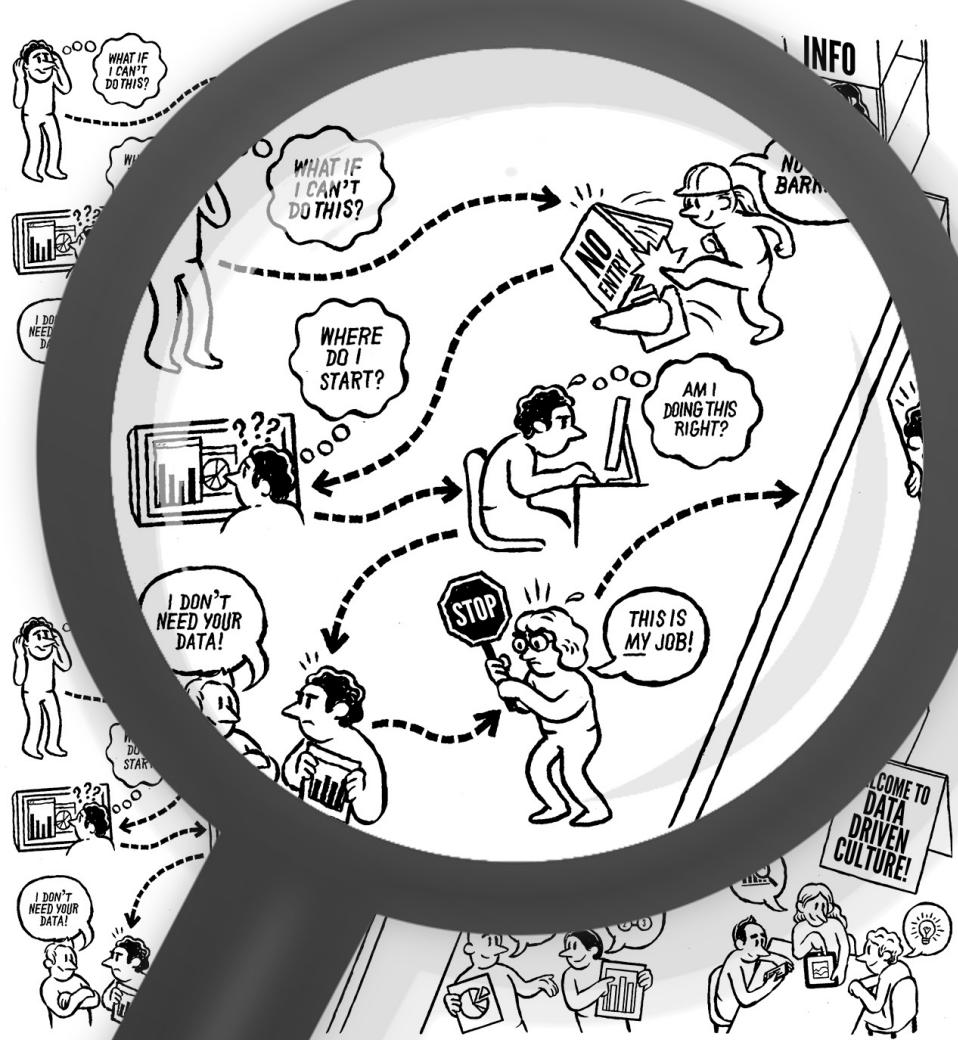


Challenges

HIPPO

Weaponization of data

Confidence and new skills



Solutions

HIPPO

- Decisions are informed by data
- Executive training and buy in

Weaponization of data

- Policy of data and analysis transparency
- Data consumer rights

Confidence and new skills

- Variety of fit for purpose enablement programs across mediums
- Read, watch, engage



Use Case

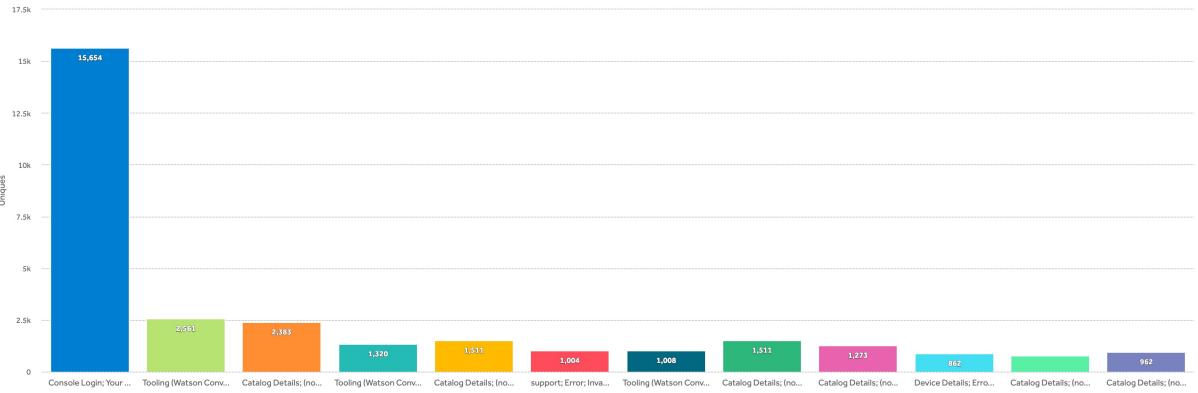
Tough executive release decisions driven by data.

- Aggregate data looking at the entire new platform vs old
- Drill into specific problem areas to address issues
- No stone left unturned - Page Performance, Spinner Duration, UI Error Notifications, etc.
- Rollout via monitored A/B Test

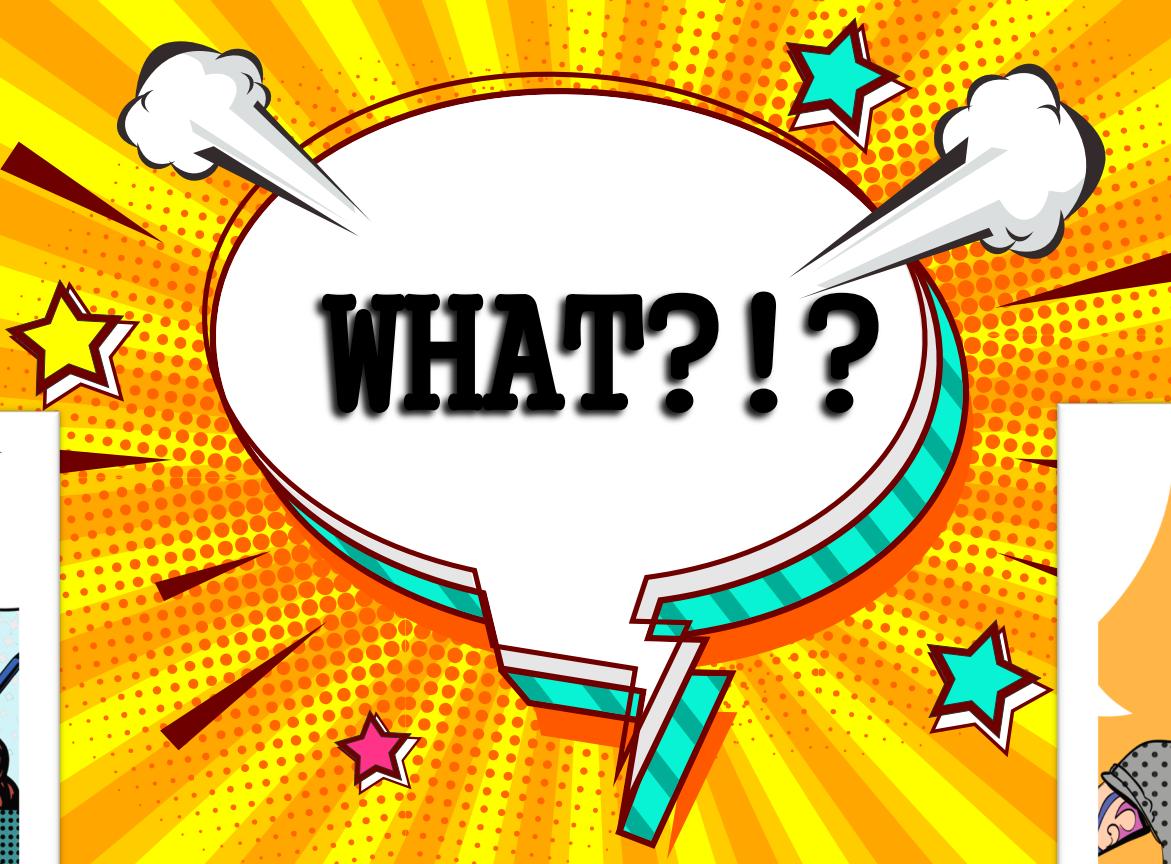
Page Load Performance



UI Error Notifications







WHAT? !?





**TO BE
CONTINUED...**

THANKS!



Laura Ellis
STSM, Analytics
Architect

@littlemissdata



Tiffany Cross
Program Director,
Analytics & UI

tiffany-cross

Slides available at:
<https://tinyurl.com/wia-talk>

