


# Who is responsible for Data Quality?

# Learning Objectives

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1. Understand importance of a healthy relationship between data consumers and data producers
  1. How to be a critical data consumer
  1. Identify and describe the different roles and responsibilities associated with data products
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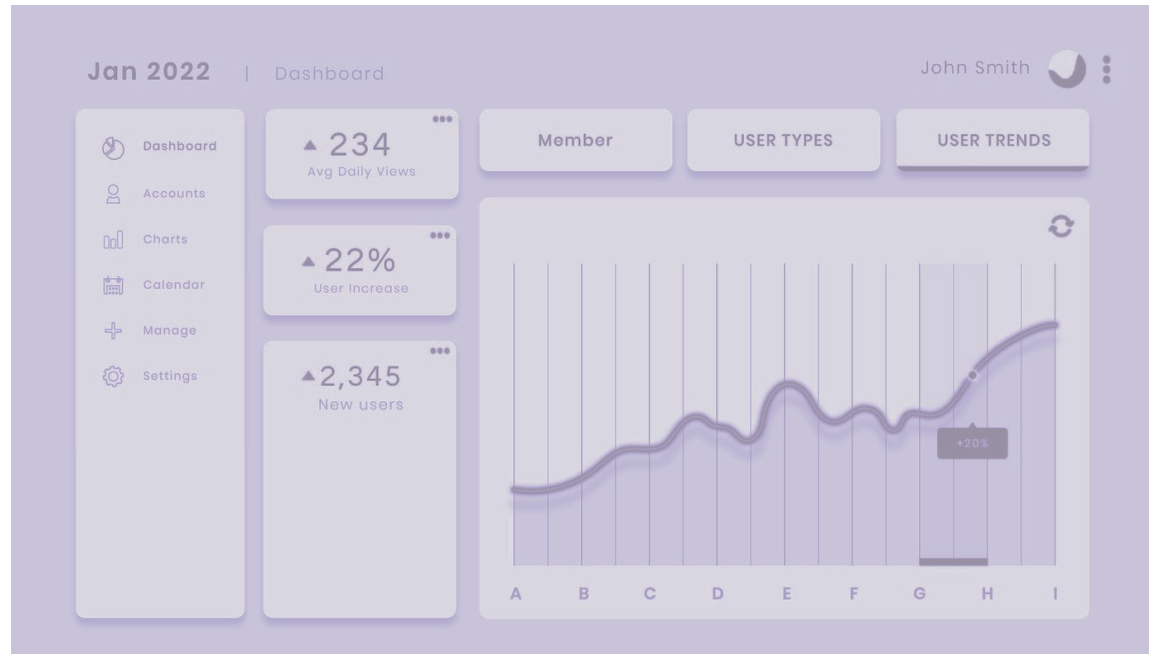
Real-life example

# Dashboard Looks Wrong

Now what?

Who do you contact?

How did this happen?



# Who Is Involved?



Dashboard User



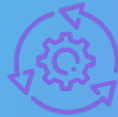
Data Analyst



Database Steward



Data Engineer

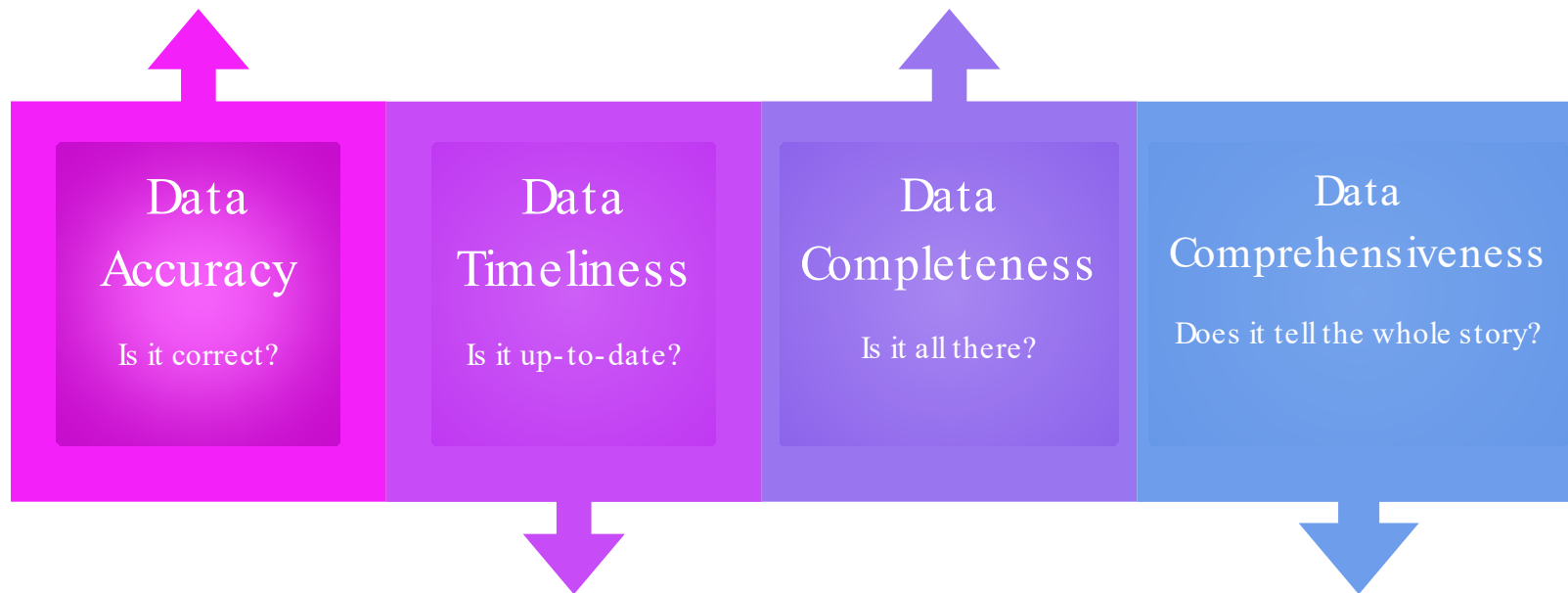


EHR/ Software  
Engineer



Domain Expert

# What Are We Looking For?



# Dashboard User

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## Initial Questions

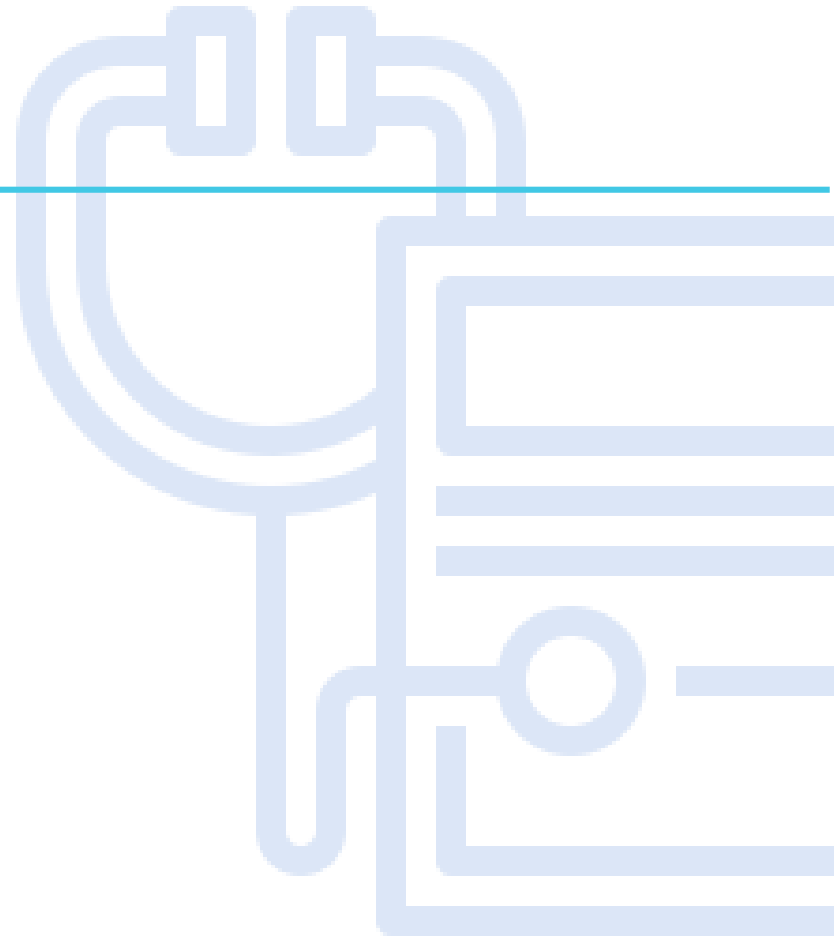
- Is EVERYTHING wrong?
- How long has this been wrong?
- Who do I talk to about this?

## Solution Efforts

- Tracking down the dashboard owner

## New Information

- Something is wrong!



# Dashboard owner (Data Analyst)

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## Initial Questions

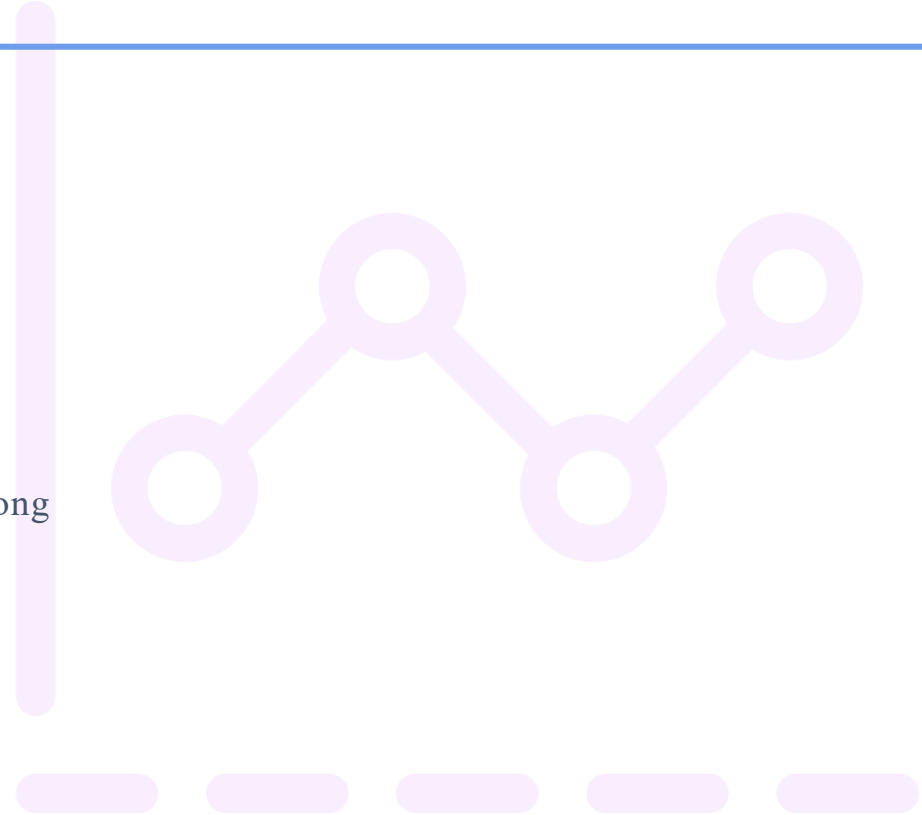
- What exactly looks broken?
- Is the data up-to-date?
- Is my data query correct?

## Solution Efforts

- Finding the exact metric that seems wrong

## New Information

- Identified the metric that looks weird



# Data Steward- Owners of the data

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## Initial Questions

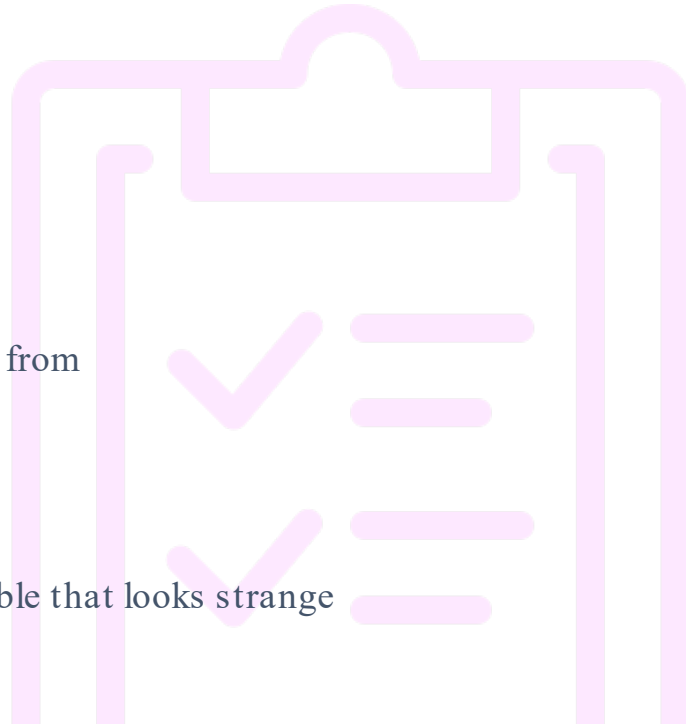
- Are the database tables up-to-date?
- Is the data being used correctly?
- Is the data complete?

## Solution Efforts

- Identifying the table the metric comes from
- Validates data in tables is accurate

## New Information

- Pinpoints the exact source field in a table that looks strange





# Data Engineers

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## Initial Questions

Did something happen in the data transformation process?

Did it get into the intended destination tables?

## Solution Efforts

Checking their transformation unit tests

Checking volumes of data processed

## New Information

Recognizes that the volume of data to that field has decreased



# EHR/Software Engineers

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## Initial Questions

Is there input data still coming in?

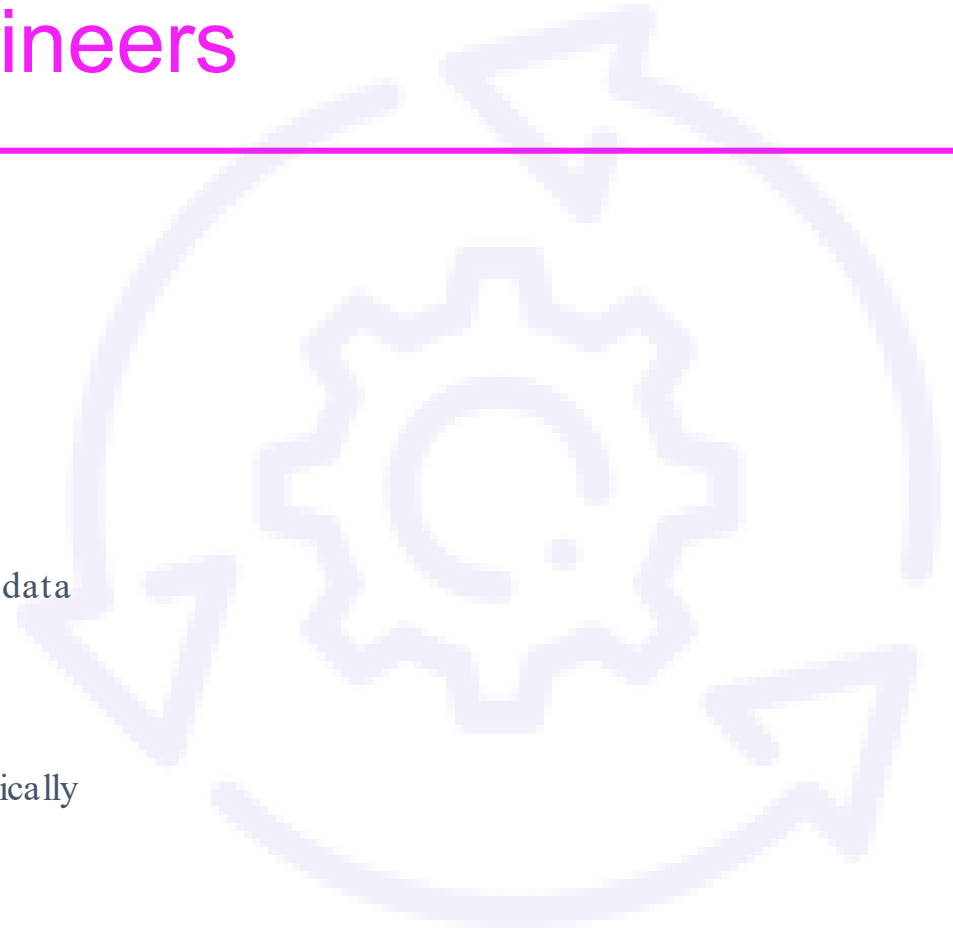
Are we storing that data properly?

## Solution Efforts

Validating the input and storage of data

## New Information

Everything working correctly technically



# Data Steward and Domain Expert

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## Initial Questions

If it's not a technical error (this time!), where is the weirdness coming from?

## Solution Efforts

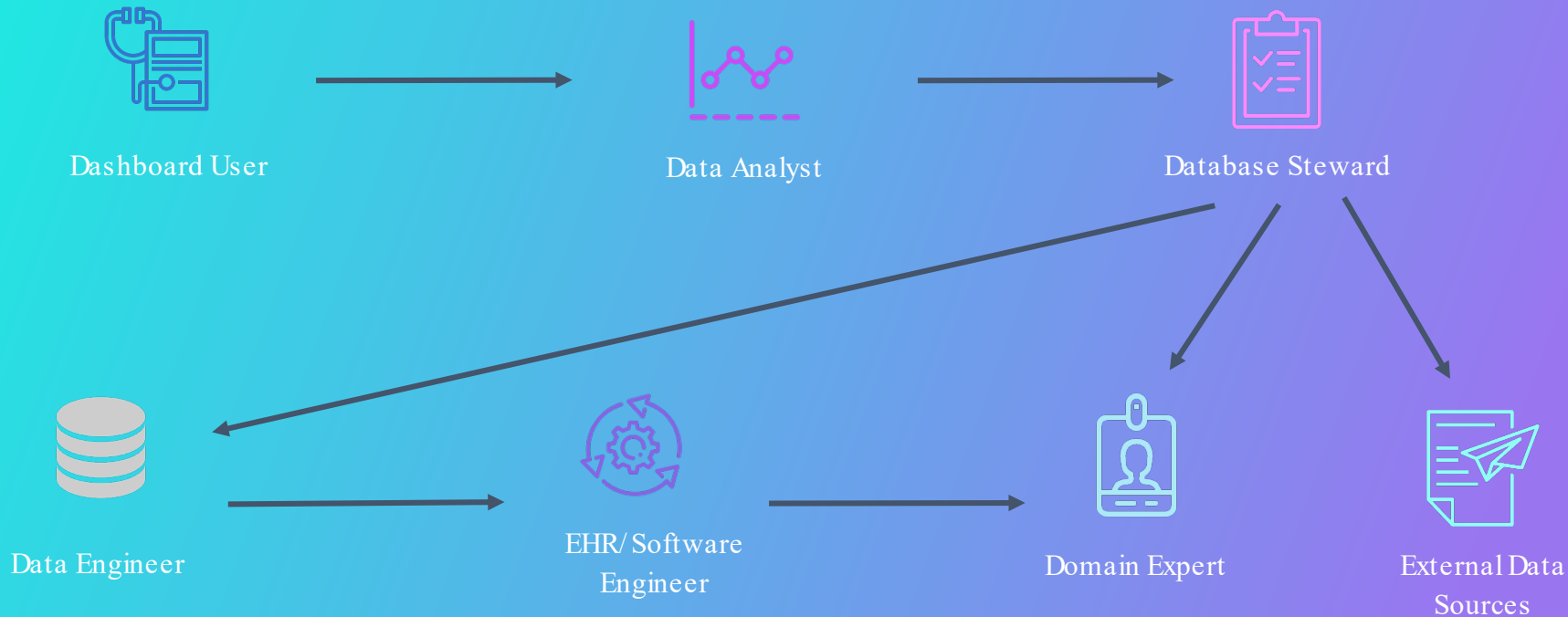
Consulting a domain expert

## New Information

The communication breakdown about process changes is evident



# The Troubleshooting Pathway



# Ideally

## Define

- A comprehensive list of data elements
  - Special documentation around external data sources (eg EDI)
- Thresholds of acceptability in timeliness and completeness for those elements
- Identify who needs to be notified when there is an anomaly in the data

## Measure

- Design tests to check if data meets the defined thresholds of acceptability

## Track

- Automate the tests to regularly check for data quality and to notify invested parties the results of the tests

## Communicate

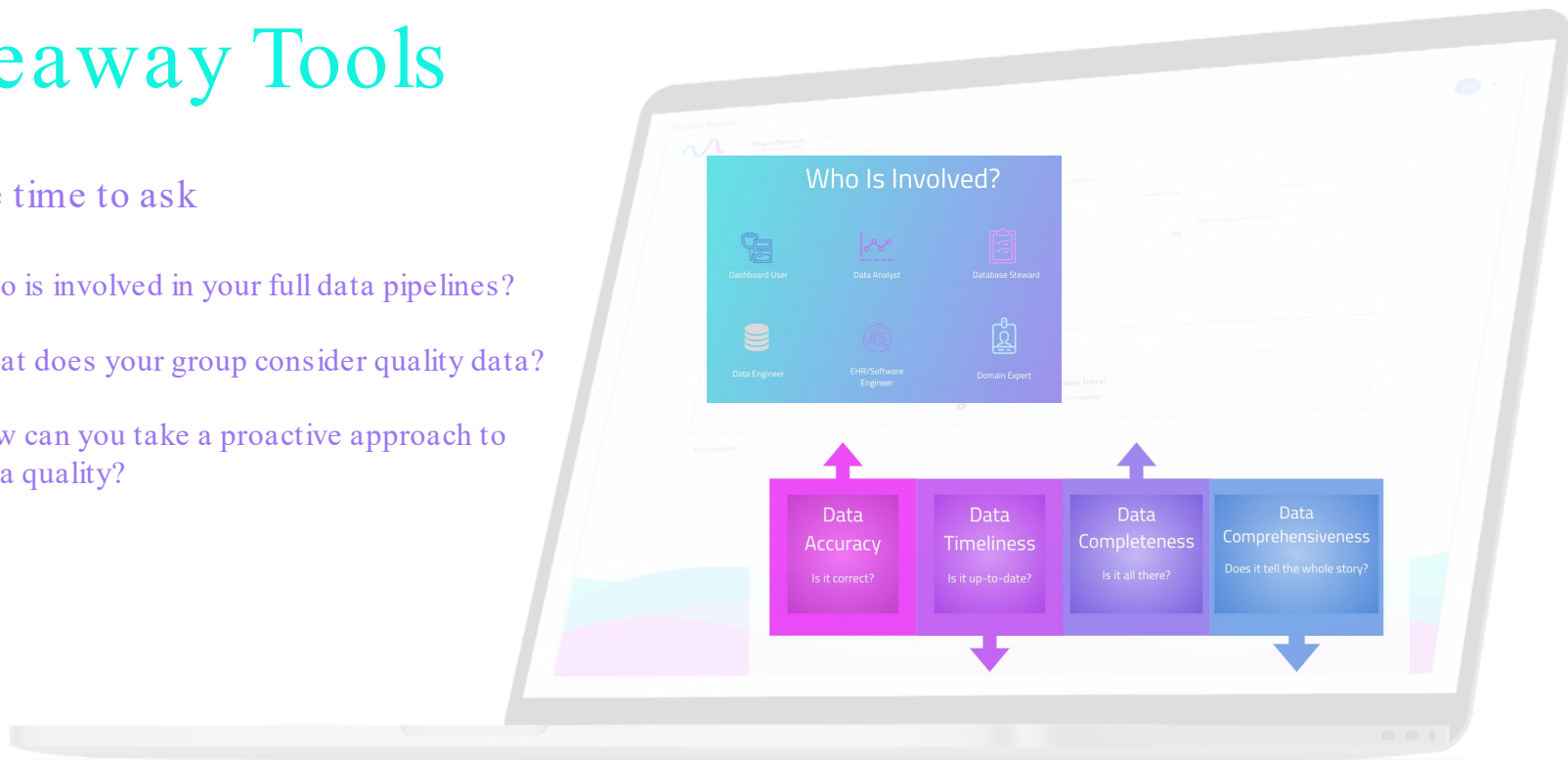
- Information is passed along in all directions



# Takeaway Tools

Take the time to ask

- Who is involved in your full data pipelines?
- What does your group consider quality data?
- How can you take a proactive approach to data quality?



# Thank You!

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For further information or questions contact:



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