# Data Governance - the Purdue Journey Continues

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# Purdue University – West Lafayette, IN

**Sarah Bauer**
*Institutional Data Governance Program Manager*

**Kendal Kosta-Mikel**
*Data Governance Program Lead*

**Stephanie Dykhuizen**
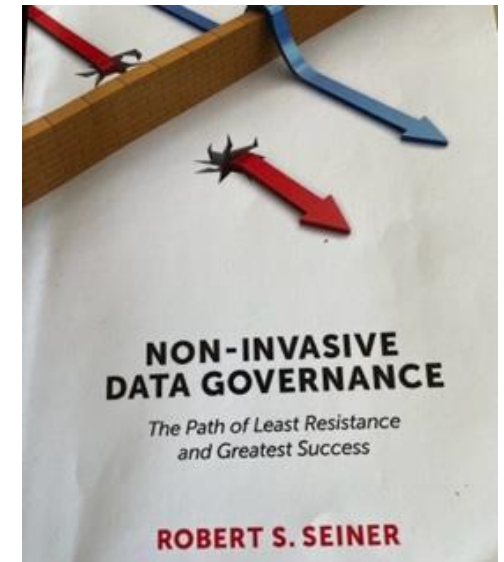*Content and Metadata Management Specialist*

**Kolitha Perera**
*Data Assistant,*
*Student in Actuarial Science*
*and Applied Statistics*

- Defining data governance
- Culture
- Leadership
- Support
- Pain points
- Opportunities

Non-Invasive Data Governance. Robert Seiner

# Data Governance Overview

Staffing
- Sarah Bauer, Institutional Data Governance Program Manager
- Kendal Kosta-Mikel, Data Governance Program Lead
- Stephanie Dykhuizen, Content / Metadata Management, often overlap, 1 FTE
- Research Analyst, Cookbook ODBC, partial FTE
- Two undergraduate students

Data Cookbook – most visible data governance component

Data Governance Structure
- Executive Data Council
- Committee leadership / participation

Visibility, Knowledge Sharing
- Participation / leadership in campus committees
- Big Ten Academic Alliance Data Governance committee

# Data Governance History / Evolution

- New ERPs and reporting environments

- Data Cookbook

- SAP Transformation (FI, HR, Research)
  - Early days of data governance

- Transformative Education 2.0 (Student)
  - Data governance more mature

Raise hands if have position(s) with Data Governance in position title

1 or more positions?

Recently?

# Student perspective

- Background, major
- Prior knowledge of data governance and metadata
- Data Cookbook
- Work/Team Environment
  - Definition/Spec Imports
  - Purdue Student Data Warehouse
  - Audit Tasks
- Future Opportunities
  - Data
  - Areas of Study

# Metadata – Data Cookbook

# Data Cookbook by the Numbers

**IDA+A**

2,600+ users with log-ins

5,000 Definitions

700 Specifications (standard reports/dashboards)

60 Collections (groupings of reports/tables by topic)

# Functional Areas

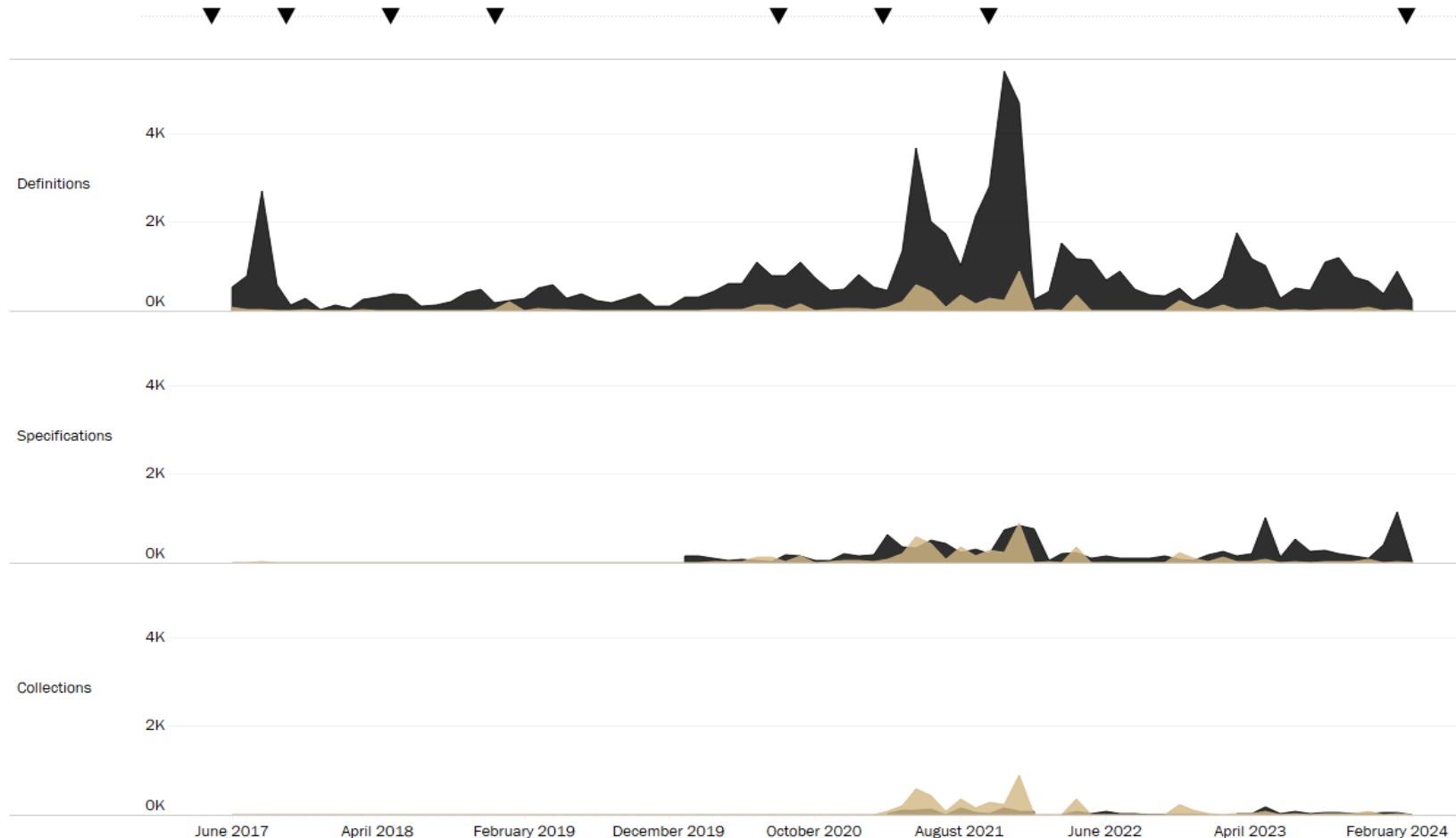| | |
|---|---|
| Academic Proposal | Instructional Activity |
| Administrative Operations | Office of Experiential Education |
| Admissions | Parking |
| BICC | Plant Maintenance |
| Bursar | Purdue for Life |
| Capital Asset Management | Purdue Online |
| Center for Career Opportunities (CCO) | Research (GM) |
| Ethics and Compliance (VPEC) | Slate Graduate |
| Finance | Space Administration |
| Financial Aid | Student |
| Graduate School | Student Life |
| Human Resources (HCM) | Student Success Programs |
| Institutional Assessment | Teaching & Learning |
| Institutional Research IR | Transact |

# What's Next – Data Cookbook

- More communication, sharing the value of metadata

- Purdue Data Warehouse

- Purdue Indianapolis (campus change)

- Additional functional areas
  - Brightspace
  - Elements
  - Glossaries
    - Common Lexicon
    - Market Segmentation

- Technical metadata

- Use of Cookbook ODBC (reporting database)

# Data Cookbook – ODBC (reporting database)

- Evolution of the ODBC
- How we use the ODBC data
  - Operational and Strategic
    - Audit files
    - Onboarding new functional areas
    - Market segmentation
- Dashboards
  - Content usage
  - New users
  - Active users
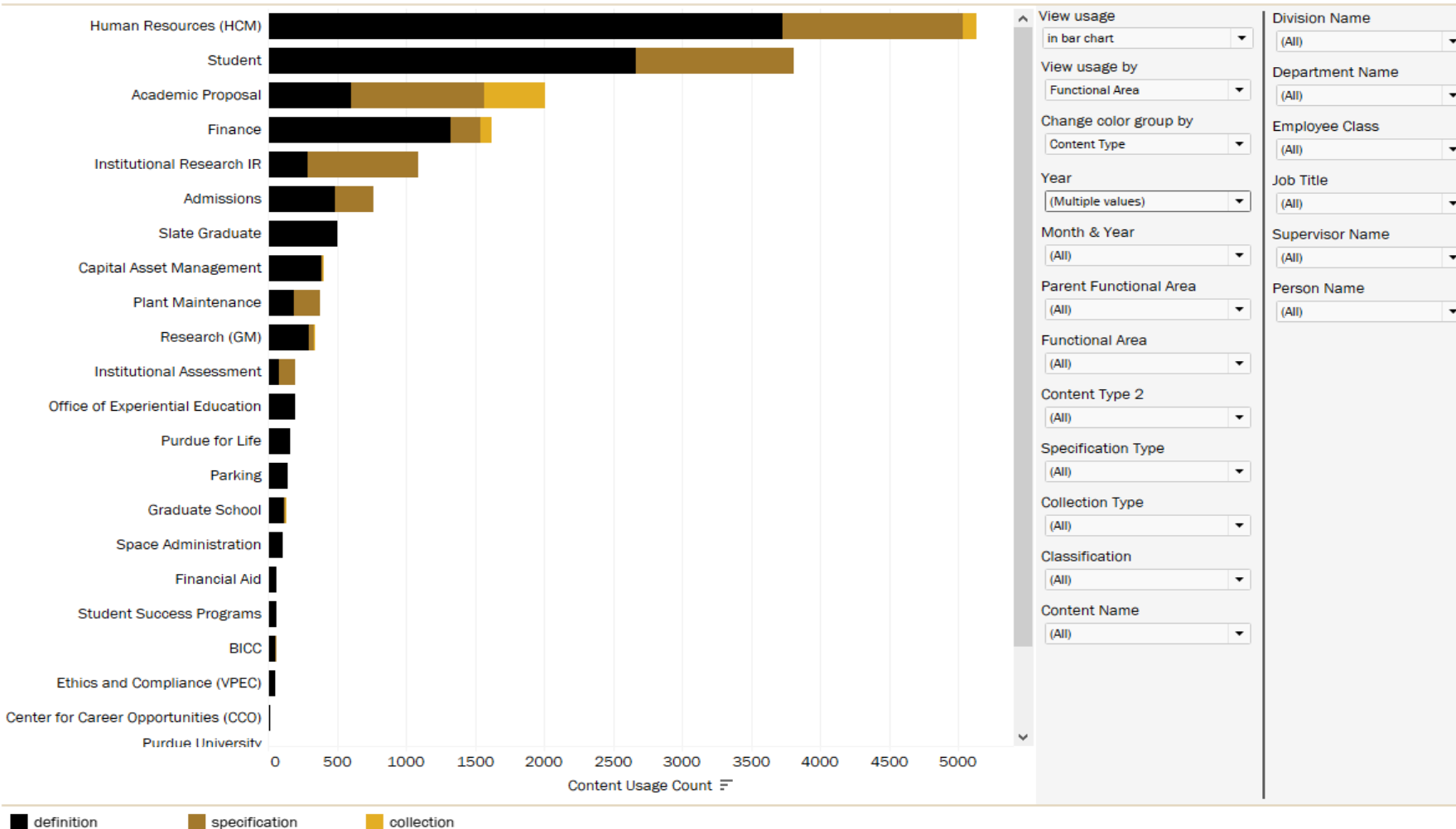
# Data Cookbook – ODBC



**Milestones |** This dashboard compares the usage and creation of content overtime and highlights data cookbook milestones for Purdue University. Data was last updated on 03/06/2024.

Definitions

Specifications

Collections

June 2017 · April 2018 · February 2019 · December 2019 · October 2020 · August 2021 · June 2022 · April 2023 · February 2024

# Data Cookbook – ODBC

# Data Cookbook – ODBC

## Content Usage

This dashboard displays info about content usage in different formats (over time, bar chart, tabular). Data was last updated 03/06/2024.
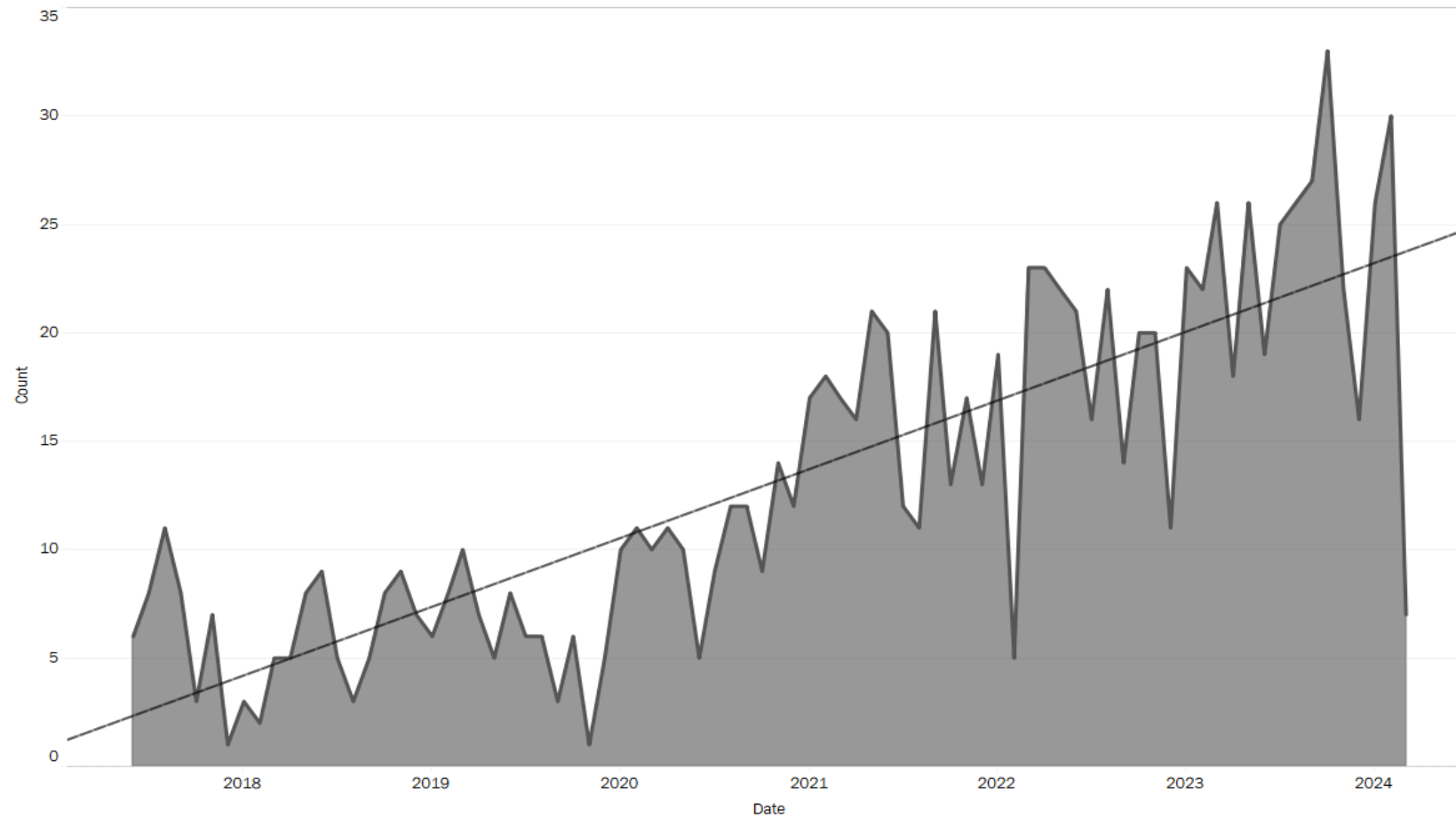
| | 2023 | | | | | | | | | | | | 2024 | | | Grand Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | | | Q2 | | | Q3 | | | Q4 | | | Q1 | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | |
| List of Students by Cohort | | | | | | | | | | | | | 8 | 108 | | 116 |
| Age Range 10 Year Increment Starting at Age 25.. | | | 3 | 13 | 20 | 5 | 7 | 8 | 11 | 3 | 11 | 6 | 7 | 13 | 5 | 112 |
| Freeze Calendar, Student | 31 | | 6 | 1 | 1 | 9 | 2 | 4 | 3 | 9 | 2 | 27 | 1 | 3 | | 99 |
| Census, Student | 26 | 5 | 3 | 2 | 3 | 4 | | 2 | 4 | 5 | 6 | 21 | 7 | 3 | | 91 |
| List of Students by Advisor Including Blank Advis.. | | | | | | | | | | | 2 | 6 | 4 | 63 | 2 | 77 |
| Employee Talent Profile - Employee Talent Demo.. | | | | | 7 | | 55 | 3 | 1 | | | | 5 | | | 71 |
| Classification, Student | | 3 | 19 | 6 | 4 | 1 | 1 | 2 | | 5 | 11 | 1 | 3 | 10 | 1 | 67 |
| Academic Period | 4 | 4 | 18 | 5 | | 2 | 2 | 11 | 3 | 3 | 4 | 1 | 4 | 5 | | 66 |
| Workforce Movement Dashboard | 1 | 10 | 2 | 1 | 1 | 1 | 5 | | 7 | 18 | 3 | 8 | 3 | 4 | | 64 |
| Academic Major | 4 | 8 | 8 | 5 | 3 | 1 | 2 | 12 | 3 | 9 | 1 | | 1 | 3 | 1 | 61 |
| List of Active Students | | 1 | | | 5 | 1 | | 4 | | 10 | 20 | 1 | 3 | 13 | 1 | 59 |
| Employee Talent Profile - Action Trends | | | | | 10 | | 41 | 6 | | 1 | | | | 1 | | 59 |
| Performance Evaluation | | | | | 11 | 2 | 10 | 29 | 1 | | | | 4 | | | 57 |
| Academic Standing | 4 | 1 | 7 | 5 | 6 | 1 | 7 | 6 | 2 | | 1 | 1 | 13 | 2 | | 56 |
| Academic College | 6 | 4 | 11 | 1 | 3 | | 2 | 5 | 6 | 6 | 2 | 1 | 1 | 7 | | 55 |
| Talent Acquistion - Staff Candidates: Pipeline Rat.. | | | | 7 | 16 | | 26 | 5 | | | | | | | | 54 |
| Underrepresented Minority (URM), Student | 3 | 12 | 10 | 2 | 4 | 3 | 1 | 3 | 2 | 3 | 4 | 1 | | 2 | | 50 |
| Talent Loss Trends - Talent Loss Trends tab | | | | | 6 | | 31 | | 9 | 1 | 1 | | 1 | 1 | | 50 |
| Race Ethnicity, Student | 1 | 6 | 7 | 2 | 4 | 6 | 2 | 8 | 3 | 4 | 5 | | 2 | | | 50 |
| Job Requisitions Report | | | | | | 36 | 12 | 1 | 1 | | | | | | | 50 |
| Employee Talent Profile - Headcount Trends | | | | | 12 | | 32 | 4 | 1 | | | | 1 | | | 50 |
| Major, Graduate | | | | | 20 | 1 | 5 | 2 | 6 | 5 | | 4 | | 6 | | 49 |
| Academic Performance - Term End | 5 | 7 | 1 | 2 | 3 | 2 | 1 | 5 | 5 | | 1 | | 8 | 8 | | 48 |
| Academic Course | 3 | 2 | 8 | 3 | 10 | | 2 | 2 | 3 | 2 | 3 | 1 | 2 | 6 | | 47 |
| Dimension - Employee | | | | 10 | 2 | 2 | | 4 | 8 | | | 1 | 1 | 2 | 16 | 46 |
| Goal Entered Status Dashboard | | | | | 11 | | 12 | 18 | | | | 2 | | | | 43 |

# Data Cookbook – ODBC



User Activity | This dashboard displays info about new users, unique users, use in first N months at Purdue, and N uses in last N months. Data was last updated 03/06/2024.

Users with at least X uses per month

# Data Cookbook – ODBC

- Future Enhancements
  - Auditing processes
    - Expand beyond definitions
    - Updating business rules
    - Improving audit review and workflow
  - Dashboard development
    - Refine content usage dashboards
    - Expand upon user activity
    - Who are our content creators? How does usage and creation coincide?

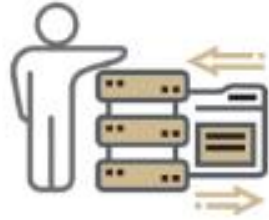# And Data Governance has continued to evolve ...

Executive Data Council (2020)

Data Governance Committees (2022)

And Restructured in 2023

- Administrative overhead of meeting prep

- Monthly meetings difficult to maintain momentum

- Quiet voices (data people)

- Some committees more advisory in nature

- Significant overlap among some committees

- Benefits, professional development
  - Opportunity to learn from the larger data community
  - Important connections made and information shared
  - Supervisors have been supportive

# Data Governance Committee Structure

**DATA STEWARDS**
Robert Oxender, IT-Purdue Systems Security

❖ ACTIVE MEMBERS

Data Stewards

**QUALITY DATA EXPERIENCE**
Andrea Pluckebaum, IDA+A & Zach Yater, BICC

❖ ACTIVE MEMBERS

❖ ADVISORY MEMBER

Quality Data Experience

**TRAINING & COMMUNICATION**
Sarah Bauer, IDA+A & Cindy Moscrip, HR

❖ ACTIVE MEMBERS

❖ ADVISORY MEMBER

Training and Communication

*Quality Data Experience previously 1) Content Stewards; 2) Data Quality; 3) User Experience*

*Committees represent the West Lafayette campus only except for Data Stewards who represent the entire Purdue system*

- **Data Stewards** three subcommittees
  - Policy Review
  - Data sharing, MOUs (memo of understanding)
  - Data Security and Privacy Training (certifications)

- **Quality Data Experience**
  - Personas, archetypes (used across the committees)
  - Common Lexicon, BI Tools Comparison

- **Training & Communication** - overarching training map
  - Build an infrastructure to avoid 'whack-a-mole' training
  - 4 Pillars (Competencies, Learning Objectives)
    - Data Governance
    - Data Landscape
    - Business Processes (Context)
    - Strategic Communication

# Ongoing Support of Data Governance

- Senior Leadership changes happen
  - President
  - Provost

- Data governance leadership changes
  - Sarah in middle of two-year partial retirement (80% year 1, 60% now)
  - Transition to Kendal
    - Cross-training
    - Mentoring
    - Strategic planning
    - Additional staffing

- Data Governance website, repository

- Committee Chairs meetings

# Audience Questions

Is Data Governance included in pertinent committees, projects across campus?

Partner with academic areas? Hire Student employees?

Is metadata part of large implementations (new systems)?

# What's Next for Data Governance…

- In addition to Data Cookbook growth…

- Staying current with changing pain points

- Continue expanding Data Governance website
  - Projects and deliverables, resources

- More <u>organic</u> communication around what the Data Governance committees are focused on. Updated talking points for all to use at standing meetings. Share success story snippets.

- Continue working with Executive Data Council for input, support

- Be flexible, ready to pivot
- Stay connected
  - Campus
  - Profession
  - Technology
- Tell your story as often as possible, in different ways
- Recognize progress, collect success stories
- Always look for partners, champions and great students
- People are the most important part of data governance!

> If not on the agenda, then on the menu!

# Presenters

**IDA+A**

**Sarah Bauer**
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**Kendal Kosta-Mikel**
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**Stephanie Dykhuizen**
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**Kolitha Perera**
*Data Assistant, Student in*
*Actuarial Science and Applied Statistics*
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# Resources and
# your Questions and Experiences

- **Big Ten Academic Alliance**
  - (BTAA) Data Governance Committee – other conferences have something similar?

- **Data Governance Professionals Organization**
  - https://dgpo.org/

- **DAMA**
  - https://www.dama.org/cpages/home

- **Dataversity**
  - https://www.dataversity.net/

- **Robert Seiner**
  - https://tdan.com

- **Purdue Data Governance**
  - https://www.purdue.edu/idata/data-governance/data-gov/index.php