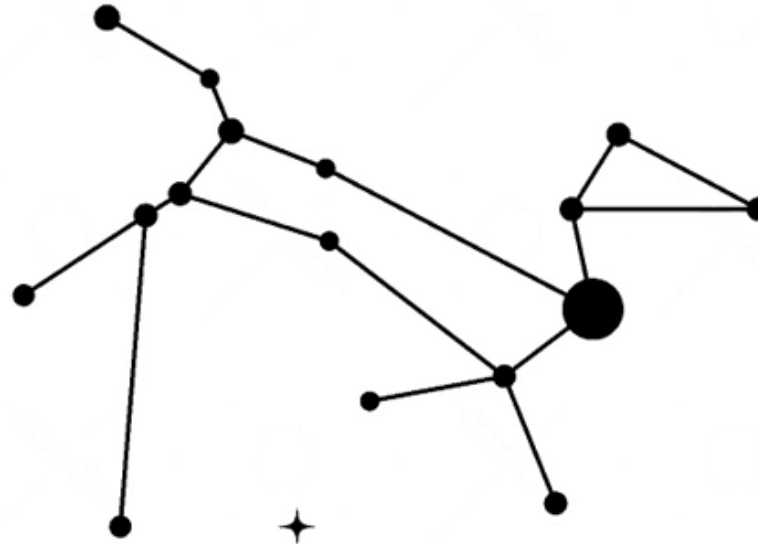




Data Analytics Working Group



YEAR OF THE DAWG? EMPHASIZING "DATA COMFORT"
THROUGH THE DATA ANALYTICS WORKING GROUP (DAWG)
AT PRINCETON

JON STOESSEL – PRINCETON UNIVERSITY



Year of the DAWG?

- How did the Data Analytics Working Group (DAWG) originate at Princeton?
- What is the purpose of this group?
- The DAWG does “byte” – What are our challenges?
- DAWG committee structure
- How do we actually get stuff done?
- Meeting topics
- Meeting format
- Inviting speakers – The True DAWG days
- Give the DAWG a bone – Lunch helps
- DAWG Tricks – What keeps things fresh and encourages continuous learning?

How did DAWG originate?

- Originally conceived with a lot of ingenuity and forward thinking by Valerie Ching (now Associate Director in Industrial Relations) and Drew Allen (now of Harvard) in 2017.
- Conceived as a working group made up from units on campus who are actively working with higher education administrative data.
- The format was an informal show-and-tell session over lunch.
- What did people present?
 1. Successes of the cool analytics / data projects we were working on.
 2. Challenges (and sometimes failures) of cool analytics / data projects we were working on.
- Content shared did not need to be in its final form (or even remotely close).

What is the purpose of DAWG 2.0?

- Encourage dialogue among data users to share their experiences of using various datasets.
- Highlight the interdisciplinary nature of this work across units
- Focus on how data projects can be created / delivered / received by the campus community
- Foster a welcoming environment for sharing analytics project successes / challenges
- Exchange best practices for data visualization and analysis

The DAWG does byte. What are our challenges?

- Encouraging participation from folks on campus who actively work with data.
- Teaching people that they do in fact actively work with data.
- More perspectives. More voices.
- Reducing discomfort and fear of data.
- Shared responsibility for planning meetings and the voice and vision of the group.
- No lost DAWGs
- “Official” vs. grass roots
- Where does the DAWG live?



Structure

- Amongst data analytics producers and consumers, 6 different offices on campus are represented on our core DAWG Planning Committee.
- **DAWG Planning Committee:**
 1. Human Resources (Reporting and Data Analytics)
 2. Office of Information Technology (Tableau Development, Data Engineering and Analytics)
 3. Provost (Institutional Research, Data Governance)
 4. Vice President for Finance and Treasurer (Business Insights, Financial Services)
 5. Dean for Research (Research and Progress Administration)
 6. Vice President for Facilities (Operational Engagement and Impact Analysis)

How do we actually get stuff done?

- As a voluntary member of the committee, all members are primarily focused on the logistics behind planning and executing meetings of the DAWG group. This includes, but is not limited to the following:
 1. Communicating with the DAWG community about important “save the dates” and announcements related to upcoming meetings.
 2. Logistics involved in the run-up-to and execution of a quarterly meeting. These meetings have been conducted in the fall (October), winter (February), and summer (June), but may occur more frequently in the future as the reach of the group and engagement with the community changes.
 3. Distributing and analyzing a short post-session survey, to use for planning purposes for future meetings. Survey is intended to capture how individuals found out about meetings, their preferences for future topics, and if DAWG is meeting / approaching its goals at each session.

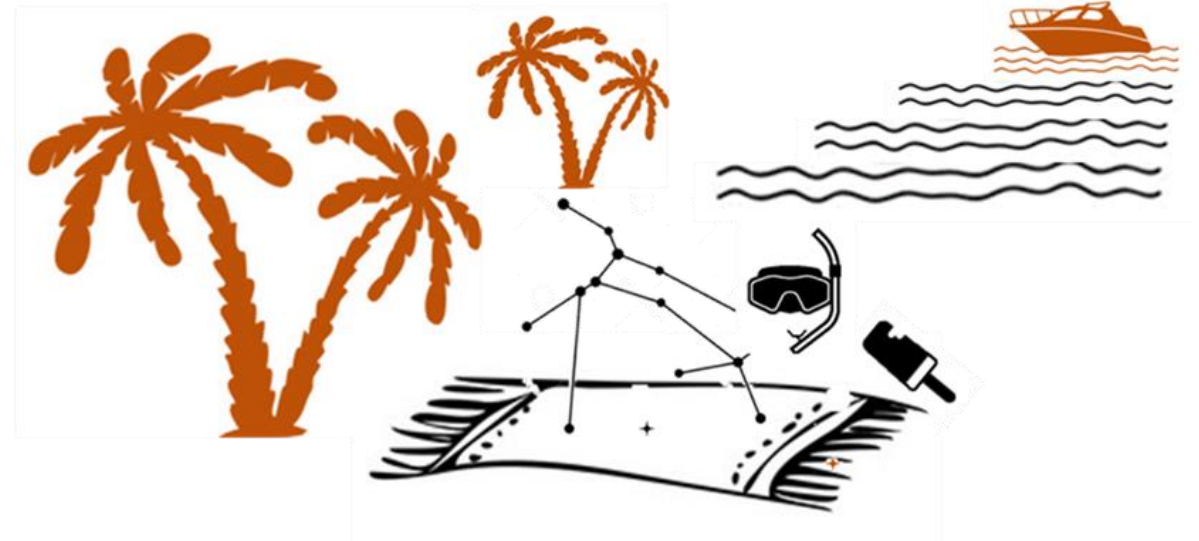
How do we actually get stuff done?

- As a voluntary member of the committee, all members are primarily focused on the logistics behind planning and executing meetings of the DAWG group. This includes, but is not limited to the following:
 - 5. Setting up planning meetings in between each of the sessions to review survey results, discuss how future meetings might be structured, exchange ideas, and develop meeting topics.
 - 6. Development of the topics / themes for each of the meetings. Planning meetings are coordinated by the group in the time between sessions where ideas are shared and brainstormed.

Meeting Topics

○ Since the re-start of DAWG in February 2023, meetings have utilized several different formats in order to present a diverse set of topics and subject matter. Across five meetings, we have focused on the following:

1. Practical Significance
2. Data Restriction
3. University Data Policy
4. Undergraduate Student Outcomes Project
5. Student Records Data
6. Artificial Intelligence (AI), Open Discussion
7. Facilities Operations, Logistics, and Planning



Meeting Formats

○ To encourage dialogue amongst a wide variety of experienced (and non-experienced) data analytics users, and to do so in a comfortable setting, DAWG has used a variety of formats during sessions.

1. Data Analytics Subject Matter Experts (Producers) + Campus Partners (Consumers)
2. Facilitated Open Discussion
3. Mini Presentations or “Lightening Talks” (10-15 minutes)



Do DAWGS dream?

- We would love to make our sessions more varied to encourage a broader audience to join us. Here are a few ideas we have cooked up for future meetings:

4. Guest speakers (local and peer institutions)
5. Poster Sessions
6. Tips and Tricks from Tool Experts (Based on Princeton case studies)



Inviting speakers: The true DAWG days

- Leading up to a session, it has been difficult (even with sufficient lead-time) to engage a broader group in potentially presenting at DAWG. While we have a very engaged core group of 30-50 attendees, our focus should also be on encouraging folks from that core group to share the expertise in ways that are most comfortable to them. In messaging to participants, we have emphasized the following:
 1. Presentations can be short and sweet, and do not have to conform to any standard of length or format. Sharing multiple viewpoints and perspectives is the most critical component.
 2. Feel free to team up for a presentation with anyone in your department (or another department). That illustrates the collaborative nature of our work. Plus, having a teammate can make the experience more comfortable.

Inviting speakers: The true DAWG days

3. No level of expertise or experience giving talks in a formal setting is required.
4. There is no expectation that the project work you share is pristine and finalized. Quite the contrary. We want to show off tangible and relatable use cases in any stage of development.
5. DAWG should be a space where we focus on the reality of data collection / analysis / reporting / communication at Princeton. Any skill or experience you share benefits all of us.



Good Afternoon Olga,

Here is to hoping this note finds you well on your way to a 2024 full of good luck and lots of joy. Apologies in advance for this message coming in “cold call” style. My name is Jon Stoessel, and I work here at Princeton in the Office of the Vice Provost for Institutional Research as an Institutional Research Analyst.

I was hoping you would take a few moments to consider the enclosed invitation to speak at our next meeting of the **Data Analytics Working Group (DAWG)**. This session is scheduled to be held on Thursday February 8th, 2024 from 11:45am to 1:00pm at the Frist Multi-purpose Room C.

What is the Data Analytics Working Group?

DAWG by design is an eclectic collection of administrative staff from technical (OIT), to function (Registrar), to consumer (ODOC). To date, 32 different offices from across campus have also attended our first 3 meetings of the group. The primary purpose of DAWG is to encourage dialogue among data users, highlight the interdisciplinary nature of this work, focus on the creation / delivery / reception of data projects on campus, and to foster a welcoming environment for sharing successes and challenges. If you are interested, there is an infographic summary of the feedback from our last meeting which might give you a better feel for the group.



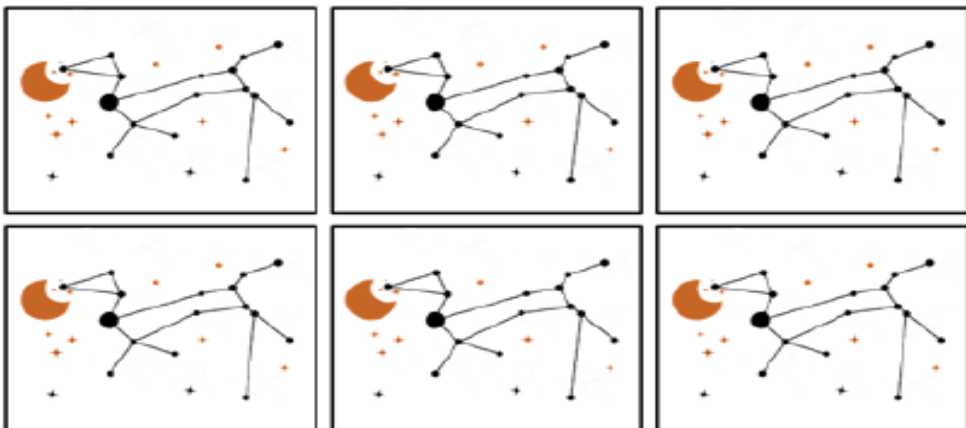
Give the DAWG a bone?

- At each of our meetings (except one) we have offered lunch to attendees which is funded by a gracious participating office.
 1. This makes the meeting more relaxed and informal
 2. People love food (at the right price)
 3. People hate mayo
 4. Funding lunch gets complicated, so a brown bag every now and then is ok.



★ DAWG-e Vision

Try out some **computer vision** to find the imperfect pup.



★ AI Word Search

Can you spot some **AI jargon** in the word search below?

N T G H E M O C B G H T J M I
 A X R E Q C K B A L Y E J A S
 T B E I C O X P C O P N T C W
 U X Z B Z M D T K S E S W H S
 R E M N M P E E P S R O O I T
 A R O S D U E L R F P R F N R
 L K D P V T P W O U A F T E O
 L X E W V E L E P N R L E L N
 A Z L L H R E A A C A O M E G
 N Y Z P O V A K G T M W G A A
 G M N Y G I R A A I E R P R I
 U P W T L S N I T O T P A N J
 A H Y H Y I I J I N E S O I I
 G H V O Y O N T O M R V H N B
 E B I N N N G Y N K K H W G H

TensorFlow
 Machine Learning
 Deeper Learning
 Natural Language
 Strong AI
 Computer Vision
 Artificial Super Intelligence
 Loss function

Reinforcement Learning
 Backpropagation
 Weak AI
 Model
 Hyperparameters
 Convolutional Neural Networks
 Python

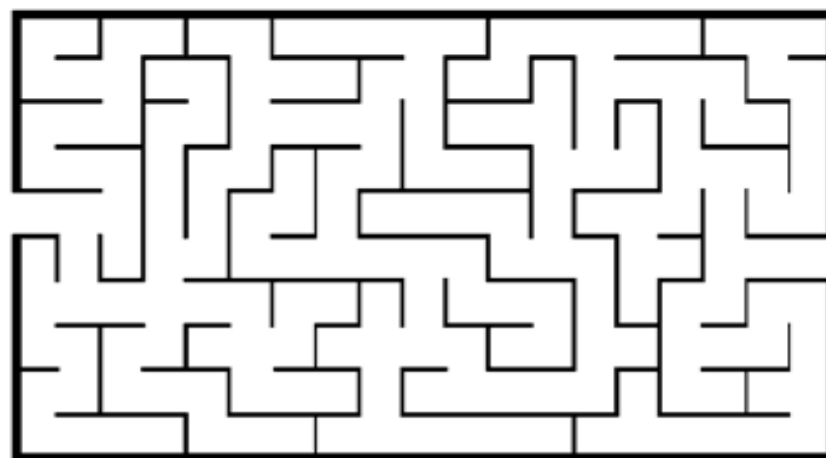
★ What does AI look like to you?

Using the space below, draw your best "portrait of AI".



★ Lost DAWG

DAWG is lost! Use your best **deep reinforcement learning** to bring DAWG back to Princeton.



Computer
 Vision at
 Princeton



A Brief on Deep
 Reinforcement
 Learning



AI jargon
 A-Z (Cour-
 sera)



20% Survey Completion

Right now, what is your current level of comfort working with data to:

	Very comfortable	Somewhat comfortable	Neither comfortable or uncomfortable	Somewhat uncomfortable	Very uncomfortable
Produce visualizations for another office on campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consume visualizations produced by another office on campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Next page >



30% Survey Completion

Why were you interested in joining the Data Analytics Working Group (DAWG) session on February 8, 2024. Please select all that apply.

- ☐ I was drawn to the topic(s) noted in the invitation e-mail
- ☐ I wanted to expand my knowledge of units that work with data on campus
- ☐ I wanted to increase my level of comfort working with data
- ☐ I wanted to learn something new to apply to my own work
- ☐ I was encouraged to represent my department by a colleague
- ☐ Other (please tell us more)

Data Analytics Working Group (DAWG) Feedback

Prepared by the Office of Institutional Research

Survey Background:

The **Data Analytics Working Group (DAWG)** was re-convened in February 2023. DAWG has (5) main objectives which are to encourage dialogue among data users to share their experiences of using various datasets, highlight the interdisciplinary nature of this work across units, focus on how data projects can be created / delivered / received by the campus community, foster a welcoming environment for sharing analytics project successes / challenges, and to exchange best practices for data visualization and analysis.

A short feedback survey was developed in order to gain insights from session participants focused on how they heard about DAWG, their level of comfort using data, what they hoped to cover in future session(s), and if they thought the objectives outlined above were met (or not).

Report Details:

On the fifth survey in **June 2024**, we had a **37% response rate (14/38)**. A dashboard such as this should be combined with the real world observations and in-person feedback acquired after each session. By utilizing both sources, we can continue to build on our strengths and identify areas for improvement.

Overall Feedback (Session #5 in June 2024)

100% 

of survey participants at the June 2024 meeting said the session created a **welcoming environment for sharing experiences with data at Princeton**.



57% of participants said they heard about the **Data Analytics Working Group (DAWG) via the invitation e-mail from DAWG**. (73% for February 2024)

**21% said a colleague in their department told them about it.*



65% said they "Strongly agreed" (29%) or "Somewhat agreed" (36%) the session **focused on topics that were applicable to their current work**.



100% said they "Strongly agreed" (71%) or "Somewhat agreed" (29%) the **session was based on current / topical work being conducted by units on campus**.

Session participants also provided feedback on their level of comfort using data and what they felt was covered during the meeting.

57% 

of survey participants said they felt "Very comfortable" (21%) or "Somewhat comfortable" (36%) **consuming visualizations produced by another office on campus**.



57% said they felt "Very comfortable" (43%) or "Somewhat comfortable" (14%) **producing visualizations for another office on campus**. (78% for February 2024)

93% of survey participants said the session included conversations about the challenges and successes associated with **producing data visualization or analytics resources**.

42% said the session covered the same ground for **consuming resources.*



DAWG Attendees

Across five meetings, there has been representation from **32 offices** on campus.

Art Museum
Building Services
Campus Life
Center for Career Development
Communications
Corporate Engagement & Foundation Relations
Dean of the Faculty
Dean of the Graduate School
Dean of Undergraduate Students
Disability Services
Facilities
Finance Technology
Financial Services

Human Resources
Industrial Relations
Information Security Office
Office of the Dean of the College
Pace Center for Civic Engagement
Planning, Budget & Analysis
Print and Mail Services
Procurement Services
Provost
Registrar
Research and Project Administration
Software and Application Services
Sponsored Research Accounting

Treasury Services
Undergraduate Financial Aid
University Advancement
University Services

Why did you decide to join DAWG?



21% indicated that they were **drawn to the topic(s) noted in the invitation e-mail**.



57% indicated that they joined **to learn something new to apply to their own work**.

**50% to expand knowledge of units that work with data on campus*



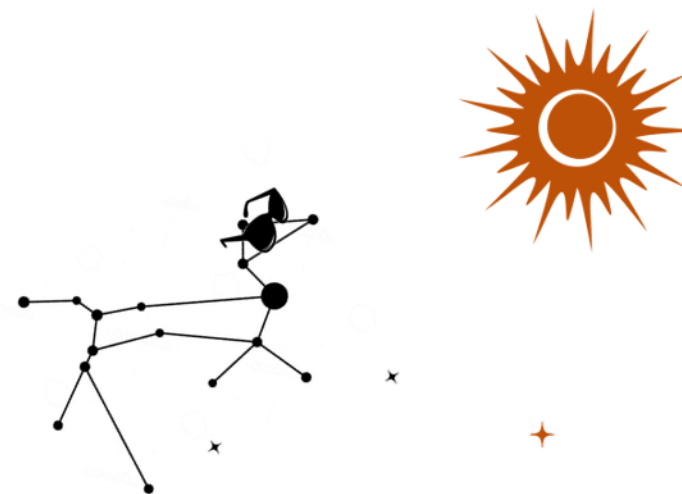
Scoping Out Resources

Making Contact



HEADS UP

Data Analytics Working Group



THANK YOU FOR YOUR TIME, AND FOR YOUR QUESTIONS.

If Q/A isn't your thing, please reach out to me. I am totally happy to meet to answer any questions you might have.

Jon Stoessel – Princeton (stoessel@princeton.edu)

