Did it do **the thing?**

Measuring training impact in the Government

The Government does not have a good way to **measure training impact.**

Every year public servants get **thousands of dollars** to spend on training.

How can we know that training is **improving Government services?**

The world is evolving and organizations **need to adapt.**

Our problem is rooted in DND's need to have a **data literate workforce.**

The solution? **More training!**

Evidence based decision making requires...

Evidence

We want to capture **a complete picture** of the learner’s experience.

Obviously, there’s an app for that.

False

Our team goal is to **analyse existing data** and **prototype an app** to collect more.

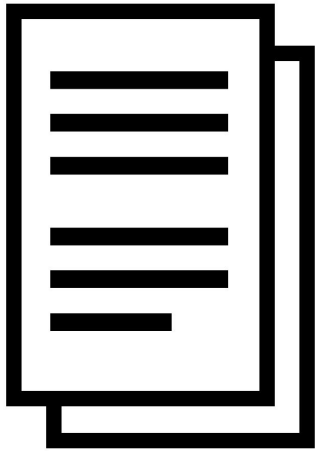
- Before, during and after training
- Frequent feedback and help
- Measure comprehension, sentiment and job tasks
- Integrated with training
- Lifelong learning

The journey

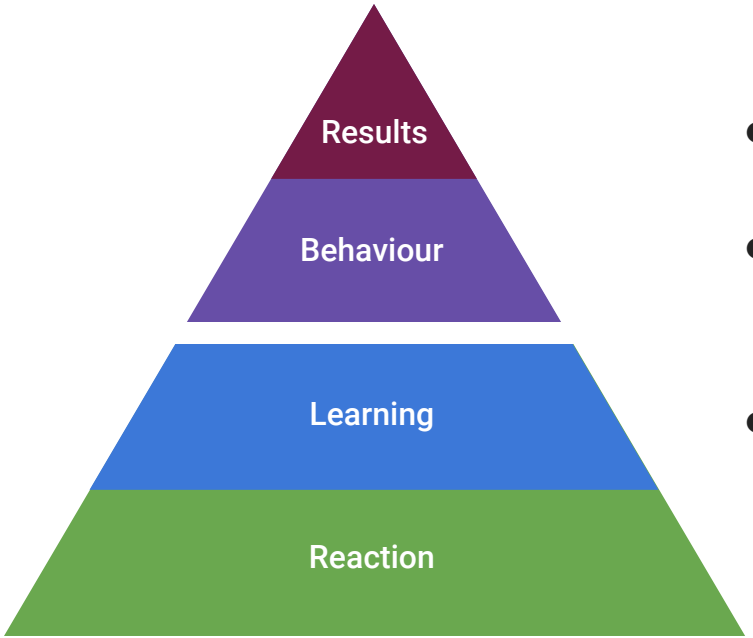
- [x] Define evaluation framework
- [x] Analyse DND training data
- [ ] Prototype application
- [ ] User research

Our framework

- A definition of data literacy
- Three defined user types
- Competencies & proficiency levels
- Foundations in education research



Evaluation interactions are...

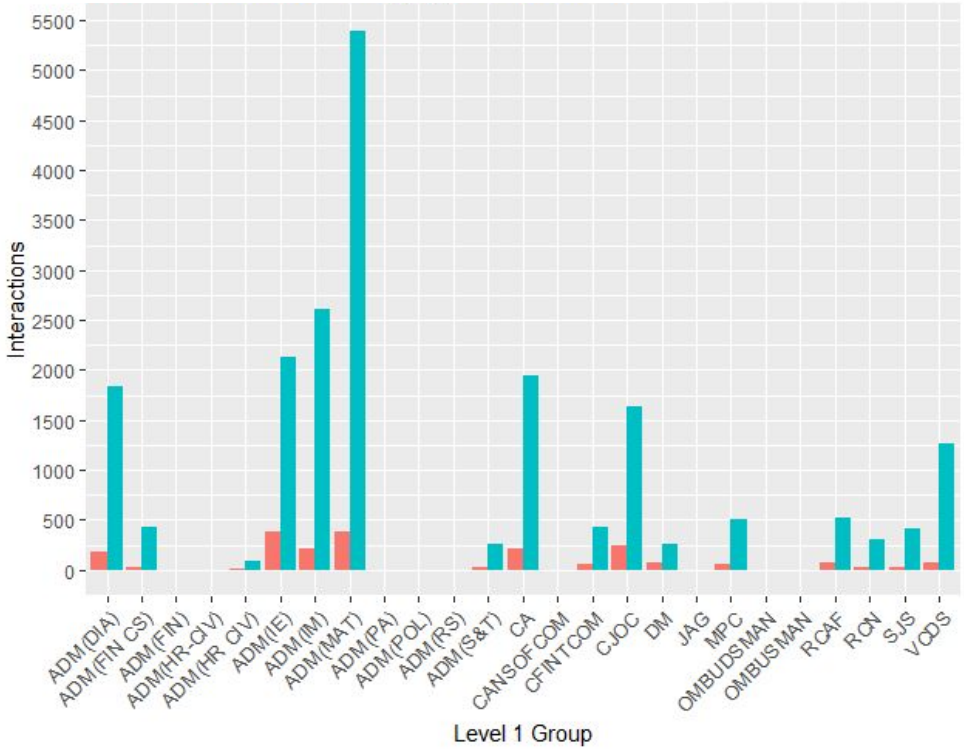


Kirkpatrick Model

- Anchored in principles of **adult learning**
- Use a systems approach to design a **goal-based evaluation model**
- Measured against a **competency dictionary** to gauge proficiency level

Data analysis

Software use by branch



5,399 ADM (Material)

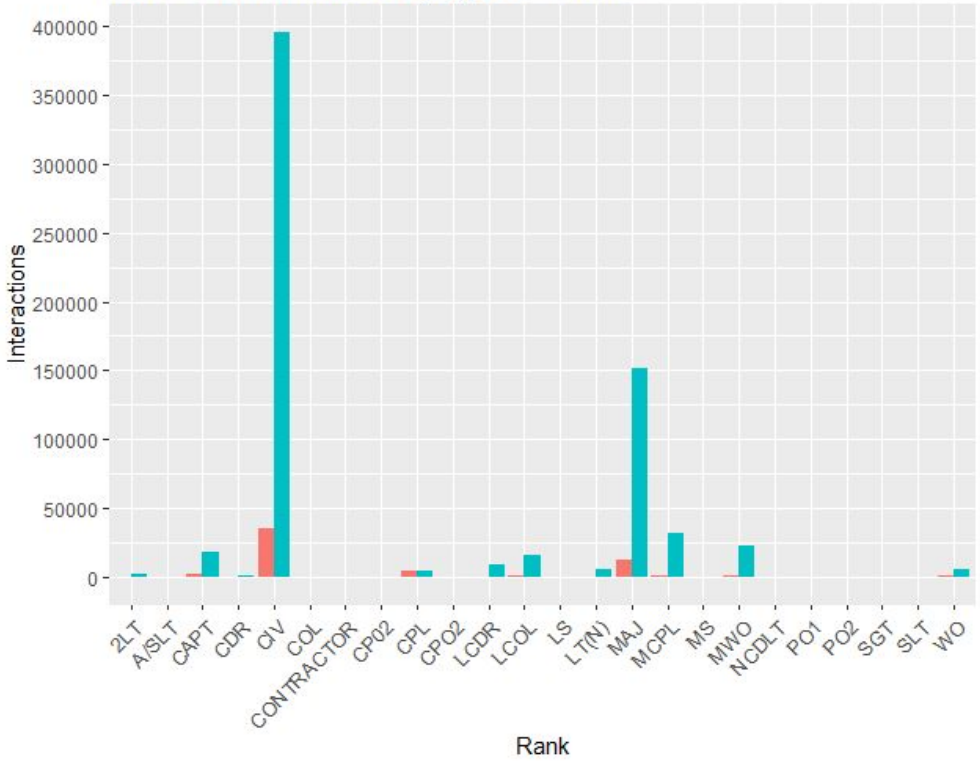
2,604 ADM (IM)

2,130 ADM (IE)

View and refresh

Create and edit

Software use by rank



395,519 Civilians

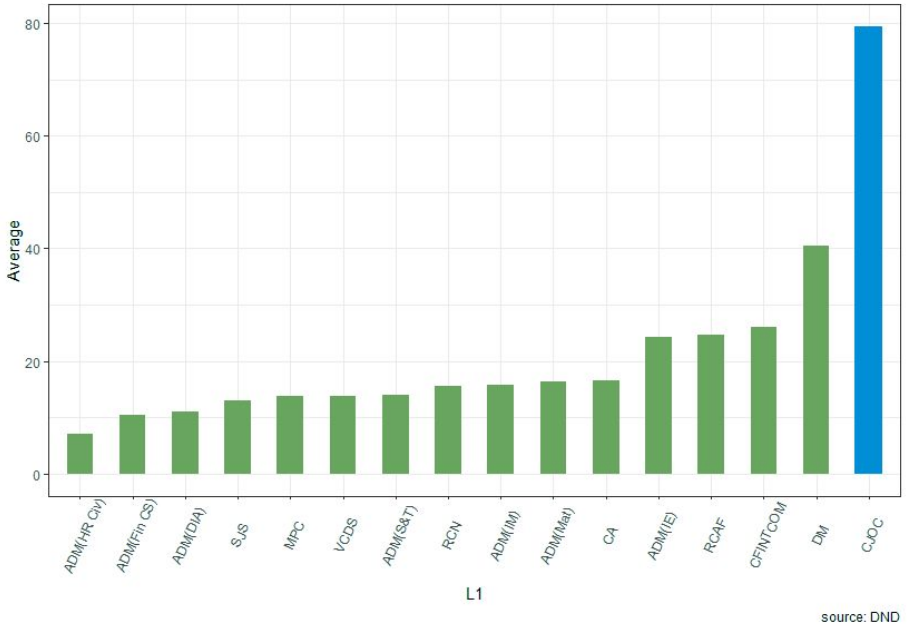
151,395 Majors

View and refresh

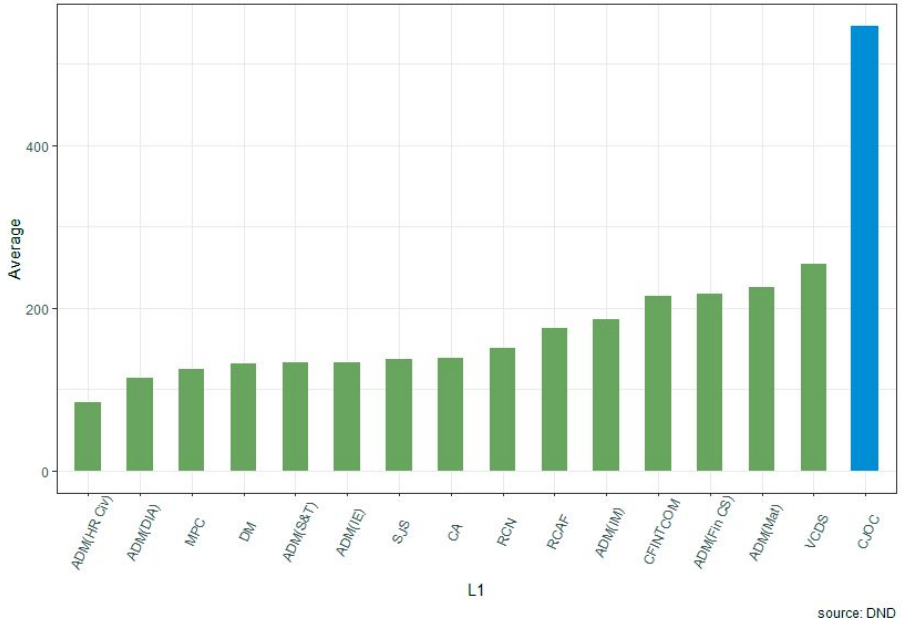
Create and edit

Branch activity (after training)

Average reports created

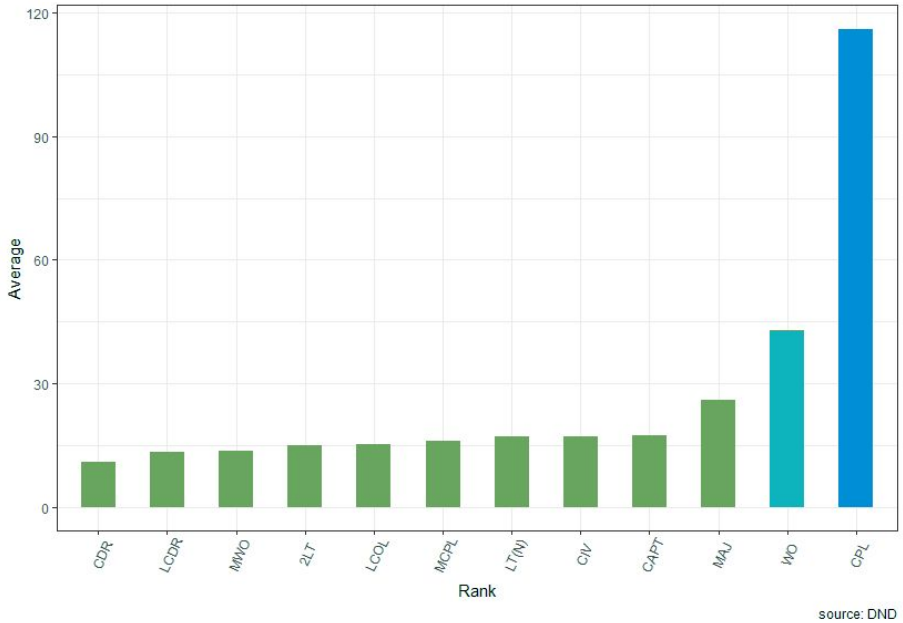


Average reports viewed



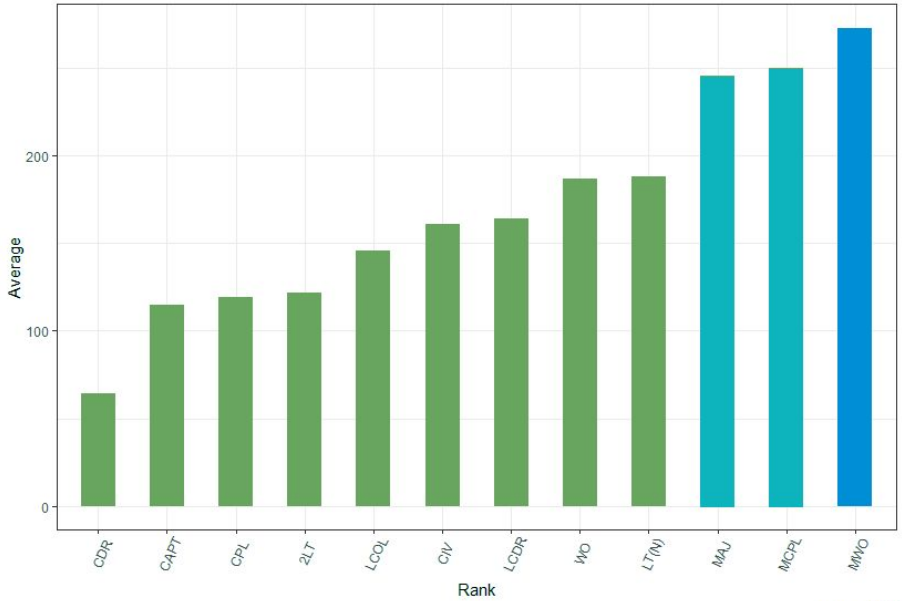
Rank activity (after training)

Average reports created



source: DND

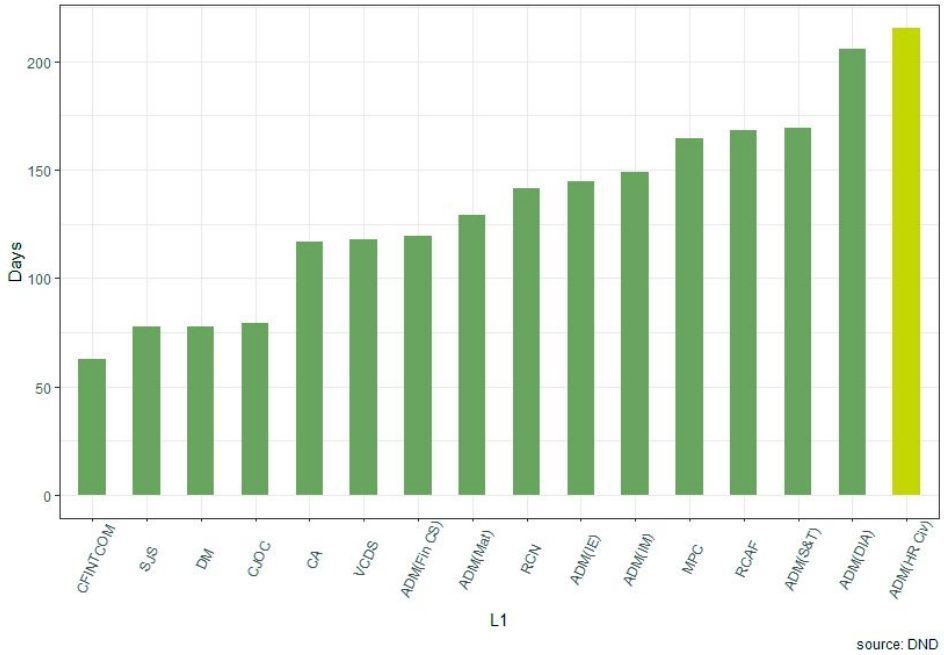
Average reports viewed



source: DND

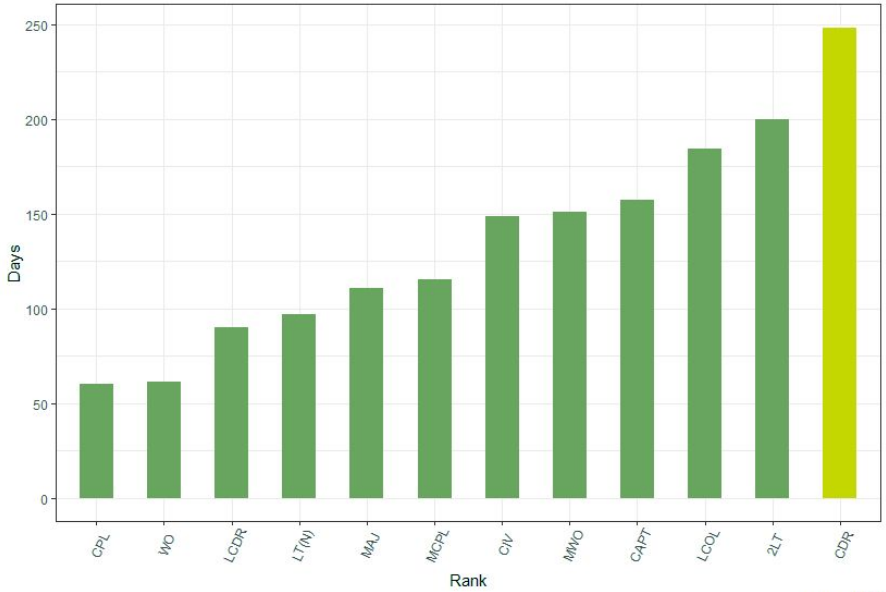
Days since last use (after training)

By branch



source: DND

By rank



source: DND

The app (for that)

- Interactive
- Real-time evaluation and feedback
- Identify skills and gaps
- Collect and analyse data
- Visualize progress
- Topic agnostic

Data literacy

Collect and clean data

Question 7 (of 9)

What should you do **before analyzing** this data?

```
"Name", "Age", "Start Date"
"J.Doe", "42", "1987-04-30"
"Xian, S.", "27.5", "31/03/2017"
"Francis Murdoch", "57", "June 5, 1996"
```

Select all that apply:

- [ ] Convert to appropriate data types
- [ ] Determine the allowed date formats
- [ ] Lookup the missing first names
- [ ] Sort the data

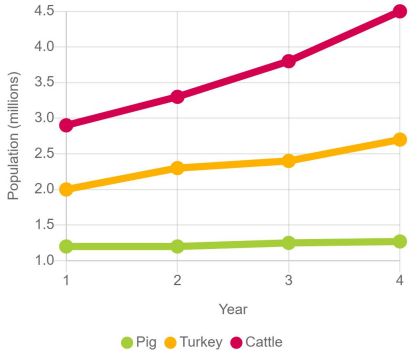
Answer | Ask a question | Go to

Data literacy

Analyze data

Question 3 (of 5)

Based on this farm animal population graph:



1. Which farm animal had the largest population increase?

- Cattle
- Turkey
- Pig

2. What can you infer about the number of pig farms over the years?

My courses Search Jane Doe Français

Competencies Recommendations 3 Assignments

Data literacy

My courses > Active

Competencies

93%
Progress towards
Collect and clean data (level 1)

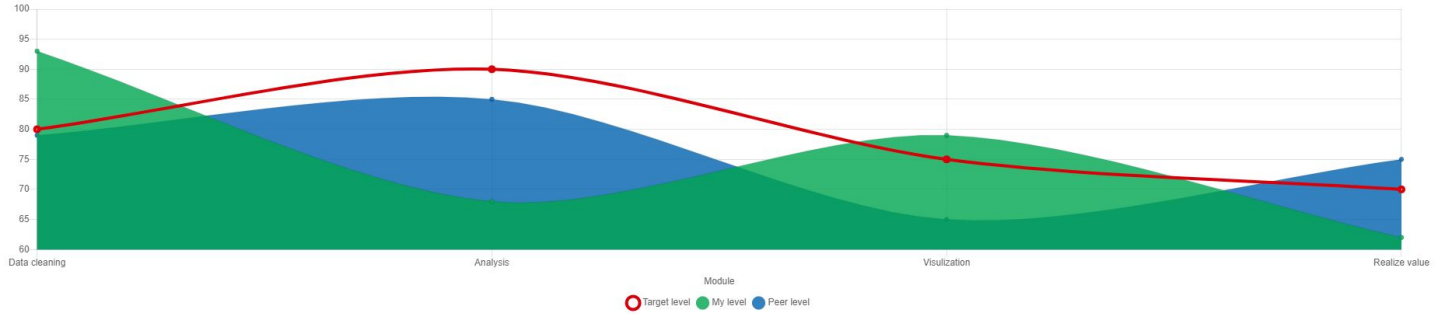
68%
Progress towards
Analyze data (level 2)

79%
Progress towards
Visualize data (level 3)

63%
Progress towards
Realize and use data (level 2)

Progress towards competencies

View data



Assignment progress

View data

Recommendations

- [x] Start the business value unit.
- [ ] Try advanced data collection. You were great at this!
- [ ] Work on pattern recognition. This concept was tough.

Instructor

This course is being taught by Dr. Flynn, who holds a Ph.D in Data Science from the University of Waterloo.

Ask a question

What’s next?

tiny.cc/evalapp