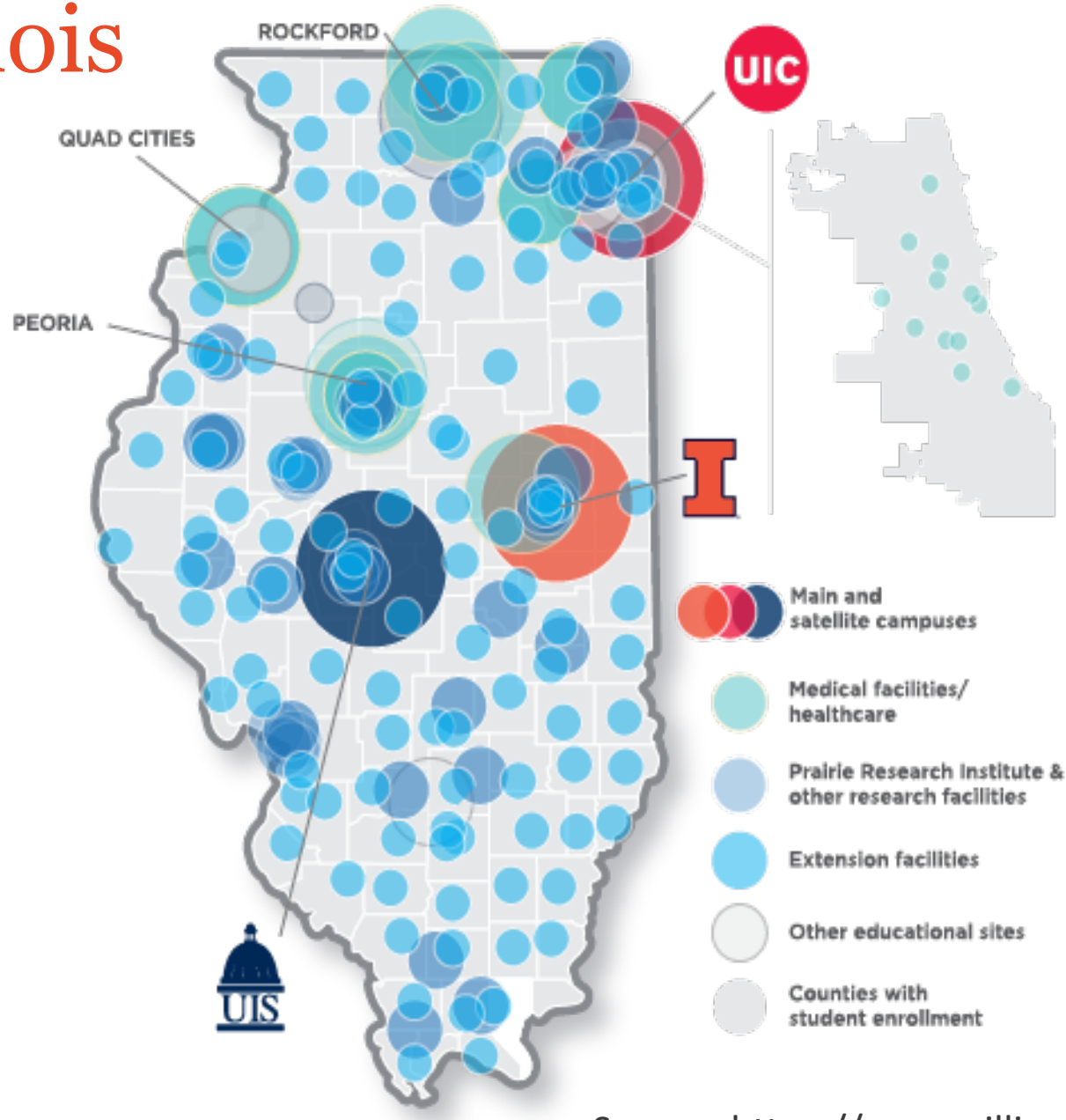


Better Data Management, One Nudge at a Time

Daria Orłowska, Colleen Fallaw, Yali Feng, Livia Garza, Ashley Hetrick, Heidi Imker, **Hoa Luong**

University of Illinois



Source: <https://www.uillinois.edu/about/locations>

15

Colleges

13,000+

Faculty & Staff

15,666

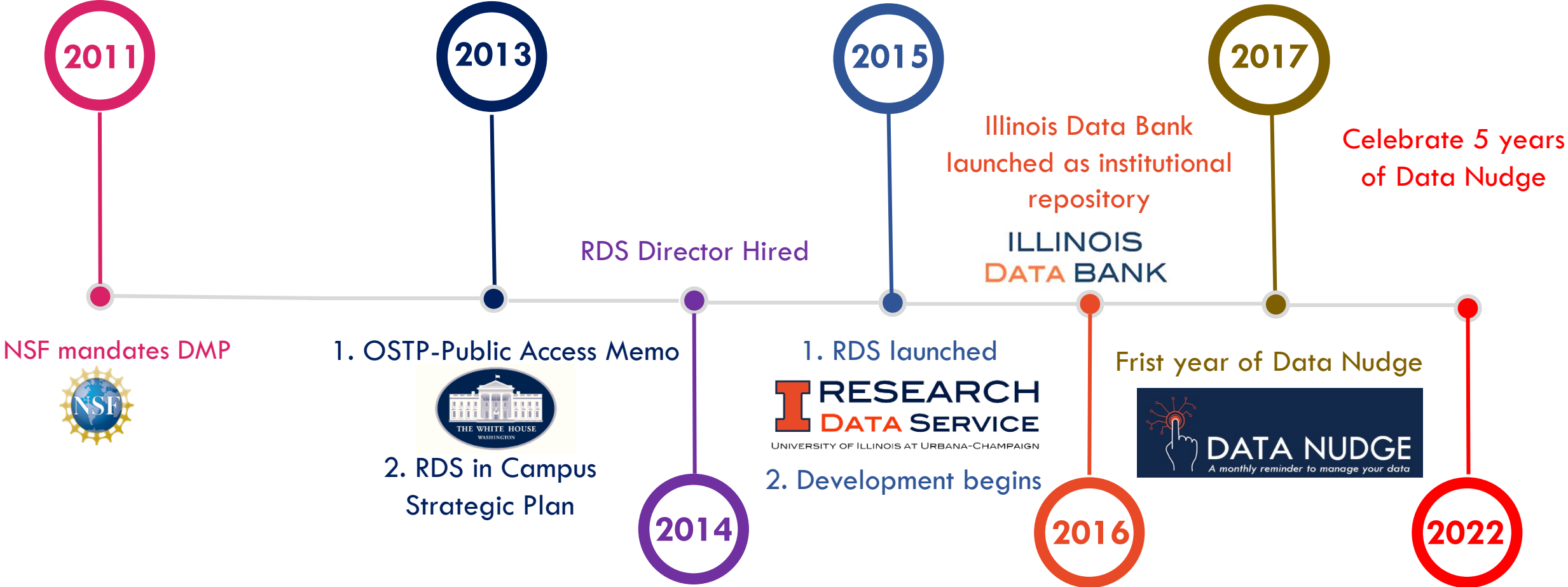
Graduate & professional students

150+

Programs of study



Research Data Service, University Library



Services we provide:



DMP Review

Fast, confidential, & free



Workshops & training

Data management topics



Consultations

DMP implementation, archiving data in repositories, or any research questions



Data Nudge

A monthly reminder to manage your research data



Illinois Data Bank

Institutional data repository for Illinois researches



Data Curation

Done by professional curators



DATA NUDGE

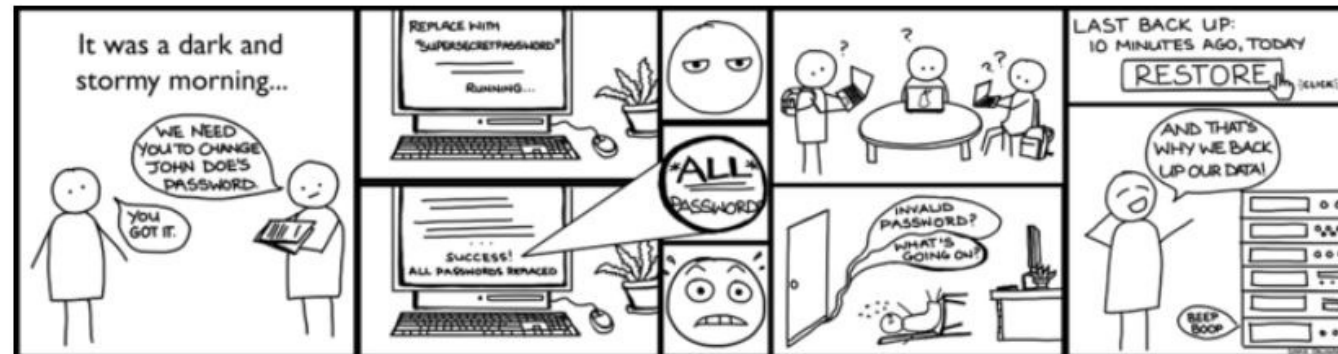
A monthly reminder to manage your data

SCARY DATA STORIES

FROM THE ILLINOIS COMMUNITY



SuperSecretPassword





DATA NUDGE

A monthly reminder to manage your data

http://go.illinois.edu/past_nudges

Our Team

- ✓ Subject liaisons
- ✓ Functional specialists
- ✓ IT professionals

Data Nudge topic selection & development

From a variety of sources, center around data, including:


- campus events
- consultations with researchers
- receive requests from campus partners supporting research, ex: UIUC Box, REDCap, ORCID
- personal experiences -- “I wish I had known that sooner!”

Develop the content

- draft the content and transfer into a template
- aim to work ahead 2-4 months before the release date
- present the draft at a weekly RDS meeting

Data Nudge structure

- Attractive, short with specific information that a researcher would use immediately.
- Valuable take-away from a glance.
- Highlight available resources.
- Link to relevant materials.
- Provide contact information for further questions.



DATA NUDGE

A monthly reminder to manage your data

It's February! Show your research data love by applying good data management practices.


```
01000001011011000110110000100000011101000110100001100101
00100000011000100110010101110011011101000010000001100100
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01101110011011101101010101110011001000000101001001100101
01110011011001010110000101110010011000110110100000100000
01000100011000010111010001100001001000000101001101100101
01110010011101100110100101100011011001010010000100100001
```

- ♥ [Document your data](#) for future you and others
- ♥ Establish clear [naming conventions](#)
- ♥ [Back up your data](#) to avoid risk of data loss
- ♥ [Share your data](#) (if appropriate to do so)

Fun fact: the binary heart image contains a message from us. The text is available [here](#). [Email us](#) with the message and get a special gift!

Data Nudge structure

- Attractive, short with specific information that a researcher would use immediately.
- Valuable take-away from a glance.
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DATA NUDGE
A monthly reminder to manage your data

Data cleaning can be an essential step of the research process that identifies potential inaccuracies and addresses them for a more uniform dataset. Data cleaning can be done in Excel, using scripts, or with specialized data cleaning tools. Before you begin cleaning, **create a copy of your raw data file and work from there**. There are many different approaches to cleaning. Here are a few questions that you can ask of your data to see if they would benefit from cleaning!

- ① **Column names**
Do they make sense? Do they avoid spaces and special characters?
Are units of measure specified?
- ② **Data types**
Do the data correspond to expected type based on the column name?
Does every value in a column consistently follow the same data type and format?
- ③ **Ranges**
Do the minimum and maximum values fit expected ranges?
- ④ **Extra spaces**
Are there white spaces that might inhibit matching and splitting column values?
- ⑤ **Non-standardized casing**
Do the values share a uniform case, such as lowercase or sentence case?
- ⑥ **Irregular spelling**
Are values spelled according to established conventions?
- ⑦ **Blank cells**
Are there missing values or blank cells in your dataset?
- ⑧ **Duplicates**
Is there potential duplication of values that should be unique?

* Here is a [printable version of the guide](#).

Have additional questions about preparing your dataset for analysis? [Schedule a consultation with CITL](#) to receive custom data cleaning support.

Data Nudge platform



Email+ in Webtools

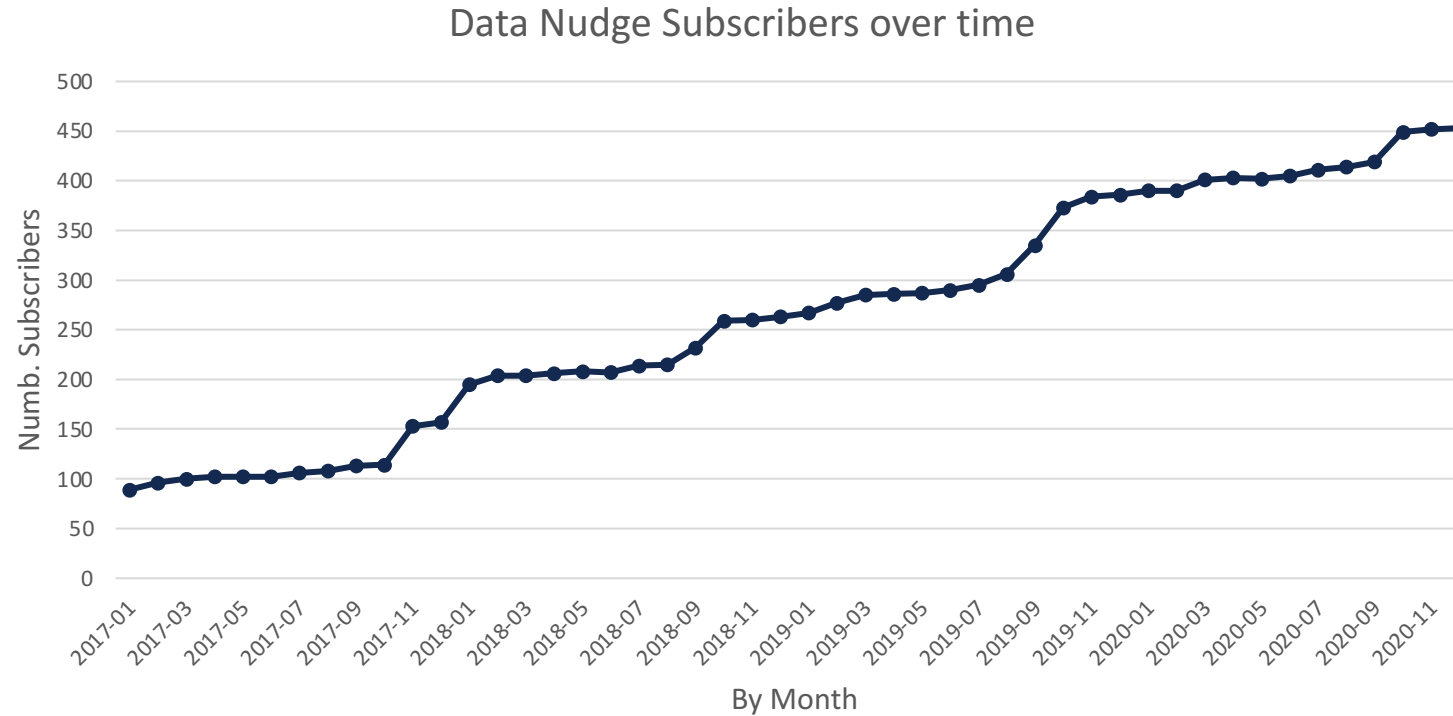
The screenshot displays the 'Email+' interface in the Webtools application. At the top, the 'webtools' logo is on the left, and navigation links for 'BLOGS', 'CALENDARS', 'EMAIL+', 'FORMS', 'GROUPS', 'SURVEYS', and 'MORE' are on the right. A user profile 'Hello, Hoa' with a 'Sign out' link is in the top right corner. Below the header, a tabbed menu includes 'General', 'Appearance', 'Message' (selected), 'Preview', 'Send', 'Reports', and 'Privileges'. Under the 'Message' tab, sub-tabs for 'Message', 'Salutation', 'Files', and 'Labels' are visible. On the right side of the editor, there are four buttons: 'Send Test Email', 'Cancel', 'View', and 'Save'. The main content area shows the message title 'Message: 2020-02-Data Love and RDS 5 year survey' and a prompt to 'Insert headings, content elements, spacers, etc., to build your email body.' Below this is a table with columns for 'Name', 'Type', 'Reorder', 'Insert Element', and 'Actions'. The table contains several rows, each representing a content element with a 'Choose element to insert' dropdown and a trash icon.

Name	Type	Reorder	Insert Element	Actions
Content	Content	↓	Choose element to insert	🗑️ ⋮
love image_V2	Content	↓ ↑	Choose element to insert	🗑️ ⋮
		↓ ↑		🗑️ ⋮
data management practices	Content	↓ ↑	Choose element to insert	🗑️ ⋮
		↓ ↑		🗑️ ⋮
Line	Line	↓ ↑	Choose element to insert	🗑️ ⋮
		↓ ↑		🗑️ ⋮

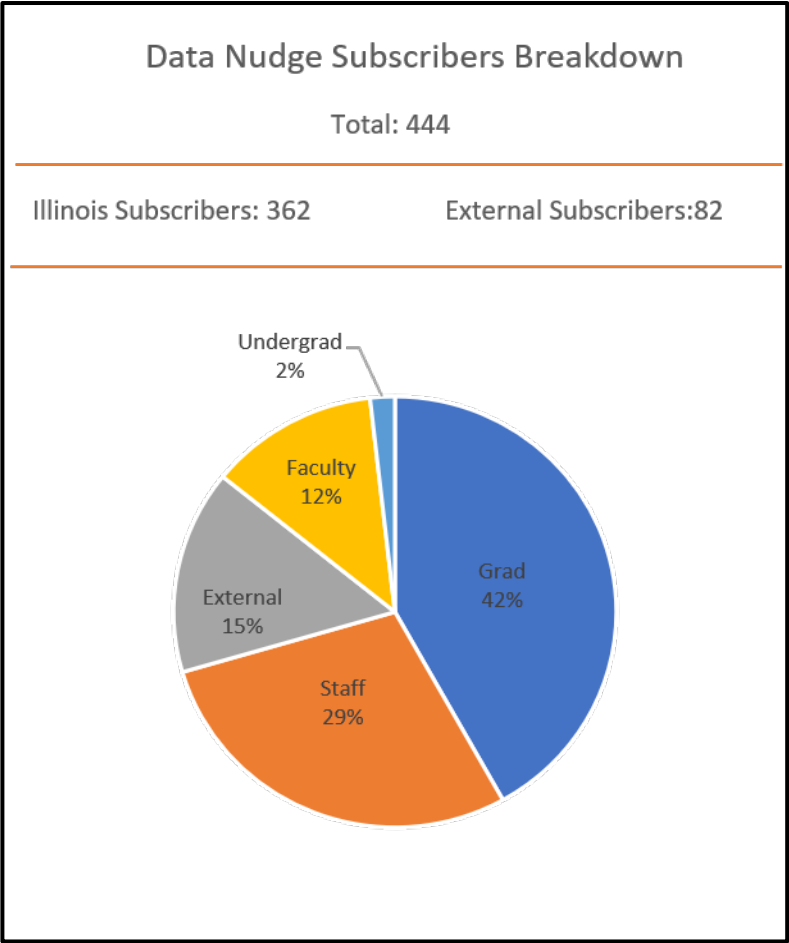
Data Nudge promotions

- Campus e-bulletins (E-week and GradLinks)
- Data Nudge cards
- Digital signage to be displayed regularly at the Main Library and library branches
- Our homepage website: <https://www.library.illinois.edu/rds/>
- Subject librarian promotion
- Word-of-mouth

Data Nudge statistics

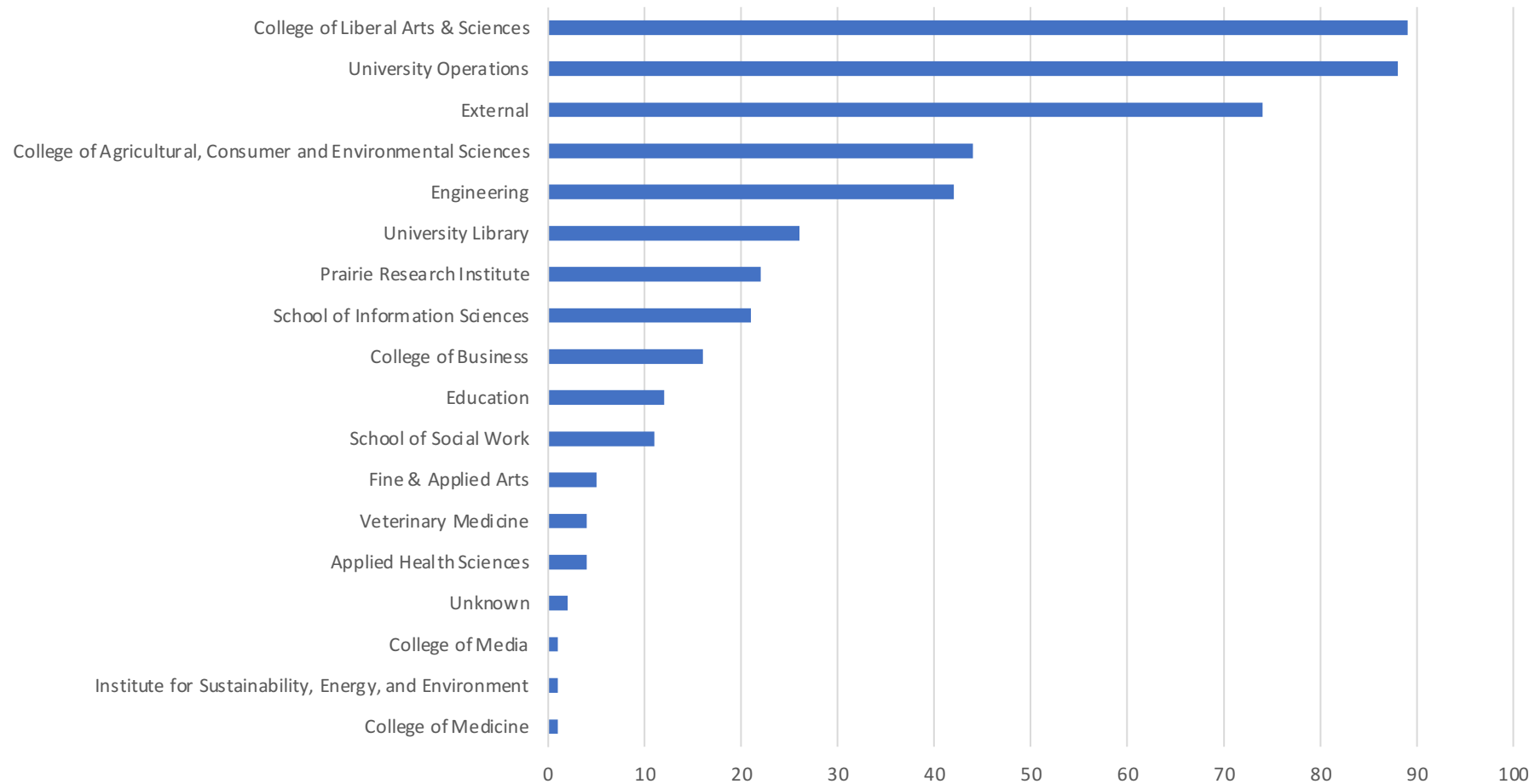


Number of subscribers between inception in January 2017 through December 2020.



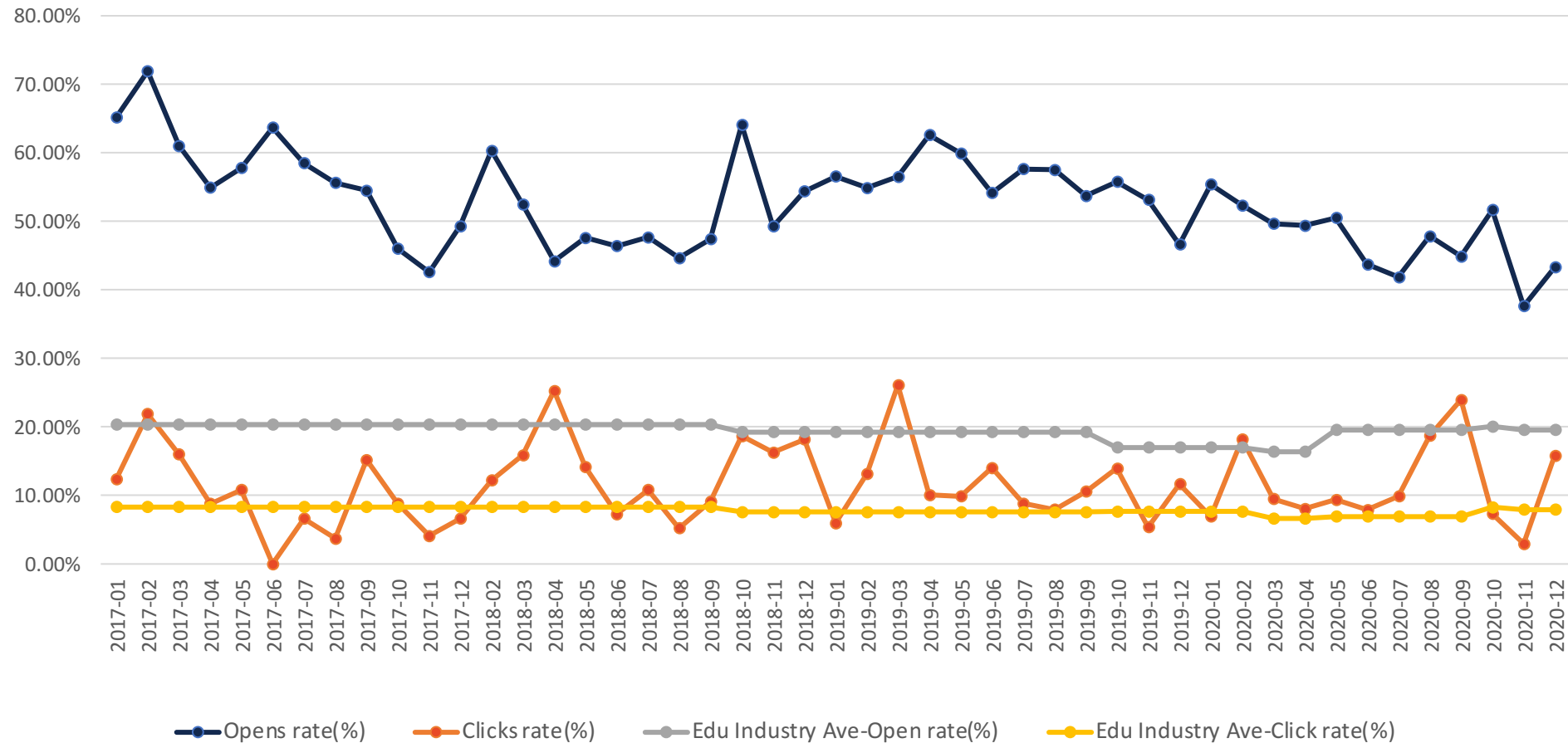
Breakdown of Data Nudge subscribers.

Data Nudge subscribers distribution based on college



Number of subscribers break down by college. Note: “University Operations” refers to subscribers who administer or support services, like Technology Services / Research IT, NCSA, IGB, Sibel Design Center, OVCRI, Graduate College, etc. “External” refers to subscribers who are located outside of Illinois. “Unknown” refers to subscribers who we could not locate their department.

Data Nudge Open & Click rate VS. Industry Open & Click rate (%)



Open and click rate of each Data Nudge topic compared with the educational industry average rate, according to Constant Contact (2021).

Quotations from Data Nudge's users

"I just tagged my Box data!! Thanks for the fabulous tip!"

"I have gone through your Data Nudges and I love them. I have been tasked as the lead of a data initiative [...] to improve the current data infrastructure. I would love to hear more about your thought processes."

"I just wanted to say again how much I enjoy the Data Nudge. I learn something valuable every time."

Adaptability and reusability Data Nudge content



- **“Generally Applicable”** – may require some changes to linked resources, but otherwise provide universally applicable content.
- **“Illinois Specific”** – mostly focus on Illinois resources and would require significant modification to customize for another institution.
- **“Mixed”** – fall into both the “Generally Applicable” and “Illinois Specific” categories and require further consideration before adapting.

Conclusion

- Data Nudge has grown into an effective tool for the promotion of effective data management.
 - It is not easy to craft a short message.
 - Networked team is a key.
- ➔ The time and effort are worth it because our community values and uses our messages

Conclusion

- Data Nudge has grown into an effective tool for the promotion of effective data management.
- It is not easy to craft a short message.
- Networked team is a key.
- ➔ The time and effort are worth it because our community values and uses our messages.
- ➔ Increase reusability and adaptability of the content.

THANKS!

http://go.illinois.edu/past_nudges



researchdata@library.illinois.edu