



PRACTICING ETHICS

in Information Professions

Content Strategy Applied - 2019

San Jose, California

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Sarah A. Rice



- **20+ years as a freelance information architect**
- **Library and Information Science background**
- **Clients include Google, PayPal, eBay, etc.**
- **Work activities include: human-centered design research, user experience design, service design, taxonomy/metadata/system implementation**

TODAY'S PRESENTATION

✓ Yes

- An introduction to start including ethical design in your toolkit
- Reference materials to get you grounded and engaged

✗ No

- Survey of philosophical frameworks
- Review of ethical principles
- Complete runthrough of the tool

**We Need to
Design and
Build Ethically**



Peter Morville

The Ethics of Information Architecture (2000)

As information architects, we are shaping the collaborative work spaces and social environments of tomorrow. Are we willing to take responsibility for the shapes we shape?

B.J. Fogg

Keynote, IA Summit (2005)

Whether we like it or not, we are all in the business of influencing people's thoughts and behaviors...
The stakes are higher now than ever before.

Vladimir Zwass

Ethical Issues in Information Systems (2010)

[W]e should use ethical principles and codes of ethics to avoid and prevent deleterious effects of technology.

Terence Fenn & Jason Hobbs

Wicked Ethics in Design (2015)

[I]s it possible that a design could be successful but not good?





Jason Raish, special to ProPublica

Millions of Americans' Medical Images and Data Are Available on the Internet. Anyone Can Take a Peek.

Hundreds of computer servers worldwide that store patient X-rays and MRIs are so insecure that anyone with a web browser or a few lines of computer code can view patient records. One expert warned about it for years.

by Jack Gillum, Jeff Kao and Jeff Larson, Sept. 17, 12 a.m. EDT

Technology

An artificial-intelligence first: Voice-mimicking software reportedly used in a major theft



A fake video featuring former president Barack Obama. A new worry: fake voice recordings that can be used to persuade people that they're being asked to do something by an authority. (AP)

By [Drew Harwell](#)

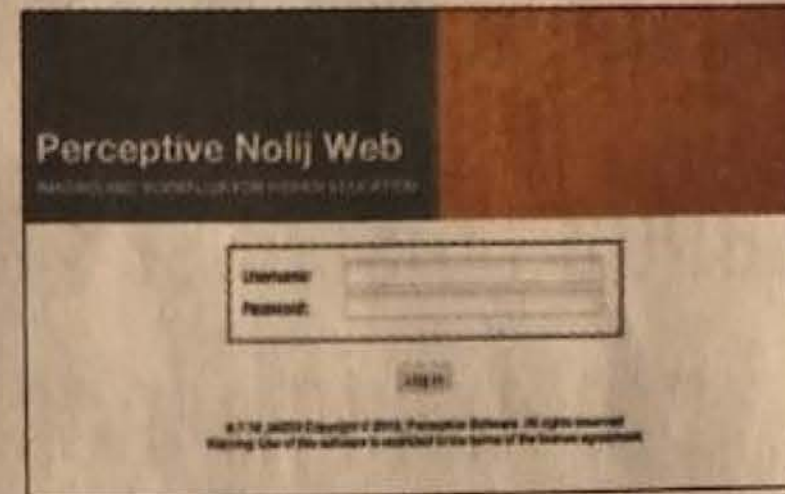
September 4, 2019 at 3:27 p.m. PDT

Thieves used voice-mimicking software to imitate a company executive's speech and dupe his subordinate into sending hundreds of thousands of dollars to a secret account, the company's insurer said, in a remarkable case that some researchers are calling one of the world's first publicly reported artificial-intelligence heists.

Student college apps exposed via data breach

Accessible info included ethnicity, criminal status, test scores

By **JULIA INGRAM**
MANAGING EDITOR OF NEWS
HANNAH KNOWLES
SENIOR STAFF WRITER



JULIA INGRAM/The Stanford Daily

Before this week, Stanford students could view the Common Applications and high school transcripts of other students if they first requested to view their own admission documents under the Family Educational Rights and Privacy Act (FERPA).

Accessible documents contained sensitive personal information including, for some students, Social Security numbers. Other obtainable data included students' ethnicity, legacy status, home address, citizenship status, criminal status, standardized test scores, personal essays and whether they applied for financial aid. Official standardized test score reports were also accessible.

Students' documents were not searchable by name, but were instead made accessible by changing a numeric ID in a URL.

A Stanford student who recently submitted a FERPA request for their admissions documents discovered the vulnerability in a third-party content management system called NoliqWeb that the University has used since 2009 to host scanned files. Since 2015, students who have submitted FERPA requests have been able to view files through NoliqWeb.

Between Jan. 28 and 29, the student briefly accessed 81 students' records

A vulnerability in the third-party content management system, NoliqWeb, that Stanford uses to store students' admissions files, allowed students to access the records of others.

student who disclosed the breach to The Daily was granted anonymity to protect them from potential legal repercussions for accessing private information while investigating the security flaw.

Stanford will notify the 93 students whose privacy was compromised because of this flaw.

"We regret this vulnerability in our system and apologize to those whose records were inappropriately viewed," Hayward wrote in an email to The Daily. "We have worked to remedy the situation as quickly as possible and will continue working to better protect our systems and data."

Stanford has also notified Noliq's parent company Hyland Software of the vulnerability. Hyland acquired Noliq in 2017 and announced on Dec. 31, 2017 that it would be discontinuing the NoliqWeb product. While Stanford University Information Technology (UIT) intends to finish implementing a new platform to replace the NoliqWeb sys-

MEMBER FEATURE STORY

Google Workers Lost a Leader, But the Fight Will Continue

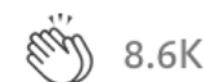
Liz Fong-Jones explains why she left, and the future of tech worker activism, in a new op-ed



Liz Fong-Jones [Follow](#)
Feb 13 · 7 min read ★



Credit: Mason Trinca / Stringer/Getty Images



8.6K




I quit Google this January. It was a bittersweet moment—I joined 11 years ago as a college dropout and ultimately emerged as a prominent figure in the field of Site Reliability Engineering. My work had impact, I liked my team, and Google had given me so much over my career. But I couldn't continue working there.

I have grave concerns about how strategic decisions are made at Google today, and who is missing a seat at the bargaining table. Google bears the responsibility of being one of the most influential companies in the world, but it has misused its power to place profits above the well-being of people. Executives seem to have forgotten the ethos of the company's earliest employees—"don't be evil"—and ethical stances, such as pulling out of China over censorship concerns in 2010, have been supplanted by shadowy efforts to appease the country's government at the expense of human rights.

The approaches that I used during my time at Google to advocate for vulnerable people, including women, people of color, and LGBT+ people, have become less effective as leadership repeatedly stonewalls employees who privately raise concerns. Google will need to fundamentally change how it is run in order to win back the trust of workers and prevent a catastrophic loss of long-tenured employees, especially those from vulnerable groups.

I first raised my voice on behalf of users in January 2010, less than two years into my run at the company. I'd taken to heart the Google handbooks containing phrases such as "focus on the user, and all else will follow," and "don't be evil; if you see something that you think isn't right—speak up!"

I, along with many peers, predicted that without significant product changes,



The creation will always
carry its maker's name.
And outlive him [or her].

Mike Monteiro

Design's Lost Generation (2018)

**We're Working
on Tools for
Ethical Design**



Ethics & Information Architecture

6th Academics and Practitioners Roundtable

At the 2018 Information Architecture Summit, Chicago, Illinois, USA

March 21 – Presentations and Discussion

March 22 – Make-a-thon

Summary of the 2018 IA Roundtable on Ethics and Information Architecture.

ROUNDTABLE THEME

Information architecture is not neutral. By organizing information for discovery and use, we not only make information accessible but also provide the lens through which people will experience it. Designing information architectures involves making and imposing value choices, which positions the work and study of information architecture in the realm of ethics.

ORGANIZERS

Sarah Rice

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Keith Instone

Consultant

Bernadette Linneman

Velvet Hamm

Andrea F...

Jönköping University

iaroundtable.org

mobile society
←-----→

Classical

Contemporary

paradigm

disembodied
postmodernist
digital

embodied
digi modernist
post digital
processual

theories

library + information
science
graphic + visual design
computer science

architecture
systems thinking
cognitive science

practice

websites
software applications

complex systems
cross-channel experiences
ecosystems



Academics' and Practitioners' Roundtable
iaroundtable.org

SCENARIO CREATION TOOL (FOR ETHICAL DESIGN)

USE CASE →

A SPECIFIC PROBLEM OR ISSUE THAT REQUIRES A DESIGN SOLUTION.

ACTORS →

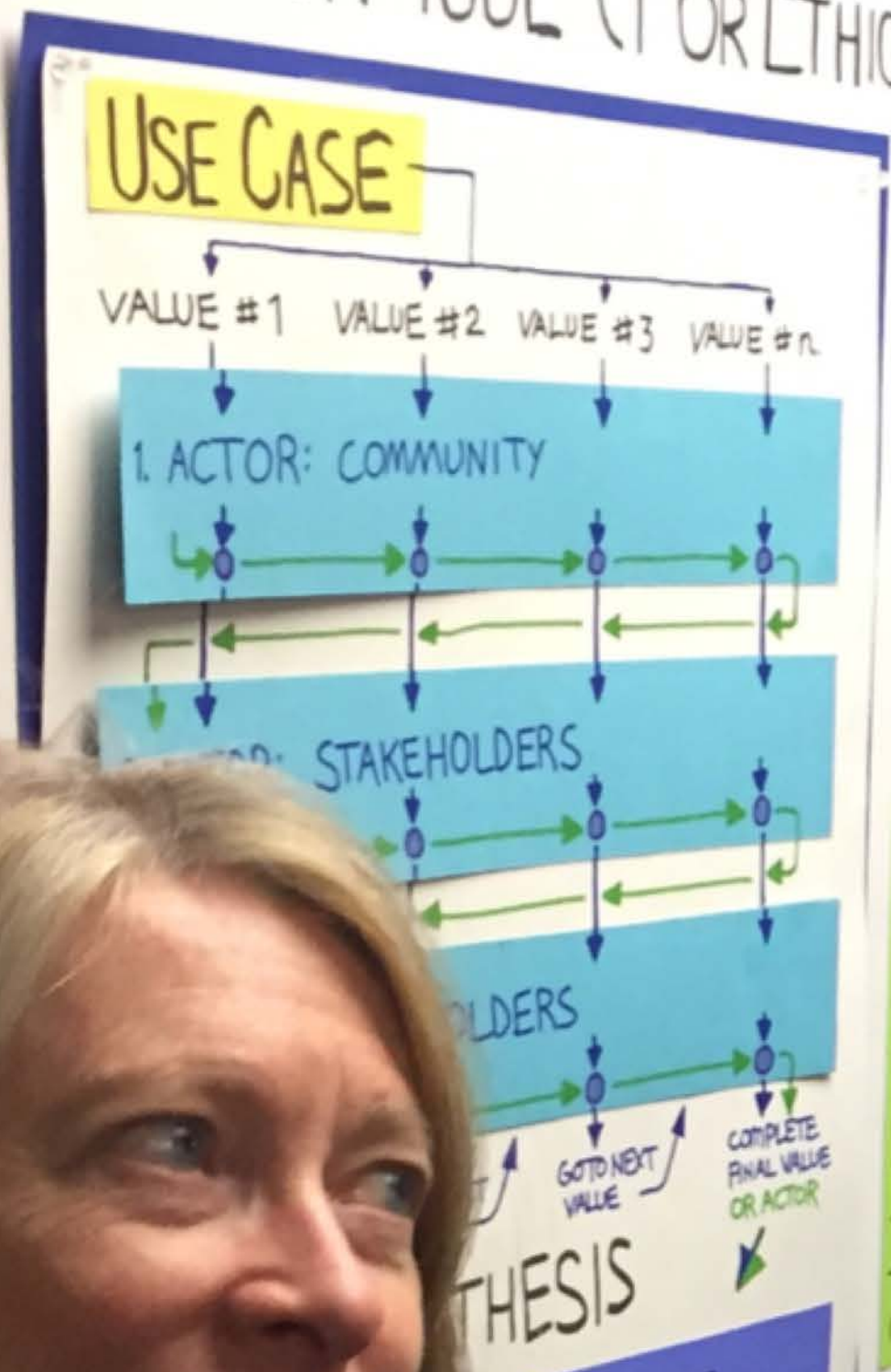
ALL ENTITIES AFFECTED BY THE USE CASE

IN ORDER:

1. COMMUNITY

2. STAKEHOLDERS

3. ...



← VALUES

IDEAS THAT GUIDE US IN ACTION (WE USED RICHARD MASON'S PAPA MODEL BUT YOU CAN CHOOSE YOUR OWN)

ANSWER THE ?'S:

- HOW DO I KNOW I AM DESIGNING ETHICALLY?
- IS THERE / WHAT IS THE HARM?

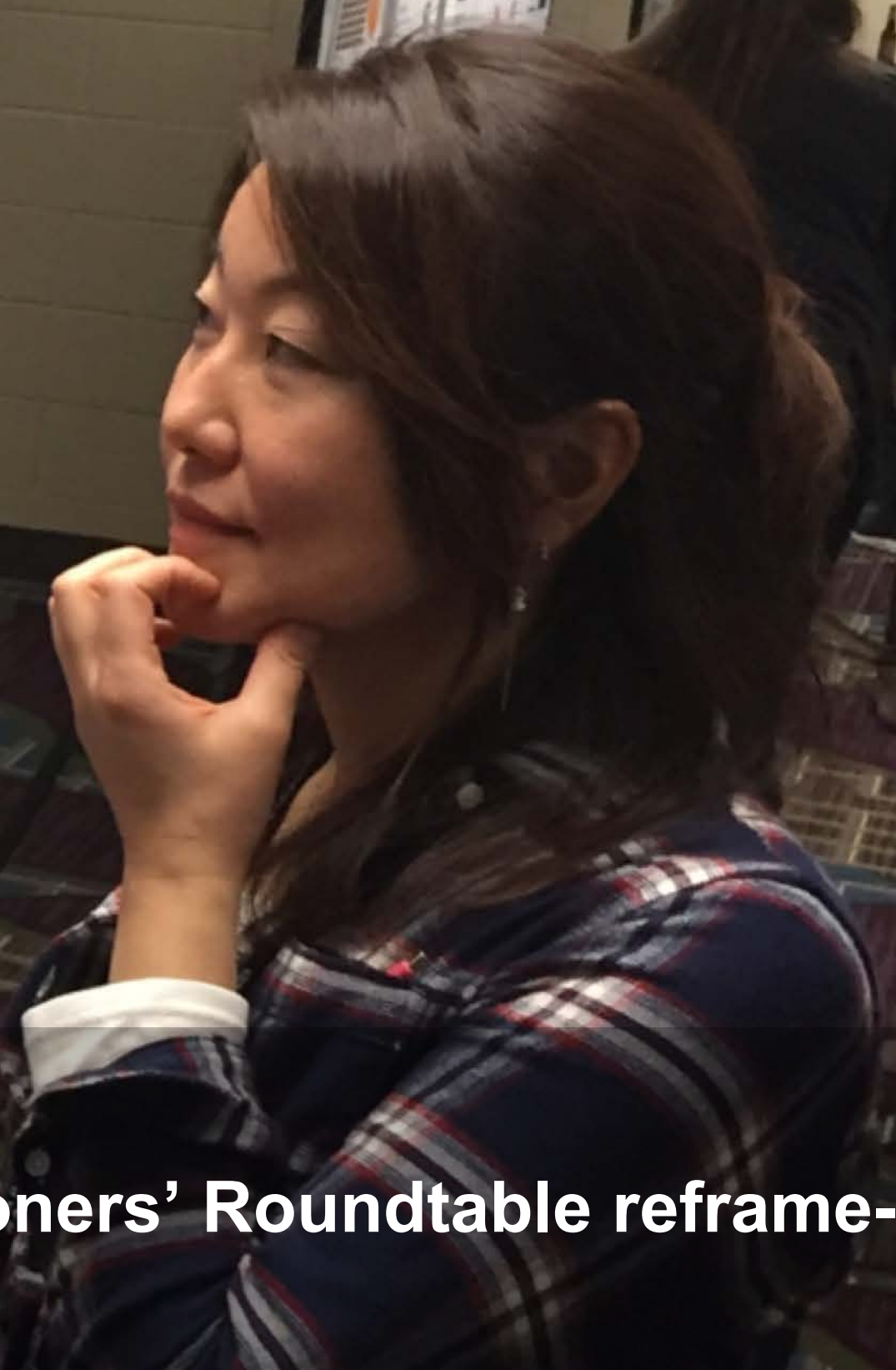
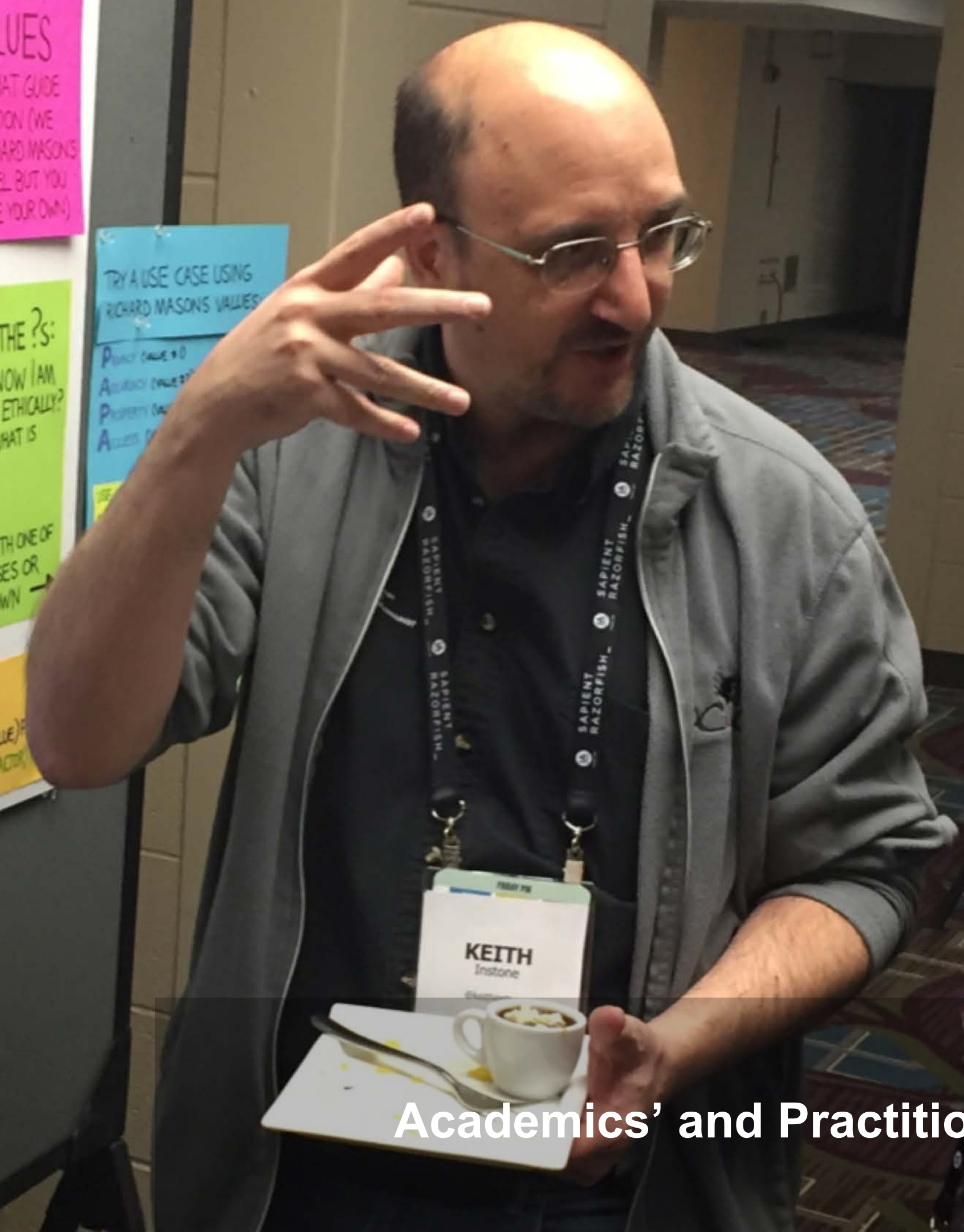
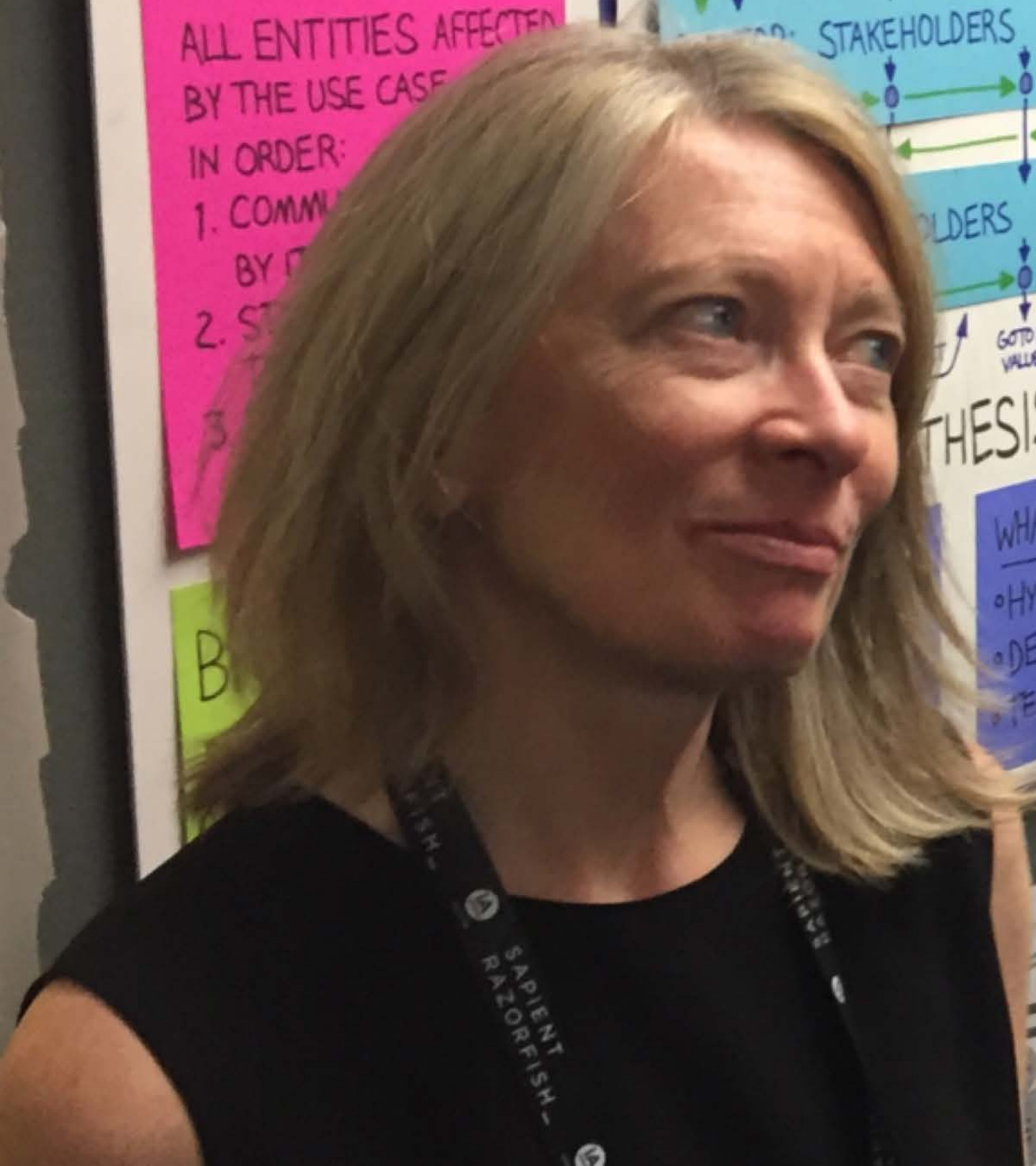
TRY IT OUT WITH ONE OF THESE USE CASES OR ONE OF YOUR OWN →

LEGEND

- ↓ VERTICAL (VALUE)
- HORIZONTAL (ACTOR)

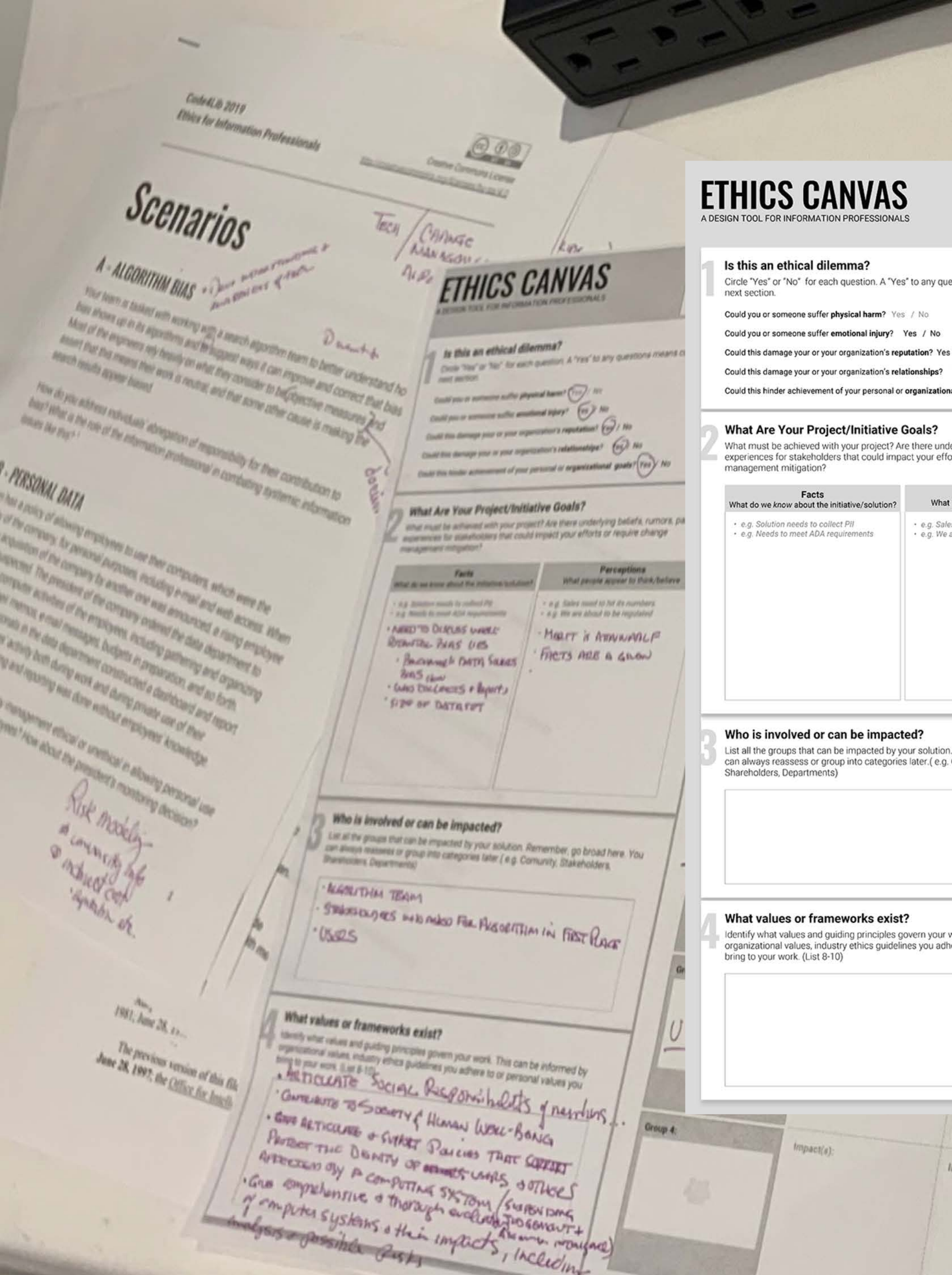
TRY A USE CASE USING RICHARD MASON'S VALUES

- Priority case #0
- Accuracy (value)
- Privacy (value)
- Access (value)



The Ethics Canvas





Scenarios

A - ALGORITHM BIAS

Your team is tasked with writing a search algorithm team to better understand how bias shows up in its algorithms and suggest ways it can improve and correct that bias. Most of the engineers rely heavily on what they consider to be objective measures and assert that the reason their work is neutral and that some other cause is making the search results appear biased.

How do you address individuals' adoption of responsibility for their contribution to bias? What is the role of the information professional in combating systemic information bias like this?

Does the company have a policy of allowing employees to use their computers, which were the acquisition of the company for another one was announced, a rising employee computer activities of the employees, including gathering and organizing the manager's e-mail messages, budgets in preparation, and so forth. In the data department constructed a dashboard and report activity both during work and during private use of their and reporting was done without employee knowledge.

Is management ethical or unethical in allowing personal use of the company's computers? How about the president's monitoring decision?

Risk modeling a community life @ include cost @ synthesis etc.

The previous version of this file June 28, 1997, the Office for Inclusion

1881, June 28, 1997...
The previous version of this file June 28, 1997, the Office for Inclusion

ETHICS CANVAS

1 **Is this an ethical dilemma?**
Circle "Yes" or "No" for each question. A "Yes" to any questions means continue to next section.

Could you or someone suffer **physical harm**? Yes / No
Could you or someone suffer **emotional injury**? Yes / No
Could this damage your or your organization's **reputation**? Yes / No
Could this damage your or your organization's **relationships**? Yes / No
Could this hinder achievement of your personal or **organizational goals**? Yes / No

2 **What Are Your Project/Initiative Goals?**
What must be achieved with your project? Are there underlying beliefs, rumors, past experiences for stakeholders that could impact your efforts or require change management mitigation?

Facts	Perceptions
What do we know about the initiative/solution?	What people appear to think/believe
<ul style="list-style-type: none"> e.g. Solution needs to collect PII e.g. Needs to meet ADA requirements NEED TO DISPLAY WHERE IDENTIFY BIAS LIES ANALYZE DATA SOURCES DATA SOURCES + REPORTS SIZE OF DATASET 	<ul style="list-style-type: none"> e.g. Sales need to hit its numbers e.g. We are about to be regulated MARKET IS ANXIOUS FACTS ARE A GROW

3 **Who is involved or can be impacted?**
List all the groups that can be impacted by your solution. Remember, go broad here. You can always reassess or group into categories later. (e.g. Community, Stakeholders, Shareholders, Departments)

- ALGORITHM TEAM
- STAKEHOLDERS WHO ASKED FOR ALGORITHM IN FIRST PLACE
- USERS

4 **What values or frameworks exist?**
Identify what values and guiding principles govern your work. This can be informed by organizational values, industry ethics guidelines you adhere to or personal values you bring to your work. (List 8-10)

- MULTICULTURE
- SOCIAL RESPONSIBILITIES of members...
- CONTRIBUTE TO SOCIETY & HUMAN WELL-BEING
- GIVE RETICENCE & SMART POLICIES THAT SUPPORT
- PURPORT THE DIGNITY OF BEMERUS USERS & OTHERS
- APPROACH BY A COMPETING SYSTEM/SYSTEMS
- GIVE COMPREHENSIVE & THOROUGH EVALUATION TO GOVERN +
- MANAGE
- computer systems a thin impacts, including
- analysis of possible risks

ETHICS CANVAS

A DESIGN TOOL FOR INFORMATION PROFESSIONALS

Title:

Creator:

Date:

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5 **Situation Summary**
Provide a brief overview, no more than 2 or 3 sentences that outlines the ethical dilemma and project context.

6 **Impacts**
What potential impacts might the product or system you are creating have on each individual or constituency. How does adhering to the value, mitigate or amplify that effect on people?

VALUES & GUIDING PRINCIPLES
Select your top values and principles from Section 4. These are lenses you will use to evaluate how your program or product could impact individuals or groups.

Value:	Value:	Value:
--------	--------	--------

IMPACTED INDIVIDUALS OR GROUPS
Select the groups you want to focus on from the Impacted section.

Group 1:	Impact(s):	Impact(s):	Impact(s):
Group 2:	Impact(s):	Impact(s):	Impact(s):
Group 3:	Impact(s):	Impact(s):	Impact(s):
Group 4:	Impact(s):	Impact(s):	Impact(s):

7 **Synthesize and Solution**
Synthesize the impacts across your impacted groups. What common themes do you see? Look at your impact map in Section 6.

+ Benefits
What are the positive impacts of this solution?

- List the positive impacts you saw affecting your groups
- What can be done to amplify these results?

- Harms
What are the negative impacts of this solution?

- List the negative impacts you saw affecting your groups
- What can be done to mitigate these results?

Need More Research
What areas do you need to explore further?

- List the areas you identified as needed to explore further to understand
- What kind of experiments might you be able to in these areas?

8 **What is your action plan?**
Based on the synthesize above, brainstorm the action items you can take as next steps.

Code4Lib 2019
Ethics for Information Professionals



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Scenarios

A - ALGORITHM BIAS

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How do you address individuals' abnegation of responsibility for their contribution to bias? What is the role of the information professional in combating systemic information issues like this? ¹

B - PERSONAL DATA

A firm has a policy of allowing employees to use their computers, which were the property of the company, for personal purposes, including e-mail and web access. When a possible acquisition of the company by another one was announced, a rising employee unrest was suspected. The president of the company ordered the data department to monitor all the computer activities of the employees, including gathering and organizing the contents of their memos, e-mail messages, budgets in preparation, and so forth. Information professionals in the data department constructed a dashboard and report that detailed employees' activity both during work and during private use of their computers. The monitoring and reporting was done without employees' knowledge.

Was the action of the company management ethical or unethical in allowing personal use of company computers by employees? How about the president's monitoring decision?

¹ Written by Sarah A. Rice, 2018.

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Group 3:

Employees

Impact(s):

- No opportunity to learn about tech used & how

Impact(s):

- Needs are not met

Impact(s):

- Mistrust by employees & management

- no agency

d of experiments might

6 Impacts

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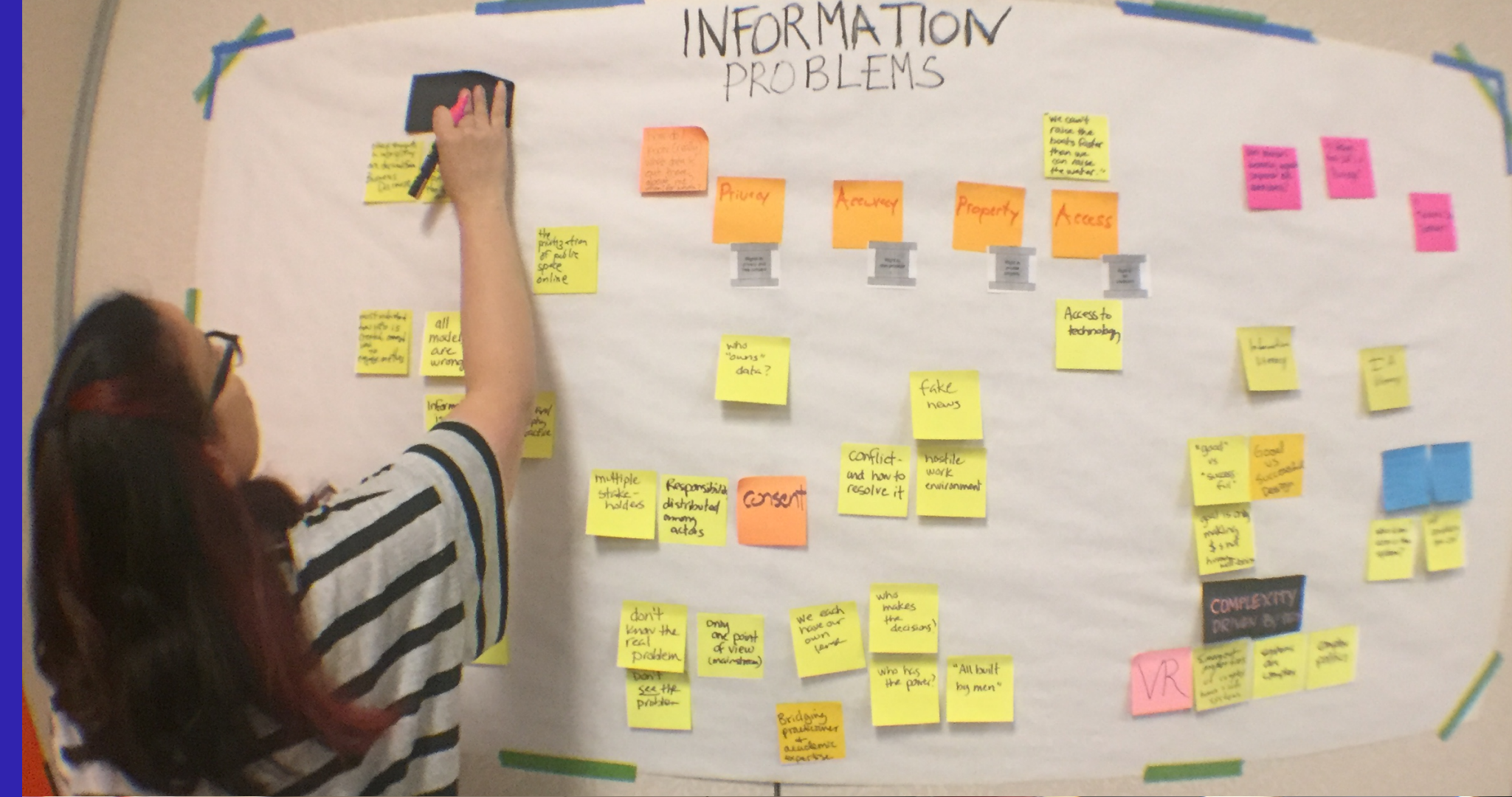
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ETHICS CANVAS

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bit.ly/ethics-canvas

RESOURCES

Ethics and Information Architecture

<http://iaroundtable.org/2018.html>

The Data Ethics Canvas, Open Data Institute

<https://theodi.org/article/data-ethics-canvas/>

ALA Code of Ethics

<http://www.ala.org/tools/ethics>

ACM Code of Ethics

<https://www.acm.org/code-of-ethics>

Information Architecture Conference

April 14 – 18, 2020

New Orleans, LA

<http://www.theiaconference.com/>

IA Roundtable: VALUES

April 14-15, 2020

<http://www.iaroundtable.org/>

REFERENCES

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http://moodle.ncku.edu.tw/pluginfile.php/848770/mod_resource/content/1/mason_PAPA.pdf

The Ethics and Politics of Information Architecture, Andrea Resmini,

<https://www.slideshare.net/resmini/the-ethics-and-politics-of-information-architecture>

Ethical Issues in Information Systems, Vladimir Zwass,

<http://reframe-ia.org/EthicalIssuesinInformationSystems-Zwass.pdf>

Scenario Creation Tool for Ethical Design, Surla, Pass, Wolfe, Perez

<https://www.slideshare.net/stacysurla/ethics-and-ia-a-scenario-creation-tool-for-ethical-design>

Thanks!

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