



# Haunted by Hackers?

Not Anymore:

Meet the Privacy Team, Your Digital Ghostbusters

# **Privacy Team**

Office of the CIO – Technology Services Identity, Privacy, and Cybersecurity

2023 Fall IT Pro Forum

# Today's Topics

- Breaches in the News
- Creating a Culture of Privacy
- Privacy Principles
  - Privacy by Design
- Introducing the Privacy Team
  - ❖ What we do/ don't do
- Privacy Efforts
  - Prevention, not Reaction
- ❖ Q & A





- 2000 organizations, 62M people
- What happened: malware exploited a vulnerability, ransom notes sent to organizations threatening publication of stolen data
- What we learned
- How it could have been prevented

# **University of Michigan**



- Students, applicants, alumni, donors, employees and contractors could be affected by the data breach. The school says social security numbers, driver's licenses, government-issued ID numbers, financial account or payment card numbers, and health information could all be affected.
- The university contained the incident quickly by shutting down the campus network from the internet.





- December 2021 cyber attack locked out admissions activities
- No personal information accessed
- Not fully operable until March 2022
- Closed on May 13, 2022
- Financially unstable after ransomware attack in addition to low enrollment during the Pandemic



# **Step 1: Awareness**



## **Protect Yourself**

Data breaches can lead to:

- Identity Theft
- Financial loss
- Reputation Damage
- Loss of Intellectual Property
- Online Vandalism



# Actionable Steps You Can Take

- Use strong, unique passphrases
- Use a VPN
- Enable two-factor authentication (2FA)
- Keep your software updated
- Secure your devices
- Be cautious with emails and third-party apps and services
- Monitor your accounts
- Limit the information you share
- Educate yourself Get in touch with the Cybersecurity Training Team!

But the truth is, you can only do so much. . .





"...serve society by educating, creating knowledge, and putting knowledge to work on a large scale and with excellence."

https://www.uillinois.edu/about/mission/

Foster innovation and creativity

Be accountable for our actions and exercise responsible stewardship

Be inclusive, treat each other with dignity and respect, and promote citizenship

Aim High

# What is a privacy culture?

- Promote responsible data handling
- Respect for personal information
- Compliance with privacy laws and regulations



A privacy culture strengthens legal compliance, contractual agreements, ethics, morality, reputation, and strategic development.

# Building Blocks for a Culture of Privacy Privacy Principles





**Choice/ Consent** 



Notice/ Awareness (Transparency)



Collection and Use Limitation (Purpose Specification)



Integrity/ Security



Individual Participation (Enforcement/ Redress)

- ✓ Support the Autonomy of the Individual
- ✓ Maximize Individual Participation in Record Keeping Where personally identifiable information (PII) is involved
- ✓ Balance beneficence to person & society with data use
- ✓ Minimize privacy harms to all persons
- ✓ Enable the principled use of data to support innovation in research, health, student success, and operational excellence





## **CONSENT**

#### TRANSPARENCY

## **TRUST**

I AGREE. I DO NOT WANT. I ACCEPT. I DO NOT CONSENT. REMOVE ME FROM YOUR LIST. I UNDERSTAND. I WANT. ACCEPT ALL COOKIES. I NO LONGER AGREE. I CONSENT. UNSUBSCRIBE ME. I DO NOT WANT. I ACCEPT. I DO NOT

CONSENT. FGIVE MY
FROM YOUR EMAIL
WANT. ACCEPT AL
PREFERENCES. I
CONSENT. I DO NO
FROM YOUR LIST.
ACCEPT ALL COOK!
LONGER AGREE. I
UNSUBSCRIBE. I A
ACCEPT. I DO NO
FROM YOUR LIST.

THE UNIVERSITY WILL PROCESS YOUR DATA IN THIS WAY. WE DO NOT SELL YOUR INFORMATION. READ OUR PRIVACY POLICY HERE. MANAGE YOUR PREFERENCES. WE SHARE YOUR DATA WITH THESE THIRD PARTIES. THESE ARE YOUR RIGHTS. THIS IS HOW YOUR DATA IS USED. THE UNIVERSITY WILL PROCESS YOUR DATA IN THIS WAY. WE DO NOT SELL YOUR INFORMATION. READ OUR PRIVACY POLICY HERE. MANAGE

The Privacy Team of the University of Illinois Urbana-Champaign is relatively new. Our goal is enablement:

- We want our students, alumni, and other data subjects to have a say in how their data is handled, processed, and shared.
- We want our data stewards to be able to do their jobs without sacrificing the personal privacy and personal data of individuals.

GOOD REPUTATION. I FEEL SAFE. MY DATA IS KEPT SECURE. PRIVACY-FOCUSED. MY DATA IS IN GOOD HANDS. I HAVE CONTROL OVER MY DATA AND HOW IT IS USED. GOOD REPUTATION. I FEEL SAFE. MY DATA IS

AVE CONTROL OVER
IT IS USED. THE
DATA TO HELP ME
I GET A SAY IN HOW
OF REPUTATION. I
S SECURE. PRIVACYIN GOOD HANDS. I
MY DATA AND HOW IT
FATION. MY DATA IS
SAFE. MY DATA IS IN

# **Meet the Privacy Team**







# privacy@illinois.edu

Phil Reiter, Associate Director, Privacy <a href="mailto:preiter@illinois.edu">preiter@illinois.edu</a>

Stephen Collette, Manager, Privacy Operations sc119@illinois.edu

Mendi Drayton, Sr. Breach & Incident Analyst mendid@illinois.edu

Sheena Bishop, Sr. Privacy Analyst <a href="mailto:sheenab@illinois.edu">sheenab@illinois.edu</a>

Oyesola 'Shola' Akinyemi, Privacy Analyst oyesola2@illinois.edu

Ece Gumusel, Privacy Analyst gumusel2@illinois.edu

# What We Don't Do...





Authorize Authorize data use or projects. We do not act as an "Approver" or "Sign Off"

Cyber
Security
Our recommendations may overlap with that area, but we aren't cybersecurity

Own We don't accept risks for you.

# ...and What We Will Do



# **Our Process**



# Advise on privacy considerations

Principled design and use of data

Potential regulatory/compliance implications

Guide on data management for projects and data use

Provide Clear, Specific Privacy Guidance to decision makers/governance/advisory/ stewards

Mature into program, policy, and resource/capabilities for future



# Recommend privacy engineering techniques

Design to minimize collection, use, retention of PII where possible

Recommend development practices, identify privacy controls

# **Privacy Team Support**



# **İ**Tİ

#### **FREE Consultative Services**

- ✓ Privacy Risk/ Privacy Impact Assessments
- ✓ Review of Research Protocol Data, Management Plans, & Data Privacy
- ✓ Data Use and Processing Agreements
- ✓ Contract Review (Data Privacy Protections & Lifecycle)
- ✓ Consent Management
- ✓ Privacy Policy/Practices/Notice Review& Development

- ✓ Illinois Privacy Policy Development
- ✓ Data Governance
- ✓ Data Discovery, Inventory, & Mapping
- ✓ Data Subject Access Request Support
- ✓ Data Breach Incident Response
- ✓ Designs for data minimization
- ✓ Privacy Engineering process designs
- ✓ Identification of privacy controls

# Privacy By Design and By Default Mechanisms





#### **Data Minimization**

Limit or eliminate collection of personally identifiable information (PII) in data and technology projects



## Data Lifecycle

Map use of PII to legitimate processing purpose, collect/store data for minimum purpose and time, and delete



## Anonymization

Embed technology capabilities that remove, mask, or escrow direct and indirect identifiers and reduce privacy harms



## Federated Learning

Allow research participants and students to share only information needed to gain the value/benefit of a service without giving up sensitive/private information.



# Homomorphic Encryption

Process information with PII/sensitive data while the data remains encrypted

# **Privacy Assessment**









TYPES OF DATA COLLECTED



CROSS-BORDER DATA TRANSFERS



ANALYZE



**GUIDANCE** 



**RECOMMENDATIONS** 

# What We are Working on Now



#### **Privacy Center**

- A website for students to understand how the university processes their data
- Includes "privacy profiles" for different types of data, such as "Wi-fi Data" and "Library Data"
- Helps to translate the University Privacy Statement into layperson terms.

#### Consent and Preference Management

- A self-service tool for students to manage their data and the consents they have granted the university
- Automation of the management of data subject requests (ex. requests for deletion)

#### Streamlined review process

- Developing methods to speed up the vendor review process
- Reducing the number of and/or aligning the assessments & questionnaires requested by different departments
- Automating parts of our engagements to provide immediate feedback to requestors

#### Maturation of Breach/Incident Response

- The Privacy Team is responsible for the coordination of notifying data subjects in the event of a breach/incident
- Streamlined and documented process to aide Administrative Coordination Team

# Illinois Privacy Center

News / Events / Resources / Report a Cybersecurity Incident

Technology Services
Privacy & Cybersecurity

Report a Cybersecurity

Report a Cybersecurity Incident 

Our Teams 

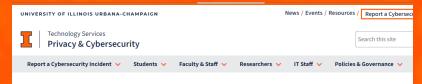
Our Teams

#### **Privacy Center**

Privacy is a right of every member of our community. It is our duty to uphold the <u>University System Guiding Principles</u> in the design and delivery of all technology services. The respect for individuals and their autonomy must fundamentally guide our decisions while entrusted with the security and privacy of each person's identity and data.

Select a Data type and find out more about what data is collected by the University of Illinois, how it is managed, and what happens to it throughout its lifecycle.

Academic Data	Cybersecurity Data	Employee Data
Health Data	<u>Library Data</u>	Printing Data
Student Record Data	Videoconferencing Data	Wi-Fi Location Data



#### **University Library Data**



The University Library at the University of Illinois at Urbana-Champaign is committed to the protection of privacy for users in compliance with all federal and state laws and professional standards related to the personal information of our users. These include:

- . Illinois General Assembly, (75 ILCS 70/) Library Records Confidentiality Act
- U.S. Departments of Health and Human Services HIPAA Privacy Rule
- . U.S. Department of Education's FERPA
- American Library Association's (ALA) Professional Code of Ethics

#### What Library Data We Collect

#### USER & PATRON INFORMATION

Information collected regarding the use of resources provided by the University Library.

#### USE OF LOCAL ONLINE RESOURCES

Information collected through the use of a library computer or network.

#### WEB ANALYTICS

Information collected via use of the Library website and digital collections.

#### **How We Use Library Data**

#### USER & PATRON INFORMATION

Locating or recalling library materials, processing overdue notices, updating patron database, making collection development decisions, resolving billing matters, or resolving issues related to Library circulation policies.

#### USE OF LOCAL ONLINE RESOURCES

Identifying, evaluating, and responding to trends in resource use, as well as investigating remote access issues and improving user experience of online resources.

#### WEB ANALYTICS

Data is used to improve services and identify priority needs and to improve the user experience, such as by using "cookies" to maintain user session and preferences settings.

# **Enabling Al**

Technology Services
Privacy & Cybersecurity

Search this site

Report a Cybersecurity Incident 🗸

Students V

Faculty & Staff 🗸

Researchers V

IT Staff 🗸

Policies & Governance

Our Teams

Q

## **Privacy considerations for Generative AI**

Posted on July 17, 2023 by Dana Mancuso

Generative AI refers to artificial intelligence models that create content in various forms, including text, images, and audio across many formats and mediums.

Generative Al uses deep-learning algorithms and training data to produce new content that approximates the training data.

Given the incredible rise in popularity and the transformative nature of Generative AI, following is some general guidance to consider related to data privacy. *Note: not legal advice, and not intended to be comprehensive.* 

#### If you use generative AI in regular work

- Explore options to purchase or license a business or enterprise version of the software. Enterprise software usually brings contractual protection and additional resources such as real-time support.
- Begin discussions with your colleagues about the privacy considerations listed in the next section.
- Consider where and how existing policies and best practices can be updated to better protect user privacy.
- Remember to validate the output of Generative AI, and if using Generative AI in a workflow, consider implementing formal factchecking, editorial, and validation steps to your workflow.

#### If you create or develop generative AI

- Provide transparency about how your Generative AI models are trained. Inform users what data might be collected about them when using generative AI and create accessible mechanisms for users to request data deletion or opt-out of certain data processing activities.
- Explore incorporating privacy enhancing technologies in your initial design stages to mitigate privacy risks and protect user data.
   Consider technologies that support data deidentification and anonymization, PII identification and data loss prevention, and always incorporate principles of data minimization.

If you would like assistance as you consider data minimization, data anonymization, or data deidentification in your AI, the Privacy Team can help.

# What We've Also Been Doing



- Actionable recommendations for how the University should handle research on COVID-19 data
- Involvement in large-scale, university-wide and system-wide projects, like Unizin, a data catalog system, email encryption, master contract reviews
- Working on HIPAA compliance reviews for each of our Health Care Components
- Coordinate breach and incident responses with data stewards and other stakeholders
- Created an entire privacy review process for new contracts from scratch...then added to it as we went.

- Guiding the Illinois App team with working towards GDPR compliance
- Partnering with the University of Illinois Police Department on their drone usage policy and procedure
- Reviewing research proposals and provided feedback and recommendations for data privacy considerations
- Developing stronger contractual language for data protection and data privacy
- Developing guidance for generative AI and chatbot usage



# Feel better?



# Consent Transparency Trust

Privacy@illinois.edu

\*2024 Privacy Everywhere Conference:

Leading with Privacy

Friday, January 26<sup>th</sup>, 2023 Beckman Institute & Online