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# We Started a Library Analytics Program. You'll Never Believe What Happens Next.

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# We Started a Library Analytics Program. You'll Never Believe What Happens Next.

Ken Varnum  
Senior Program Manager  
University of Michigan Library

1. Campus Context
2. Privacy Policy
3. Implications and Initiatives
4. Next Steps

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Initiatives



**ACADEMIC  
INNOVATION**

5,162,883

Learners

Learning Experiences should be  
*Personalized, Engaged and Lifelong*

Academic Innovation partnerships are  
*Individualized, Creative and Collaborative*

Shape the Future, [Innovate Now](#)

# Library's Previous Statement on Privacy

- Prevented collection of nearly all data
- Required the deletion of any transaction data once the transaction was complete
- Made it hard for us to...
  - Provide good service in a virtual environment
  - Know how changes we made, or planned to make, effected usage
  - Understand our users well

- **Policy**

The University of Michigan Library may collect some data about your library use in order to improve services and to integrate with broader University teaching and learning initiatives.

- **Commitment to Privacy and Confidentiality**

We are committed to protecting the privacy and confidentiality of all patron data in compliance with federal and state laws, university policy, and professional standards (e.g. American Library Association).

Library data is considered an institutional asset and may be accessed and used only by authorized university entities according to procedures identified by the University. No person or entity may access library data, except through strict policy and processes established by the University and in compliance with Michigan law.

# Understanding the Library's Needs



<https://static.pexels.com/photos/5106/forest-trees-fog-foggy.jpg>

# Next Steps (A Work in Progress)

- Infrastructure
- Data pipelines
- Baseline Data
- Collaboration with Librarians & Campus Researchers



# Proposed Core Data Elements

Data Sources	Web Site Server Logs	Mirlyn Server Logs	Proxy Server Logs	Circulation History and Related Data	Campus status & affiliation data
Data Attributes	timestamp	timestamp	timestamp	timestamp	
	uniquname	uniquname	uniquname	uniquname	uniquname
	event/action type (search, display details, external link, etc.)	event/action type (search, display details, get this, external link, etc.)	event/action type	event/action type (charge, discharge, renew, hold, recall, overdue sent, library-to-library delivery, etc.)	user category (undergrad, grad, faculty, staff, sponsored, etc.)
	Database/Package/Resource identifier(s)	Aleph resource IDs (barcode, bibliographic record number, etc.)	Resource identifier	Aleph resource IDs (barcode, bibliographic record number, etc.)	user department
	Search string (when event is a search)	Search string (when event is a search)	Result (success or dead end?)		additional user demographics
	Search results	Search results			
	Referrer string	Referrer string	Target		
	Target (when event is external link)	Target (when event is an external link)			

Colors represent potential linking points to connect data from different sources. Note that some connections (e.g., uniquname) are relatively strong and unambiguous while other (e.g., timestamp, referrer, and target strings) may be circumstantially related, but we rely on inference when postulating a relationship as a user session or path between multiple systems.

- Infrastructure in place
  - ElasticSearch
  - Kibana
- Practicing on a range of System Admin data
  - Uptime, reports, logged items
  - Moving to web-based interfaces soon

New link resolver launched in October 2016

## User Information

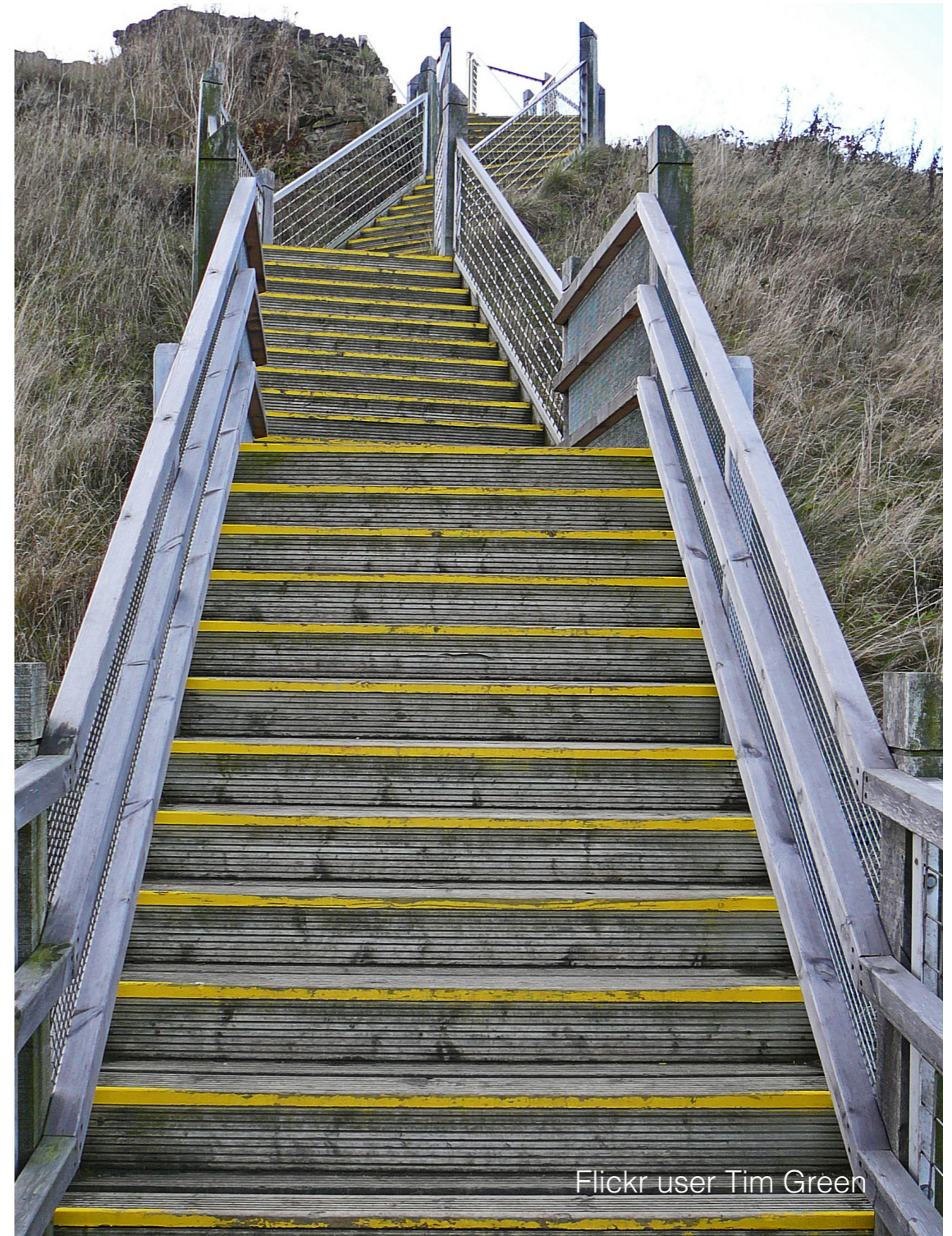
- Uniqname
- Access location
  - On/Off campus
  - Proxied
  - State/Country
- Academic status
- School / College
- User Agent (browser, OS)

## Document Information

- OpenURL or IEDL
- Raw OpenURL
- OpenURL SID
- ISSN / eISBN
- Link(s) on the Umlaut screen the user clicks
- Bounces
- Was there full text
- Target vendor/platform
- Referring URL

# Next Steps

- Continuing pilot this fall
- Assess pilot
- Share with the library & campus
- Assess data collection & identify changes
- Repeat



# Thank You!

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