W209 Cybersecurity Issues in Scholarly Publishing

Wednesday, October 23, 2019
11:30 a.m. – 12:30 p.m.

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J. Michael Slocum, Esquire, Distinguished Faculty, Alexandria, Virginia, USA
Agenda

• How / why companies collect user data
• Business cases for leveraging user data specific to publishers
• The ways scholarly platforms track user data, and which data is tracked
• What platforms and publishers do with user data
• The controls given users over their data (compliance)
• Incentivizing users to provide personal data
• Publishers use of scientific data
Who Collects the Data?
User Data: Collecting

- Why
  - Trends, segmentation, $ 
- How
  - Cookies, ‘likes’, clicks, connections 
- What data
  - Identifying, characterizing 
- Opt in/Opt out?
Data Segmentation
User Data: Leveraging

- Business cases
  - Data aggregation
  - Population segmentation
  - Targeted content
  - Ads
- Publisher-specific data
  - Research interests, views, searches
Scholarly Publishing Workflow

AUTHORING & COLLABORATION

SUBMISSION PORTAL

PRE-PUBLICATION W/ ARTICLE BADGING and ANNOTATION-BASED PEER REVIEW

AUTOMATED HTML TO PDF

AUTOMATED CONTENT HOSTING & DELIVERY

MANUSCRIPT & DATA

JOURNAL-BRANDED PREPRINT

PEER REVIEW REPORT

ONLINE ARTICLE OR BOOK

DATA

PRINT ARTICLE OR BOOK

DATA AVAILABILITY STATEMENT

ATYPON

2019 ANNUAL MEETING
OCTOBER 19 - 23
Data Tracking: Scholarly Platforms

- Ways data is tracked
- What data is tracked
  - Login info
  - Searches
  - Views
  - Annotations
Data Availability: Publishers

- Anonymized
  - Preserves privacy
  - Limiting
- Known users
  - Content recommendations
  - Content metrics
- Secondary market (is data sold and to whom and for what purposes)
Users and their Data

- The controls given users over their data / compliance
- Incentivizing users to provide personal data
Compliance

• Putting controls in place to ensure data is shared compliantly.
• Identify cybersecurity issues that arise in preparing and publishing scholarly articles and presentations.
• Identify laws and regulations that affect the security and integrity of research data and publications.
Data Issues in the Actual Publication of Scientific Papers

• Access to raw data to support publication
  • Access by peer reviewers
  • Access by other scientists
    • Timing
• Quality of data and data integrity
  • Metadata
    • Describes the content and context of the data based upon terms and standards that are specific to the particular discipline.

(continued)
Data Issues in the Actual Publication of Scientific Papers (2)

- Quality of data and data integrity
  - Data must be findable, accessible, interoperable and reusable
- Interplay between data quality and misconduct
- Errors in the data

(continued)
Data Issues in the Actual Publication of Scientific Papers (3)

• Who is responsible for addressing these
  • Publisher’s role
  • Institution’s role
  • Investigator’s role

• Interplay between Data Errors and Misconduct

(continued)
Data Issues in the Actual Publication of Scientific Papers (4)

- Publishing standards
  - Empowering the peer-review and publication process using a series of independent auditing tools, data verification algorithms, and direct contact with all of the stakeholders can help combat fraud in medical publishing. The journals that achieve a lower rate of retractions improve their trustworthiness and can achieve competitive advantage in a crowded industry.


(continued)
Data Issues in the Actual Publication of Scientific Papers (5)

• Publishing standards
  • Statistical techniques
  • Research validation
  • Data analysis algorithms
  • Plagiarism detection programs
• Pre-publication: author guidelines and peer review
• Post-publication issues – retractions
References


Speaker Contacts

Questions?

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**Allan Gajadhar** is a technology consultant for Atypon, the leading platform provider for scholarly publishing. He has over 20 years experience in software and information technology, and has worked with a number of Federal agencies to redefine core business processes around compliance, risk management, and governance. He has significant experience in managing technology, including driving software development to meet federal compliance mandates. Mr. Gajadhar holds a Bachelor of Arts from the University of Louisville. He was a Doctoral Candidate in History at Georgetown University where he also completed graduate work in Literary Theory, Linguistics, and Philosophy.

**J. Michael Slocum** is a senior member of the law firm of Slocum & Boddie, PLLC, specializing in Federal contract law and university procurement and grant management. He has advised and trained universities, non-profit organizations, federal agencies and private businesses on contract planning and drafting, management, EEO matters, contract negotiation, small purchases, price analysis, contract administration and other topics. During his career he has conducted hundreds of training courses and seminars and has written many texts and training manuals. A member of the Virginia State Bar, Mr. Slocum is an honor graduate of DePauw University and received his J.D. with honors from George Washington University National Law Center.