Aries systems
Publish Faster. Publish Smarter.
XML Workflows and the Advancement of Scholarly Publishing

Jennifer Fleet
Managing Director
jfleet@ariessys.com
Who We Are

• Founded in 1986
• Headquartered in North Andover, MA
• 90 staff globally
• Local staff in the UK and Germany
• Acquired by Elsevier Inc. in September 2018
• 7000+ publications, 250+ customers
• Invest $6 million annually on R&D
Aries Systems is committed to delivering workflow solutions that help publishers and scholars enhance the discovery and dissemination of human knowledge.

- Editorial Manager®: Manuscript Submission & Peer Review Management
- ProduXion Manager®: Manuscript Production & Task Management
- LiXuid Manuscript™: Comprehensive XML Workflow
1. User Centered Publishing
2. Machine as Reader
3. Science as Social Machine
4. Privacy – Web of Trust
5. Big Data meets AI
Deriving Opportunities and Needs in the Publishing Workflow out of these Trends

• Using AI and machine learning to support editorial decisions
• Publishing to preprint servers
• Pushing for reproducibility and transparency
• Improving and even disrupting the current experience for the author, reviewer, and editor
• Increasing pressure to review and publish faster
• Reducing costs
• Identifying duplicate submissions and fraudulent material
• Growing volume of submissions and reviewer fatigue
Current Workflow
Future Workflow
Automated Technical Check for Manuscripts

• Use tools to check content of the manuscript file against figure, table and other file counts

• Search for duplicate publication

• Check manuscript formatting against publication style requirements
Future Workflow
Editorial Decision Support Tools

• Predictive bibliometrics

• Statistical review

• Interrogate Methods section and reproducibility
Future Workflow
Automatically Create Taxonomy Mapping

- Match editors and reviewers to manuscripts
- Use the taxonomy later for richer tagging and to facilitate discovery once published
- Find the right journal for the content
Future Workflow
New Review Experience

• Editors and reviewers interact with an HTML presentation of the XML
  • Guided/more intuitive review

• Authors edit manuscripts for revision in the same environment
  • In text comments and queries
Publish Preprint

• Push the XML to preprint server for a rich preprint publication
Future Workflow
Automated Production

• Authors and copyeditors use the rendered HTML

• Automatically compose the article
Deriving Opportunities and Needs in the Publishing Workflow out of these Trends

• Using AI and machine learning to support editorial decisions
• Publishing to preprint servers
• Pushing for reproducibility and transparency
• Improving and even disrupting current experience for the author, reviewer, and editor
• Increasing pressure to faster review and publication
• Reducing costs
• Identifying duplicate submissions and fraudulent material
• Growing volume of submissions and reviewer fatigue
Ramifications of the Downward Pressure on Pricing, Scholarly Kitchen post by Angela Cochran on October 1, 2019

Angela addressed many of the same topics:

• Expectations around peer review and the increasing submission volume
• The cost of the production process
• Content enhancements
• Discovery

All publishers are not equal

But one way for publishers to keep up with the increasing requirements, volume, and constraints is to use the tools that are emerging – and these are fed by XML
Up next: Sean MacRae and Aries’ LiXuid Manuscript
Aries Systems Corporation
50 High Street, Suite 21
North Andover, MA 01845 USA

www.ariessys.com