



Publish Faster. Publish Smarter.

XML Workflows and the Advancement of Scholarly Publishing

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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



What We Do

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

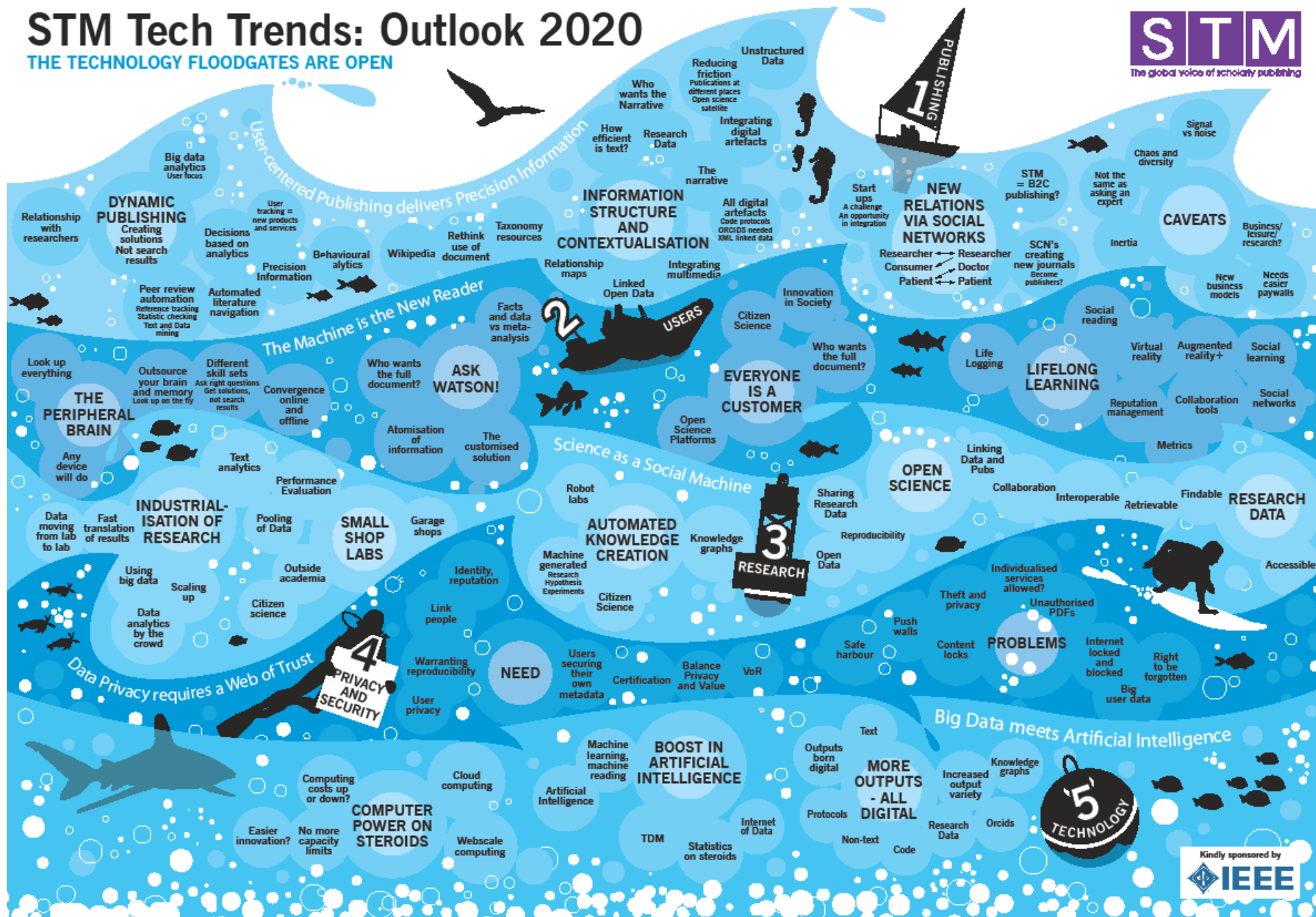
 **LiXuid Manuscript[™]**

Comprehensive XML Workflow



STM Tech Trends: Outlook 2020

THE TECHNOLOGY FLOODGATES ARE OPEN



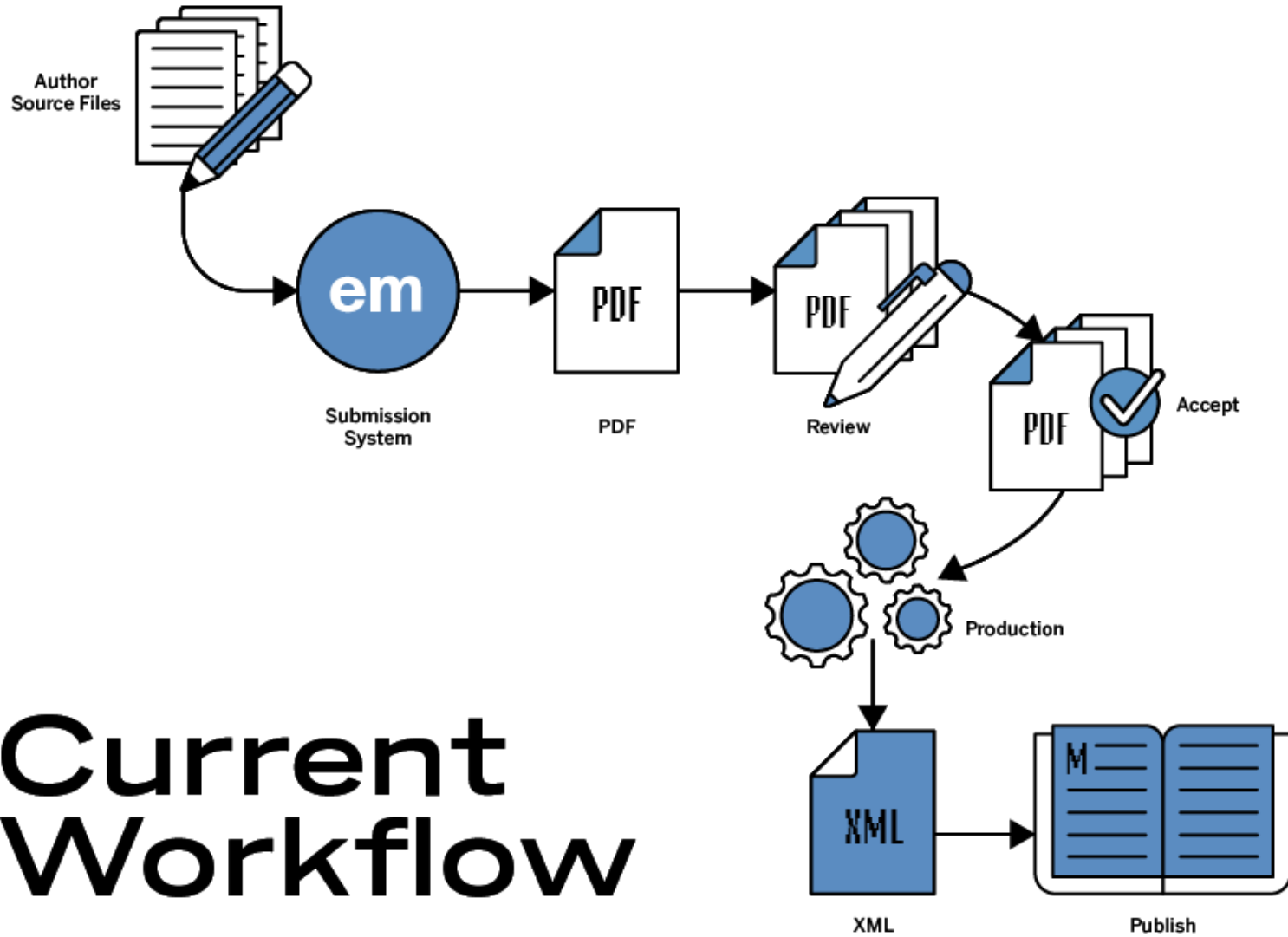
1. User Centered Publishing
2. Machine as Reader
3. Science as Social Machine
4. Privacy - Web of Trust
5. Big Data meets AI



Deriving Opportunities and Needs in the Publishing Workflow out of these Trends

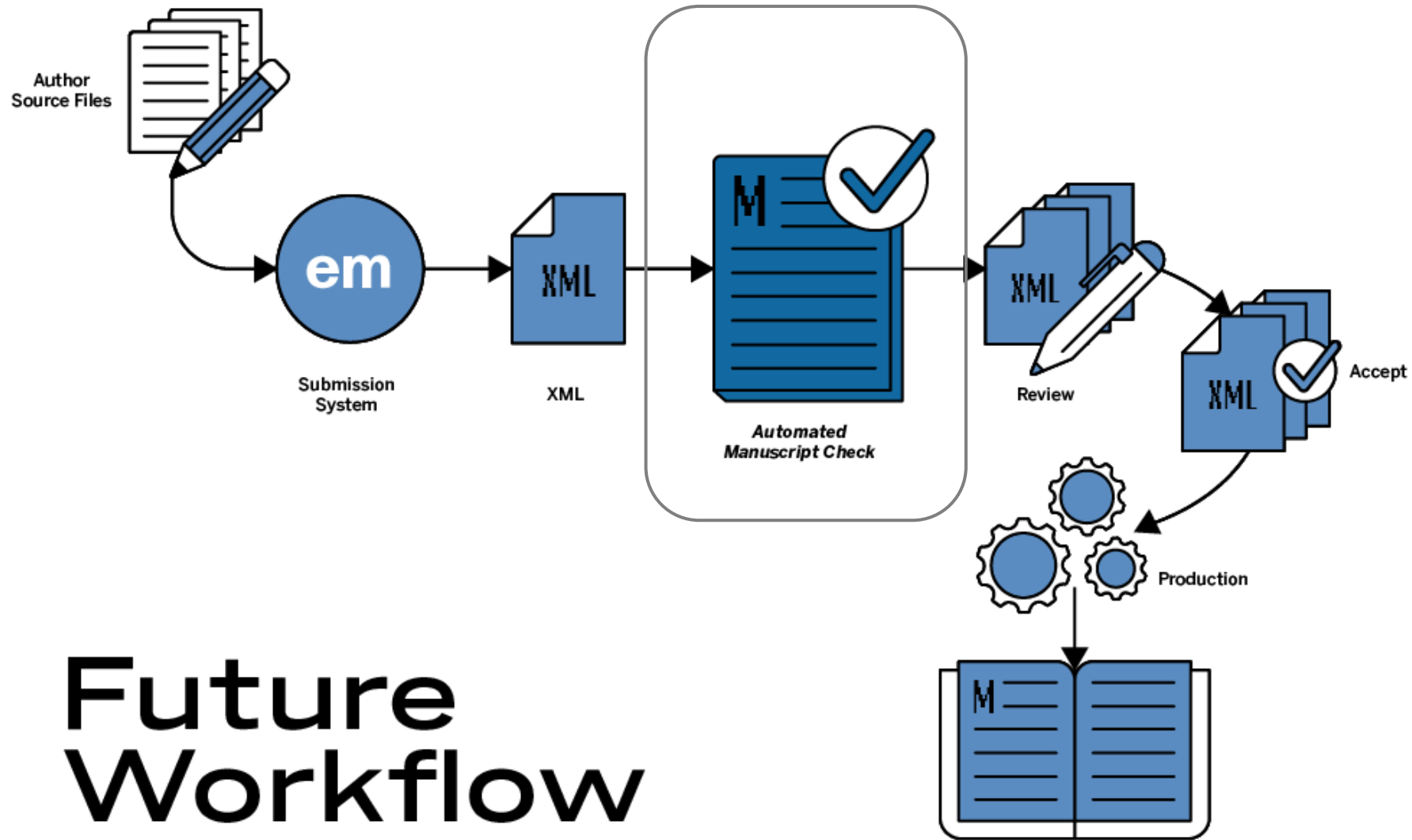
- Using AI and machine learning to support editorial decisions
- Publishing to preprint servers
- Pushing for reproducibility and transparency
- Improving and even disrupting the current experience for the author, reviewer, and editor
- Increasing pressure to review and publish faster
- Reducing costs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





Current Workflow





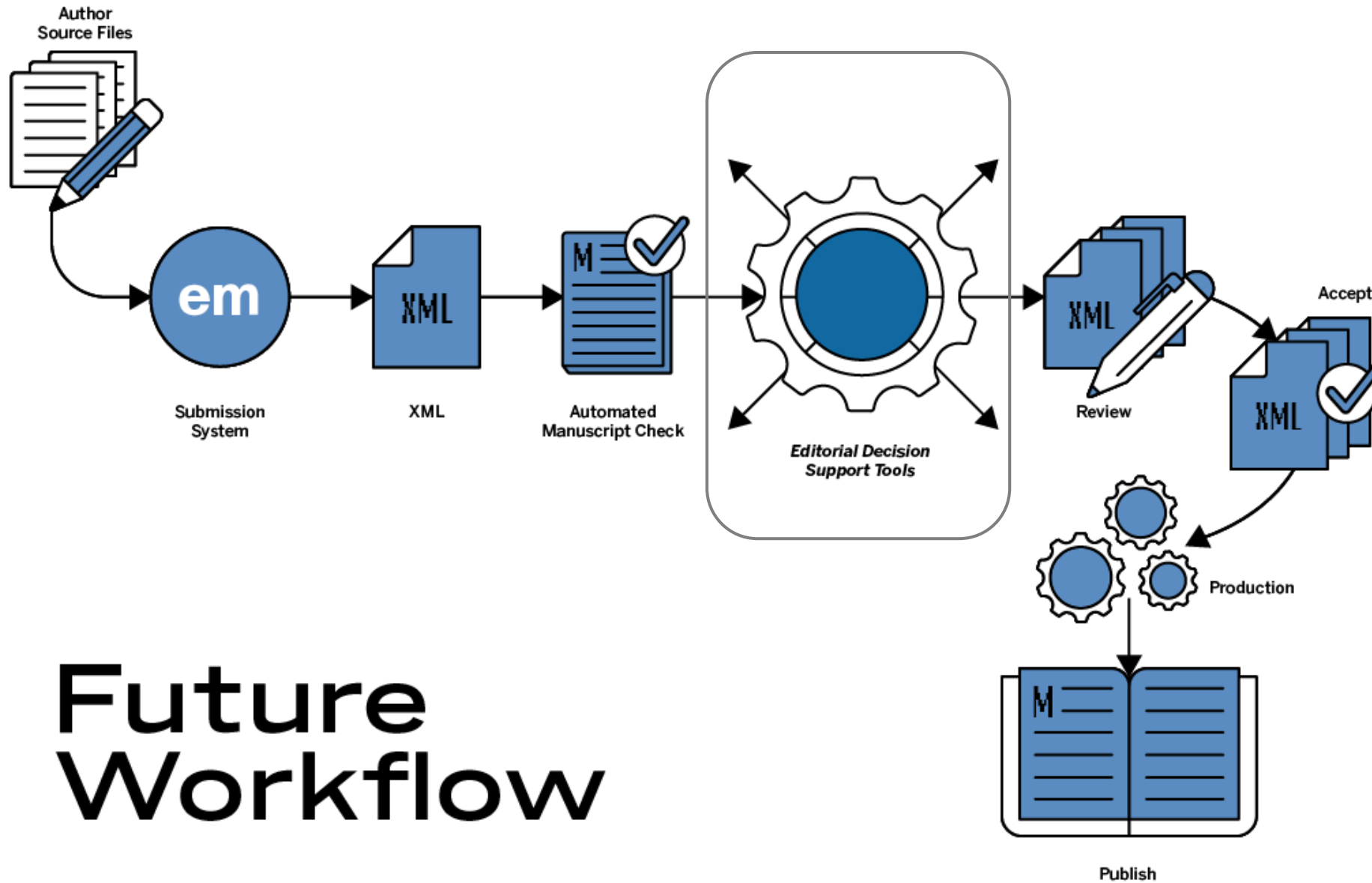
Future Workflow



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



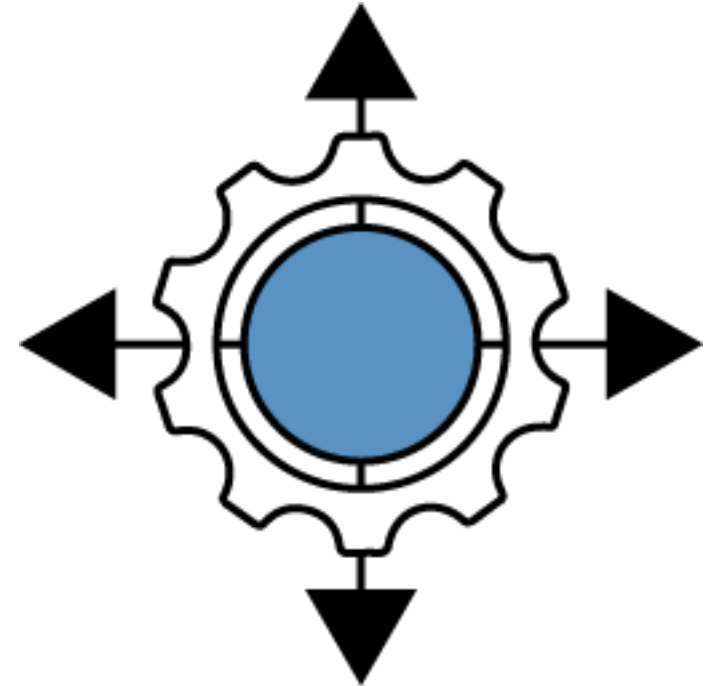


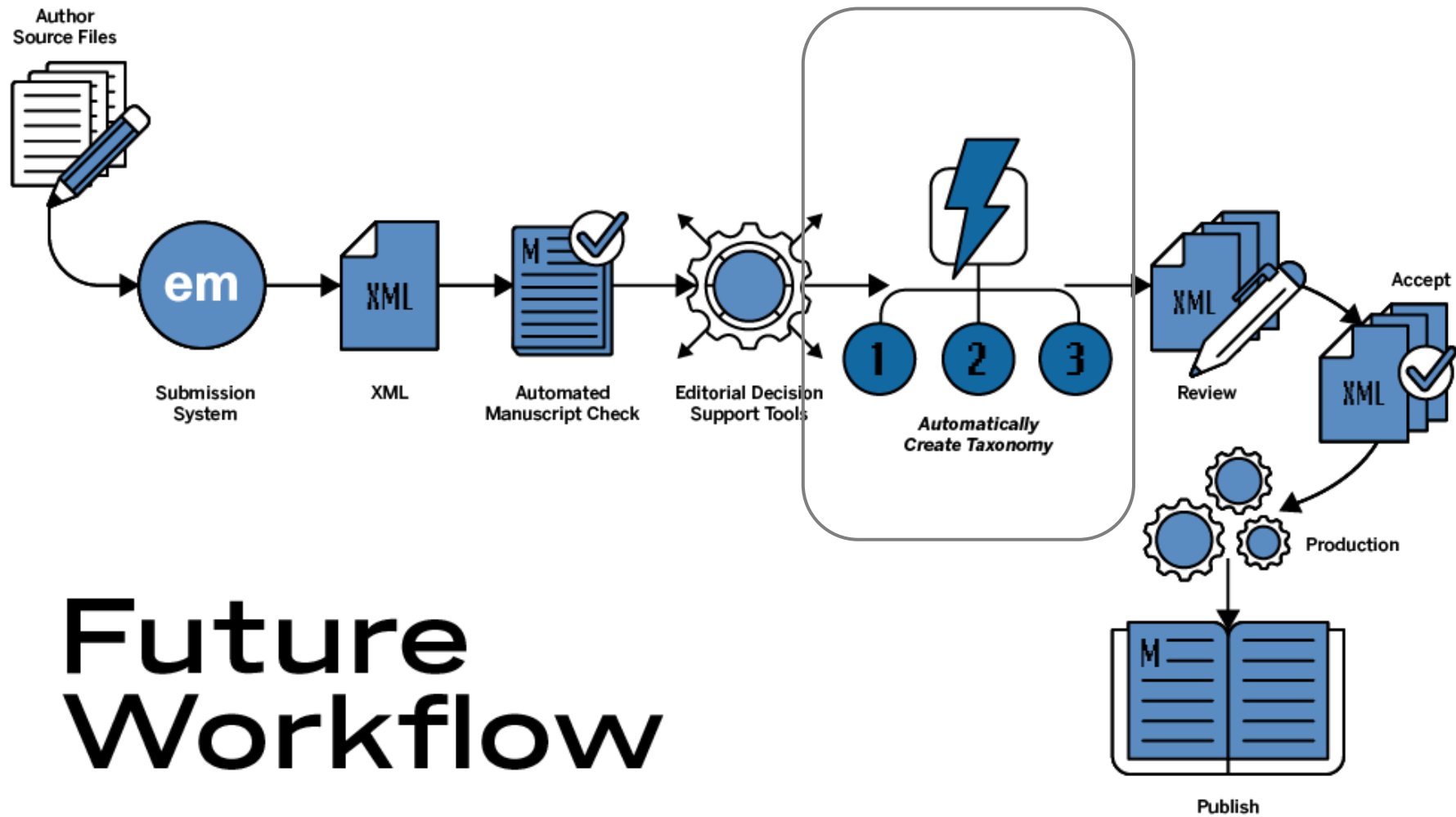
Future Workflow



Editorial Decision Support Tools

- Predictive bibliometrics
- Statistical review
- Interrogate Methods section and reproducibility



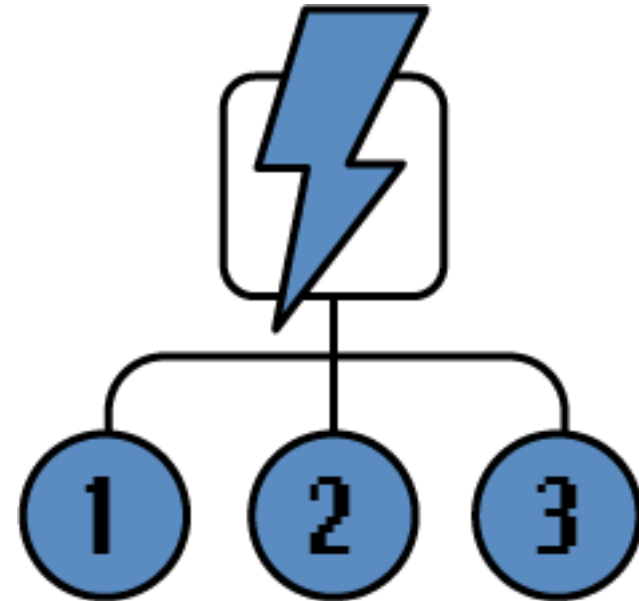


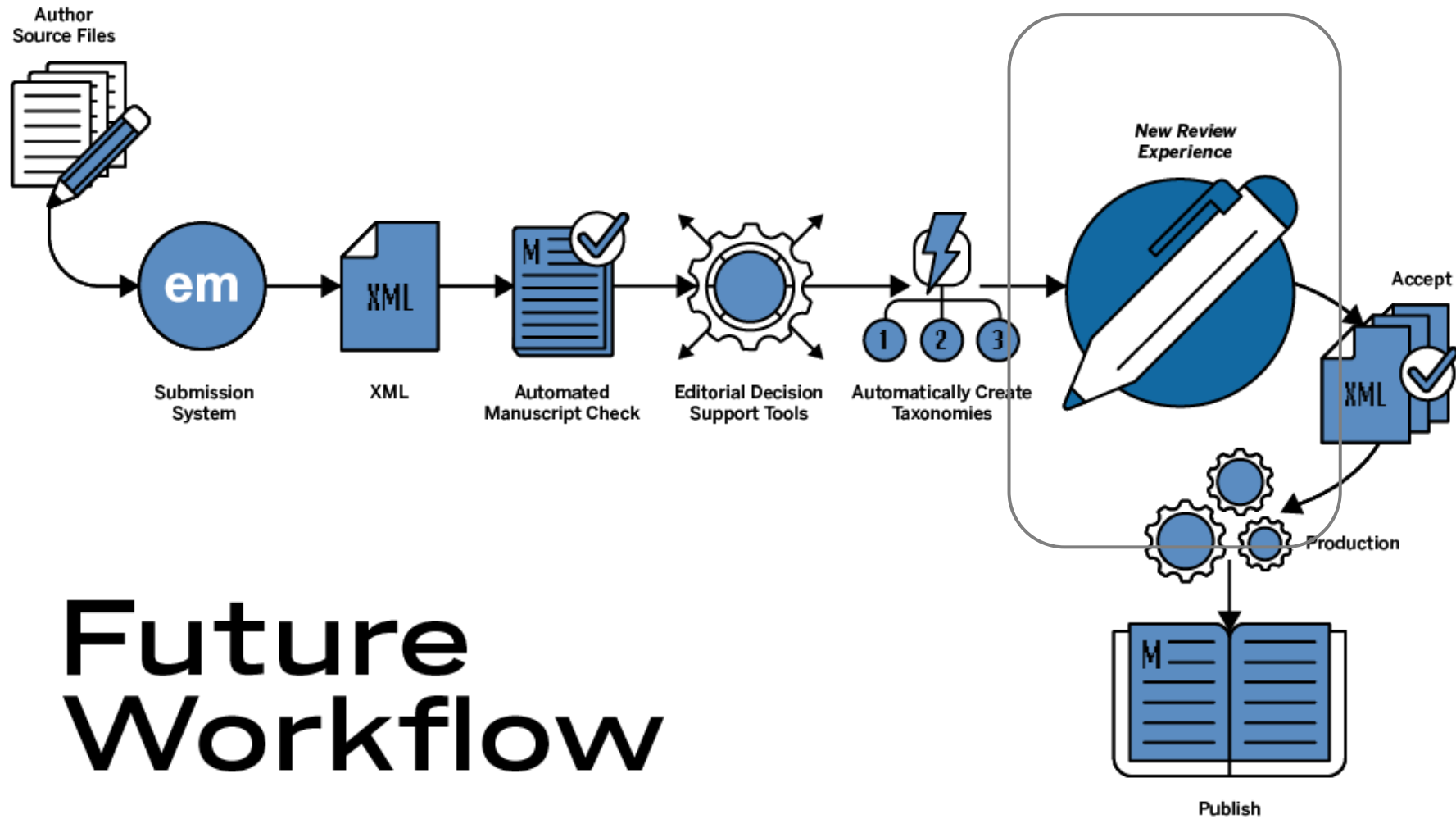
Future Workflow



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





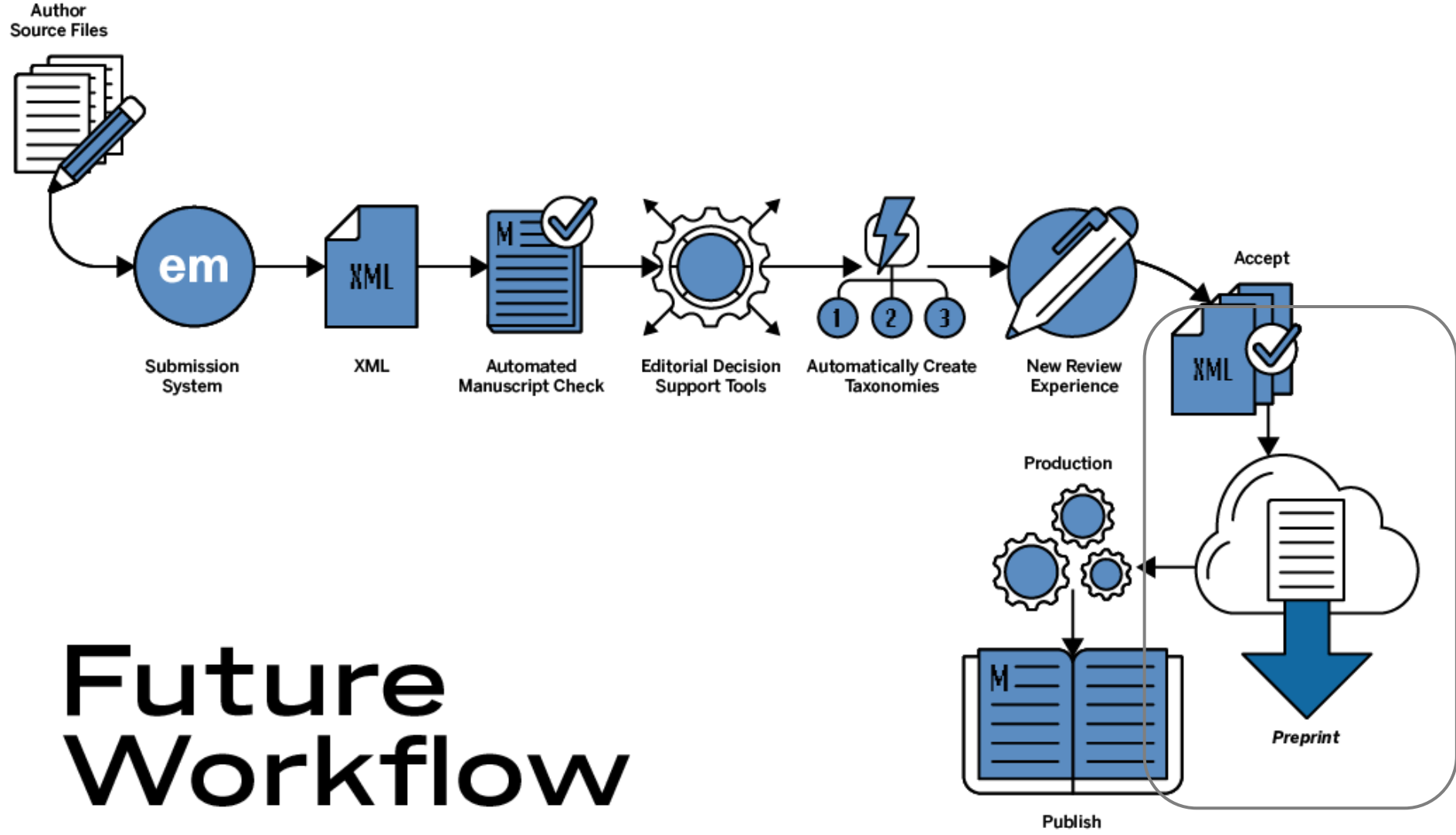
Future Workflow



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





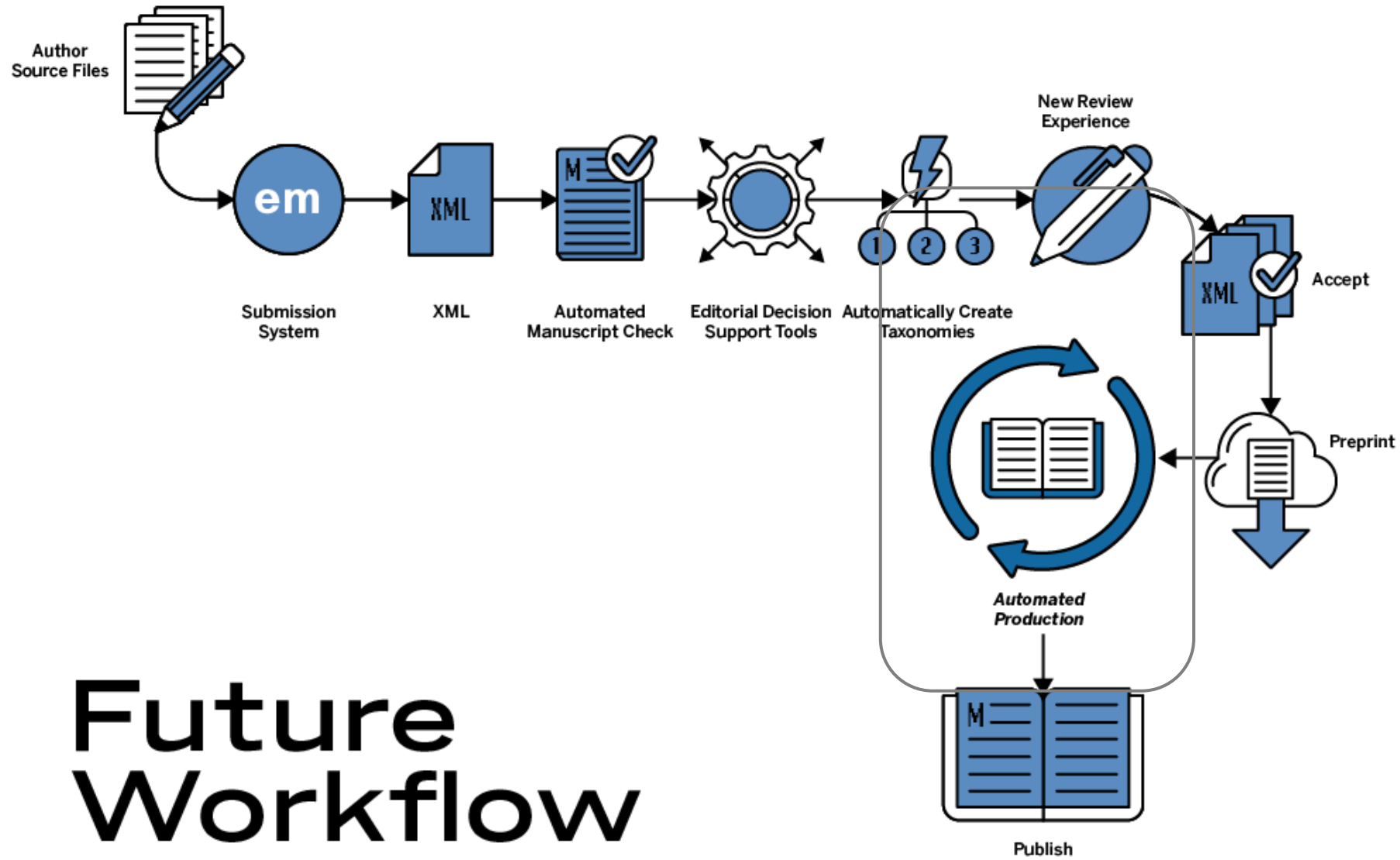
Future Workflow



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



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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





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