New Journal Models

SUMMARY: The traditional model of academic publishing is facing disintermediation by new, technology-enabled forms of scholarly communication. Open access journals, preprint archives, and research data aggregators make it increasingly easy for researchers to bypass traditional publishing. Both traditional and non-traditional journals need to develop sustainable business models and rethink how to maintain editorial quality standards in a changing publishing environment.

Forecasts

- Journals provide multiple functions: selection, promotion, reputation, and communication. A growing number of platforms and mechanisms will be available online to replace and disaggregate these functions.
- "Digital native" millennials are likely to push journals to reduce or shift their access costs, having been raised on the internet-induced idea that information should be free.
- Scientific fields may grow more divided, with conflicting camps of scientists gravitating to different platforms, giving new form to rivalries among journals.
- Just as digital technologies shifted music sales from albums to singles, so could emerging technologies and services (e.g., blockchain, Patreon) unbundle journals and make it easy and profitable for researchers to offer articles and papers without the imprimatur of established publishers.

Key Uncertainties

Sustainable business models for journals

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Impact of open access on research quality

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Reforms in peer review process and new replication standards

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Potential for university cutbacks in journal subscriptions as higher-education structures and economics evolve

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Influence of emerging-market science programs

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Public perceptions of scientists and experts

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Development of new web content formats

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Supporting Trends

- **Open access journals and documents growing.** The volume of open access journals and documents is growing steadily.
- **Growing expectations for open science.** Government agencies and other funders increasingly require that research and publications data resulting from grants they supply be made publicly available.
- **Reimagination of scholarly communication.** A variety of current and proposed practices could restructure the entire scholarly communication process.
- **Growth of scholarly data and software publishing.** Raw datasets, research software, and data visualizations can now be published online.
- **Findings of irreproducible science sparking reforms.** A number of recent published studies suggest that a significant proportion of published science may not be reproducible; these results are sparking a variety of reforms.
- **Growth of alternative metrics for research.** Alternative measures of research impact go beyond counting citations to look at downloads, social media activity, and other indicators.

Related Drivers of Change

- Higher Education 3.0
- Who Owns the Data?
- Socializing Reshaped
- A Shifting Environment for Content

Notable Data Points

GROWTH IN OPEN ACCESS JOURNALS

The Directory of Open-Access Journals list of **open access journals included 12,938 journals** in April 2019.

Source: Directory of Open Access Journals

EU PUSHES FOR OPEN ACCESS

In 2018, leading European research institutes and EU governmental science agencies agreed to **Plan S, requiring all grantees to publish results of funded studies in open access journals starting in 2020.**

Source: Ashley Yeager, "Open-Access Plan in Europe Bans Publishing in Paywalled Journals," The Scientist, Sept, 4, 2018

CALIFORNIA NIXES SUBSCRIPTIONS

In February 2019, the University of California system decided not to renew its license for access to Elsevier's academic journals, **ditching a $50 million contract.**

Sources: Chronicle of Higher Education

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Strategic Insights

- The new forms of journals are moving beyond recreating paper on a screen: gamification, multimedia, apps, and interactivity that allows users to learn and play with data are all emerging as alternatives. Associations have an opportunity to be leaders in the development of alternatives to traditional publishing.
- Associations with a lucrative income from journal publishing need to seriously address the potential for declining revenues from publishing in the future. Diversification of income sources may become increasingly necessary.
- Researchers will face additional challenges in keeping up with developments in their field, as publication options multiply. Associations could play an increasingly important role in content curation.
- Alternative media platforms can elevate and promote new voices within an association community. However, this increasingly includes quasi-research, such as white papers and content marketing briefs. Growing acceptance of "good enough" information could cause associations to "lose control" of the conversation to alternative authoritative sources.
- Associations could play a growing role as the central archive for research datasets and software tools for their community.
- Associations could lend their weight to efforts that increase the transparency and quality of scientific research, helping to ensure that innovation does not lead to lower standards.

Timing

- **Stage:** Growth, though new innovations are at the emergence stage
- **Speed:** Medium

Potential Alternative Futures

- **Public funding means open access:** Grant-makers boost requirements to make publicly funded research available to the public free of charge.
- **Google Scholar:** Google or other IT innovators create online tools that make open platforms competitive with more prestigious journals.
- **Science reformed:** Initiatives to improve the quality and significance of scientific publishing are successful, and elevate the reputations of more traditional publishing outlets.

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Take Action

- **Determine if your journal is a member benefit or a resource for your field.** Other strategy and distribution decisions become easier once you clarify your purpose. If members typically access journals through their institutional libraries, they may not value member pricing access. If the journal is a resource for the field, it might pursue different priorities than your association, but could be a probe and attractor for new members in related disciplines. Deciding what to offer free or for a fee becomes clearer with a stated purpose.
- **Wake up your board to these risks to journal publishing.** Revenue and prestige may slowly erode, providing you with enough time to innovate and build toward other high-value ways to curate content, repurpose knowledge into learning, and offer a suite of services based on research and knowledge exchange.
- **Foremost, strive for quality.** Your association cannot afford to lose its authoritative voice. With more people willing to reject expertise, journals have to be vigilant about the significance and reproducibility of featured research. This extends to vetting the accuracy and impartiality of industry-funded research. Another way to advance quality research is to embrace publishing negative results and helping others learn from failures.
- **Find mutually beneficial ways to collect and host data.** Researchers want access to shared data, but the disincentives to sharing are real. Foster a dialogue to find a way forward that protects researchers' data yet advances collaboration within the field.

Keyword Search

To continue researching this change driver, use these search terms:
open access, open access journal, open source science, open source publishing, preprint archive, open access repositories, open science, Unpaywall, Sci-Hub, open access button, Plan S

Who Will Be Affected

Health and medical, scientific, engineering, technical, research-oriented, and some professional associations rely on journals as a primary source of revenue and prestige. They face extensive competition from digital and open-access journals and other research platforms. Many grapple with declining submissions and impact factors as researchers vie for highly regarded journals.

About ASAE ForesightWorks

ASAE ForesightWorks is a deliberate, evidence-based research program and emerging line of products to provide association professionals with a continual stream of intelligence about the changes facing the association industry, including:

- regularly updated action briefs;
- tools for applying insights from the research in your association;
- guidance in performing environmental scans; and
- opportunities to engage with peers around the research.

Ultimately, the program's mission is to empower association leaders to create a culture of foresight.

Check **asaecenter.org/ForesightWorks** and follow **@ASAEfdn** on Twitter for updates on new findings and events.

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