Digital Transformation of Academic Publishing: A Call for the Decentralization and Democratization of Academic Journals

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EDITORIAL

Digital Transformation of Academic Publishing: A Call for the Decentralization and Democratization of Academic Journals

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Abstract

This opinion paper aims, following a brief overview of the state of affairs of the academic publishing ecosystem, to shed light on a market failure that stems from commercial publishers harnessing that ecosystem for exorbitant profits at the expense of the scientific enterprise and society at large. The paper examines how emerging technologies can help the scientific community grapple with this predicament and reestablish an institutional logic that favors scholarship and world benefit over the economic interests of publishers. Building on Web3 technologies, the paper suggests a two-pronged strategy that relies primarily on blockchain and AI technologies to help restore a fair and equitable power balance and improve the publishing experience. This proposed course of action presents an opportunity to tackle the grand challenge faced by the academic publishing ecosystem while simultaneously asserting the IS community's proclaimed role as stewards of the digital revolution. It is time for us to harness digital technology to transform our journals from monolithic monarchies to agile democracies.

Keywords: Academic Publishing, Academic Journals, Decentralized Journals, DAOs, Blockchain, Artificial Intelligence, Web3

1 Introduction

The production of knowledge has been one of the greatest achievements of the modern human enterprise. Knowledge, especially scientific knowledge, has been produced through the meticulous work of many trained researchers and communicated mainly as published papers in topical disciplinary journals. Since their inception in 1665 with the debut of *Philosophical Transactions of the Royal Society*,[1] scientific journals have served as a means to communicate and record new scientific knowledge that has been vetted through peer review. The emergence of a new disruptive technology often triggers calls to examine the potential of such technology for digital transformation, or at

least its impact on essential matters. The case of artificial intelligence (AI) is no exception. With its state-of-the-art ability to automate skilled work, AI has demonstrated remarkable potential in content creation, revision, and assessment based on various inputs and criteria. Naturally, this situation raises questions about how AI may affect knowledge generation and, more specifically, how it may affect the production of papers and the journals that host them.

As a groundbreaking technology that can identify patterns and predict outcomes in massive unstructured data (Iansiti & Lakhani, 2020), AI has the potential to transform the deep structure of the scientific enterprise. The unsettling suggestion of an inevitable forthcoming change driven by AI has sparked lively debates about

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[1] https://royalsocietypublishing.org/rstl/about

the potential benefits of the technology, the associated risks and negative repercussions in the overall context of knowledge generation, and specific to the present context, the writing of scientific papers (e.g., Ågerfalk et al., 2022; von Krogh et al., 2023). For example, there has been much discussion on how AI can assist and complement researchers in exploring vast amounts of data, leading to new discoveries and breakthroughs (Loebbecke et al., 2020); how AI can help with writing and communicating these findings (Dwivedi et al., 2023); and even how AI can automate or supplement the peer review process (Yuan et al., 2022). In contrast, there has also been much discussion on how AI may mislead researchers by providing them with misinformation and how AI may be misused to create convincing false content (Ji et al., 2023). Moreover, using AI to generate content raises ethical questions concerning intellectual property ownership, accountability, data rights, and the potential job displacement of human creators.

All of these are important and relevant questions that evoke a feeling of déjà vu among those who remember similar questions and discussions in relation to the rise of the internet in the 1990s (e.g., Kling & Callahan, 2003; Van Alstyne & Brynjolfsson, 1996). Did the internet have a significant impact on the scientific enterprise and particularly on journals? Yes, unquestionably. Did scholars realize the envisioned internet-related benefits to journals, and are scholars better off today? Certainly, but not as much as anticipated. While the internet has made it easier to access and share scholarly articles, many challenges still need to be addressed (Borgman, 2010). Overall, the economically unjustified exponential growth of the periodical subscription price (Bosch et al., 2019; Gantz, 2013) suggests that the lion's share of the internet-related added value has gone to the publishers, not the scholars. It is concerning to think that history may repeat itself when it comes to the distribution of value with the increasing use of AI. To address this possibility proactively, we need to take a more radical approach to shift the prevailing value distribution pattern toward a more equitable state.

These days, many of us are concerned with the potential impact of AI on the process and product of the scientific enterprise. Perhaps because we are technology aficionados, we tend to focus on the direct impact of the new technology du jour on topics of immediate concern. Assuming such a deterministic view, we tend to think of the current status quo as a given steady state rather than an outcome of circumstances and the prevailing institutional logic. We also rarely make the underlying assumptions explicit, let alone examine whether and how we can challenge them. Thus, instead of contemplating how AI can be leveraged to benefit scientific journals and speculating on what might be the unintended

consequences thereof, the present paper seeks to leave this beaten track to briefly reflect on the current state of affairs of journals, highlight some predicaments, and suggest how emerging digital technologies—including AI—might be used to alleviate the situation.

2 The State of Affairs of Academic Journals

Journals have a critical role in shaping and sustaining communities of scholars. Journals were established as platforms for researchers to share their original work and communicate scientific knowledge with the respective academic communities as well as external stakeholders such as practitioners, policymakers, and the general public. Through rigorous peer review, they aim to ensure the quality and credibility of published research that contributes to the advancement of the accumulated knowledge base. Journals also contribute to the growth and progress of the various academic disciplines by facilitating academic discussions, fostering collaboration among scholars, and serving as a repository that preserves research findings for future reference.

The institutional logic and role of academic journals in the scientific enterprise have changed little over the centuries. In the very beginning, journals were owned and managed mainly by academic societies and had a functional role as a means to communicate academic news and share research findings, a normative role as an agent of knowledge certification and standards setting, and a social role as an anchor for academic societies and communities of knowledge. Two seemingly unrelated developments that began in the 1960s profoundly affected the nature of journals and the power balance between their three main stakeholders—publishers, research institutions, and scholars. These developments are (1) the establishment of citation indexing and bibliometric databases (Giles et al., 1998) and (2) the relentless efforts of commercial publishers to acquire journals from academic societies (McGuigan & Russell, 2008).

The use of journal publications to measure academic performance gained prominence due to the establishment of citation indexing and bibliometric databases like the Science Citation Index (SCI), which provide standardized quantitative metrics for academic performance evaluation. Ultimately, the metrics derived from the citation indexing and bibliometric databases have become central criteria in tenure and promotion assessment, merit pay determination, performance-based funding for universities, and the overall ranking of scholars, research units, and universities.

At that point, despite the debates on the inherent limitations and negative unintended consequences of journal publication counts and bibliometric scores, they became standardized markers for academic

performance evaluation. Subsequently, both scholars and their host institutions started treating citations and publications, especially in highly ranked journals, not merely as indicators of scholarship but as the ultimate goal of scholarly work. As a result, qualitative holistic assessments of knowledge products and their impact have become nearly insignificant for a scholar's career and reputation unless they are reflected in and supported by bibliometric measures.

This predicament puts scholars in a vulnerable position because they have no bargaining power and are highly dependent on journal publications for their professional survival and promotion, let alone merit pay. The power imbalance between scholars and journals is further exacerbated by low acceptance rates, slow review turnaround times, and opaque and inconsistent review criteria for paper submissions. These issues often lead to increased stress and burnout (Lackritz, 2004) and can result in pressures to violate academic integrity principles (e.g., the infamous cases of Stanford University president Marc Tessier-Lavigne [2] and Harvard Business School professor Francesca Gino,[3] who allegedly falsified research results).

The use of journal publications as a measure of academic performance also puts universities in a vulnerable position, as they likewise lack bargaining power and are highly dependent on journals to provide the necessary assessment metrics to manage the academic workforce and justify the research funding they receive from public and private agencies. Subsequently, universities are torn between meeting the increased demand for specialized journals to support research and managing financial constraints due to rising subscription costs and open-access publishing fees against the backdrop of frequent budget cuts.

In general, publishers assume a mediating role in which they collect articles produced by scholars, curate and package the articles in journals, and disseminate them back to the academic communities of interest via university libraries that purchase and provide access to the journals. The primary readers of a journal are the very same group of scholars that produced the journal content. After scholars consume and use journal content to further their research, new articles are produced, and the cycle continues. It is customary that publishers get the two most important inputs to the production of a journal—the articles and editorial review services—virtually free of charge.

This model worked well when journals were managed by not-for-profit academic societies that charged nominal fees for their services. However, the efforts of commercial publishers to acquire journals from academic societies have shifted the delicate balance between the primary stakeholders of the publishing ecosystem. The inevitable market consolidation of journal portfolios has resulted in a highly concentrated industry dominated by three large publishers—Elsevier, Springer, and Wiley—which together account for more than 50% of all journal articles published (Kim & Park, 2020). As a result of this market concentration, although the large publishers provide little added value and the production and distribution costs have decreased, the cost for academic journals has persistently and sharply increased above the inflation rate over the past 30 years.[4] The high profit margins and the ability of commercial publishers to continuously raise prices can be explained by the bargaining power exerted by publishers (McGuigan & Russell, 2008) that operate like typical profit-driven platform owners. The adopted business model that was dubbed by Robert Maxwell "a perpetual financing machine"[5] relies on capturing unpaid-for resources and reselling them to a captive market at hefty prices.

The case of commercial publishers taking over the centuries-old business model of academic journals and harnessing it for exorbitant profits, with little concern for the scientific enterprise that is dependent on it and the associated cost to society, seems like a Gordian knot that academic societies, universities, and policymakers are not able to cut. The institutional failure to address this market deficiency has evoked much debate and grassroots action from the open-access movement to blunt defiance of the copyright system,[6] as well as painful walkouts of entire editorial boards that have decided to abandon abusive commercial publishers and start fresh (e.g., see the cases of the journals *Neuroimage* [7] and *Design Studies* [8]). To address the present situation of the publishing ecosystem, we need to examine how emerging technologies may help the scientific community grapple with its predicaments and reestablish an institutional logic that favors scholarship and world benefit over the economic interests of publishers.

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[2] https://www.theguardian.com/us-news/2023/jul/19/stanford-president-resign-research-fraud

[3] https://www.theguardian.com/education/2023/jun/25/harvard-professor-data-fraud

[4] https://library.missouri.edu/news/lottes-health-sciences-library/scholarly-publishing-and-the-health-sciences-library

[5] https://www.theguardian.com/science/2017/jun/27/profitable-business-scientific-publishing-bad-for-science

[6] https://www.theguardian.com/commentisfree/2018/sep/13/scientific-publishing-rip-off-taxpayers-fund-research

[7] https://www.theguardian.com/science/2023/may/07/too-greedy-mass-walkout-at-global-science-journal-over-unethical-fees

[8] https://www.timeshighereducation.com/news/elsevier-journal-board-follows-through-mass-resignation-threat

3 Back to the Future

As we reflect on the current state of affairs of academic journals and the institutional logic shift over the last half-century, it becomes apparent that bringing about a structural change would entail an examination not only of the operational issues related to publishing mechanics but also of the entire publishing ecosystem. This would include scrutinizing the work practices and organizational logic (Bailey et al., 2022) while paying careful attention to the raison d'être of science as a human endeavor. Restoring a fair and equitable power balance between the primary stakeholders of academic publishing appears to be the most pressing step that must be taken to tackle the underlying predicaments and move forward.

Although commercial publishers have statutory power over the current journals and control the support infrastructure, scholars control the content production and the editorial process. The generative capability (Avital & Te'eni, 2009) of scholars to create the core resources in the publishing ecosystem provides them with the means to drive change and, if needed, to develop alternative journals and platforms that underscore nurturing scholarship and curtail economic considerations to play a minor role.

While curating and publishing digital content online has become a widely accepted practice, establishing the required organizational infrastructure to enable equitable scientific publishing through collaborative efforts and the coordinated action of scholars is a challenging and complex undertaking. Whereas most commercial publishers are unlikely to willingly relinquish their cash cows, most academic societies today may not be well-suited to reclaim and resume the role of publishers. In light of recent advancements in digital technology, it is inevitable that the way forward to restoring a fair and equitable power balance and improving the publishing experience should involve leveraging these technologies. In the underlying context, we should particularly consider both the technical and organizational aspects of change and the interactions between them (Barley & Orlikowski, 2023; Orlikowski & Barley, 2001).

Since Rick Watson's proposal at ICIS 2004 to create a market for all papers (Gray et al., 2006), it has been apparent that something needs to change in the way we organize the publishing ecosystem. Although this was an intriguing idea that relied on the emerging platform economy at the time, it did not gain broad support because it stopped short of accounting for the organizational and social ramifications of such a change (Avital et al., 2015). Almost two decades later, the development and steady materialization of Web3 technologies are providing the foundation for addressing the grand challenges we face. Web3 [9] refers to the transition of the internet from a centralized to a decentralized, secured, and user-centric

architecture, driven by blockchain, artificial intelligence, edge computing, and other interrelated technologies. In the context of the academic publishing ecosystem, building on Web3, we should consider a two-pronged strategy that builds primarily on blockchain and AI technologies. Both technologies can help restore a fair and equitable power balance and improve the overall publishing experience, as briefly explored below.

In the last decade, and especially since the emergence of blockchain technology, the notions of decentralized and autonomous organizational formations have attracted increasing attention (Vergne, 2020). Specifically, blockchain technology has been celebrated as an enabler of collective organization governance and a potential shift from the hierarchical organization governed from a position of power (Wang et al., 2022). Reorganizing journals as decentralized platforms is certainly a promising way to shift the current power balance. Transforming the governance and modus operandi of academic journals by building on the principles of decentralized autonomous organizations (Hassan & De Filippi, 2021) and token-driven organizations (Schirrmacher et al., 2021) is likely to generate value in several ways beyond mitigating the prevailing power imbalance between scholars, universities, and publishers. For example, it is likely to nurture a "participation architecture" that embraces newcomers and integrates them into work practices (Massa & O'Mahony, 2021). It is also likely to facilitate collective ownership, the equitable distribution of opportunities, and merit-based value sharing through smart contracts (Ellinger et al., 2023). The inherent token economy infrastructure is likely to revitalize archaic peer review ecosystems through effective market-driven peer review (Avital, 2018). Moreover, making scholarship and knowledge dissemination the journals' prime objective while decreasing the focus on economic growth is likely to lighten the financial burden of university libraries and the public resources that fund them.

Overall, decentralized platforms can improve the scholarly publishing landscape and address the existing challenges and power imbalances within the industry. Decentralization can promote equity, inclusivity, and the democratization of knowledge production; reduce publisher dominance; promote academic freedom and independence; and nurture collaboration and networking. In short, decentralizing academic journals is a crucial step toward creating a more equitable, inclusive, and diverse scholarly publishing ecosystem. All together, decentralization can lead to a more sustainable and accessible environment for the dissemination of knowledge, benefiting researchers, institutions, and society worldwide. In a nutshell, as the adage goes, the decentralized future is not just about

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[9] https://ethereum.org/en/web3/

creating new applications, it's about rethinking how we organize society.[10]

Decentralized organizations are not run by managers (Hamel, 2011). Consequently, the decision-making process in a decentralized journal would be facilitated by tokens. In this context, tokens are small scripts, deployed on a blockchain backbone, that convey voting power similar to shares in legacy organizations. Decisions in a decentralized journal would revolve around proposals for policy amendments, operational aspects of the journal, and the general management of the journal. Proposals would be presented, discussed, and brought to a binary majority vote, after which successful proposals would be directly implemented. Unlike in journals today, the decision-making processes in decentralized journals would be open to all token holders, transparent to everyone, and conducted in public online forums. This is a core tenet of a decentralized organization that secures fair and equitable distribution of value. Moreover, design principles from holacratic and polycentric organizations could be adopted to avoid complex, lengthy, and labor-intensive decision-making processes that could fall prey to voter apathy or personal interests (Jensen et al., 2023).

AI can play a key role in enhancing such token-driven decision-making in decentralized journals. Specifically, AI has the potential to revolutionize decision-making by automating and streamlining the process. Machine learning algorithms could analyze patterns and trends to provide insights. By leveraging such techniques, AI could help identify the most relevant proposals, predict their potential impact, and prioritize them for consideration by token holders, thus significantly improving the efficiency and transparency of a journal's decision-making mechanisms.

Moreover, without management structure to support the equitable distribution of resources, the alternative token-driven allocation mechanisms could benefit from AI employed to manage and optimize resource allocation through informed decisions on how best to allocate the available resources based on predetermined criteria. From a technical standpoint, the integration of AI into smart contracts enables them to facilitate more complex decision-making processes that require data analysis, predictive capabilities, or pattern recognition.

Furthermore, AI-powered smart contracts can automate intricate workflows and processes that involve multiple parties and numerous conditional actions. By utilizing AI's capacity to process and examine large amounts of data, smart contracts could manage these complex processes more effectively, thereby decreasing the need for human intervention, reducing errors, and minimizing potential disputes[11].

Overall, AI could play a pivotal role in supporting the goals of decentralizing academic journals and promoting equity, inclusivity, and collective decision-making by contributing to the realization of a more decentralized and user-centric blockchain-based publishing ecosystem. For example, AI algorithms could help identify potential biases in the editorial board selection process, enabling them to recommend and ensure diverse representation from various backgrounds and regions. Furthermore, AI-powered tools could aid in streamlining and improving the peer review process. These tools could assist reviewers in identifying potential issues, such as plagiarism, data quality concerns, or incomplete literature reviews, leading to more robust and fair evaluations. In short, incorporating AI into the academic publishing ecosystem could amplify efforts to decentralize journals and create a more equitable, inclusive, and innovative landscape. By automating certain tasks and providing valuable insights, AI would empower researchers and publishers to make informed decisions and foster a more accessible and collaborative environment for scholarly communication.

4 Flash Forward to the New Everyday

Let's use a metalogue (Bateson, 1972) to animate and briefly inquire into (Zandee, 2013) decentralized journals. Suppose that a PhD student and a senior scholar, Dann and Dana, have just revised a paper they presented recently at ICIS 2034, and they are ready to submit an extended version for publication consideration in the highly acclaimed journal of the Digital Technology Research Collective (jDTRC). The journal was founded as a spin-off of the Association for Information Systems in response to members who called for the decentralization and democratization of the association's journals in the early days of Web3.

The journal is organized as a member owned and managed collective that aims to facilitate the publishing of high-quality papers in the field of information systems. On the surface, it bears a resemblance to legacy journals, as it solicits contributions and publishes high-quality academic papers that have successfully undergone stringent peer review. However, it operates quite differently from the hierarchically governed legacy journals that conduct their work behind a veil of confidentiality. In contrast, jDTRC is managed through technology-enabled transparent collective decision-making that requires members' involvement and participation.

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[10] Attributed to Vitalik Buterin, co-founder of Ethereum.

[11] https://www.leewayhertz.com/ai-in-web3

Dann is struggling to figure out the process of submitting a journal paper and Dana is helping him to learn the ropes.

Dann: This is my first journal submission, and I'm feeling a bit uncertain about the process. How does the journal work?

Dana: The journal is the flagship of the Digital Technology Research Collective, which is organized as a publishing collective. The members of the collective manage the journal's operation through three interdependent circles. The editorial board circle takes care of the peer review and paper development. And the managing editors' circle takes care of the administrative aspects of publishing, from paper submission processing to the production and dissemination of accepted papers. We will receive updates from them as the paper progresses through the process.

Dann: I thought you said three circles?

Dana: Oh yes, there is also the developers' circle that takes care of the technical infrastructure, including continuous development, maintenance, data integrity, tamper-proofing, and censorship resistance. We will not hear from them directly.

Dann: Are they the digital grease monkeys that ensure all systems run as intended?

Dana: Well, they do much more than keep the engine running. The developers' circle is a mission-critical group with a substantial number of people involved in adopting new technologies and integrating new services into the core systems while collaborating with the relevant open-source communities that are tuned to publishing collectives.

Dann: The division of labor among the circles sounds sensible, but how does it work? Who calls the shots?

Dana: There is no hierarchical management structure. In general, the collective operates like a member owned and managed cooperative in which decisions are made through collaborative, consensus-driven decision-making processes. The work performed in the circles adheres to protocols and routines that have been established through collective decision-making in the general council of the collective.

Dann: Nice. I'd like to join the general council one day after I've defended my PhD thesis.

Dana: You can actually join much sooner. The General Council comprises all the members of the collective, so anyone who contributes to the collective can become a member.

Dann: What counts as a contribution? Do I need to donate money?

Dana: Not at all. Contributions are usually in kind. You just have to get involved in some capacity in the collective and make contributions to the operation of the journal. For example, you can help as a reviewer.

Dann: That sounds too good to be true. Do I really get to take part in the decision-making from the get-go just by doing one review?

Dana: Well, yes, but your voting power will be proportional to the number of tokens you can stake. You must have skin in the game if you want to exert influence on decisions.

Dann: Tokens? What's a token?

Dana: Tokens are small scripts deployed on a blockchain backbone that convey voting power similar to shares in legacy organizations. Building on the principles of tokenomics, or token economics, the collective mints and distributes tokens to create and manage incentive structures and potential value for its members. In our case, the collective issues universal publishing tokens (UPTs).

Dann: Oh, I see. So, how do I get tokens?

Dana: In general, tokens are awarded for contributions to the collective. For example, you can gain tokens in exchange for working in a circle, providing services to the collective, or even providing a one-off review. The tokens represent your vested interest and are used in collective decision-making when voting on proposals in the general council. So, members who make more substantial contributions to the collective and have more skin in the game also have more voting power.

Dann: Hmm, voting power sounds nice, but I wonder if it's worth the effort. Can I do anything else with tokens?

Dana: Yes, the tokens serve multiple purposes. In addition to representing ownership rights, tokens are used as payment for services provided by the collective. They provide access to the journal's platform features and facilitate transactions and exchange. For example, authors spend tokens when submitting a paper for review.

Dann: That sounds good, but what should I do now? I don't have any tokens for our submission.

Dana: No worries, I will cover our submission fee. I work in the editorial board circle and have plenty of UPTs. If I weren't part of the collective, we could purchase UPTs for Bitcoin or digital cash at the going exchange rate.

Dann: Great! I'm excited. Let's do it now. I've already logged into the submission system.

Dana: Perfect. I'm transferring the paper submission fee of 10 UPTs, which covers the administrative processing and review charges.

Dann: What does the review entail? When should we expect an answer?

Dana: It should be soon. The paper first needs to run through iPub, the AI system that helps with plagiarism detection, reference accuracy, relevance check, data analysis verification, logic consistency, and gap assessment scores.

Dann: But we already ran the paper through iPub to ensure that it checks all the boxes prior to submission. Hmm, I guess the managing editors like to follow their own qualification process.

Dana: Indeed. It won't be long before the paper reaches the review team, who will help us take it to the next level. It's a relief that the review team has become mostly focused on developmental advice, helping authors to refine their ideas. I still recall a time when publishing was a brutal, anxiety-filled battle, filled with blood, sweat, and tears, and I don't miss it! I'm grateful for the positive change brought about by the widespread adoption of AI-publishing support systems like iPub, especially the affirmative publishing experiences and the high acceptance rates.

Dann: The anticipation for the decision letter of the review team is nerve-wracking. I hope they will give us the thumbs up. It would have been helpful if iPub had provided us with some insight into the extent of our paper's contribution.

Dana: It's actually coming soon. The journal is in the process of testing an experimental module for creativity and contribution scoring, which is expected to go live soon. Although the new module is still far from perfect, it is being continuously improved, and everyone is confident that it will eventually match the quality of the other modules.

Dann: That's excellent news, but I'm beat. We've just submitted the paper and I think it's time to unwind with a drink!

5 Conclusion

New general-purpose technologies, including AI and blockchain, may drive structural and institutional change in the publishing ecosystem, but they are unlikely to replace people, who will remain the primary stakeholders of the scientific enterprise. Although we may redirect many routine tasks to digital agents, there will be plenty of work left for humans. Furthermore, tighter integration between people and machines to form mutually constitutive and continually enacted sociomaterial assemblages (Suchman, 2007) is probably inevitable. Finally, despite the utopic sentiment that surrounds new technologies with exciting prospects, one does not need to be clairvoyant to know that no technology solves all problems and that new technologies often create new challenges.

Decentralizing the publishing ecosystem is not a panacea for all its maladies, and it is likely to generate new challenges (Foss & Klein, 2022). Nonetheless, it is important to remember that the suggested digital transformation in this case is not driven by purely economic motives (Hamel & Zanini, 2016); rather, it is also a step toward designing a more equitable publishing ecosystem that nurtures and reaffirms human values (Mumford, 2003).

This opinion paper aims to provide a brief overview of the state of affairs in the academic publishing ecosystem and shed light on a market failure that deserves our attention. Against the backdrop of recent advances in blockchain and AI, we have a unique opportunity to take action and address the challenges faced not only by the IS community but also by the scientific community as a whole. The paper explores in broad strokes how a two-pronged strategy that builds primarily on blockchain and AI technologies can help to restore a fair and equitable power balance in the academic publishing ecosystem and improve the publishing process and product. Future research should explore in further detail the technical, organizational, political, and semiotic aspects of alternative designs of journals and the migration plans to realize them.

This proposed course of action presents an opportunity to tackle the grand challenge faced by the academic publishing ecosystem while simultaneously asserting our proclaimed role as stewards of the digital revolution. It is time we eat our own dog food and harness digital technology to transform our journals from monolithic monarchies to agile democracies.

Acknowledgments

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