

Sustainable Open Access Ecosystems:

Balancing Financial Viability and Publishing Integrity

This report examines the transformation of the global research publishing ecosystem under the combined influence of a connected internet world without borders, the open science movement, and growing demands for transparency, accountability, and accessibility in knowledge dissemination. Traditional subscription-based publishing is now being challenged by Open Access (OA) models, which are reshaping the financial and organizational foundations of scholarly research communication.

This study reviews major OA business models, including author-paid and/or subscriber-paid fees for OA, such as those known as Article Processing Charges and Subscribe-to-Open (S2O), as well as entirely fee-free models supported by non-profit organizations for which neither authors nor subscribers pay any fees. These fee-free OA models can be found at some community-driven publishing platforms including institutional repositories, preprint servers, and university presses. This review of OA models evaluates their sustainability, inclusiveness, and capacity to overcome the structural limitations of traditional publishing, including paywalls, barriers and market power concentration.

Fee-based models may accelerate OA expansion but may also deepen inequalities for underfunded researchers and institutions. In contrast, fee-free models for OA with cooperative mechanisms to eliminate financial barriers better align scholarly publishing with the societal value and benefit of shared public knowledge for the common good of all. International initiatives such as Plan S, UNESCO's Open Science Recommendation, and the PORTAL-DOORS Project DREAM Principles with FAIR Metrics for assessing the integrity of the historical record of published literature are also important drivers of this transition.

Special attention is given to Ukraine, where OA can strengthen research visibility, support collaboration, and foster integration with the international community despite wartime constraints. The future sustainability of scholarly publishing depends on hybrid funding models, institutional support, transparent cost structures, and broader adoption of inclusive open publishing practices.

Mariia Naumova¹ mariianaumova@knu.ua,

Ganna Kharlamova¹ ganna.kharlamova@knu.ua,

Olena Liashenko¹ lyashenkoolena@knu.ua,

Carl Taswell² ctaswell@bhavi.us

¹ *Taras Shevchenko National University of Kyiv*

² *Brain Health Alliance Virtual Institute*