

# Tools for Transition



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To start



# To start

- What's on tap for today?
  - Pay-It-Forward Model Calculation Tool: general approach to assess overall feasibility and sustainability
  - Data analysis to support negotiations for transformative OA agreements: targeted analysis with actionable outcomes for UC negotiations
  - Takeaways
- Why should you care?
  - Important step between theory and practice
  - Analysis informs strategy; strategy informs analysis

# Part 1: The Pay-It-Forward Model Calculation Tool



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# Pay-It-Forward study:

- Goal to evaluate the viability and sustainability of a large scale conversion to an APC-funded journal model in North America.
- Two main components:
  - Qualitative: author focus groups and surveys
  - Quantitative: gathering and analyzing data about publication, expenditures, research funding, APCs.
- Final report available at:
  - <https://www.library.ucdavis.edu/icis/uc-pay-it-forward-project/findings-and-other-news-from-the-pay-it-forward-project/>

# Model assumptions

- If authors are asked to pay for publication, they will exhibit price sensitivity when choosing what journal to publish with
- This implies that in an APC-funded universe, journals will need to compete for authors, which helps define publisher pricing behavior.
- Journal prices will therefore settle at a level consistent with the value that the journal provides to the author
- SNIP was determined to be the best quantitative proxy for journal value available

# Creating the model

- Data gathered describing APCs where:
  - The publisher publishes two or more full OA journals
  - The publisher exhibits the pricing behavior that we are trying to observe: positive correlation between APC and SNIP
- Based on the observed pricing and SNIP values for the journals in this data set, predicted the following equation:

$$\mathbf{APC = 1147.68 + 709.4 * SNIP}$$

- Valid for journals within our data set range, SNIP between 0 and 3.207
- Higher SNIP values assigned an APC of \$5000.

# Multi-payer strategy

- Rather than assume that the cost is borne solely by one entity, create structures in which it can be split among various stakeholders:
  - The institution (via the library)
  - The author's granting agency, if applicable
  - The author, via institutional research funds or other discretionary funds available to him or her.
- General notes:
  - The actual structure can be created to incentivize incorporation of grant funding
  - We expect that authors will choose to use grant funds above other funding available to them
  - We can potentially set up library-administered structures to help support authors when they are paying through their own funding pathways

# Model Calculation Tool

- MCT applies the equation and the multi-payer model to real-world data.
- Inputs include:
  - Publication data (including journal, grant info)
  - Financial data (subscription expenditures, grant funding)
  - Multi-payer payment structure (library subsidy, etc.)
- Outputs include:
  - How much funding required and from what source
  - Subject breakdown
  - Comparison to expenditures and grant funding
- On to a live demo...

# Part 2: Data analysis to support negotiations for transformative OA agreements



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# Why is deeper data analysis necessary?

**Transformative agreements represent a new way of doing business with publishers.**

- Previously, the relationship was generally simpler:
  - Library pays for access/services; analysis focused on return on investment
- In transformative agreements, there are more moving parts:
  - Volume of publishing is not known in advance
  - Expenditures are coming from outside of the library
  - Payment structures depend on actors outside of the library
  - Trying to exercise control over a previously unregulated area of interaction

# Why is deeper data analysis necessary?

**Transformative agreements represent a new way of doing business with publishers.**

- Therefore, as a part of preparing for these negotiations:
  - We need to fundamentally understand what this means for our bottom lines, how financial flows are shifting, and what models match with local priorities.
  - We need to be able to garner support for our models from stakeholders within the institution.
  - We need to be on equal footing with the vendors, and we can bet they're doing the same deeper analysis.

# What more do we need to gather?

To fully understand what a transformative agreement could mean, we need to gather additional data about:

## Author Publication Patterns

- Volume of publication
- Distribution across journals
- Distribution across disciplines
- Lead/corresponding author
- OA status of publications
- Grant acknowledgements

## Journal Characteristics

- List-price APC
- Known APC discount arrangements
- Business model (Full OA, Hybrid, Delayed OA, No OA)
- Portion of the journal currently OA

# Tool demos

- Institution Publishing Analysis (Excel):
  - Data set and visualizations of institution-wide publication patterns, sliced in various ways
- OA Status Dashboard (Tableau):
  - Interactive dashboard detailing how much content is available OA
- Offsetting Worksheet (Excel):
  - Targeted analysis for a specific publisher (or group of publishers) examining a potential flip to APC-funded OA

# Part 3: Takeaways



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# Data analysis is...

- **Critically necessary**
  - To understand the environment we're working in and what we're proposing and negotiating for
  - To give us confidence in our approach
  - To convey compelling messages to faculty and other stakeholders
- **Not trivial**
  - CDL has done a lot of work, but there are always unique aspects to consider in replications
  - Differences by institution, discipline, publisher, and geographic region need to be taken into account
  - Flexibility and responsiveness is important as circumstances change
- **Not something you need to do alone!**
  - Excel sheets are shareable and applicable to other data sets
  - UC toolkit has a chapter on data analysis to guide you
  - CDL is happy to help with informal consultation

# Resources

- Pay-It-Forward:
  - **Report:** <https://www.library.ucdavis.edu/icis/uc-pay-it-forward-project/findings-and-other-news-from-the-pay-it-forward-project/>
  - **Model Calculation Tool:** <https://www.library.ucdavis.edu/wp-content/uploads/2018/11/ICIS-UC-Pay-It-Forward-Model-Calculation-Tool.xlsm>
  - **Guide** for creating data sets: <https://www.library.ucdavis.edu/wp-content/uploads/2018/11/ICIS-Guide-to-UC-Pay-It-Forward-Model-Calculation-Tool.docx>
- **UC Toolkit:** <https://osc.universityofcalifornia.edu/open-access-at-uc/publisher-negotiations/negotiating-with-scholarly-journal-publishers-a-toolkit/>
- **Institution Publishing Analysis and Offsetting Worksheet:** Available upon request; to be posted publicly soon.
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