

Connecting the dots with Hum: Unlocking data potential for publishers

Laura Simis* and Dustin Smith
Hum, Charlottesville, VA, USA

Abstract. This paper is based on a presentation by Dustin Smith at the APE 2023 Conference. Publishers struggle to gain a single view of audiences. As a consequence, they extract insights from inconsistent data sources. A customer data platform (CDP) and natural language processing engine help publishers solve these challenges. By integrating data, analyzing content, and using machine learning to understand individuals, publishers can personalize experiences, support key business cases, and tap into data's full potential.

Keywords: First party data, artificial intelligence, data intelligence, machine learning, natural language processing, scholarly publishing, data analytics

1. Publishers sit on an untapped gold mine of data

The scholarly publishing community and the internet at large is in the midst of a shift. The world has moved from print to digital, and now, publishers are adapting from digital to an audience-first focus; this means direct engagement with particular parts of their audience. There are multiple constituencies within a publisher's audience: readers, authors, editors and reviewers. Ultimately, they call for actually being engaged with under those guises; seeking more individualized and personalized experiences unique to them as readers, authors, editors and reviewers.

Publishers have access to vast amounts of data about their different audiences but struggle to gain insights and drive personalized experiences from siloed, inconsistent and mostly anonymous information. This means that valuable behavioral data at the intersection of people/content interactions is often washed away. This data shows how a publisher's audience (readers, authors, editors, reviewers, librarians, members, etc.) are engaging with their content (journals, blogs, books, videos, podcasts, events, etc.) – and it holds extraordinary value.

2. Unified data is valuable data

To unlock the full potential of their data, publishers have to be able to connect the dots across different data sources. Hum has developed a customer data platform (CDP) and Artificial Intelligence (AI) engine called Alchemist to help publishers connect the dots across data sources, which will enable them to gain a single view of each customer, and unlock the potential of unstructured data.

*Corresponding author: Laura Simis, Director of Marketing, Hum, Charlottesville, VA 22902, USA. E-mail: Laura@hum.works.

Many publishers have an audience with a significant number of anonymous readers, and Hum is able to cultivate data about those individual people, despite not knowing exactly who they are at the moment. Hum collects and connects signals from first-party data, including: identity data, people data (demographics), and transactional data to build a “golden profile” for each individual in a publisher’s audience.

Alchemist uses natural language processing to analyze content and apply consistent tags, enabling the creation of structured behavioral data. By integrating with publishers’ digital platforms, Hum combines identity, demographic and transactional data with new behavioral data to build rich customer profiles and an “activity log” of all interactions.

3. Use cases for publishers

There are many publisher use cases served by the ability to build and derive meaning from data assets. This data asset powers a range of publisher use cases, from targeted marketing and content strategy to improving ad targeting, author recruitment and sales support. Publishers can build real-time audience segments based on any data in the CDP to pass to marketing systems and tailor experiences. For example, segments of C-level executives with certain topic interests could be sent to advertising platforms to enable highly tailored ads. Over time, anonymous users can be identified to continue enhancing profiles.

Use cases include:

- Targeted marketing: Tailor marketing to the interests and behavior of the individual visiting a page, as opposed to traditional digital marketing tactics that target individuals based on the content of the page itself. Develop segments based on detailed, complete information and deliver personalized messaging.
- Advancing content strategy: See trends in content topics, uncover opportunities for special issues, and discover the right audiences for those issues.
- Improved ad targeting: Create highly targeted, valuable segments for advertisers, based on complete profiles, and pass segments directly to Google Ad manager.
- Author and reviewer recruitment: Identify high potential authors and reviewers based on institution, behavior and interest. Deliver personalized marketing to convey next steps for manuscript submissions or peer review.
- Open Access sales support: Drive new revenues and defend renewals. Arm your sales team with first-party data on usage, engagement, and content consumption - so you can approach libraries and institutions with insights that drive sales.

4. Conclusion

Overall, Hum gives publishers a launching point for an insight-driven future by making the most of the data they already have. By knowing individuals and understanding content in a deeper way, publishers can keep audiences highly engaged and coming back.