Dimensions

How Dimensions helps to inform academic journal development

An analysis to understand how the research patterns around the United Nations' Sustainable Development Goals can inspire the strategic direction of a journal portfolio

Dimensions is a linked research data platform that can help publishers take a data-driven, analytical approach to understanding the market opportunities for their portfolio.

The linked datasets in Dimensions - publications, grants, clinical trials, patents and policy documents - have extensive filtering options which can be used to glean insights from the data to help you inform the strategic direction, of a publishing portfolio - irrespective of whether you work for a small society publisher or a large international publishing organisation.

In this example we show how Mingxin Zhou, former Head of Publisher Development Analytics at Springer Nature*, used Dimensions Analytics to understand the broad research patterns around the United Nations' Sustainable Development Goals (SDGs) and what they indicate for journal development.

Connecting SDGs to Research Activities

Zhou was looking to answer the business question ***"How can academic journal publishers such as Springer Nature possibly contribute to sustainable development goals (SDGs)?"***

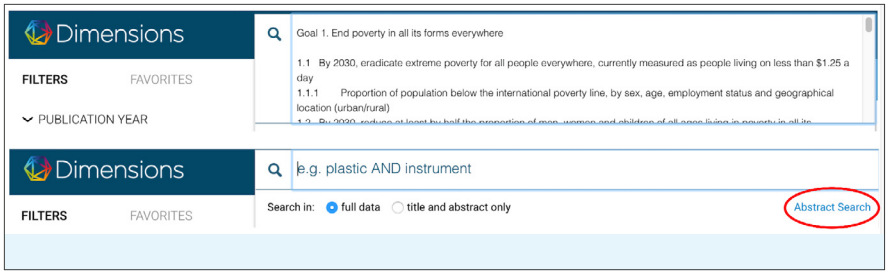
The Sustainable Development Goals are goals set by the United Nations to be reached by 2030. 169 targets have been set, along with 244 indicators to measure those targets. Zhou believes that academic publishers can contribute to these goals by promoting researchers working in relevant areas and helping to improve the general public's understanding of Sustainable Development Goals (SDGs) from a scientific point of view. Zhou sees potential to align the journal content acquisition strategy with the SDGs, especially in concert with open access initiatives.

Benefits of Dimensions for Publishers

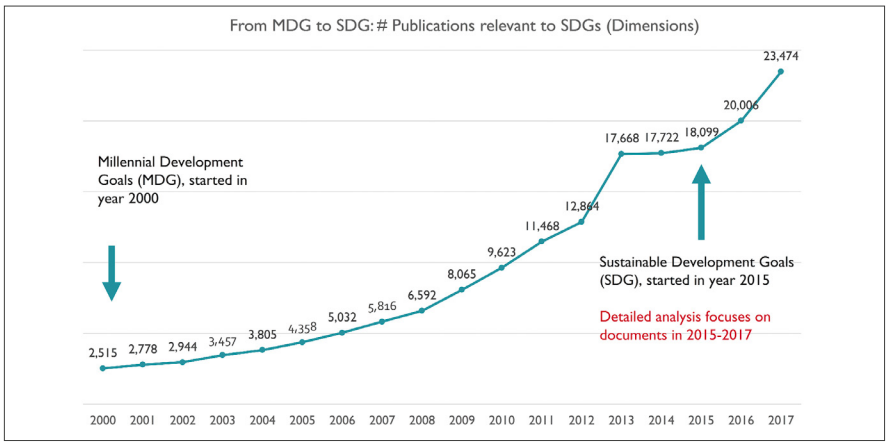
- **Track** the academic and broader impact of your publications and see how they compare with other titles in a specific field.
- **Deliver** more comprehensive reporting for your editorial boards and marketing efforts.
- **Identify** potential reviewers, authors or editors by understanding and evaluating their contribution to a field.
- **Monitor** research from the point of grants being awarded to prepare and develop your portfolio for the future.
- **Inform** special issue and journal development by exploring specific topics in depth to ensure your commissioned content is targeted for maximum effectiveness.

[1]*Mingxin has since moved to a new job role.*

Zhou explored a unique feature of Dimensions; Abstract Search, which allows a user to run a search over a paragraph pasted into the search box of the web application. The natural language processing technology extracts topics from paragraphs and compares them to the whole corpus of publications, grants, patents, and clinical trials. It then returns the most relevant documents. Zhou ran the abstract search for the description and definitions of targets and indicators for each of the 17 goals, from the United Nation Resolution A/71/313.

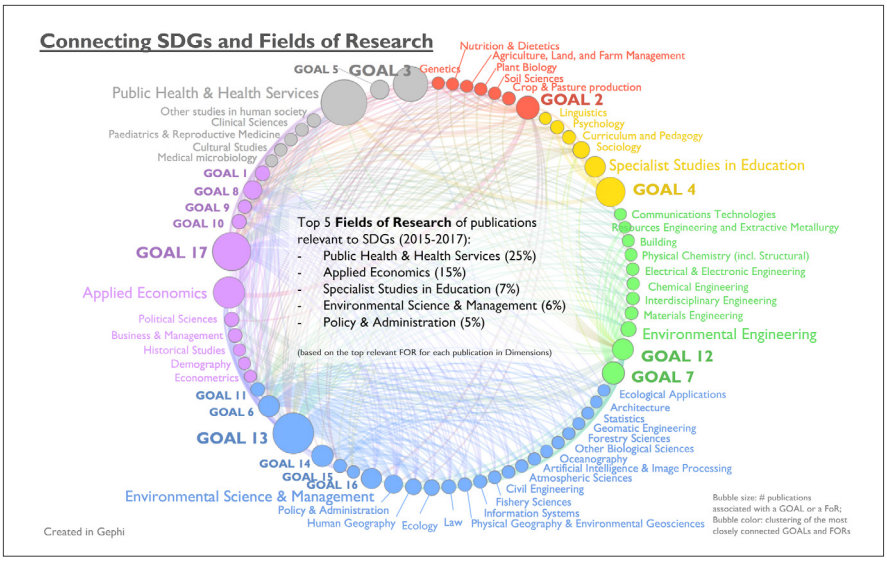


The resulting publications and active grants were then taken as a sample most relevant to SDGs, and used for further analysis.

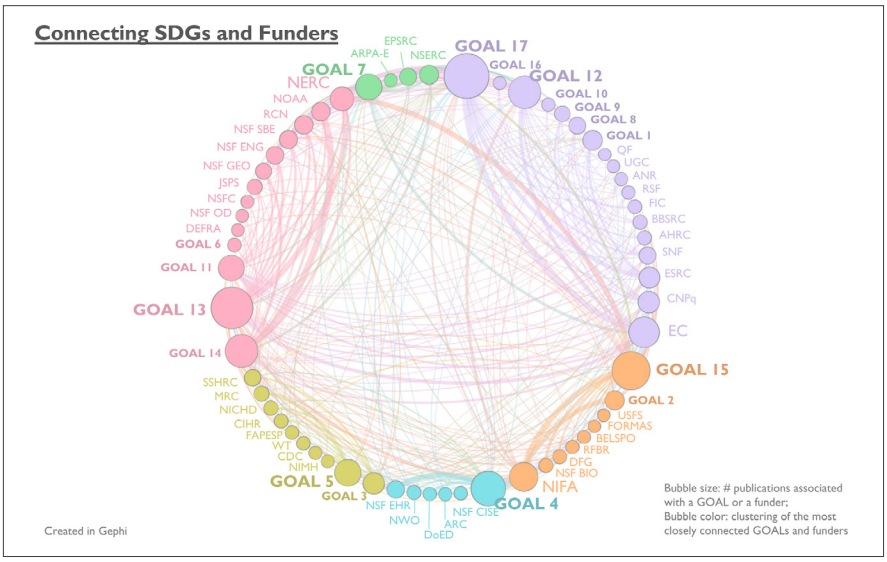


A sharper focus was put on the documents published in the time period 2015-2017.

The article level classification clearly shows that research potentially contributing to SDG areas is highly interdisciplinary, often calling for broad collaboration across both science and social science fields (for example, Public Health and Health Services; Applied Economics; Education; Environmental Science and Management; Policy Administration).



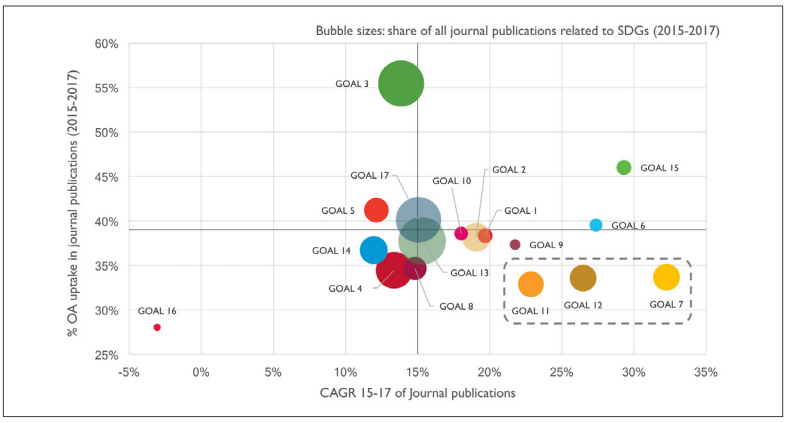
Similarly, Zhou highlighted the key funders actively supporting the relevant research in recent years.



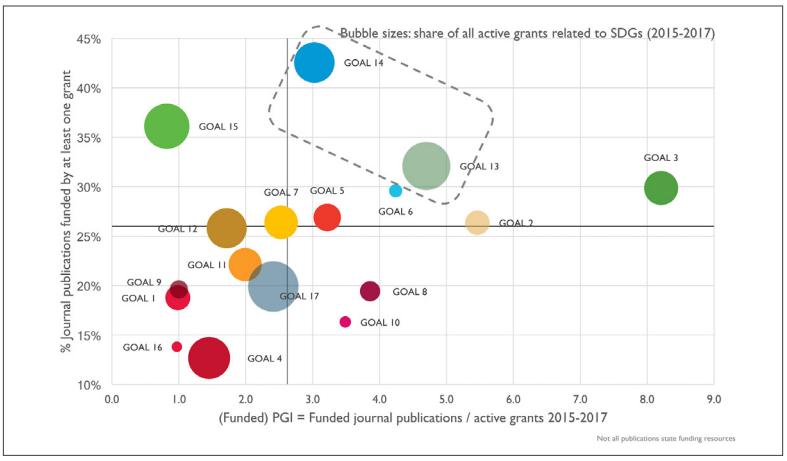
Implications for Journal Development

Zhou found that 32% of the publications connected to the SDG goal areas were available open access, including documents in Gold OA journals. Amongst the 17 goals, she identified 3 that are growing rapidly in research output but have relatively lower uptake of OA.

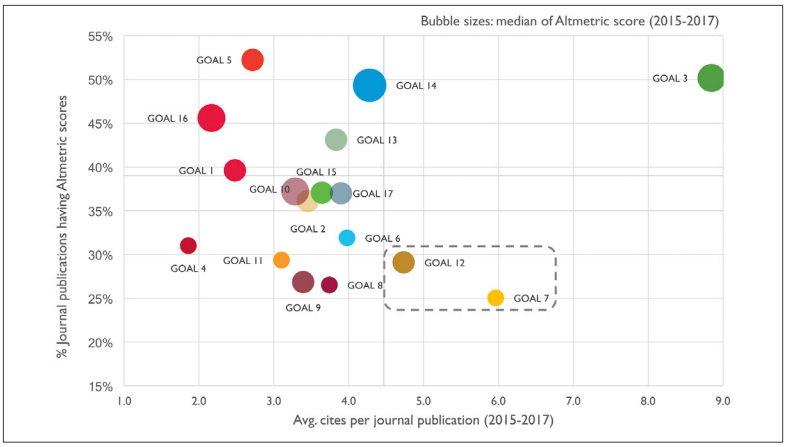
Meanwhile, she found that publications related to goal 7 (Affordable and Clean Energy) and goal 12 (Responsible Consumption and Production) were cited more often than most of other goals, but gained a relatively low social attention (reflected by the proportion of publications that had Altmetric scores).



This implies an opportunity for research in these goal areas to be more open, and disseminated more broadly amongst public audiences.



Zhou also quickly checked the research activities at the input end based on awarded grants. She recommended that goals 13 (Climate Action) and 14 (Life Below Water) should be earmarked for targeted content acquisition in future, as these are goals where both the conversion of grants and the share of funded publications was high.



"A Connected Data Network"

"Dimensions is a connected data network." Mingxin enthuses, ***"The SDG analysis explored just a small part of this innovation. There is a lot of potential for identifying new ways to define or redefine questions, and then to answer them."***