



Automating Subject Collections for Karger Publishers

KARGER

Scholarly publishers have cost-effective systems for the initial publication of their content, but many publishers face challenges when repurposing that content. While some enterprising publishers increasingly identify new opportunities for their content by providing subsets of their collections, it remains very labour-intensive to create subject-based packages from their repository.

Often manual tagging systems and existing taxonomies are unable to provide the quality required for an accurate extraction, or the time to market that is required for the rapidly changing healthcare and pharmaceutical communities. Standard search tools typically involve complex Boolean searches, and this methodology is both cumbersome to implement and difficult to

maintain; it requires expertise in managing large Boolean search expressions, a labour-intensive activity.

UNSILO uses a novel and more flexible approach to managing packages of content. The UNSILO Package Manager provides publishing staff with a solution that offers a unique combination of automation and manual curation. Using the publisher's corpus as the basis for analysis, a set of articles for a subject-based package is automatically identified, and the extraction can then be fine-tuned via a simple interface. In this way, the publisher makes it easy for staff to create and maintain new and innovative packages, that dynamically grow to include newly published articles, without losing control of the process.

Improving the Quality and Productivity of Editors

- **About The Client:** Karger Publishers (<http://www.karger.com/>), based in Basel, is a medical and scientific publishing company founded in 1890 and run by the Karger family. Their publishing programme comprises more than 100 peer-reviewed journals and around 50 new book releases every year, as well as a growing number of open-access journals.
- **The problem:** Karger Publishers wanted to collect all of their science and medical content relating to a single theme, for output to medical practitioners and to researchers in pharmaceutical companies. Karger's customers welcome the time saved by curated collections, but the time to create each collection manually was significant – and editors could not be certain they had extracted all the relevant content.
- **The solution:** Following a workshop session at Karger's Basel headquarters, UNSILO developed an automatic tool for extracting content around a single topic. Karger editors use the tool to create a draft list, and then can fine-tune the automatic selection via an innovative dashboard tool. This tool not only enables the selection of articles to be adjusted, but also enables the publisher to control the degree of automation of the subject extraction - a unique blend of automatic operation and manual control, so that human effort can be focused on where it is required most.

How UNSILO works

UNSILO scans your content using novel text intelligence software

UNSILO extracts the most important phrases

UNSILO analyses their meaning

UNSILO find similar things, events, and ideas, even when they have different names

UNSILO works with or without existing taxonomies

UNSILO needs no manual training. It trains itself on your corpus

UNSILO reduces the need for in-house subject-matter experts or IT specialists

Workflow stages

The package manager workflow comprises two main stages, each of them controlled using simple, intuitive interfaces that require no skilled IT input:

Fine-tune the extraction

Inspect articles (185) ⊙

Approved articles (20) ⊙

Diabetes mellitus and tuberculosis: programmatic management issues
Saliş O, Bedir A, Özdemir T, Okuyucu A, Alacam H in PLoS ONE Journal (2015)
The Diabetes Interactive Atlas is a recently released Web-based collection of maps that allows users to view geographic patterns and examine trends in diabetes and its risk factors over time...
Article mentions these concepts that match concepts in Gold Articles
trifunctional antibody | elispot assay | peritoneal release | epcam gene expression

Improving diabetes medication adherence: successful, scalable interventions
Saliş O, Bedir A, Özdemir T, Okuyucu A, Alacam H in PLoS ONE Journal (2015)
The Diabetes Interactive Atlas is a recently released Web-based collection of maps that allows users to view geographic patterns and examine trends in diabetes and its risk factors over time.

Diabetes Mellitus and Thoracic Aortic Disease: Are People With Diabetes Mellitus Protected From Acute Aortic Dissection?
Nienaber, Christoph A. in Journal of the American Heart Association (2012)
The Diabetes Interactive Atlas is a recently released Web-based collection of maps that allows users to view geographic patterns and examine trends in diabetes and its risk factors over time...
Article mentions these concepts that match concepts in Gold Articles
trifunctional antibody | elispot assay | peritoneal release | epcam gene expression

Tuberculosis and diabetes mellitus - an underappreciated association
Skowroński, Marcin in Archives of Medical Science: AMS (2014)
The Diabetes Interactive Atlas is a recently released Web-based collection of maps that allows users to view geographic patterns and examine trends in diabetes and its risk factors over time.

Using this dashboard, users can control if certain concepts should have a greater priority simply by clicking on that concept. If a concept does not make sense to include, users can block it and articles that contain the blocked concept will no longer be extracted.

Adjust the level of automation

UNSILO PACKAGE MANAGER All packages

Diabetes Edit package settings

Inspect Export

Filters

Automation level
Adjust the level of manual and automation inspection needed for articles that match the concept of this package.

Auto discard 30% 50% 100%
Inspect manually 30% 50%
Auto approve

Publication date
Adjust time frame for articles recommended
Start date End date

Journals
Select journals to include
Include all journals

For articles that need manual inspection, users can decide if they would like to approve them for the package or discard them. If an article is particularly relevant to the package, users can mark it as a Gold Article. Concepts from this article will then be added to the Package Engine Concepts, and thereby influence recommended articles for this package in future extractions.

About UNSILO

UNSILO is a Danish company founded in 2012, working with the world's largest academic publishers. UNSILO has been Springer's preferred strategic content enrichment partner since 2014, including providing related article links to every article or chapter on SpringerLink.

What Karger says

Marc Schindelholz, eBusiness Development Manager at Karger Publishers, commented: "Using the Package Manager we can create our Topic Article Package more efficiently, as well as delivering improvements in quality - our output selection is now a more accurate and reliable. Using the tools provided by UNSILO, we feel that Karger has the perfect balance of automation and manual control that gives us a twenty-first century publishing workflow and at the same time guarantees our customers the high quality they are used to from Karger."

Next steps

Following the first phase of the Package Manager, Karger Publishers aim to use the software tool for other Karger publications, including Kompass, its highly successful series of subject updates for medical practitioners in Germany.