

## Flax and Oxfam - case study of a Search Audit

**Oxfam** is a globally renowned aid and development charity working in 90 countries with over 10000 staff and 50000 volunteers. Currently the organisation is in the middle of a change process which involves the merging of at least 20 information architectures from at least 5 major sources and multitudes of minor sources.

In November 2017, Oxfam contacted open source search experts Flax to carry out an assessment and audit of the search engine on their intranet, based on Apache Lucene/Solr. This process was designed to be comprehensive, covering the search needs of staff and volunteers, how content is created and ingested by the search engine and how the search software is configured, leading to a set of recommendations for future development. Importantly, Flax were to cover both the business and technical aspects of search.

Flax visited Oxfam at their UK headquarters to meet the team responsible for Oxfam's intranet. During a series of meetings, Flax talked to technical staff, content creators, intranet managers and others and examined the current and planned technical implementations. The flow of content through the system was examined as were security requirements, relevance of search results and system scalability. Flax also assessed how the team carried out configuration changes and the level of in-house expertise in search. Oxfam provided Flax with access to source code and the search configuration files and Flax created a temporary Solr index of Oxfam's data so that further tests could be carried out off-site.

Oxfam uses a number of different technologies to run their intranet, including Drupal, Workplace by Facebook as enterprise social network, Box.com for filesharing and Apache Lucene/Solr to provide search facilities. The picture is further complicated by an ongoing migration process from a previous intranet running on older versions of Drupal and Solr. A huge range of content is potentially available for search, from that created in a structured fashion to reflect Oxfam's organisational hierarchy, to flat files, publicly-accessible websites, social media posts and reference libraries. Content may be written in several languages.

Like any organisation of this size, Oxfam's information architecture is complicated, which can make the provision of consistent and accurate search results difficult. It can be as important to exclude certain data from search as it can be to include the most relevant resources.

Flax assessed what content is currently searchable and what could potentially be searchable in

the future and how these combined results might be presented to the user. A number of minor faults with the current Drupal/Solr integration were identified (such issues are common with Drupal/Solr systems in Flax's experience) and strategies to fix these faults were discussed. The user interface for search was assessed and tested. The addition of search features such as 'did you mean' spelling suggestion and faceted search was discussed.

Flax also talked about relevance testing and demonstrated some processes and tools that can be used in an ongoing test-based relevance tuning process. This process would enable Oxfam to design tests based on what users are actually searching for, rate the results that come back and adjust the search configuration accordingly, as part of an ongoing process of search quality management.

Flax suggested how a 'search team' might be created within Oxfam's existing organisational structure, to manage and improve the search facility on an ongoing basis.

Over the next two weeks Flax created a detailed report for Oxfam, covering how content is created, tagged, organised, indexed and searched; identifying any faults found and ways to fix them; suggesting new search features and scalable architectures; detailing a test-based relevance tuning process and how to create, train and manage an in-house search team. The report was delivered in December 2017 to Oxfam who have reported that they will be planning their future search strategy based on Flax's recommendations.

*For more details of Flax's services, including search audits, expert design, development, training and support of open source search applications based on Apache Lucene/Solr and Elasticsearch, contact Flax, the open source search experts today on (+44) (0)8700 118334 or via [www.flax.co.uk](http://www.flax.co.uk)*