

OECD Loses Its RDBMS to Win With Faster Feature Development

MarkLogic's Innovative Information Delivery Hub Helps the OECD Reach New Audiences



CUSTOMER:
OECD

INDUSTRY:
Non-profit

CHALLENGES:
Data complexity; Disparate data sources; Customer experience; Rigid traditional database

FEATURES:
Search; Flexible Data Model

CUSTOMER USE CASE:
Heterogeneous data integration; Content delivery

BENEFITS:
Fast time-to-value; Improved user experience; Flexible architecture

COMPANY OVERVIEW

The Organisation for Economic Co-operation and Development (OECD) works with governments around the world to promote policies that will improve the economic and social well-being of people and provides a forum in which governments can work together to share experiences and seek solutions to common problems. The OECD measures productivity and global flows of trade and investment, analyzes and compares data to predict future trends, and sets international standards on a wide range of policy areas. One of the outcomes of the OECD's work is a significant programme of publications that enables audiences around the world to benefit from the OECD's research findings and datasets.

CHALLENGES

In support of the OECD's mission and to meet the needs of all its audiences, the publishing arm of the OECD seeks to disseminate the OECD's knowledge in a coherent, consistent and accessible manner. To achieve this objective, OECD Publishing needed a more powerful, agile information delivery system that would make it easier for various audiences (researchers, students, policy makers and shapers, the media and lay public) to access, discover and understand the OECD's content and data.

The OECD built its initial content management hub on a SQL database. But as data volume and complexity grew alongside the evolving demands of audiences, the OECD needed to:

Integrate and Manage Complex Data. The OECD's relational model could not handle different data formats, easily integrate new types of content, keep up with the need for granularity (publishing chapters, tables, graphs independently...) or volume of data. Some content also needed to be managed in up to 30 language versions.

Improve Internal User Experience. With its existing system lacking an integrated search functionality, internal actors of the publishing value chain (editors, bibliographic experts, production managers) were unable to leverage the full value of the data they managed.

Expand Product Offerings and Channels. OECD Publishing believes that content needs to be made available in respective audiences' digital environments; and readers should not have to visit the OECD website to access the OECD's knowledge. An agile, flexible infrastructure was required to create content once and disseminate it everywhere in multiple formats (hub-and-spokes model).

Support iLibrary Partnership Program. The OECD's main dissemination channel is the OECD iLibrary. This state-of-the-art publishing platform is unique in that it provides a seamless interface to

“Today, we can say that MarkLogic is a key enabler of OECD Publishing’s objective to ingest content once and disseminate it via many channels whether our own or via third parties. Thanks to MarkLogic, we are now able to deliver new digital content and services to our audiences faster and in a more cost-effective manner.”

— Toby Green,
Head of Publishing, OECD

books, working papers, journals, indicators, statistical periodicals and real-time datasets. In 2014, the OECD invited other inter-governmental organisations to join the iLibrary Partnership Programme so they too could benefit from the OECD’s e-publishing infrastructure. Three IGOs have since joined, The Commonwealth, the Nordic Council and the United Nations. As a result, the OECD’s publishing division now needs to ingest third-party content (publications and datasets) quickly and efficiently into the central data hub and disseminate them to the various dissemination channels, including the OECD iLibrary.

THE SOLUTION

To address its challenges and fulfill its objectives, OECD Publishing decided to migrate its central data hub (OECD.KAPPA), to the MarkLogic[®] Enterprise NoSQL database platform. MarkLogic’s flexible data model, providing seamless multi-language support, able to securely ingest data ‘as is’, and its powerful built-in search feature were critical to its success. With MarkLogic, the OECD’s central data hub could integrate and store 22,000 books, 1,100 periodicals and series, 83,000 chapters, 4700 multilingual summaries, 80 statistics databases, 2,400 datasets and indicators and their associated metadata quickly. Datasets, indicators and summaries are already distributed from this new central data hub to external channels. Ultimately this hub will enable the OECD to make content available through its various channels including the OECD iLibrary, the institutional website OECD.org, Google Books, and specialized sites such as RePEc.

WHY MARKLOGIC?

Rapidly, OECD Publishing found that MarkLogic’s functionality and flexibility met expectations and new features could be quickly added and made immediately available to users. And today, OECD Publishing benefits from:

Rapid Time to Value and Increased Productivity. The OECD’s first project using the MarkLogic database was to integrate 4,700 summaries of books in more than 30 languages. The OECD was able to accomplish this task in less than six months, reducing previous time commitments. This also laid the foundation for ongoing innovation and rapid data ingestion of future content including the 500 new publications added to the system each year.

Powerful User Experience. With search functionality built in to the MarkLogic database, the OECD data is more discoverable and accessible as searches can traverse data, metadata and text. And with the ability to more quickly and easily ingest information such as the 4,700 summaries, internal OECD.Kappa users can focus on their expertise: content managers and not data entry clerks.

New Product Offerings. By building OECD.Kappa using the MarkLogic database, the OECD can store all content in a standardized way that makes it easy and fast to access, publish and reuse. The OECD can now distribute timely information to its large and diverse audience, ensuring the right content reaches the right audience at the right time. Already, three new applications are in production:

- Multilingual summaries: disseminated in HTML, PDF and ePUB format via a number of channels from a single XML source content
- Interactive statistical indicators: data visualization and textual information managed and distributed from OECD.KAPPA to several channels in a fast and fully automated manner
- UN iLibrary: built in just six months, OECD Publishing ingested more than 800 publications and 12,000 chapters