



Oakland County Michigan Transforms Records Search

Google Cloud Case Study



Overview

Oakland County, Michigan is home to 1.2M people and hundreds of thousands of homes and properties. Like many counties across the US, they manage a large database of property records. In fact, their electronic records, dating back to 1964, number in the millions and they manage roughly 200,000 new property records (e.g. mortgages, liens, deeds) every year. Lisa Brown, the Clerk/Register of Deeds for Oakland County, wanted to be seen as a technology leader and to create a system where all residents and prospective residents would have access to all of the public property documents.

To create this industry leading solution, Brown partnered with Google, SADA (Google Partner), and state and local solutions provider Avenu Insights & Analytics.

Customer Challenges

Oakland County's business challenge could be broken down into a few key areas:

Volume

Oakland County, specifically the OC Clerk/Register of Deeds, had over 12 million records dating back to 1964, with more than 200,000 being added every year for the last several years. While the majority of these individual files were not huge, the data included a significant amount of metadata and all of the Optical Character Recognition (OCR) data for the records. Indexing all of these was critical to enabling the public access to all the right records.

Oakland County Michigan



SADA



Avenu Insights & Analytics



Accessibility

Brown was also clear that they needed a search engine that could go beyond just internal data searching and could also be used as a public facing search interface. They were focused on solving for constituent needs, not just the needs of her office.

Data Security and Hygiene

Avenu Insights & Analytics focuses on the public sector and had built an application called "Super Index," which would allow county governments to search across property records. Oakland County needed to ensure that their county records were safely indexed and secure for just their county and that there was no data pollution between various counties.

New Services

In addition to enabling publicly available search, Brown also wanted to add new services (e.g. fraud alerting) for her constituents.

Pioneering

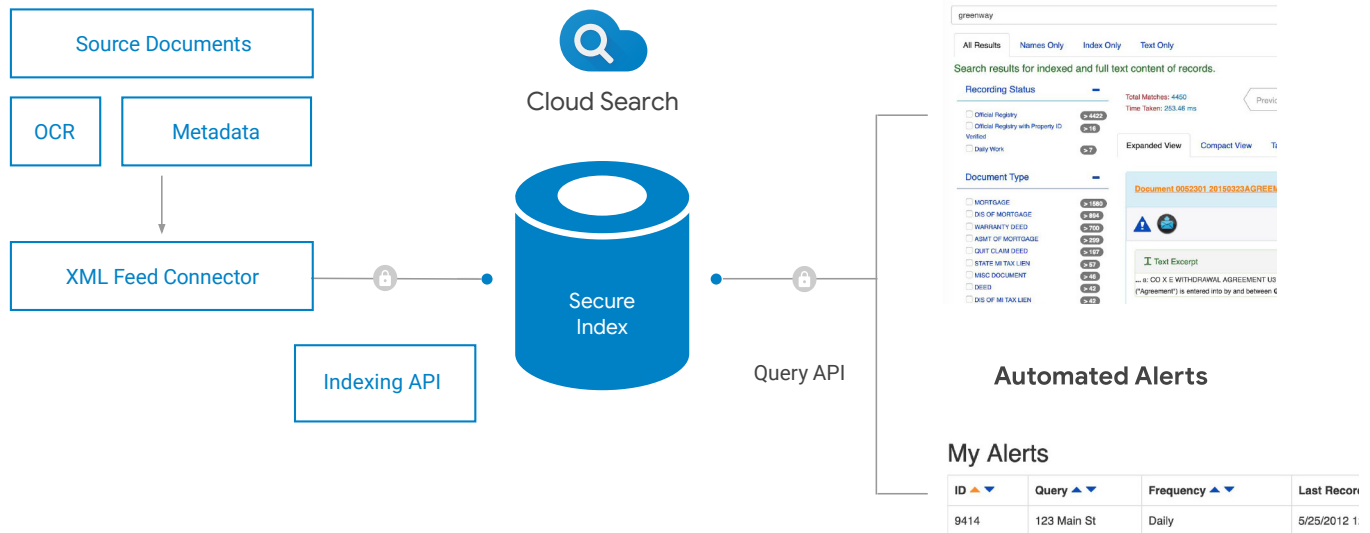
Lisa Brown wanted to be seen as a leader in this space. Typically, land record search solutions only enabled people to be able to search across a couple of pre-existing indexed fields (e.g. "Grantor" and "Grantee") and Oakland County wanted people to be able to engage in more natural search to achieve a much more comprehensive solution.

"Traditionally, online Land Records databases are limited to searching pre-indexed fields like 'grantor' and 'grantee'.

Now with Super Index, Oakland County's Google Cloud Search-based solution, users have the flexibility to search our records by any term and in one of the five languages we offer. This enables us to accommodate our diverse population. Super Index is user friendly and in the Google format that people are familiar with."

Lisa Brown

Oakland County Clerk/
Register of Deeds



Super Index: Avenu Insights & Analytics + Oakland County

Solution

The solution involved three key parties: Google, SADA as the integrator, and Avenu Insights & Analytics, which had created the “Super Index” application and wanted to make use of Google’s advanced search technology. Together, we created a fully searchable online application that Oakland County rolled out as ocmideeds.com (see diagram above).

Avenu Insights & Analytics leveraged Google’s world class search infrastructure to ensure greater **data security and hygiene**, keeping Oakland County records separate from any other neighboring counties.

Leveraging the Super Index application and the Cloud Search APIs and SDK, SADA built a comprehensive schema with 75 different data attributes to enable the public to search through the records on a number of different variables.

Once the schematic was created, SADA used Cloud Search's SDK and the Indexing API to build a connector to ingest the data from storage into one index. They were able to ingest more than 12 million records in less than two days.

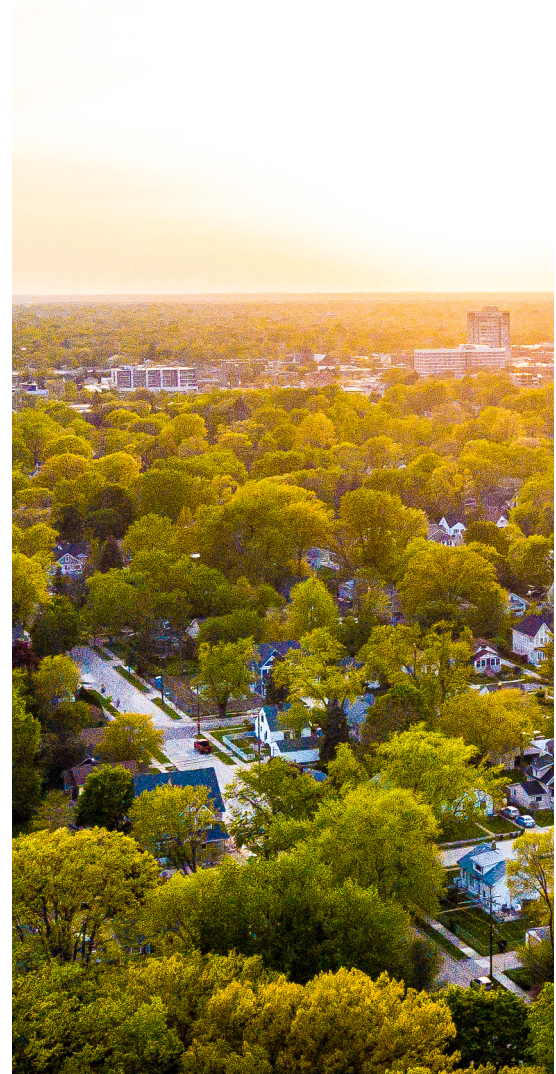
From there, they created a public search interface for ocmideeds.com that enabled **accessibility** for all users to sort and filter the data across all of those attributes (e.g. name, address, subdivision, liens placed).

That, in turn, led the team to be able to create additional **new services** for the public. The search interface displays a one page preview of the document so a constituent could be sure it was the right document before they paid to download it. In addition, Google, SADA, and Avenu Insights & Analytics created a "fraud alert" service so that any constituent could register an alert if any documents had been filed on their property. As with many counties, Oakland County had seen a number of predatory liens filed on some properties and now the property owners could protect themselves with an automatic alert if any documents were filed regarding their property.

Results

Oakland County was thrilled with the results as it delivered on all of their requirements:

- **Volume** - Over 12 million records ingested in less than 2 days with ongoing documents added seamlessly to the index
- **Accessibility** - All of the records are available to the public in a far easier search format than before.



Cloud Search enables people to easily search Oakland County Michigan property records

- **Data Security and Hygiene** - Backed by Cloud Search's world class infrastructure, Oakland County and Avenu Insights & Analytics can ensure no data pollution between records from other counties.
- **Innovative Services** - Some other fraud alerts are generated quarterly based solely on a person's name and are sent via postal mail or e-mail, often resulting in the wrong person receiving the alert if there was another person with the same name. In contrast, the new fraud alert service generates alerts on a daily basis and allows citizens to create notifications using any term.

Learn more:
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