

How to Optimize Your Website for AI Overviews? Google Cloud Case Study

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Do you know that you can generate Google AI Overview cards for any query on your website? I didn't know and I figured it out.

Google Cloud's Vertex AI Search Agent with Discovery Engine is a powerful tool that allows developers to build high-quality, AI-powered search experiences. This technology enables organizations to create custom search engines for their websites and applications, improving information retrieval and user experience. Unlike traditional keyword-based search, Vertex AI Search leverages semantic search, employing natural language processing and machine learning to understand user intent and the relationships between words and concepts.

This leads to more relevant and accurate search results, drawing on Google's extensive expertise in search technology¹. This article provides a comprehensive guide on leveraging Vertex AI Search Agent with Discovery Engine, focusing on creating an isolated index for your website, building a site-specific search engine, and optimizing content for AI-powered search results. You can access Vertex AI Search through the Google Cloud Console or integrate it into your existing workflows using the API¹.

Adding Your Website to an Isolated Index

An isolated index provides a dedicated search space for your website's content, ensuring focused and relevant results, giving you more control over the search experience than a general index². Here's a step-by-step approach to adding your website to an isolated index in Discovery Engine:

- 1. Prepare Your Website Data:** Before indexing, ensure your website data is well-structured and accessible. Vertex AI Search supports various formats, including HTML, PDF, and TXT, as well as images². Organize your website content logically and ensure all essential pages are linked correctly. While this example focuses on websites, remember that Vertex AI Search can also handle structured data, like product catalogs, and unstructured data, such as research papers, broadening its applicability. OR just verify with Search Console on Google Cloud!
- 2. Divide and Conquer:** For efficient indexing, divide your website data into smaller batches. This can be done by splitting large files into smaller ones with a maximum of 50 URLs each or grouping related content together². This partitioning strategy improves indexing speed and manageability².
- 3. Cloud Storage Integration:** Leverage Google Cloud Storage to store your website data. Create a dedicated bucket for your website's content and upload the partitioned files. This ensures secure and scalable storage for

your search index².

4. **Create a Cloud SQL Database:** Utilize Cloud SQL to store metadata related to your website and index. Create a table to capture entity information, such as website name, URLs, and corresponding batch IDs. This table will be crucial for routing search queries effectively².
5. **Establish Search Indexes and Search Applications:** Use the Vertex AI Search API to create search indexes and search applications for each batch of website data. Assign unique display names to each index, incorporating the batch ID for easy identification².
6. **Configure Query Routing:** Implement a mechanism to route user queries to the appropriate search index based on the entity information provided in the query. This ensures that searches are directed to the relevant index, resulting in accurate and targeted results². To further refine the search, you can transform raw user queries into a more structured format. This can include adding filters for specific websites or file types, providing more precise and relevant results. For example, a user query like "Brown University United States Graduate Handbook" could be transformed to "Brown University United States Graduate Handbook filetype:pdf site:brown.edu"².

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Creating a Site-Specific Search Engine

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With your website indexed, you can now create a dedicated search engine tailored to your specific needs. Follow these steps:

1. **Access Vertex AI Agent Builder:** Navigate to the Vertex AI Agent Builder in the Google Cloud Console. This platform provides the tools and interface for creating and managing your search applications³.
2. **Create a New Search App:** Initiate the creation of a new search application. Vertex AI Agent Builder offers various types of search apps, catering to different needs and data sources³. Choose the one that best suits your requirements and provide a descriptive name for your app, such as "MyWebsite Search," and specify your company name³.
3. **Select Search Index:** Choose the search index that corresponds to your website's isolated index. This ensures that your search engine retrieves results exclusively from your website's content³.
4. **Configure Search Engine Parameters:** Customize the search engine's behavior by adjusting parameters such as ranking factors, filtering options, and result display settings. Tailor these settings to align with your website's structure and user expectations.

5. **Preview and Test:** Before deploying your search engine, thoroughly preview and test its functionality. Experiment with different queries and refine the configuration to ensure optimal performance and user satisfaction.
6. **Monitor Indexing Activity:** After creating your search engine, utilize the "ACTIVITY" section in Vertex AI Agent Builder to monitor the indexing progress and identify any potential issues. This section provides valuable insights into the health and performance of your search application³.

Optimizing Content for AI-Powered Search Results

While specific instructions on applying AI Overview cards within the Discovery Engine are not available in the provided research material, optimizing your content for AI-powered search results is crucial, especially with the rise of AI Overviews in traditional Google Search⁴. Here are some general strategies to enhance your content's visibility and performance in AI-driven search:

- **Structure Your Content:** Organize your website content with clear headings, subheadings, and concise paragraphs. This structured format makes it easier for AI algorithms to analyze and understand your content⁵.
- **Provide Direct Answers:** When addressing specific topics or questions, ensure your content provides clear and concise answers. Avoid unnecessary fluff and focus on delivering valuable information directly⁵.
- **Maintain Contextual Relevance:** Use relevant keywords and phrases throughout your content, but avoid keyword stuffing. Focus on creating natural and informative content that accurately reflects the topic⁵.
- **Build Trust and Authority:** Incorporate statistics, citations, and quotes from authoritative sources to enhance the credibility of your content. This helps establish your website as a reliable source of information⁵.

Starting Target Queries on Traditional Google Search with AIO

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To understand how your website performs in AI-powered search results on traditional Google Search, follow these steps:

1. **Identify Target Keywords:** Determine the keywords and phrases relevant to your website and content. Focus on long-tail keywords and informational queries, as these tend to trigger AI Overviews more frequently⁶.
2. **Utilize 3rd Party SEO Tools:** Leverage Ahrefs or Semrush tool to identify keywords that trigger AI Overviews and add them to the AI Tracker to monitor your website's presence in these AI-generated summaries⁴. The AI Overview Presence graph within the AI Tracker helps you assess your website's visibility and understand which websites are being prioritized by Google's AI algorithms⁴.
3. **Find which passages trigger AI Overview cards, compare with competitors! You can use cosine similarity.**

Comparing Results and Optimizing Content

While the research material doesn't provide specific details on comparing the results of AIO searches with and without an isolated index, it's crucial to monitor your website's performance in both scenarios. Analyze search result rankings, click-through rates, and user engagement metrics to understand the impact of the isolated index on your website's visibility and user experience. This analysis can help you identify areas for improvement and optimize your content accordingly.

Although the provided research doesn't offer specific guidance on how to apply changes to your website content for AIO optimization, remember that content relevance is key. Tools like cosine similarity calculators can help you assess the semantic similarity between your content and target keywords, guiding your content optimization efforts⁷. By refining your content to better align with user search intent and relevant concepts, you can improve your chances of ranking well in AI-powered search results.

Conclusion

Google Cloud's Vertex AI Search Agent with Discovery Engine offers a robust platform for building advanced search experiences. By creating an isolated index, constructing a site-specific search engine, and optimizing content for AI-powered results, you can significantly enhance information retrieval and user satisfaction on your website. While AI Overview cards are a relatively new feature, understanding the principles of AI-driven search and utilizing tools like SE Ranking can help you stay ahead of the curve and maximize your website's visibility in the evolving search landscape. Take the next step and explore Vertex AI Search Agent with Discovery Engine to unlock the full potential of AI-powered search for your website.

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AI Overviews optimization is the Google-specific branch of AEO. The same pages that earn AI citations in AI Overviews tend to perform in ChatGPT, Perplexity and Gemini too. Run the Google Cloud case study as an answer engine optimization template, then expand to other AI engines.

Generative engine optimization is the broader label for what this Google Cloud case study teaches about AI Overviews. The same principles generalize to ChatGPT and Perplexity.

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