StuDocu + algolia

Making the Grade: Improving Search to Increase Stickiness, Grow Subscribers and Drive Content Sharing

"Our goal is to make sure the search experience works well for everyone, because if it is good for non-Premium users, they are more likely to upgrade and become Premium

Elvira Romashkina,
Discovery & Engagement Product Manager at StuDocu

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Kilian Saint cricq,
Engineering Manager and Discovery & Engagement lead at StuDocu

algolia

Headquarters:
Amsterdam, NL

Use Case:
Media / E-Learning

Customer
Since 2021

Feature Usage:
Search, Dynamic Synonyms, Analytics, Rules, Query Suggestion

- 15 million users
- Documents shared from more than 2000 universities
- 20%+ increase in conversion rate

StuDocu

- Decreased maintenance costs compared to Elastic
- Easy fine-tuning, without code deployment needed
- Improved ranking formula

The Challenge

- Inability to test, tweak and optimize search easily
- Complex platform required developers have search expertise

The Solution

- Easy to implement and maintain
- Flexible and scalable
- Multi-language support and geographic footprint

The Results

- Greater user engagement through improved search relevance
- Reduced cost of search maintenance and infrastructure
- No specialized technical skills required for fine-tuning and testing

Helping Students Find the Content They Need to Excel

The brainchild of four students, StuDocu was founded in 2013 to easily share documents with each other to aid in studying. Since then, more than 15 million students around the world have used StuDocu's platform to share more than 9 million high-quality documents and study materials.

StuDocu's mission is a lofty one: empower every student to excel at their studies by providing the best tools to study more efficiently. It does this by providing students with a wide range of user-generated scholastic content — lecture and study notes, (book) summaries, guides — published from more than two thousand universities.

Content is provided by students for students and offered either for free or through a Freemium model: users can upload their own content to get Premium access or get a paid subscription. Content creators gain 14 days of free Premium service, but the goal is to encourage free users to register and upload their own content or subscribe.

Of course, academic resources are only as good as the ability for a student to easily find them, making search vital to the user journey for content creators and consumers alike.

Stealing Search from the Google Goliath

Users don't usually just stumble onto an E-learning platform like StuDocu. They discover it with a specific goal in mind, often searching Google with a course or assignment related query: "Math 101", "What is the fabric of space-time" or a course code.

Elvira Romashkina, Discovery & Engagement Product Manager at StuDocu, recognizes that Google searches bring users to the quality content hosted on the platform. Ensuring the content is successfully indexed on Google Search is essential to growing traffic but building a loyal base of content creators and subscribers demands giving users a search experience that is just as good, and capabilities that keep them coming back.

"We want them to use our search instead of using Google; the next time they search, we want them to use our platform," Romashkina says. "They'll do that if they see the added value of StuDocu's search experience and find plenty of relevant content. Besides that, we have some nice features for them to discover, encouraging them to use our platform more."

While it is a challenge to compete with Google on search, the risk of the search engine giant hogging traffic and StuDocu losing the opportunity to drive loyalty and stickiness is too great to ignore.

StuDocu provides search functionality across several locations on the platform: its homepage, landing pages, and through a search bar in the header.

The Need to Improve Search to Build Loyalty and Conversions

For a business that relies on user-created content and subscriptions, building a loyal user base is crucial. Search has been identified — alongside content recommendations and other tactics — as a key to achieving the stickiness to retain users and ultimately grow subscribers.

StuDocu tracks click-through-rates (CTR) and the conversion from clicking on a result to reading the document to gauge the engagement generated by its search functionality. It's a complex process, since not all documents are available for free, and search results are careful not to prioritize only gated content to ensure that non-subscribers are still able to find results they can use.

But when the company sought to improve its search capabilities to increase CTR and consumption it struggled when using its existing Elasticsearch engine. It required too much expertise and even small changes, say the tweaking of search rankings, required releasing a new relevance model.

"Elasticsearch requires a lot of technical knowledge, especially with the Query DSL. You really need to be an expert in Elasticsearch to tweak the algorithm. We tried many times to improve the relevance model and we barely moved the needle."

Killian Saint cricq,
Engineering Manager and Discovery & Engagement lead at StuDocu

The company's user-generated content model makes top-notch search functionality even more essential, since content creators must assign correct metadata for their content to be properly uncovered. Here search helps by allowing content creators to search across existing indexed categories and select the right ones, avoiding typos or misleading categorization.

Improving Consumption Rates while Reducing Search Costs

StuDocu looked to Algolia as an alternative to their Elasticsearch-based engine, and after testing found it to be the best solution for their needs. The company created a roadmap to migrate the search functionality around its documents, course material, books and education institutions in priority order to be indexed by Algolia.

The company was drawn to investigate Algolia because of its experience in the market, language and geographic capabilities, execution competence, scalability and footprint. The migration and implementation went well, and Saint cricq says the engineering team particularly appreciated Algolia's developer support around setting up criteria.

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On the developer side, he adds, it's much easier now to make changes to search — and see their impact — since with "just a few clicks on the dashboard you can change or tweak search and already see the behavior changing without releasing again or needing to change the model."

The technical ease of working with the Algolia dashboard is also a benefit outside of the engineering and development teams.

"What I really like about Algolia is that we can run A/B tests with no code involved. From the dashboard we have been able to test AI-features such as Personalization and Dynamic Re-Ranking in only a few clicks. I'm able to do this really quickly and easily and I'm not a developer."

Elvira Romashkina,
Discovery & Engagement Product Manager at StuDocu

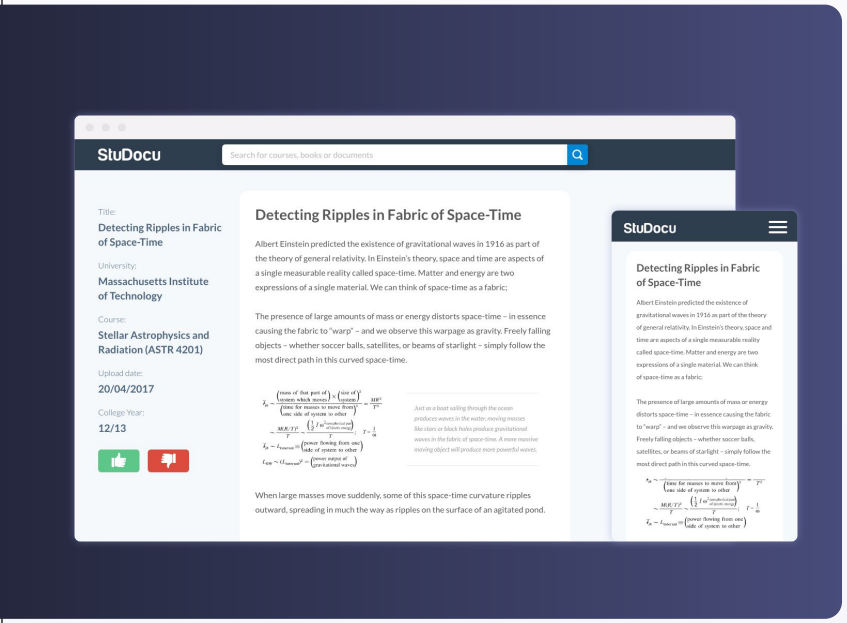
Using Algolia, StuDocu has been able to define a custom relevance model, adding more fields compared their past configuration. The engineering team has even injected its own criteria dubbed “positive experience probability”—maximizing user satisfaction.

While StuDocu is still on its migration roadmap, it has moved all its document search to Algolia and has already seen positive results: a 20 percent improvement in consumption rates as students more frequently find the materials they are looking for.

This improvement comes, Saint cricq says, while reducing costs associated with maintaining its own search engine, both from the perspective of developer time and infrastructure needed. Moving to Algolia’s SaaS solution model has been a boon, he suggests.

> *“The DevOps team won’t have to handle and monitor the servers (as it relates to search), we won't have to pay the AWS costs anymore, and we don't have to care about the infrastructure side of things. Search is just one less thing they have to do.”*
>
> ***Killian Saint cricq - Engineering Manager and Discovery & Engagement lead at StuDocu***

Freeing Up Focus for What Matters



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The ease and speed in which Algolia lets StuDocu improve its search functionality, and ultimately the user experience, allows the content marketplace to focus on what it does best: help students study.

"We should focus on our main product—our core product. It's not a search. It's making sure users have a good way to study, to read content and to upload content. It's to share content. Now we're looking at things around that, what else can we provide, and we want them to be able to organize content nicely, have easier navigation and courses."

"It's not search that we're experts in, and that's why we decided to outsource this to those who are."

Algolia experts can help you take your site experience to the next level.

Get a customized demo from our search experts today.

Schedule a demo

www.algolia.com