



SUCCESS STORY

Reed.co.uk helps people find the jobs they love and want with Elasticsearch

UK's largest recruiter brings job searchers and employers together using vector embeddings in Elasticsearch.

Region

United Kingdom

Industry

Professional Services

Solution

Elasticsearch



Increases candidate click-through rates by 20%

- Elasticsearch improves the click-through rates for Reed to improve the time spent by candidates searching and finding relevant results, which enhances the experience.



Reduces cost-per hire by 20%

- By improving the relevance of the match between job seeker and role, Elasticsearch helps employers reduce the cost per hire by 20%.



Boosts job application completion rate by 30%

- With more relevant results that match the job seeker's search, application completion rates are improved, giving the hirer a more appropriate candidate choice.

For Reed.co.uk, the largest online job site in the UK, search technology is critical for the success of the business. With 11 million registered candidates applying for almost 100,000 roles every day, the speed and relevance of a results page can have a dramatic impact on careers and livelihoods. Search is also a priority for 30,000 recruiters seeking the best people for their business and who pay to list their vacancies on the platform.

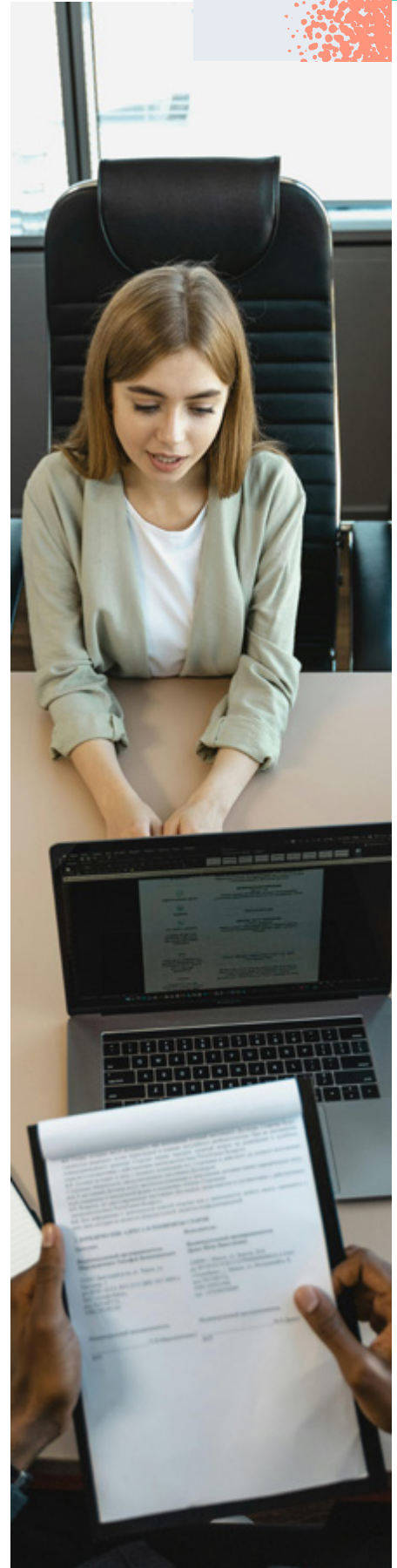
To stay ahead in the highly competitive recruitment market, Reed is leading the way in the deployment of artificial intelligence, including generative AI, to transform its search capabilities. Krishna Chalasani, Software Development Manager for the search team at Reed, says, “Our two main objectives are to serve relevant results to customers and increase revenue through promoted jobs. Finding the sweet spot between these goals is our main challenge.”

Elastic Search, built on the Elasticsearch platform, plays a crucial role in this non-stop approach to innovation. When Reed first moved away from relational databases for search, it tested several alternatives. “When it came to performance and relevancy, the early results from evaluating Elastic Search as a vector database were amazing,” says Chalasani. Since then, Reed has taken advantage of frequent feature updates that deliver better results to users. “We simply update our Elasticsearch clusters to implement the latest releases. It’s incredibly easy.”



We chose Elastic Search is because of its performance, as well as features that enable us to productionize vector embeddings and explore the potential of generative AI.

Krishna Chalasani
Software Development Manager
Reed.co.uk



Vector embeddings: Taking search to the next level

Chalasanani is quick to emphasize how Elastic Search enables Reed to capture semantic relationships and meaning in a far more nuanced way than pure keyword matching. When a user begins their search, keywords are processed by a machine learning model to generate vector embeddings that capture search intent. Similarly, job descriptions are transformed into vector embeddings representing their requirements. Using vector similarity techniques, Elastic Search matches user intent with job descriptions. Elasticsearch provides the ability to store embeddings in a vector database. The Elastic API has powerful search retrieval capabilities including filtering, aggregations, and role based access controls at the document level.

If a job listing includes 'reports to director of engineering' this may not be relevant to the role itself. Vector embeddings and search tools in Elasticsearch enables Reed to make these subtle, but important distinctions and return more relevant results to the user.

Growing revenues with detailed analytics

Telemetry data captured by Elastic Search enables Reed to evaluate and compare the performance of job roles served to candidates. From information such as click through rates, Reed can generate metrics which show how well a recommendation is performing. "As we uncover correlations for higher performing listings, we can use this knowledge to boost the relevance of less successful postings," says Chalasanani.

More relevant searches also enable Reed to retain and acquire corporate clients who pay to promote job openings. "By adding vector matching to keywords in Elastic Search we can deliver more accurate results for hiring organizations. When they see a return on their promotional spend, they are more likely to continue their partnership and payments with Reed," says Chalasanani.





Vector matching and generative AI are the future of search in recruitment. With Elasticsearch we have a clear roadmap towards the deployment of these features, ensuring that we continue to match candidates with employers and jobs that they love.

Krishna Chalasani

Software Development Manager
Reed.co.uk



A better search experience for candidates

When candidates search for a role, they can set an alert to receive updates for similar openings via email or push notifications. Elasticsearch is used for both search page results and alerts ensuring a connected user experience throughout the job search journey.

“Let’s say you get an alert for a new job on your smartphone, but you don’t have time to click the link straight away,” says Chalasani. “When you return to your laptop a few minutes later you’ll see the same role on our website. Elasticsearch ensures that candidates can move between channels without interruption.”

In the future, Chalasani also sees potential for generative AI to further boost search relevancy. “Vector matching is our priority, but in the next year we want to implement techniques such as learning to rank and generative AI that enable us to further refine search and deliver more personalized job results for candidates.”

See how you can utilize Elasticsearch with a free, 14 day trial.

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