RIVERSAFE

CLIENT CASE STUDY: ACCELERATING ENGINEERING WITH AI ENABLED KNOWLEDGE DISCOVERY

OUR IMPACT

68,000+ engineering hours saved annually

Over **£4 million** in annual cost savings (within the first year)

Reduced search time from up to **10 days** to immediate responses

Improved document quality and relevance

THE CHALLENGE

Slow Access to Technical Information

Our client, a leading oil and gas corporation, faced significant challenges in knowledge management.

The software engineering function struggled with locating the right documentation across multiple platforms such as ADO Repo, Confluence, SharePoint, and others. This fragmented system created delays and inefficiencies, with engineers spending valuable time searching for answers rather than focusing on delivery.

The sheer volume of documentation, continuously growing, compounded the problem. Onboarding tools for cloud services was also cumbersome, often dependent on a "hero culture" where finding the right person for help was the norm. This led to frequent meetings, wasted time, and a negative engineering experience, significantly slowing down workflows.

RiverSafe was brought in to improve the engineer experience and increase velocity by enabling engineers to complete tasks more efficiently, reduce reliance on individual knowledge holders, and minimise time spent searching for outdated or misplaced documentation.

THE SOLUTION

AI Enabled Knowledge Discovery

We introduced an engineering portal powered by AI and natural language processing (NLP). Using a closed-domain RAG model, this portal introduced a ChatGPT-style interface where engineers could engage in natural language conversations to query documentation and receive consolidated answers, dramatically reducing the time spent locating information.

The portal's capabilities include rich content support such as diagrams, graphs, videos, and even in-platform automation for tasks like tool onboarding, further streamlining processes. The platform draws from multiple high-quality content repositories, creating a unified search experience across ADO Repo, Confluence, Internal document management systems, SharePoint, and more.

Crucially, we implemented near-real-time monitoring for key model metrics, ensuring that each user's question and answer interactions delivers unparalleled accuracy and relevance.

This guarantees that the portal continuously provides genuine value through its responses. Recognising the challenges posed by response degradation and hallucinations in AI-driven systems, we have developed a set of innovative solutions designed to optimise each interaction's impact.

THE OUTCOME

Eliminating Wasted Time and Accelerating Software Delivery

The portal has transformed the way engineers work, saving significant time and boosting efficiency across the board.

One engineer commented, **"I've been here for 15 years, and this is the best product for software delivery in our organisation. Previously, it could take me 2 weeks just to find out how to build a cloud environment. Now I get the answer straight away."**

KEY OUTCOMES:

Time and Cost Savings:
Engineers now save between 45 minutes and 10 days when searching for technical solutions. The portal has saved the organisation 68,000 engineering hours annually, equating to over £4 million in cost savings within the first year.

Improved Document Quality:
The platform collects and analyses data on the usefulness and quality of documents. This feedback loop ensures that outdated or low-quality documents are flagged for improvement, keeping the knowledge base relevant and focused on high-value content.

High-Fidelity Responses:
Engineers receive immediate, detailed responses with links to relevant documentation, images, videos, and graphs. This reduces reliance on outdated information and significantly improves the quality of software delivery.

Onboarding and Automation:
Engineers can complete tasks directly within the platform, such as onboarding new tools, without needing to switch between systems, further streamlining workflows.

The portal continues to gather user feedback and performance data, ensuring that it remains an invaluable tool for the organisation, consistently improving the engineer experience and accelerating software delivery.

The organisation has also engaged NeuroLogik to build on these successes. NeuroLogik specialises in providing deep insights into entire codebases, ensuring that engineers can easily locate and reuse existing code across the organisation, further enhancing efficiency and reducing duplication of effort.

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