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DELOITTE HELPS CHORUS NEW ZEALAND BOOST ARCHITECT PRODUCTIVITY WITH GENERATIVE AI ON AWS

Learn how Deloitte helped Chorus New Zealand boost productivity for its software architects by up to 75 percent with generative AI.

[Chorus New Zealand](#) has empowered software architects with a unified, searchable documentation database, powered by generative artificial intelligence (AI). The broadband provider faced inefficient access to software documentation, which was spread across different systems and formats. Using Amazon Web Services (AWS), [Deloitte](#) built a generative AI solution that software architects can query in natural language and receive relevant answers to guide their development. This solution has not only centralized Chorus New Zealand's information landscape but also made it intuitively accessible, boosting software architect productivity by up to 75 percent.



OPPORTUNITY | Using AI to enhance document accessibility and efficiency

Serving over 1.5 million homes and businesses, Chorus New Zealand has expanded the country's fiber broadband network, bringing high-speed internet access to both major cities and nonurban communities. The telecommunications provider values innovation and operational efficiency and consistently seeks ways to improve the reliability of its service. This includes adopting technologies, such as cloud offerings from AWS, to address the needs of its customers and facilitate the expansion of its broadband network.

Software architects at Chorus New Zealand relied on documentation to guide their solution development and maintenance processes, but this information was scattered across different systems and formats. This made the documentation difficult to accumulate, read, and analyze, preventing software architects from accessing vital information when they needed it. The decentralized information landscape prevented the company from efficiently addressing customer complaints, let alone implementing new solutions.

As a forward-thinking organization, Chorus New Zealand recognized the potential for generative AI to transform its documentation management.

With this technology, the company could empower its software architects to access and understand internal information at a faster pace.

To aggregate its internal knowledge, Chorus New Zealand turned to Deloitte for a solution.



SOLUTION | Architecting a unified information environment with Generative AI

As an AWS Premier Tier Services Partner, Deloitte built a generative AI solution using [Amazon Bedrock](#), a fully managed service that offers a choice of high-performing foundation models from leading AI companies. This solution brings together software architecture documentation from various sources into a unified, searchable database, which facilitates rapid information retrieval through text search queries. All of the aggregated documentation and feedback data is stored in [Amazon Simple Storage Service](#) (Amazon S3), an object storage service built to retrieve virtually any amount of data from anywhere.

The solution's search and retrieval capabilities are powered by [Amazon Kendra](#), an intelligent enterprise search service. After an architect submits a query, the query is answered in a conversational format, helping architects quickly comprehend complex documentation. [Amazon Lex](#), a fully managed artificial intelligence service with advanced natural language models, powers the conversational interface for querying the database.

Instead of spending hours reading and interpreting source code, a software architect at Chorus New Zealand can enter a quick text query, such as "explain what this software component does." Using generative AI, the solution provides a contextually relevant response based on the aggregated documentation stored in Amazon S3. The response may also include links to source materials, which let software architects validate information quickly and ask follow-up questions as needed. Architects can also provide feedback to improve the accuracy of the solution's responses.

AWS Services Used



Amazon Bedrock



Amazon Simple Storage Service (Amazon S3)



Amazon Kendra



Amazon Lex

About Chorus New Zealand

[Chorus New Zealand](#) provides telecommunications infrastructure throughout New Zealand. Serving over 1.5 million homes and businesses, Chorus New Zealand has expanded the country's fiber broadband network, bringing high-speed internet access to both major cities and nonurban communities.

About Deloitte

Deloitte is a global network of independent firms that provide audit and assurance, tax, legal, risk and financial advisory, and consulting services to a wide range of clients in 20 industry sectors. It is an AWS Premier Tier Services Partner and an AWS Managed Service Provider.



OUTCOME | Boosting software architect productivity by up to 75 Percent

With the ability to access information quickly, Chorus New Zealand's software architects experienced up to a 75 percent boost in productivity. This has transformed hours of document analysis into seconds of search and retrieval. The rapid access to relevant information has also accelerated the company's decision-making processes, facilitating more agile responses to customer requests. Thanks to these efficiency gains, Chorus New Zealand has unlocked significant cost savings that have surpassed its initial development investments.

With this enhanced productivity and efficiency, Chorus New Zealand can build new software products to address customer queries and escalations more efficiently. It can also develop solutions to identify the most optimal path for laying cables, minimizing hardware usage, and further boosting operational efficiency. By aggregating all of its documentation in one accessible location, Chorus New Zealand can build a product that it desires, but at a more agile pace. Its software architects can quickly take advantage of existing resources to initiate their projects, reducing the time to market for new innovations.

This project has not only accelerated product development timelines but also empowered Chorus New Zealand to expand its service offerings. With enhanced productivity, it can connect more customers to high-speed, reliable internet access—furthering its mission to expand broadband access across the country.

"The proof of concept yielded outstanding results," says Michael Brosnahan, Portfolio Architect at Chorus New Zealand. "The generative AI tool provided a significantly better user experience and delivered a 75 percent productivity increase compared with new staff performing the same activity before we introduced the tool. Buoyed by this success, Chorus New Zealand is now actively exploring additional areas where generative AI can expedite operations and streamline processes."

*Chorus New Zealand is now actively exploring additional areas **where generative AI can expedite operations and streamline processes.***

—Michael Brosnahan, Portfolio Architect, Chorus New Zealand

About Amazon

Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and longterm thinking. Amazon strives to be Earth's Most Customer-Centric Company, Earth's Best Employer, and Earth's Safest Place to Work. Customer reviews, 1-Click shopping, personalized recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Career Choice, Fire tablets, Fire TV, Amazon Echo, Alexa, Just Walk Out technology, Amazon Studios, and The Climate Pledge are some of the things pioneered by Amazon. For more information, visit [amazon.com/about](#) and follow [@AmazonNews](#).