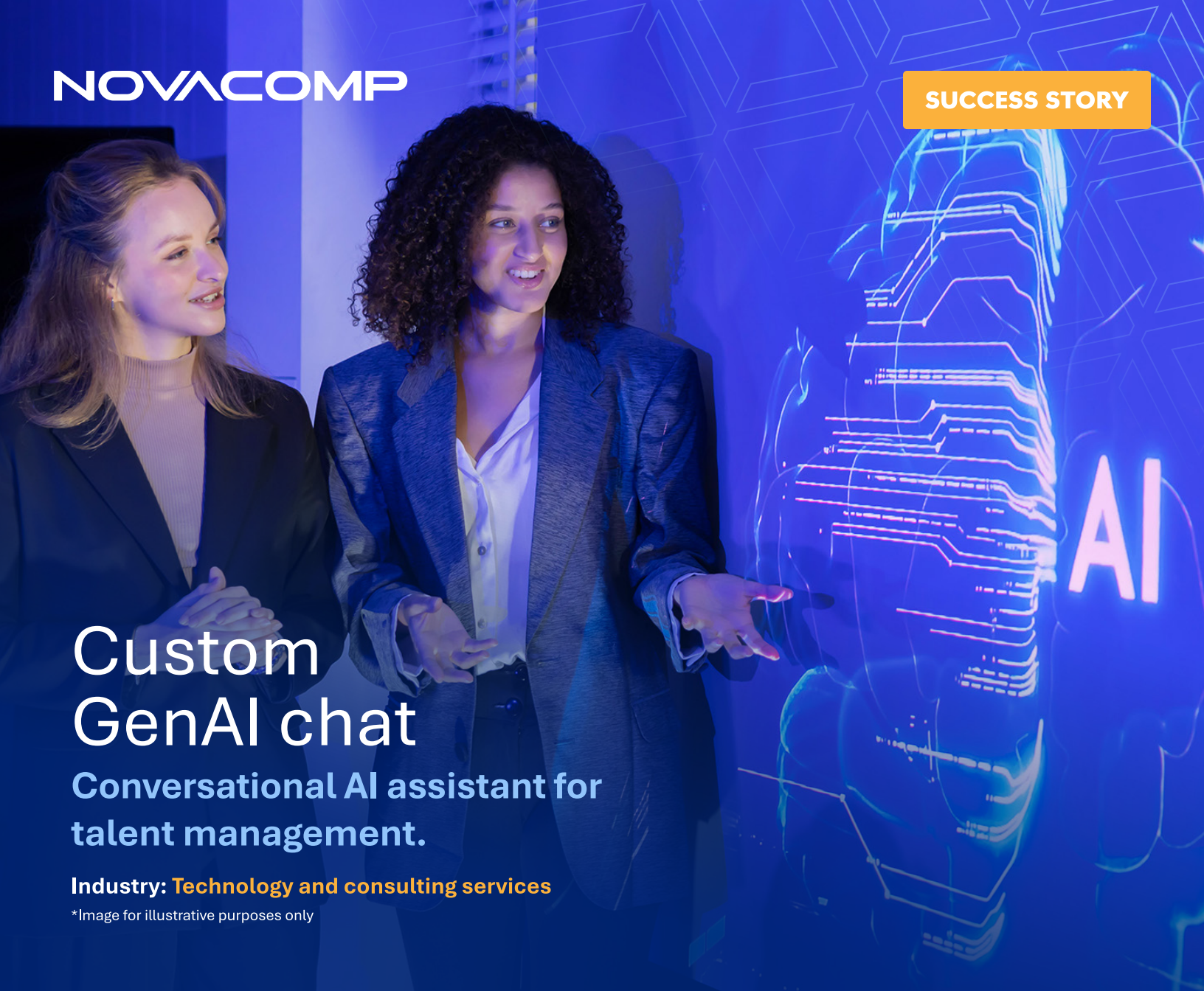
NOVACOMP

SUCCESS STORY



Custom GenAI chat

Conversational AI assistant for talent management.

Industry: Technology and consulting services

*Image for illustrative purposes only

Summary

Novacomp developed an internal conversational assistant based on Generative AI to centralize access to employee CV information.

Built on Amazon Bedrock using Anthropic's Claude models, the solution allows users to query staff skills, experience, and background in natural language, supporting talent management and team formation decisions.

Main challenges

- CV information was scattered across multiple formats with no centralized channel for efficient retrieval.
- The leadership team lacked an agile tool to identify profiles with specific skills when forming project teams.
- It was necessary to keep information synchronized with Jira, avoiding duplicates and outdated data.
- The solution had to ensure controlled access to sensitive employee information, with differentiated roles and permissions per user.
- The system needed to scale without dedicated infrastructure, adapting to growing volumes of documents and queries.

Approach

Novacomp designed a fully serverless architecture on AWS, with Amazon Bedrock as the core of the solution. The approach included:

- **RAG-powered AI model**, combining Claude Sonnet and Claude Opus from Anthropic with Knowledge Bases so the assistant coul respond directly from real employee CVs.
- **Content control and safety**, using Bedrock Guardrails to ensure responses remained within the permitted domain.
- **Embeddable frontend on the internal website**, built with AWS Amplify and React for a smooth, accessible conversational experience.
- **Serverless backend with REST API**, built on AWS Lambda and API Gateway to manage CV registration, updates, and deletions in Word and PDF formats.
- **Automated synchronization with Jira**, enabling periodic profile updates without manual intervention.
- **Role and permission-based access control**, protecting the confidentiality of employee information.

Results

- Knowledge centralization: all CV information accessible from a single conversational channel in natural language.
- Drastic reduction in profile search time: identifying employees with specific skills in seconds.
- More informed decision-making in resource allocation, team formation, and talent management.
- Automatic synchronization with Jira, ensuring consistency and eliminating manual data update workload.
- Robust access control through roles and permissions, protecting the confidentiality of employee information.
- Scalable serverless architecture that grows with the organization without requiring additional infrastructure.

Technologies used

Amazon Bedrock	Knowledge Bases (RAG)
Bedrock Guardrails	Claude Sonnet (Anthropic)
Claude Opus (Anthropic)	AWS Amplify
AWS Lambda	Amazon API Gateway
Amazon S3	Amazon DynamoDB
Jira API	React / TypeScript / Node.js

Conclusion

The **Custom GenAI Chat** demonstrates Novacomp's ability to implement enterprise Generative AI solutions that deliver real operational value.

By transforming employee CVs into an accessible conversational knowledge base, the company modernized its talent management, accelerated decision-making, and eliminated friction in internal information retrieval — positioning itself as a benchmark in the adoption of Amazon Bedrock for organizational knowledge management.

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