

CUSTOMER STORY

2Cimple, Inc. partners with RapidScale to develop the Nano Sustainability Chatbot



Overview

2Cimple, Inc. operates within the software industry, specializing in Climate Tech through its innovative product, Nano. Nano leverages an AI and blockchain platform to gamify sustainability efforts via the Nano Sustainability League. This platform aims to achieve decarbonization, reduce waste, and optimize energy consumption.

Looking to increase engagement among players, 2Cimple partnered with RapidScale, an AWS Premier Partner with robust experience in developing generative AI solutions.

The collaboration between 2Cimple, Inc. and RapidScale resulted in the successful development and deployment of the Nano sustainability chatbot, significantly enhancing player engagement and education on sustainability practices.

Challenge

Before partnering with RapidScale, 2Cimple faced several challenges:

- **Player Engagement:** The company sought to enhance engagement levels among participants through more interactive education and social learning that focused on sustainability.
- **Technological Integration:** 2Cimple wanted to deploy Generative AI technology to bolster educational and engagement experiences within the platform, recognizing the need for innovative solutions to capture user interest effectively.

Challenge: 2Cimple, a company offering a gamified platform for sustainability engagement (Nano), needed to enhance user experience by providing quick and accurate answers to sustainability-related questions. Their goal was to improve user engagement, position themselves as a leader in promoting sustainable practices, and gather valuable data on user concerns for future initiatives.



We are very excited that RapidScale understood our mission and were equally passionate to utilize advanced technologies to solve a very complex climate problem. We found them extremely mission-driven, motivated, highly technical, very professional, and always prepared to brainstorm to make the solution be its best! Looking forward to partnering with them in the future.

Syed Abbas,
Founder and CEO
2Cimple, Inc.

Strategic objectives

To address these challenges, 2Cimple established key strategic objectives:

Chatbot Development: The primary aim was to develop and integrate a unique Generative AI sustainability chatbot. This chatbot would utilize advanced technologies like Amazon Bedrock and SageMaker and be trained on specialized sustainability knowledge bases.

Enhanced Engagement: The chatbot would recommend strategies to companies and players on how to reduce and avoid Scope 1-3 emissions and waste, significantly improving the educational component of the Nano platform.



Solution

RapidScale collaborated closely with 2Cimple to implement the proposed solution. Key phases of deployment included:

- 1. Initial Assessment:** Understanding the existing platform and identifying specific areas for enhancement.
- 2. Technology Integration:** Leveraging Amazon Bedrock and SageMaker to develop the AI chatbot, ensuring it was equipped with the necessary sustainability knowledge.
- 3. User Testing:** Conducting trials with a select group of players to gather feedback and fine-tune the chatbot’s functionality and engagement capabilities.
- 4. Full Deployment:** Launching the chatbot across the Nano platform, enabling players to interact and learn about sustainability in real-time.

The chatbot solution contained the following features:

CHATBOT FEATURE	TOOLS & OUTCOMES
Intent Routing	Bedrock LLM-based intent detection and routing to distinct response tracks
Irrelevant Input Handling	Reroute irrelevant inputs towards chatbot’s defined domain
Grounded Sustainability Responses	Retrieval of sustainability sources from EPA/EPD via custom web scraper
Company Information Responses	Chatbot answers questions related to Nano and their platform
Best-in-Class LLM	Streamed responses from Claude 3.5 on AWS Bedrock
Chat History	Memory of each session stored in DynamoDB

CHATBOT FEATURE	TOOLS & OUTCOMES
Chatbot Monitoring	Conversation tracing, latency metrics, and usage monitoring stored in RDS and visualized in ECS application
Feedback Collection	User feedback on responses kept in DynamoDB table
Input Guardrailing	Bedrock Guardrails to detect hate, insults, sexual, violence, misconduct, or adversarial prompts
Verbosity Control	Condensed vs Elaborated response modes
Identity Management	Managed sessions and user authentication via DynamoDB
IaC and DevOps	Terraform, AWS CodeCommit, and AWS CodePipeline
Customer Validation Testing Workflow	Solicited prompt-response-comment testing from clients

Throughout these phases, RapidScale focused on maintaining open communication and collaboration, ensuring the final product aligned with 2Cimple’s vision.

Conclusion

The collaboration between 2Cimple, Inc. and RapidScale resulted in the successful development and deployment of the Nano sustainability chatbot, significantly enhancing player engagement and education on sustainability practices. By integrating cutting-edge technology, 2Cimple is better equipped to lead the charge toward a carbon-neutral and zero-waste future, empowering organizations and individuals to make meaningful changes in their sustainability efforts.

About RapidScale

Whether refreshing legacy IT systems or launching an app that will reach millions, RapidScale empowers your business with a complete set of private and public cloud solutions to simplify IT and unleash innovation.

From Infrastructure as a Service to AI, RapidScale brings you the best portfolio of managed services in the industry, backed by a deep bench of certified experts holding over 400 accreditations. RapidScale has helped hundreds of customers migrate to AWS and Azure while helping over 2000 customers drive the complexity and administration out of IT. RapidScale makes technology your biggest competitive advantage.

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