



Transforming HR Operations with Generative AI on AWS

Clearscale implemented a secure, scalable HR assistant that automated support, boosted productivity, and improved employee experience.

Client Profile



Industry

Client Consulting / Professional Services



Technology

Gen AI

Overview

A growing remote-first company struggled with HR bottlenecks that slowed onboarding and frustrated employees. Clearscale built an intelligent HR assistant on AWS that automated support, streamlined access to information, and reduced the workload on HR teams. The result: improved productivity, faster response times, and a better employee experience.

Meet Our Hero: A Growing Remote Workforce

This organization wanted to provide its employees with quick, reliable access to HR information, without overwhelming its small HR team. Remote workers often faced delays in getting answers to common questions about benefits, onboarding, and company policies.

The company's processes relied heavily on manual intervention, which introduced bottlenecks and slowed down productivity. HR staff spent valuable time answering repetitive questions, while employees waited for responses that impacted their day-to-day work.

As the organization continued to grow, leadership knew they needed a modern solution: an intelligent, secure assistant that could handle HR inquiries automatically, keep data fresh, and scale alongside the business.

The Challenge

Challenge 01

Reduced productivity from repeated manual HR support

Challenge 02

HR bottlenecks slowed employee onboarding and daily operations

Challenge 03

Inconsistent information access led to frustration across the workforce

Challenge 04

Lack of a centralized, intelligent system made it difficult to scale HR processes

The Goal

- Fully shift away from an on-premise data center
- Establish a secure, PCI DSS-compliant AWS Landing Zone
- Improve scalability and resilience with multi-account governance
- Minimize downtime during migration
- Reduce operational overhead and enable long-term innovation





The Solution

Clearscale designed and implemented an intelligent HR assistant powered by AWS services.

Step 01: Architecture & Data Pipeline

- Ingested HR documents from Amazon S3
- Indexed data in Amazon OpenSearch and Amazon Kendra for retrieval
- Used AWS Lambda functions to automate ingestion and processing

Step 02: AI-Powered Assistant

- Leveraged Amazon Bedrock to enable generative AI responses
- Provided employees with natural-language answers to HR questions
- Ensured accuracy by using Bedrock for context-grounded retrieval

Step 03: Scalability & Security

- Deployed the system using AWS API Gateway and IAM for secure access control
- Built a serverless, scalable design that grows with the organization
- Created an architecture capable of supporting future integrations

The Impact

Automated HR support, reducing manual workload on HR teams

Faster employee responses, cutting delays during onboarding and daily operations

Improved accuracy, with centralized data ingestion and retrieval

Enhanced productivity and employee experience, particularly in a remote-first environment

Turn Cloud Chaos Into Clear Results On AWS

Clearscale helps organizations break free from cloud chaos and experience clear results on AWS, applying generative AI to real-world challenges, from HR to customer service. If your teams are slowed by repetitive questions or scattered information, let's build an AI assistant to free up time and improve productivity.

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