



AWS Cost Optimization for Convexity Leveraging Wendu Platform

Overview

Convexity Technology Limited stands as a prominent blockchain consultancy firm, not only in Nigeria but also across Africa. At the forefront of their offerings is their groundbreaking solution known as the 'Convexity Humanitarian Aid Transfer Solution.' This innovation is designed to establish comprehensive visibility and transparency in the distribution of humanitarian aid throughout Nigeria and Africa.

This solution seamlessly connects all stakeholders involved in the aid distribution chain, spanning from donors to beneficiaries, leveraging the power of blockchain technology to ensure efficiency and accountability.

The Convexity Humanitarian Aid Transfer Solution (CHATS) represents the flagship product of Convexity. With a dedicated product team boasting over two decades of collective experience in both humanitarian and financial sectors, CHATS is purpose-built to tackle distribution challenges associated with Cash & Voucher Assistance (CVA) in Africa. By harnessing blockchain technology, CHATS aims to combat fraud in aid administration and enhance the welfare of vulnerable individuals and households.

The Convexity team is actively developing a digital cash and voucher transfer platform underpinned by blockchain technology, facilitating the seamless movement of funds between donors, NGOs, and other relevant parties. Blockchain's inherent immutability and transparency empower donors and auditors to monitor aid distribution processes closely.

CHATS ensures that all aid recipients possess a wallet account linked to a verified individual, offering multiple channels for aid redemption, including USSD, SMS vouchers, QR code paper vouchers, and NFC cards for beneficiaries without internet





access or smartphones. Moreover, aid distribution is meticulously geo-fenced and mapped to prevent unauthorized disbursements, thereby providing donors with real-time visibility into their funded projects.

Crucially, the CHATS system is fortified with a non-custodial smart contract cryptocurrency fund management system, allowing donors to intervene in case of suspected malpractice during the disbursement process by pausing or retracting funds. This proactive measure further solidifies trust and accountability within the aid ecosystem, fostering impactful humanitarian initiatives across Nigeria and Africa.

Customer Challenge

For Small and Medium Business (SMB) such as Convexity utilizing Amazon Web Services (AWS) cloud infrastructure, managing costs effectively can present significant challenges. One common problem is the lack of visibility into spending patterns and cost drivers. Without proper monitoring and analysis tools, SMB companies and finance teams may struggle to understand where their AWS dollars are being allocated, making it difficult to identify areas for optimization and cost reduction.

Additionally, SMBs often face difficulties in predicting and forecasting their AWS expenses. Fluctuating usage patterns, unexpected spikes in demand, and evolving business requirements can lead to unpredictable costs, making it challenging for SMB to budget and plan effectively. Without accurate forecasts, SMB's risk exceeding their budgetary constraints and experiencing financial strain.

Another prevalent issue in AWS cost management for SMBs is the complexity of pricing models and billing structures. AWS offers a vast array of services with diverse pricing schemes, including pay-as-you-go, reserved instances, spot instances, and savings plans. Navigating these pricing options and understanding their implications for cost optimization requires a deep understanding of AWS pricing intricacies, which may be daunting for SMB teams with limited resources and expertise.

Furthermore, SMB's often struggle to implement and enforce cost optimization practices effectively. While AWS provides various cost management tools and best





practices, SMB's may lack the dedicated personnel and resources to implement these strategies consistently. Without a proactive approach to cost optimization, SMB's risk overspending on unnecessary resources, missing out on potential savings opportunities, and undermining their financial sustainability in the long run.

Solution

Convexity teamed up with CloudPlexo specialists and utilized CloudPlexo's SaaS solution, Wendu, a platform tailored for AWS security and cost management. Together, they tackled Convexity's challenges in managing and optimizing costs. CloudPlexo performed a thorough FinOps assessment of Convexity's AWS infrastructure, delving into cost optimization strategies, resource utilization analysis, inefficiency identification, and recommendation of cost-saving measures. This encompassed actions such as rightsizing instances and fine-tuning storage solutions to trim unnecessary expenditures while upholding performance and reliability standards. The integration of advanced FinOps tools and industry best practices provided by Wendu played a pivotal role in this endeavor.

Results and Benefits

By teaming up with CloudPlexo's cloud specialists and harnessing the capabilities of Wendu Security and cost optimization platform, Convexity successfully conducted a comprehensive assessment of AWS costs and security. Through this collaboration, Convexity streamlined its AWS infrastructure, slashing unnecessary expenses, and optimizing resource utilization. The outcome was remarkable cost savings, paving the way for enhanced financial efficiency and profitability within the organization. These savings empowered Convexity to redirect resources towards strategic initiatives focused on innovation and business expansion, driving sustainable growth and competitiveness in the market.