



Business challenge

To build a global blockchain ecosystem that could support its decentralized finance network, Akropolis Decentralised Ltd. needed to replace its existing cloud solution with a more robust, scalable cloud infrastructure.

Transformation

Akropolis needed a cloud infrastructure that could support a distributed blockchain-based ecosystem for autonomous financial organizations. The company replaced its existing cloud platform with the more robust, scalable IBM® Cloud™ infrastructure, which was capable of handling high transaction volumes with stability.

Results

Robust cloud infrastructure

that supports a distributed, scalable blockchain ecosystem

Greater level of support

included with cloud solution at no additional charge

Security-rich features

with a unique triple-network architecture

Akropolis Decentralised Ltd.

A financial fortress built on blockchain in the public cloud

Founded in 2017, Akropolis is developing a domain-specific financial protocol based on blockchain technology. The company aims to use the platform to enable informal autonomous financial organizations (AFOs) to quickly form and operate, foster an interoperable, scalable network through which AFOs can exchange value in a trusted environment and ultimately reduce instances of fraud and misuse of funds. Akropolis is incorporated in Gibraltar and currently conducts business in Singapore with plans to expand globally.

“I want to create a distributed fund that is provably solvent at all times, as opposed to one that appears solvent in annual reports but can suddenly go bankrupt.”

—Anastasia Andrianova,
Founder and CEO, Akropolis
Decentralised Ltd.

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Quest to create an immutable pension fund

When the financial crisis of 2008 hit Wall Street, the repercussions reverberated throughout the world. Among the most adversely affected were individuals—particularly the elderly—with pension funds.

Anastasia Andrianova, Founder and Chief Executive Officer (CEO) of Akropolis, was keenly aware of the painful consequences on a personal level. Not only was she working as a financial analyst at Lehman Brothers of London when the investment bank crashed, but her parents, who lived in Lithuania, were directly impacted.

“Because of the structure of the inter-bank lending system, when a bank collapses in New York, ordinary people, and the most vulnerable people specifically, find themselves in situations where they can’t access their accounts,” says Andrianova. “Their long-term savings are raided, as typically public funds are the first pot of money the government reaches into during a financial crisis.”

The experience became the impetus for founding Akropolis, a company with a mission to shield vulnerable populations from the domino effects of future economic meltdowns. In fact, the company name comes from the word “acropolis,” which refers to

a fort-like structure built in ancient times to protect inhabitants from external attacks.

“What we’re trying to do is to create an unraidable fund that doesn’t depend on the inter-bank lending system,” says Andrianova. “One that is architected as a peer-to-peer financial network and delivers a trifecta of basic services: access to reliable savings, credit and insurance.”

To that end, Akropolis is building a protocol and domain-specific chain to provide blockchain-based infrastructure for a decentralized financial network. The purpose of the network is to enable the formation, operation and interlinking of informal autonomous financial organizations, such as digital co-ops, guilds and mutuals.

The immutable characteristics of a blockchain ledger make it resilient in the face of fluctuations of the global market. Since each block of information (such as a set of transaction details) in the blockchain is recorded in the subsequent block, changes cannot be made without detection. This makes it possible for two parties to exchange funds directly using blockchain, without the need for a bank or other entity to process or track the transaction.

After initial testing of its blockchain protocol running on a cloud platform, Akropolis came to the conclusion it

needed a more robust and resilient solution—a secure, sustainable, distributed cloud infrastructure that could scale globally and handle high volumes of transactions.

Startup support with room to grow

While investigating cloud platform options, the Akropolis team initially didn’t consider IBM. In fact, when a team member suggested IBM, Andrianova and others didn’t see it as a fit.

“We kept saying, ‘We’re a startup. IBM works with enterprise clients. What’s the point?’” says Andrianova. But upon meeting with IBM, the Akropolis team came to see things differently. “We were pleased to find out that IBM actually works with startups, offering designs flexible and scalable enough to accommodate young companies and their product sales cycles.”

Ultimately, the team selected IBM to develop its new public cloud infrastructure. The solution consists of IBM Cloud and its containers and security, as well as IBM Cloud Functions and DevOps.

Several factors contributed to the choice of IBM over competitors. In addition to startup support from IBM, the IBM name was a boon to a budding company that wanted to establish trust with stockholders and potential customers.

Economics also factored into the decision. Unlike many other companies, IBM doesn’t charge customers for internal traffic. This capability is particularly vital for blockchain due to the large number of changes that occur inside the data center network. What’s more, IBM includes a sufficient amount of support with the solution for customers to maintain a business production environment in the cloud without incurring additional charges.

The security-rich features IBM provided were attractive, as well. The IBM Cloud solution has a unique triple-network architecture in which public, management and private networks are separate, so there’s no risk of users of one network accessing the others. And finally, IBM has Cloud Computing Compliance Controls Catalog (C5) certification to demonstrate it meets General Data Protection Regulation (GDPR) standards in Europe, which many competitors lack.

A vision for global reach

Currently, Akropolis is in the process of finalizing its strategic roadmap, with IBM at the core of its cloud infrastructure. The company anticipates working with the IBM incubator in New York City to explore design solutions in greater detail.

“Right now we’re building the foundational layer. Then we’ll develop the applications on top of that layer and begin working on connecting various entities across our architecture,” says Andrianova. “As we start testing it, we’ll be scaling it across geographies. It is crucial to ensure that the robustness of the network won’t be compromised then.”

As the Akropolis team progresses toward bringing its vision into fruition, its initial wariness toward IBM as a corporation devoted solely to large enterprises has shifted into a shared appreciation. According to Andrianova, “It is very rewarding for us to see that such a global company is interested in what we’re trying to do.”

Solution component

- IBM® Cloud™

Take the next step

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