

Revolutionising Nigeria's Financial Infrastructure: The CSCS-Nutanix Partnership

Embracing the Future: How the Nigerian Central Securities Clearing System (CSCS) Pioneered a New Era in Capital Market Technology with Nutanix at the Helm.

The Central Securities Clearing System PLC (CSCS) stands as Nigeria's premier financial markets infrastructure (FMI), positioned at the nucleus of the capital market. Its role encompasses a broad spectrum of services that drive the very heartbeat of the country's financial ecosystem.

Today CSCS is Nigeria's Central Securities Depository (CSD), licensed to carry on the depository, clearing and settlement of all transactions in the Nigerian Capital Market. The company processes an astounding 99.3% of all trades in the capital markets, underscored by its preeminent position in the equities market and considerable presence in bonds and other financial areas.

"At CSCS, we've built a robust technological framework as the cornerstone of our success, propelling us to the pinnacle of Nigeria's capital market. A defining characteristic of the business it that our deep-rooted technological ethos and the fact that we view ourselves not just as a financial entity but fundamentally as a technology company operating within the capital market," says Tobe Nnadozie, Divisional Head of Business Technology & Digital Innovation at CSCS.

Challenges

In 2018, CSCS began re-evaluating its operational strategy and recognised the need for an infrastructure overhaul. Then by 2019, after meticulous planning and strategy formulation, it looked for a partner to support a redefined strategy anchored in delivering self-service platforms, expanded API infrastructure, and an environment that could support technologies like machine learning, artificial intelligence, robotic process automation, and blockchain.

The bottom line? CSCS wanted an infrastructure to ensure consistent service provision to the market, deliver a robust business contingency and effective disaster recovery.

"Three core tenets were foundational to our evaluation criteria: service, stability, and scalability. Following a thorough analysis of potential partners, one name emerged as a clear front-runner: Nutanix. Despite individual encounters with Nutanix previously, it wasn't until the cusp of 2019 and 2020 that we considered a partnership," adds Nnadozie. But the partnership faced a challenge: the absence of a reference within the capital market; no entity had deployed Nutanix at the scale it envisioned. "Our vision was audacious: transitioning all our vital infrastructure onto Nutanix, barring one environment," says Nnadozie.

Industry

Financial Services

Location

Nigeria, EMEA

Website

www.cscs.ng

Key Benefits

Financial Savings

 \$450,000 saved on reduced licensing, data centre expenses, and decreased reliance on network devices

Enhanced Agility

 Enabling faster go-to-market strategies and positioning CSCS as an innovator in the capital market

Operational Efficiency

 Streamlined IT operations, reduced infrastructure concerns, and notable improved risk profile Transitioning to a new infrastructure, especially one as extensive as CSCS's, is no small feat. Its legacy system was a behemoth, with an intricate web of over 70 physical servers. The primary challenge? To retain only the core server and transpose functionalities from the others to a more modern, hyperconverged infrastructure. Beyond the operational challenges, data security was a towering concern. Given the scale of their investment and the strict regulations in Nigeria, ensuring absolute data security was not just crucial-it was imperative.

Solutions

"In our blueprint for technological metamorphosis, Nutanix was at the core. With their invaluable expertise, we streamlined our sprawling infrastructure to about 50 optimised servers. Our new avatar included a cutting-edge multicloud disaster recovery environment that promised rapid recovery and ensured zero downtime," elucidates Nnadozie.

Their collaboration with Nutanix witnessed an overhaul of nearly 90% of their systems, which were transitioned to just five Nutanix clusters, including a three-node cluster for its production environment and a two-node cluster for its disaster recovery (DR) environment - paving the way for a streamlined and futuristic operational module.

"To put it succinctly, Nutanix now hosts our most vital components: our core database, crucial data sets, pivotal applications, and essential APIs. We have moved 90% of our systems across to the Nutanix clusters. We are developing a multicloud disaster recovery system that can transition between on-premises and cloud operations, providing us unparalleled flexibility," says Nnadozie.

According to CSCS, something that sets Nutanix apart is the calibre of its support system. With its acquisition of the Nutanix Ultimate License, it has access to premium support services. Furthermore, Nutanix Flow has proven invaluable, simplifying the management of the entire Nutanix ecosystem.

Customer Outcomes

"Incorporating Nutanix into our operations has brought transformative benefits to our company. Firstly, the financial advantages have been immediately clear, with savings of approximately \$450,000. This arises from a combination of factors, including reduced licensing costs, diminished data centre expenses, and lesser dependence on costly network devices," says Nnadozie. This financial clarity extends to budget predictability. Unlike the uncertainties tied to traditional systems, Nutanix's platform provides scalability and transparency, allowing CSCS and its partners to develop and scale new digital products and solutions rapidly. CSCS is also implementing a robust cloud strategy, moving from outdated backup systems to instantaneous replications.

Products

- · Nutanix Cloud Infrastructure
- · AHV Virtualization
- · Prism Management
- · Flow Network Security

Applications

- · Infrastructure-as-a-service
- · Disaster Recovery
- · Multicloud Management

Regarding workforce impact, the team can manage this advanced environment through comprehensive training without expanding its headcount, and remote management provides flexibility and supports work-life balance.

"Our agility has positioned us as a strategic player in the capital markets. We're not merely providers but innovators. Our ability to promptly roll out servers, replicate workloads, and introduce changes has accelerated our go-to-market strategies. The change is so significant that our CEO makes it a point to visit what's now perceived as the engine room of not just our business but the broader capital market of Nigeria," adds Nnadozie.

Beyond operational expectations, Nutanix has exhibited empathy, aligning with the company's growth strategy and addressing concerns genuinely while remaining transparent about future plans, potential gaps, or costs.

"I have been in IT leadership for 20 years, and managing infrastructure has always been the biggest challenge. With Nutanix, that concern has taken a backseat. When I get a daily risk report from the chief risk officer, infrastructure is hardly ever on it, and if it is, we already have a solution," says Nnadozie.

The ability to manage multiple OEM suppliers, like its HP hardware, is a massive win for the team. So is the user-friendly interface of Prism and Prism Central, offering an insightful overview and a platform for strategic planning, giving the team insights, operational clarity, and peace of mind.

Next Steps

"Nutanix is a central pillar in our strategies as we envision our future. Currently, an overwhelming 90% of our infrastructure is anchored on Nutanix. Our commitment to the platform will grow as we want to deploy a scaled-down version specifically for testing purposes. Meanwhile, our production infrastructure will keep expanding with Nutanix," says Nnadozie.

CSCS is also looking to expand its hybrid cloud capabilities and is negotiating with cloud providers. However, with Nutanix as core to this strategy, it has made compatibility and integration with the Nutanix environment a prerequisite for future partners.

"Our roadmap with Nutanix stretches out for five to seven years. Naturally, as our business evolves, so will our requirements, and we will invest further in licenses, storage, and compute capacities," he ends.

Learn more at www.nutanix.com

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