MOBI724 GLOBAL SOLUTIONS VALIDATES SCALABILITY & PEAK CAPACITY OF THEIR AI-DRIVEN SMART TRANSACTIONS PROCESSING PLATFORM

Mobi724 Global Solutions has developed a platform that seeks to optimize monetary point systems for both end-users and companies looking to leverage these systems' data. They did a CENGN project to validate their solution's functions and scalability within a containerized environment.

Mobi724 is a fintech company that was founded in 2012 and headquartered in Montreal, Canada. The company offers a suite of integrated technology-agnostic, BI & AI-powered card-linked offers & reward solutions. Their solution has been developed to optimize rewards points & offers systems for both end-users and their clients, such as payment card issuing banks, payment networks & merchants looking to leverage these systems' transactional and behavioral data.

The Mobi724 platform is a suite of data-driven card-linked rewards solutions that work on any digital payment method and at any point of sale, for both online and brick-and-mortar locations. This unique platform is designed to enable its clients – banks, payment processing networks, and merchants – to generate incremental revenues by leveraging purchase-related data insights while delivering a seamless and engaging experience to cardholders.

REWARDING CARD ISSUERS AND CARD HOLDERS

Mobi724's all-in-one solution uses an extensive AI data analytics engine to allow banks and merchants to engage customers with the most appealing behavior-driven offers & rewards. This self-learning engine can predict spending habits and find patterns that are of material significance to marketing campaign performance. Empowered with this knowledge, they can make the customer journey more personalized, frictionless and fun.

Additionally, Mobi724 offers card providers the platform and budget control tools to enable the execution of targeted marketing campaigns based on real-time insights and campaign performance. By capturing payment card transactions in real-time and at any location, Mobi724 provides card issuers and merchants a means to know, recognize and engage their customers.

In essence, the Mobi724 platform was developed to replace current reward delivery costs with better quality data metrics and incremental revenue opportunities for banks, payment processors and merchants, while allowing cardholders to benefit from relevant offers, frictionless point redemption, and increased savings. This is with a clear objective to enable proactive cardholder lifecycle management through the seamless usage of AI-driven Smart Transactions processing platform.

SCALING IN A CONTAINERIZED ENVIRONMENT

Mobi724 is offering its solution to payment card issuers around the world, which will lead to an incremental increase in payment card transactions. This is noteworthy as the solution is expected to drive the shift to a cashless economy, which has been proven to promote amelioration of economic conditions everywhere. Their solution needs to be reliable and robust at a national & pan-regional scale so Mobi724 can establish field readiness of the platform and bring it to customers with confidence.

To effectively scale up, Mobi724 has developed a containerized version of its platform. Containerized solutions can automatically scale based on load, which is an advantage over using virtual machines or other more traditional network environments. To address the needs of large customers, Mobi724 came to CENGN with a Cloud project to scale and stress test their solution as a containerized deployment. This would help them develop key metrics to gain a better understanding of their solution, such as peak capacity, scalability, number of clients that could be supported concurrently, maximum load, and point of failure. In order to properly test their solution, Mobi724 utilized 2.5 billion transactional data sets provided by a partner.

TESTING ON THE CLOUD

To complete this project, Mobi724 was provisioned an isolated containerized environment within CENGN's Cloud Infrastructure. As is the case with containerized deployments, the solution was divided into master and worker nodes. For this project, Mobi724 had three master nodes, one active and two on standby. These standby nodes would automatically take the place of the active master node after it would hit its point of failure. The core features were housed on the four worker nodes within the deployment. The AI algorithm remained on the worker nodes, as did all the simulated traffic of users and actions that were incrementally increased to the point of failure.

Also included in their cloud tenancy was a monitoring virtual machine (VM), which collected the metrics throughout the project. For the monitoring, Mobi724 used an open-source technology named Prometheus, allowing them to properly determine the resource requirements of their solution at different levels of user and transaction traffic.

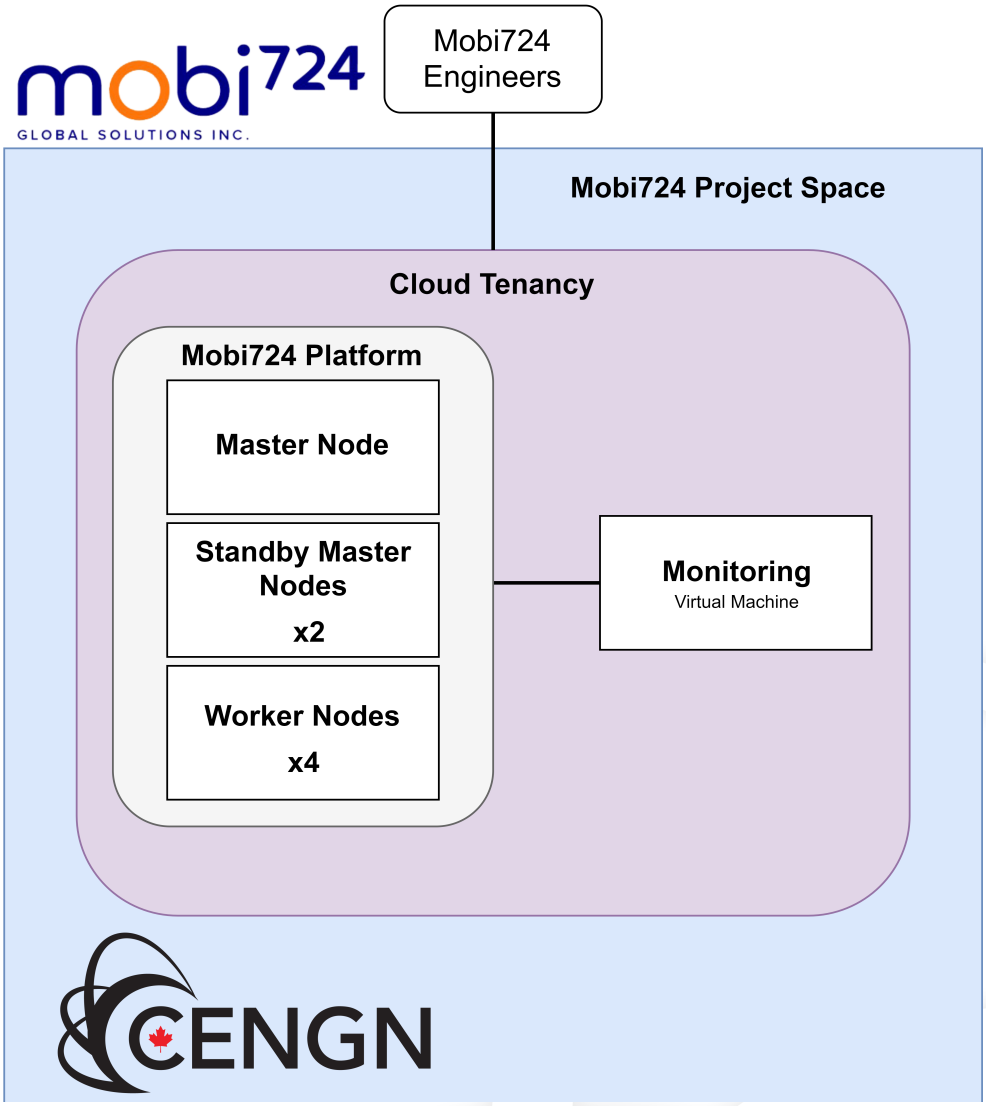

Figure 1: Mobi724's Project Space on CENGN's Cloud

THE VALIDATION PROCESS

This project was a great success for Mobi724. They confirmed their solution is highly available, avoiding downtime by successfully and quickly switching to standby master nodes when the active one reached its point of failure. Also, through testing on a commercial-grade infrastructure, they were able to identify and address issues with their solution, ensuring their product was optimized for market before its launch.

The testing has also helped Mobi724 verify that their data analytics engine has marketing value. They were able to compare the project information to their former solutions, verifying that the data generated by the platform can lead to better targeted marketing, and understanding of the users, resulting in higher ROI, faster adoption rates, and a true "Surprise & Delight" experience for cardholders. Armed with this knowledge, Mobi724 is preparing to bring their product to market.

PREPARING TO SCALE UP

The results of this project have given Mobi724 the knowledge they need to properly scale their product, as they now have a clear outline of how their platform performs. They have also found key areas for improvement, which will only make their product offering more robust and appealing to customers as they continue to evolve.

Completing this project has equipped Mobi724 with experience in using open source technologies and container orchestration, leading to more efficient scaling and a better ability to tailor the solution to their clients.

Mobi724 are already preparing for their next CENGN project! The company plans to test the core functions of their platform using a GPU to determine if shifting from CPU can help them refine their already polished solution. We were happy to advise Mobi724 during this project and are excited for them to get started on their second!

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CENGN
Rick Penwarden, Marketing Manager
rick.penwarden@cengn.ca
cengn.ca/projects

Eli Rozhansky, Business Development and Relationship Manager
eli.rozhansky@mobi724.com
www.mobi724.com

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