Cellulant Achieves Data Sovereignty and Service Flexibility with VMware Cloud

Cellulant is a leading Pan-African payments company providing locally relevant and alternative payment methods for global, regional and local merchants. Its single API payments platform enables businesses to collect payments online and offline.

Industry

Financial Services

Partner

Pure Infrastructure Limited is a company incorporated in Nairobi, Kenya, in 2020 and a VMware Cloud Provider Partner. It offers cloud consulting services, helping organizations to define and deploy their cloud technology strategies. From simple migration to hybrid and multi-cloud deployments, Pure Infrastructure strives to assist companies looking to get a better return on their cloud assets.

VMware footprint

Pure Infrastructure Limited Services built on VMware® Cloud™ technologies

Cellulant, a Pan-African financial technology company, was moving its services to a public cloud when it hit a major obstacle. Customers in multiple countries had data residency, regulatory, and data sovereignty concerns that halted the company from migration, leading Cellulant to reconsider who it could partner with and which technology would help overcome these challenges. Cellulant aligned with Pure Infrastructure, a VMware Cloud Provider Partner, to help build an extensible VMware Cloud that can traverse borders.

Scaling payments across Africa

The financial tech company has offices in 18 countries, services 33 other regions in Africa and has a mission to create opportunities by accelerating economic activities through payment platforms. For Cellulant, a project stall was devastating since it was geared to ensure the company can scale and deliver innovative applications and services. A new cloud environment would give Cellulant the perfect growth platform. Still, the pause gave time to consider precisely the type and nature of the partner and vendor it would require that would deliver the same quality of service its customers were used to, albeit in the cloud. And that supports the Cellulant vision to enable seamless payments for businesses, banks and consumers across Africa.

"The challenge we face is that there is no homogeneous way of looking at regulation. It's all different. And on the one hand, we consider regulators and governments as our partners, but on the other, we want to give our users an ubiquitous experience. This is why we elected to scale to the cloud with VMware."

John Mburu, Head of Platform Engineering, Cellulant

CELLULANT OVERCOMES PUBLIC CLOUD CHALLENGES
WITH VMWARE CLOUD
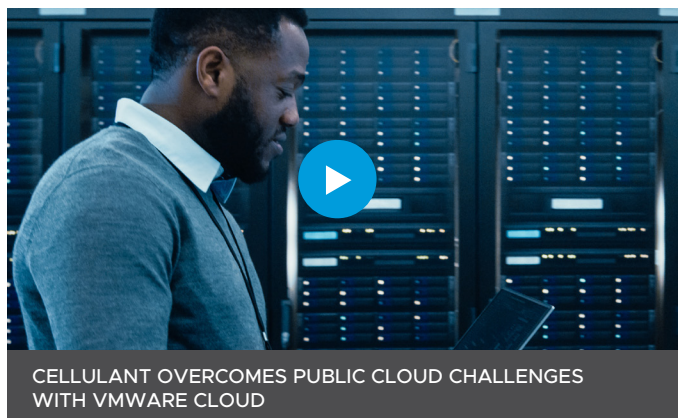
Data sovereignty set to unravel cloud expansion

From its roots as a premier cellular provider, the company has experienced dramatic growth over the last decade. Cellulant has morphed its business into a payment platform, seamlessly integrating fragmented payment processes on its centralized software platform. But this ingenuity is also a challenge as many regulatory bodies insist on hosting payment data in-country.

At this point, Cellulant approached Pure Infrastructure, a VMware Cloud Provider Partner, and shared its three core challenges. One was the local data sovereignty requirements introduced by multiple African countries the company must adhere to.

Secondly, for Cellulant to scale across borders, the costs of putting a data center, or a rack in a local data center, in every country made the capital expenditure too high. And lastly, the company needed to deliver a consistent platform for its developers to work with so they can scale operations and continue delivering and deploying innovative solutions in the payment space.

"We are on a journey to solve the fragmented payment ecosystem in Africa, providing solutions that address the challenges that merchants and banks face when collecting payments. It's a problem we aim to solve elegantly. By doing so, we believe that create opportunities that accelerate economic empowerment for all Africans."

John Mburu, Head of Platform Engineering, Cellulant

VMware Cloud in each region

"From our research and talking to various partners and peers in the technical space, we found Pure Infrastructure, a VMware Cloud Provider Partner, and chose to use VMware to help solve our challenges. The key thing for us was that we could deliver the same quality and functionality to all our clients from the cloud, but that we had full ownership and visibility of," says John Mburu, head of platform engineering at Cellulant.

The mandate to Pure Infrastructure was clear. Cellulant wanted an autonomous, vendor-agnostic cloud environment that would deliver the data sovereignty it needed per country and the development flexibility required to drive innovation.

To support this, the Cellulant cloud is hosted at Pure Infrastructure, which delivers managed services for its VMware Cloud. The model enables Cellulant to benefit from a pay-as-you-use and pay-as-you-grow model and allows it access to licenses in each country where it requires to turn services "off or on."

The solution has been built to help the business scale its operations with a cloud footprint and offer a level of comfort for customers uneasy about where their data is being processed by delivering a ubiquitous experience. The business can still host certain applications in a public cloud but ensure its transactional data is hosted on its VMware Cloud in the country of origin.

"Pure Infrastructure is a managed cloud provider based out of Nairobi, Kenya. We provide software licenses, hardware, and consulting services on a consumption model that better aligns with our customers' business objectives. This and the fact that we have a 17-year long history with VMware, including that the team was part of the first people to bring the VMware Cloud to Kenya, is why Cellulant selected us."

Phares Kariuki, CEO, Pure Infrastructure

Per transaction, per usage

With the VMware platform, the Cellulant team benefits from one contiguous cloud platform. The benefit of this is that should it need to scale into a new country, where, say, Pure Infrastructure cannot support it, it can simply look for a VMware Cloud Provider in that region. With VMware, Cellulant has what Phares Kariuki, CEO at Pure Infrastructure compares to a compatible cloud operating system that can be used in any country should sovereignty requirements come up.

"What we have today is a platform that allows us to scale and roll things out much faster, making it easier for me to get services up and running without having to wait for the typical annual budget cycles. And the problem with those annual budget cycles is your budget may or may not be approved. And when it's been approved, you already waited for months. But because this is an OpEx model, if I need to test or roll out a service, it's just a matter of saying my bill will rise by this fraction. Which is easier to sell within the company as opposed to asking for a huge outlay at first," says Mburu.

According to Mburu, the company's infrastructure team can also experiment with new services and develop new products and solutions without management becoming a bottleneck.

> "To make our underlying technology align with the way the business works, we needed to embrace a utility model so we could grow and shrink the underlying technology and underlying infrastructure as needed. It's been invaluable for us to move to an OpEx model, allowing us to model our business and revenue models down to a transaction and per use. Which is the way we think and the way we operate as a business."

John Mburu, Head of Platform Engineering, Cellulant

Consistent development and a responsive business

According to Cellulant, selecting a reliable partner in Pure Infrastructure who could support its need to scale into new markets and has a good understanding of VMware and the VMware Cloud Provider platform was a huge benefit. This is alongside the massive savings it has made through the cloud provider licensing model and the ability it gives the company to scale operations incrementally.

"The first benefit we saw is how quickly the products become available to us. I think it was within a couple of weeks of closing the discussions with Pure Infrastructure that we got the licenses and could select the services we wanted to start with and which ones they wanted to add later. This lets us experiment much faster without spending long back and forth cycles with vendors asking for trial licenses and the like," says Mburu.

The Cellulant development team is now far more responsive to the business needs and can innovate and scale-out applications as needed.

"VMware has proven to be an underlying core platform that solved many problems. In part, because they could lease services and licenses from me (Pure Infrastructure) in a consumptive manner, which better matched their growth. And also as it is compliant with sovereignty requirements in each country while delivering a consistent developer experience," says Kariuki.

A contiguous cloud

"Based on trends in the fintech market and the requirements by the countries where we deploy our services to have the infrastructure in the country, we are going to grow with Pure Infrastructure and VMware. With Pure Infrastructure, we can easily deploy services in new countries without going back to the vendors for long negotiations, trying to get good discounts. This flexibility also supports a future in which we will be rolling out our services as microservices across all our environments," says Mburu.