Kenya | Financial Services

Family Bank Kenya builds a secure network for digital growth

Family Bank Kenya partnered with NTT DATA to modernize its network and security infrastructure, supporting regulatory compliance, reliability and future growth. NTT DATA implemented a Cisco-based software-defined network, SD-WAN, Catalyst Center, F5 security solutions and Infoblox DNS protection across 100+ branches. The transformation improved network visibility, resilience and security, while enhancing operational efficiency, optimizing costs and helping the bank meet local and international banking standards.

Client profile

Family Bank is a commercial bank in Kenya that was established in 1984 as Family Bank Building Society with just one branch. It has since grown and became a fully-fledged commercial bank in May 2007. The Bank is regulated by the Central Bank of Kenya (CBK) and is a member of the Deposit Protection Fund.

The Bank has 95 + branches in 32 counties across Kenya to care of more than 1.2 million customers.

The bank is renowned for its digital innovation, being the first to introduce paperless banking through smart card technology. This allows customers to transact without filling in deposit or withdrawal slips. Family Bank is also a pioneer in mobile banking with its PesaPap mobile app, which is unparalleled in the market.

> "Over time, we'd developed a strong partnership with NTT DATA. They know how global banks and their infrastructure work. They've also taken the time to get to know Family Bank Kenya and our needs. They support us in our ambition to expand into East Africa."

Ezekiel Kimanthi, CIO, Family Bank

Business need

Modernize the network and enhance security

Family Bank is a leading commercial bank in Kenya. They provide a wide range of digital financial services to their customers and were the first Kenyan bank to introduce paperless banking.

The Central Bank of Kenya regulates Family Bank and uses the global capital adequacy, asset quality, management, earnings, liquidity and sensitivity (CAMELS) system to rate the bank's performance. Family Bank also must comply with international standards, such as the Payment Card Industry Data Security Standard (PCI DSS). To meet these banking and data-security requirements, the bank must keep their technology — including their network — up to date.

Banking services require a highly reliable and secure network. So, when some of the bank's infrastructure was nearing end of life, they saw an opportunity to modernize their network, improve network administration and operational efficiency, and increase network security.

The solution had to be easy to manage and enable the bank to push upgrades to all their branches at once. Services running on the network had to be available all the time and run smoothly, without any interruptions.

Solution

Transform with software-defined infrastructure and zero trust

The solution we proposed would change the bank's approach to network infrastructure. We designed a software-defined network that leverages the capabilities of Cisco infrastructure and network-management tools.

The software-defined solution enables each branch to use different connections (such as MPLS, 4G or the internet) to connect to the bank's WAN. If one connection goes down, the network automatically switches to another connection without interrupting business. F5 Load Balancing distributes incoming client requests across multiple servers, improving performance with a highly available network.

We implemented the network infrastructure refresh for Family Bank Kenya's more than 100 branches in phases, so we would not disrupt operations. The infrastructure closest to its end of life was updated first.

We also designed and implemented the Cisco Catalyst Center management platform to give the bank a better view of what was happening in their LANs. Cisco SD-WAN connects branches, data centers and headquarters.

Using Cisco tools, the bank can use one dashboard to observe their entire network and detect performance problems before they affect business operations or customers.

The bank's server farms were also updated as part of the process to create a software-defined data center.

Software-defined infrastructure builds security into the network design. The bank's network solution uses a combination of Cisco solutions — including firewalls and network access controls — as part of a zero trust approach to security where users only have access to the information they need.

Implementing F5's web application firewall helped to protect against security threats by providing better visibility and application-level protection for digital services such as ebanking, mobile banking and merchant services. To protect the Domain Name System (DNS) services that support all banking services, we implemented Infoblox Advanced DNS Protection.

> "Complying with regulations is important for any commercial bank, especially one that aims to adopt a universal banking model that can meet all our customers' financial needs, from insurance products to corporate banking. We took the opportunity to adopt a new, software-defined approach to our network and security so that we could further our ambitions knowing without compromising on compliance and security."

Ezekiel Kimanthi, CIO, Family Bank

Outcomes

Cost-effective solution that supports growth

The solution modernized Family Bank Kenya's network and created opportunities for the bank to automate and improve their network as they update their infrastructure. The refresh also enabled the bank to take a zero trust approach to security, protecting their applications and web domain.

Improved operational efficiency

The bank's IT team can now manage the entire network through a single dashboard and automate routine tasks such as setting up devices. With a clearer view of how the network and applications are performing, they can address potential problems before these affect the bank or their customers.

Meeting audit and regulatory requirements

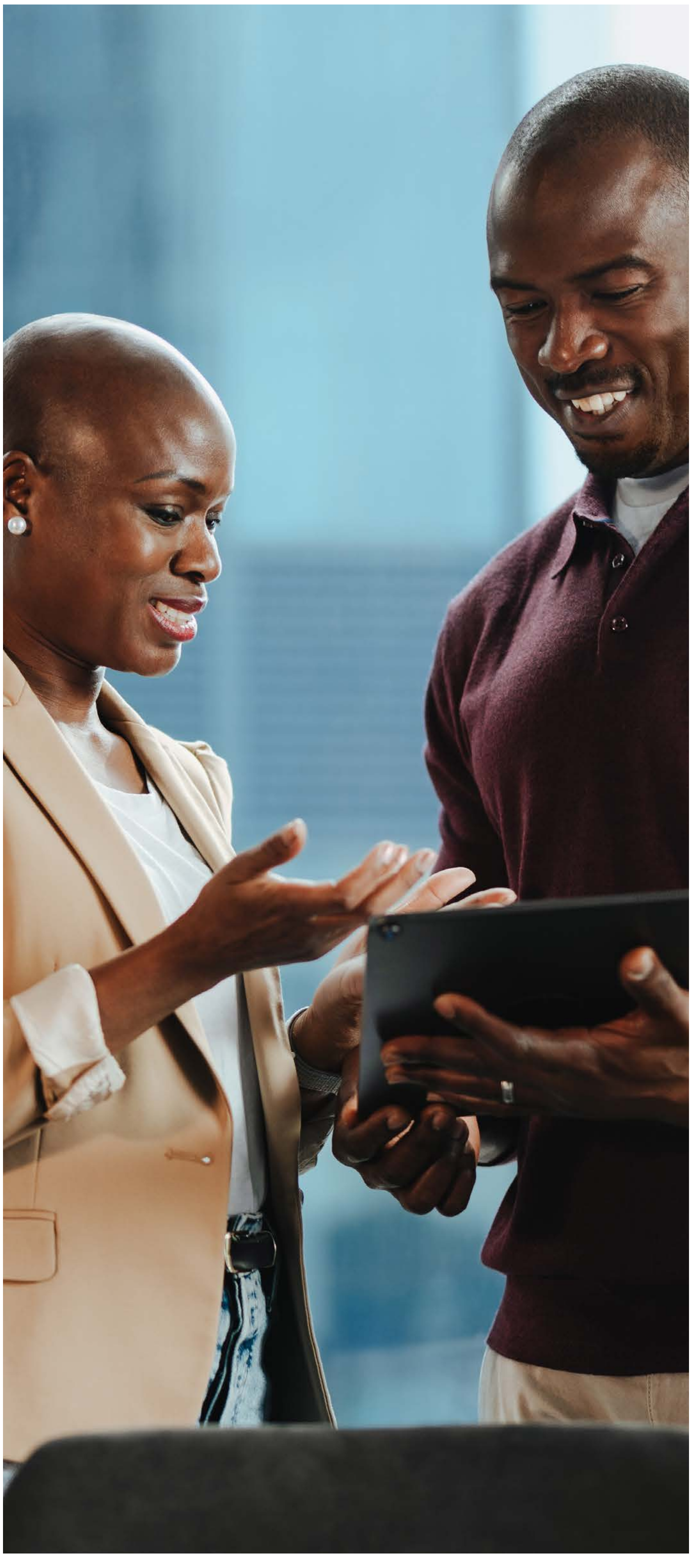
The updated network and increased security enable the bank to meet local and international standards and regulations.

Optimized costs

Our flexible consumption models and the bank's Cisco Enterprise Agreement make it much easier to predict costs. The bank can add any of the services in Cisco's bundled agreement, at any time.

Enhanced security posture

By implementing essential security measures like web application firewalls and DNS threat prevention and by modernizing their network security infrastructure, Family Bank Kenya greatly enhanced their security posture. Fewer risks and vulnerabilities mean better protection for the bank and its customers.



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