

# Standardizing IT infrastructure and operations worldwide



Size: 132,000 employees | Industry: Financial services | Location: Madrid

BBVA is a customer-centric, global financial services group founded in 1857. It has a strong leadership position in the Spanish market, is the largest financial institution in Mexico, and has leading franchises in South America and the Sunbelt Region of the United States. It is also the leading shareholder in Garanti, Turkey's biggest bank by market capitalization. BBVA's diversified business is focused on high-growth markets and relies on technology to drive its sustainable competitive advantage.

## Challenges

- Modernize longstanding business models to compete with new market entrants
- Standardize IT infrastructure and operations globally
- Increase business agility and service innovation

## Solutions

- Application-centric, software-defined networking
- Centralized, automated infrastructure management
- Infrastructure as a Service (IaaS), Security as a Service (SECaaS), Platform as a Service (PaaS), Data as a Service (DaaS), Streams, Events, Metrics, and Monitoring as a Service (SEMMaaS)

## Results

- Enhanced business efficiency, agility, and consistency
- Transformed and unified IT operations
- Automated network provisioning, security, and load balancing

## For More Information

- Visit: [cisco.com/go/aci](https://cisco.com/go/aci)

## Challenge: Delivering a consistent customer experience around the world

The financial services industry is being upended. Regulatory pressures have negatively impacted profitability. And new digital players have infiltrated the value chain, luring consumers with innovative services and raising the stakes of competition.

This has led venerable financial institutions like BBVA to rethink and rebuild their operating models. BBVA is undergoing a global transformation centered on three core values: Putting the customer first, thinking big, and acting as one team.

“The transformation is focused on the customer,” says BBVA CEO Carlos Torres Vila. “As soon as the customer becomes digital, the satisfaction level increases, the engagement with the bank grows, and it leads to more revenue.”

BBVA’s revamped customer experience starts with anytime, anywhere banking. It involves new digital experiences. And it supports customer interactions across multiple devices and applications.

But it must be consistent around the globe, pursuant to BBVA’s third core value of operating as a single, unified business. With 73 million customers, 8,200 branches, and 31,602 ATMs in more than 30 countries, this is no small feat.

BBVA needed a powerful, flexible, automated infrastructure environment. One that could be easily replicated in data centers around the world, establishing a global standard for internal IT operations and customer-facing service delivery.

## Standardizing IT infrastructure and services

BBVA sought to deliver standardized infrastructure, security, platform, data, and streams, events, metrics, and monitoring as services (IaaS, SECaaS, PaaS, DaaS, SEMMaaS) to its core banking teams. Two purpose-built data centers in Spain and Mexico were the testbeds, featuring a combination of Cisco® Application Centric Infrastructure (Cisco ACI™), Cisco Unified Computing System™ (Cisco UCS®), and Red Hat OpenStack Platform.

“We wanted to change the way we work and the way we serve our customers,” says Raúl Tomas Tornero, global head of IaaS networking at BBVA. “So we created a fully automated environment using software-defined networking and open source technologies.”

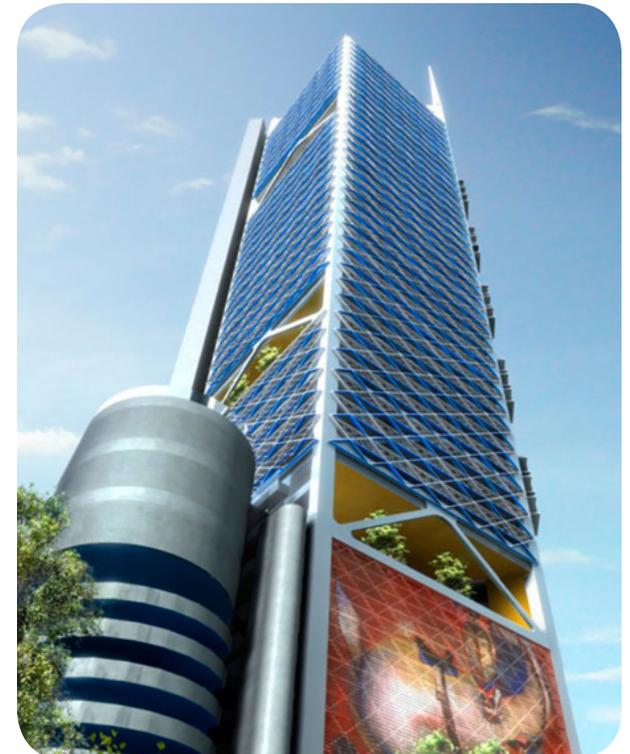
The new data centers in Spain and Mexico use the exact same hardware and code. And both include a development and testing sandbox, in addition to a production environment. Fabio Martínez Merino, global head of compute at BBVA, says standardization has led to a number of benefits.

“We can reuse code for faster application development and deployment,” Fabio explains. “And because everyone is using the same tools and platforms, we are more cohesive and efficient. It helps us work as one company around the world.”

“We have embraced new technologies and become more efficient and innovative. It’s totally different, but very exciting.”

**Luis Sánchez Vidal**

Global head of storage, BBVA



## Fine-tuning security and load balancing

The automation capabilities of Cisco ACI and its ability to seamlessly integrate with OpenStack and legacy platforms via APIs were deciding factors in BBVA's choice of software-defined network. The bank can now manage its virtual network overlay and physical infrastructure underlay with a centralized controller.

"Cisco ACI is a very powerful solution," Raúl says. "We no longer have to configure and define VLANs, subnets, and all the other network elements because it's fully automated. Other networks get in the way, but Cisco ACI makes things very easy."

Security provisioning and load balancing have also been simplified. Building, defining, and segmenting tenant and data environments are effortless. And with a combination of Cisco ACI and F5 BIG-IP, a load balancer and full proxy, BBVA can fine-tune security and performance levels for each tenant, tenant group, and application.

"The visibility, automation, and control we have now isn't possible with traditional networks," says Raúl. "We can see, define, and automate both virtual and physical environments all from a single controller."

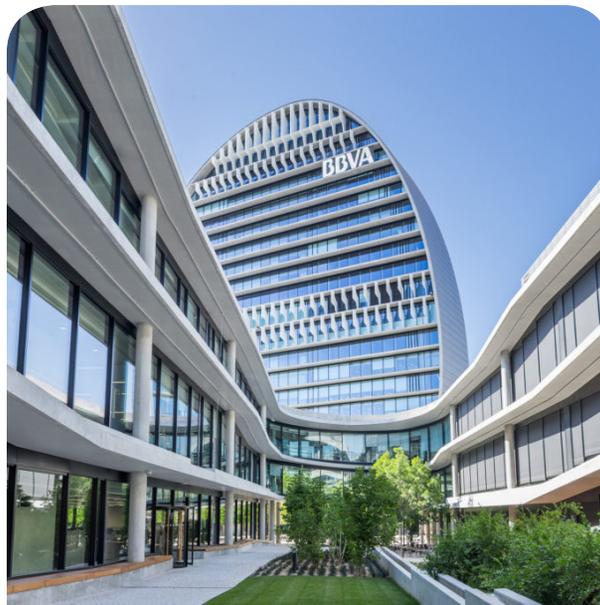
## Transforming IT operations

BBVA hasn't just standardized its global IT infrastructure. It has also completely transformed its internal IT operations.

In the past, traditional methodologies and siloed teams resulted in slow and disconnected IT processes—with lots of handoffs and waiting before a project could move forward.

Today, BBVA's formerly independent groups have been united into a single infrastructure team that works in lockstep. Everything from network configuration and troubleshooting to application development and deployment take less time and effort. According to Luis Sánchez Vidal, global head of storage at BBVA, fully provisioned data clusters are now being deployed in minutes.

"We have embraced new technologies and become more efficient and innovative," Luis says. "It's totally different, but very exciting."



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**Fabio Martínez Merino**  
Global head of compute, BBVA

## Looking ahead

With a proven and standardized infrastructure environment, BBVA will extend its IaaS, SaaS, and PaaS capabilities to additional data centers around the world. It will automate additional processes to gain new efficiencies. And it will continue to transform its business to succeed in a rapidly changing financial services market.

“Companies like Google and Amazon are fast and innovative, and they are redefining customer services,” says Fabio. “We must respond, transform, and innovate. And we must be agile in the creation and delivery of new services. That’s what we’re doing with Cisco ACI.”

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## Raúl Tomas Tornero

Global head of networking, BBVA

## Products

- Cisco Application Centric Infrastructure (Cisco ACI)
- Cisco Unified Computing System (Cisco UCS)
- Red Hat OpenStack Platform
- F5 BIG-IP Local Traffic Manager

