

temenos

A Temenos white paper

Everyone's
Banking
Platform

Building Trust and Driving Growth: Temenos Banking Cloud

Delivered by Temenos, powered by AWS.

powered by  aws

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Introduction

Cloud technology has matured. 72% of banking executives now recognize that incorporating cloud into their overall growth strategy will help them achieve their objectives faster and with confidence.

Turning that belief into reality needs strategy, planning, and extensible architecture together with uncompromising security and industrial-grade resilience. The Temenos Banking Cloud powered by Amazon Web Services (AWS) brings all of this and more.

The Temenos Banking Cloud is the premier Software-as-a-Service (SaaS) offering for banks that want to deliver growth through world-class customer experiences that build deeper trust between you, the businesses, and consumers that you serve.

Accessing the full capabilities of the Temenos Banking Platform through SaaS means it's now possible to consume the most comprehensive set of banking services available in the market, for any segment, for any region, for any bank.

1. The case for cloud has been made

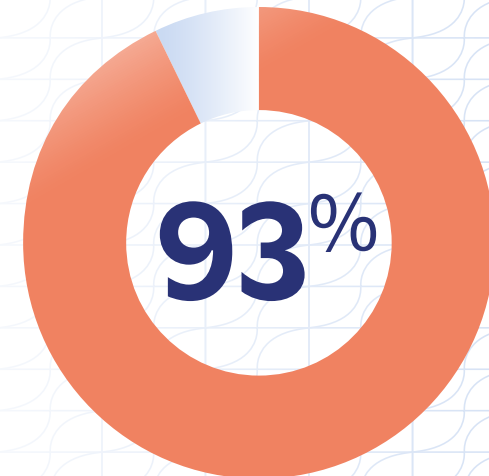
It's time to ask what and when, not if.

At the beginning of 2022, The New York Times¹ published an article with the headline, “Banks Tiptoe Toward Their Cloud-Based Future.” Accenture² agreed and has been tracking the cloud journeys of 100 banks since 2020.

While every bank in Accenture's study has transitioned to the cloud to some degree, the percentage of actual workload in the cloud remains low. The most recent benchmark showed total cloud workloads almost double (from 8% in 2021 to 15% by the end of 2022), but these workloads typically represent the “easy wins” that were straightforward for banks to achieve. Although 35% of enterprise systems were now cloud-based, only 7% had transitioned any core banking workloads.



of banks' total workloads are currently operating in the cloud.



of core banking workloads remain on premise.

¹ <https://www.nytimes.com/2022/01/03/business/wall-street-cloud-computing.html>
² <https://www.accenture.com/content/dam/accenture/final/industry/banking/document/Accenture-Banking-Cloud-Altimeter-Volume-6.pdf>

It's time to build the business case for a cloud transition.

In the same study, after security, compliance, and legacy infrastructure, the two biggest barriers to more fully embracing cloud solutions were the complexity of operational change (ways of working, mindsets, and behaviors) and a lack of skills.

This is where the Temenos Banking Cloud powered by AWS can help.

Think of the times you've wanted to add a new service or test an idea, but you simply didn't have the capacity, you didn't have the expertise. Cloud experts, security experts, payments experts are difficult to find but consuming SaaS removes the need for staffing experts in all fields.

Imagine never having to think about these limitations again.

If you're new to the cloud or considering SaaS for your critical banking systems for the first time, you'll want experienced partners that will help you optimize your environment with the most efficient solutions.

Since 2018, Temenos and AWS have collaborated to serve banks around the globe in retail, corporate, SME, and wealth to reap the benefits of the cloud. Our clients can now leverage the power of the AWS cloud, while consuming the renowned Temenos banking capabilities as an end-to-end SaaS service.

AWS gives you security, resiliency, scalability, and flexibility. Temenos builds on this to give you end to end security monitoring, business continuity and business model flexibility. And the composable

architecture of the Temenos Banking Platform means you can choose which parts of your banking experience you want to move—and when.

Our end-to-end SaaS services now also means you have immediate access to industry experts and skill levels that are almost impossible for any individual bank to find and retain.

Over 700 banks already trust Temenos cloud services to support strategically important customer experiences, drive innovation, and deliver business-critical processes securely. We trust AWS to provide the extensible, resilient, highly secure, and compliant infrastructure that allows our clients to grow and innovate rapidly.



Temenos Transact on AWS provides lower infrastructure and operating costs for WeLab Bank's core banking, while the AWS Cloud delivers auto-elastic capabilities, making it very easy for WeLab Bank to scale for future business growth."

Kenneth Chau

Chief Technology Officer, WeLab Bank



700+

Temenos clients are already confidently using Temenos solutions and Temenos Exchange services through AWS Cloud.

It's time to trust Temenos Banking Cloud to solve banking's biggest challenges.

The last few years haven't been easy. Every quarter brings new challenges. From daily evolving compliance requirements and cybersecurity threats to increased pressure to deliver new services in developing channels to compete with emergent distribution models like Banking-as-a-Service.

In a recent survey³, more than 8,000 senior business decision-makers working in financial services were asked about the biggest challenges they were facing. Four main themes emerged: the need to stay competitive, commercial uncertainty, optimizing technology investments, and attracting and retaining talent. Let's take a look at how the AWS-powered Temenos Banking Cloud can help address these challenges:

³ <https://info.metia.com/the-state-of-the-b2b-financial-technology-buy-cycle-2023>

⁴ <https://pages.awscloud.com/rs/112-TZM-766/images/hackett-group-the-business-value-of-migration-to-aws-012022.pdf>

⁵ <https://pages.awscloud.com/rs/112-TZM-766/images/Global%2B1000%2BBenchmark%2B%2BSupercharge%2BFinancial%2BPerformance%2BWith%2BAmerican%2BWeb%2BServices.pdf>

⁶ <https://pages.awscloud.com/rs/112-TZM-766/images/hackett-group-the-business-value-of-migration-to-aws-012022.pdf>

⁷ <https://pages.awscloud.com/rs/112-TZM-766/images/Banking-on-the-Cloud-ebook.pdf>

Top challenges in banking

How the cloud helps solve them

45% competition in the market
30% keeping up with industry innovations



The need to stay competitive

43-59% reduction in time-to-market when developers have workloads on AWS.⁴

33% the ability to stay profitable
32% the current economic climate
31% hitting sales targets



Commercial uncertainty

128% higher earnings before interest, taxes, depreciation, and amortization (EBITDA) for organizations with a higher percentage of workloads in the cloud.⁵

38% making effective use of IT and technology
32% preventing and mitigating cyberattacks
26% data protection and compliance



Optimizing technology investment

20% average lower IT infrastructure spend when companies migrate on-premise workloads to AWS.⁶

31% building a good, modern workplace
31% finding and hiring staff
30% maintaining morale and retaining staff



Attracting and retaining talent

10-20% improvement in employee satisfaction after a customer experience transformation.⁷

It's time to stop managing servers and start innovating.

Temenos' cloud-native and composable platform provides you with the end-to-end support and flexibility required to innovate freely. Temenos allows FI's to consume a service and build innovation closer to the customer - creating more value. Our solutions have been built and honed based on our experience of supporting some of the most innovative banks in the business of getting to the cloud quickly and operating efficiently.

For example, WeLab, Hong Kong's first homegrown virtual bank⁸, launched using Temenos' cloud-native core banking platform in less than 10 months, and we were there with them step by step. Developing a cost-effective and scalable core banking solution was paramount for WeLab Bank as it set out to transform banking in Hong Kong.

In as fast as 5 minutes, customers can remotely open a WeLab Bank account with no monthly fees and start enjoying differentiated services such as time deposits with competitive rates, an interest-bearing deposit account with an instant virtual debit card, and real-time payments powered by the Faster Payment System.

The bank reported 10,000 account openings within the first 10 days of launch. With the preconfigured system of the Temenos Core Banking Platform, WeLab Bank was able to bring its service to market faster and extend its innovation with more than 400 out-of-the-box APIs.



WeLab Bank was born from an initiative to reimagine the banking experience for the 7.5 million people of Hong Kong. From the start, we knew this vision needed the most advanced cloud-native technology and a partner that shared our vision for digital transformation. With Temenos, we have efficiently built WeLab Bank from scratch, free from any legacies, with innovative features that proactively help customers to take control of their money and their financial journey.”

Adrian Tse
Chief Executive Officer, WeLab Bank

⁸ <https://www.temenos.com/community/success-stories/welab-bank-success-story/>

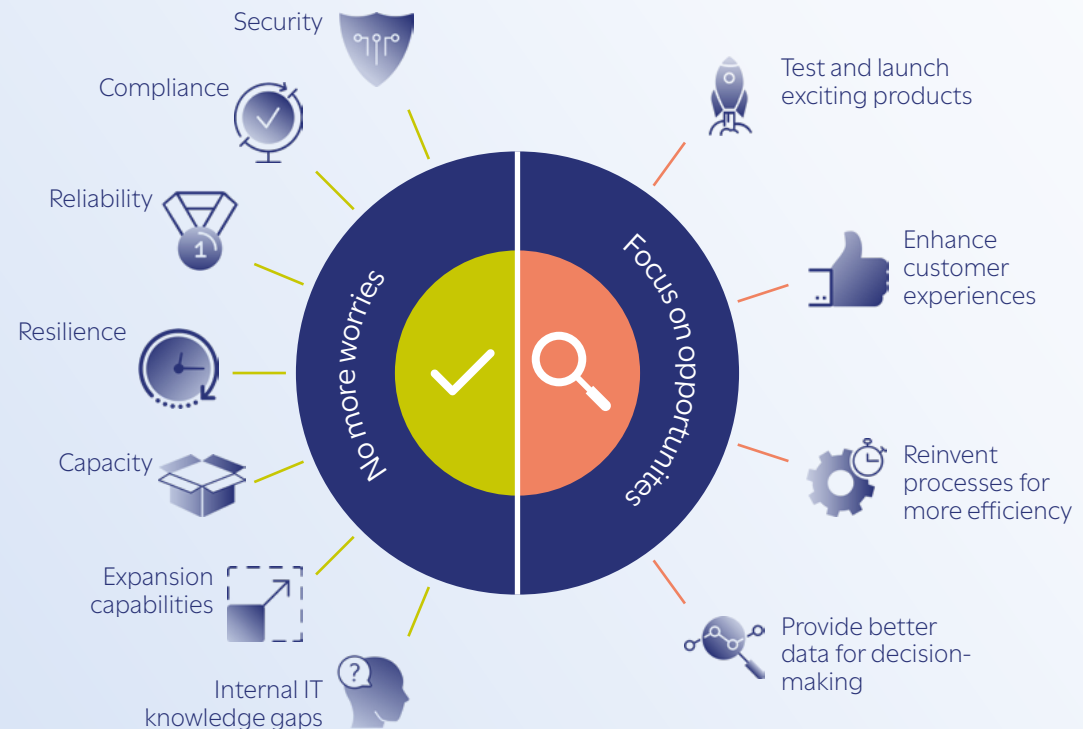
2. The business case for the Temenos Banking Cloud

Shift your focus from managing IT to delivering outstanding banking experiences.

When you choose the Temenos Banking Cloud, you can shift your focus away from keeping the lights on and battling with legacy solutions. You can trust your Temenos teams to manage security, compliance, reliability, resilience, capacity, and expansion capabilities while you are free to focus on creating the right financial services for your customers.

Deploying the Temenos Banking Cloud with the full weight of AWS expertise behind it means you can stop worrying about or investing in internal knowledge gaps immediately. Why should you be investing in a senior cybersecurity leader for your bank when Temenos and AWS can provide those skills and more? Imagine what you could do if you could deploy that expensive technical overhead into getting closer to your customers instead?

Your time and energy can be focused on testing and launching exciting products, enhancing customer experiences, reinventing processes, providing better data for decision-making, and benefiting from Temenos Explainable AI (XAI).



Building the business case for growth.

Your cloud journey shouldn't be about cutting costs. Instead, it should be about investing in a future that will build value for your institution and for the customers you serve. There are nine key factors to consider in building your business case:

Building your business case



Manage your growth



Operational efficiencies



Automated test framework



Frequent releases to customers



Continuous updates



Always on



End-to-end service



Environmental impact



Business focus

Manage your growth: Define your agenda, plan your expenditure, and set the pace of growth you want. You define, manage, and control the resources you use, easily accessing the right level of cloud resources, capabilities, operations, and support that you require to meet your banks' goals. Non-cash transaction volumes are expected to reach 1.8 trillion by the end of 2025, and the Temenos Banking Cloud will enable you to scale fast and cost-effectively whenever you want.

Operational efficiencies: You'll experience operational efficiencies as we shoulder the burden of cloud management, security, and compliance in partnership with you. Adopting a SaaS model to manage your cloud infrastructure means that

you can shift your investment to skills focused on innovation and growth, not operations.

Automated test framework and frequent releases to customers: Accelerating innovation and constantly improving your customer experience will be easier. You'll be able to compete confidently and stay ahead of customer needs, reducing development time and costs and accelerating your market release cycles. Now you can test, prototype, and try out new solutions without disrupting day-to-day business. Your developers will be limited only by their imaginations as they experiment with third-party tools or develop and customize solutions to meet business objectives. Meanwhile, the environment remains highly secure, compliant, and available.

Continuous updates and always on: AWS has the highest uptime of any of the major cloud operators. Added to that, you won't have to worry about complicated upgrade exercises because Temenos provides automated, annual updates to make sure you get access to all the latest banking capabilities and features from the Temenos Banking Platform. Consequently, you'll be always on and always up to date.

Building the business case for growth. *(continued)*

End-to-end service: Temenos Banking Cloud offers a complete service to support the banking experiences you need to deliver. You'll enjoy perpetual access to all the required infrastructure, software, and a complete managed service to run it together while being able to elastically scale it, secure it, make it efficient, and seamlessly upgrade it. We ensure constant availability, seamless operations, and aligned tooling to extend services. The partnership between Temenos and AWS means we take full care of the engine room while you focus on creating value for your customers.

Environmental impact: Moving on-premise workloads to Temenos on AWS can lower your carbon footprint by up to 95%. By 2025, AWS will be powered by 100% renewable energy—good for your financial institution and great for the planet. Temenos and AWS are your partners in building sustainable organizations.

Business focus: Now you can concentrate on your business and your customers instead of on running authenticated systems, managing infrastructure, and integrating a patchwork of applications. Focus on what's important to your customers, such as intuitive banking experiences and ESG, where Temenos continues to be a standout performer on multiple global ESG indices and ratings.

Temenos continue to top ESG global indices and ratings

<p>Top25 Swiss stocks</p> <p>SZI Switzerland Sustainability 25 Index</p>	<p>TOP SOF Category globally</p> <p>Dow Jones Sustainability Index World & Europe</p>	<p>Highest rating</p> <p>MSCI AAA Rating</p>	<p>Highest rating</p> <p>CDP Leadership (A/A-)</p>	<p>Top performer</p> <p>Bloomberg Gender Equality Index</p>	<p>Top 1%</p> <p>Ecovadis Platinum medal</p>
<p>Top 10%</p> <p>FTSE4GOOD Index</p>	<p>Highest rating</p> <p>ISS E&S Rating</p>	<p>PRIME status</p> <p>ISS ESG PRIME Status</p>	<p>Low risk</p> <p>Sustainalytics</p>	<p>Sustainability winner x3</p> <p>2022 S&P Global Gold Class + Industry Mover</p>	<p>Top 20%</p> <p>Vigeo Eiris</p>

Get ready to feel the benefits of Temenos Banking Cloud.

Moving to the cloud and choosing SaaS is all about achieving the business case through a far more extensive proposition compared to what's offered by traditional software vendors.

You know Temenos.

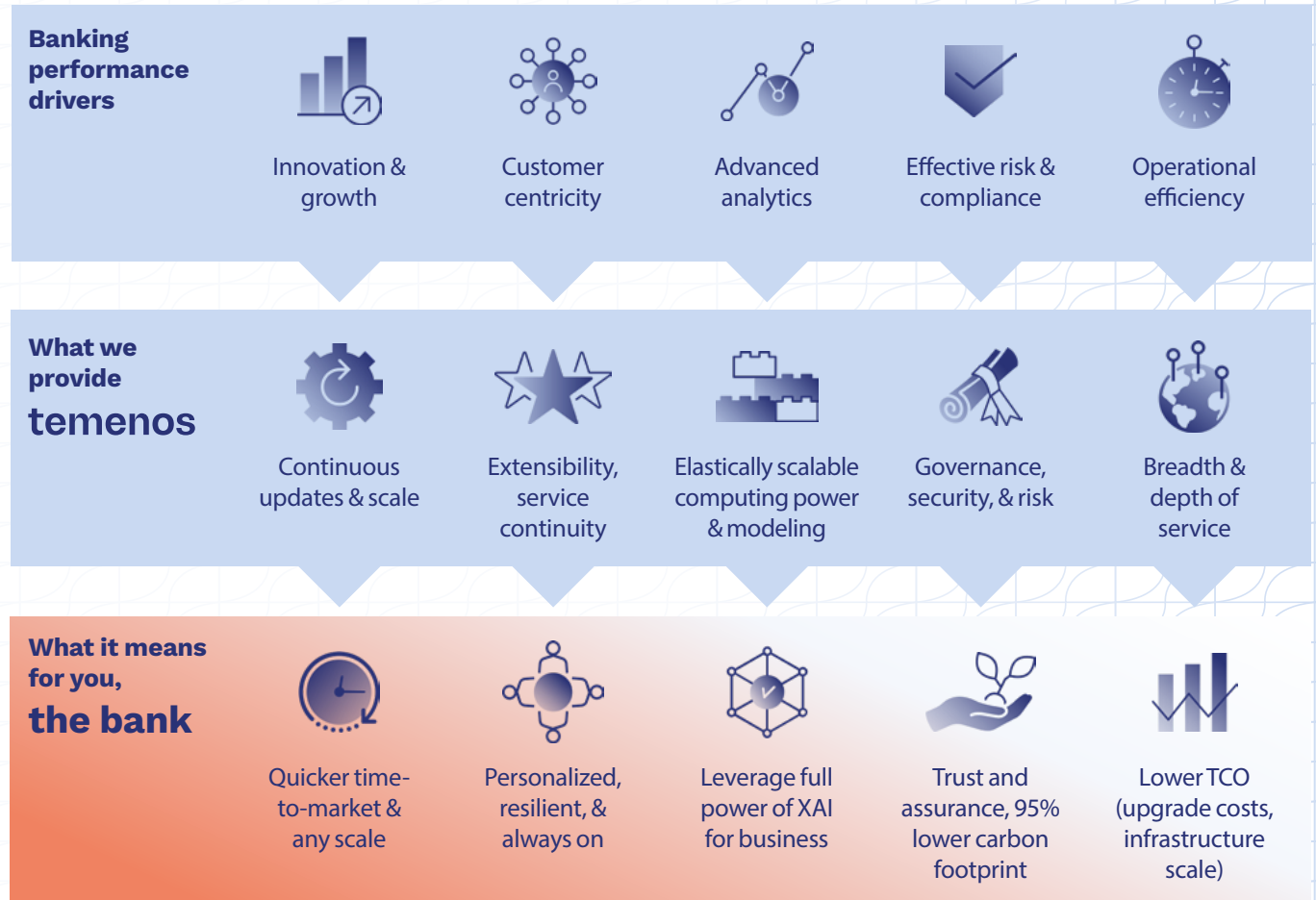
You know AWS.

Together, you can trust us to get you to the cloud faster through a fully managed service that will help you modernize your customer and employee experiences.

For example, you have unlimited capacity for rapid experimentation, which dramatically lowers the cost of innovation. You can implement Temenos XAI and machine learning (ML) technologies that only the very largest financial institutions have previously been able to afford.

Once you commit to Temenos Banking Cloud powered by AWS, a whole world of opportunity opens.

Benefits of Temenos Banking Cloud



3. Temenos powered by AWS, a collaboration for growth

Unparalleled investment in the future of banking in the cloud.

Cloud solutions and SaaS may be relatively new if you plot it on the timeline of banking history. However, both Temenos and AWS have invested heavily and evolved rapidly to meet the most stringent business requirements. The Temenos Banking Platform is the culmination of 30 years of developing specialized banking software for over 3,000 customers worldwide.

Temenos has invested over \$2.8 billion to date in evolving the Temenos Banking Platform. We plan to invest an additional \$1.3 billion between now and 2026—a level of investment that no individual bank could ever make in their future. Our commitment to unrelenting research and development creates business value for all our customers, today and in the future.

In parallel, AWS has invested in building the most resilient cloud network in the world. With Temenos

Banking Cloud powered by AWS, you'll be always on, up to date, highly secure, and compliant—enjoying the benefits of the cloud from one of the top global providers.

You'll be choosing a company with proven capacity to process the entire world's banking transaction volumes in a single AWS cloud environment.

\$2.8B

Invested in developing the Temenos Banking Platform

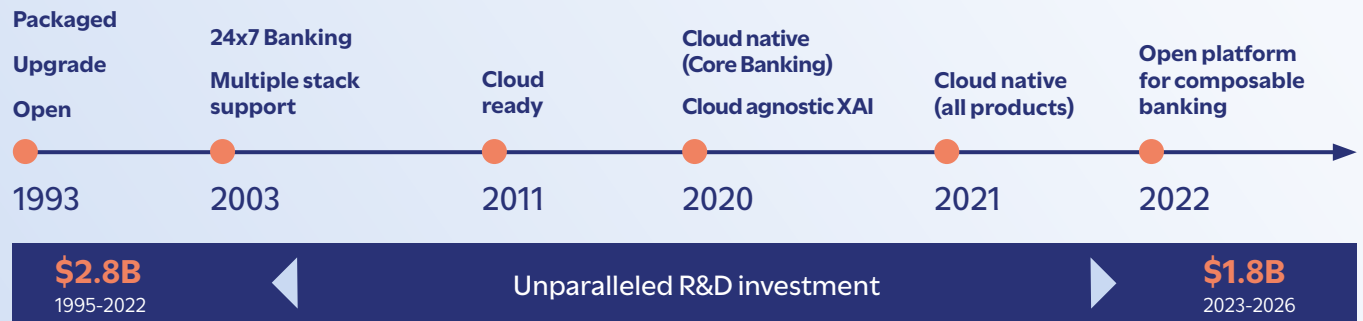
3,000+

Temenos customers on the Temenos Banking Platform worldwide

500+

Banks already trusting Temenos Banking Cloud solutions powered by AWS

Relentlessly investing in the Temenos Banking Platform



(Based on historic R&D ratios on predicted revenues)

Give yourself the freedom to innovate.

At Temenos, we like to say you can build banking experiences your customers will love. It's your job to imagine what that looks like; it's our job to ensure that your vision becomes a reality for your customers.

Great ideas will come to fruition faster with the flexibility and functionality of the AWS-powered Temenos Banking Cloud. You automatically have access to over 700 enterprise API endpoints and a suite of powerful tools to deliver products, services, and experiences your customers will love. You can tap into the power of data analytics and Temenos XAI to build a modern banking brand that's responsive to your customers and ready for the future.

The composable nature of Temenos Banking Cloud means that we can expertly assemble the banking capabilities you need from Temenos and other providers on your behalf—and make them your own. We can deploy more than 200 fully featured cloud-native services, draw on our extensive repository of certified ready-to-go features, and access the two largest repositories of banking-ready APIs and microservices. We can create and manage unique digital banking experiences by integrating with third-party systems or leverage prebuilt integrations from the Temenos Exchange and AWS Marketplace.

Unparalleled performance: The capacity to process the entire WORLD's banking transaction volumes on a single cloud environment

Temenos 2022 Highwater Benchmark



100 million

Customers



200 million

Deposit accounts



100,000

Transactions per second



61

Transactions per second per core

Tap into third-party solutions and services.



AWS Marketplace has financial services software, services, and data that run on AWS including solutions for access controls, AI and ML, analytics, compliance, crypto and blockchain, data series, IT infrastructure, and security.



Temenos Exchange is a curated collection of the best and newest services that cover the entire banking value chain, all pre-integrated for rapid consumption.



Plan out your cloud journey using proven frameworks.

In “The Wizard of Oz,” Dorothy got clear directions for her journey to the Emerald City: Follow the yellow brick road. But she still had to contend with obstacles like flying monkeys and grouchy trees. The point is, the destination may be well understood, but getting there can still be arduous. What you need is a navigator who’s already been there and solved the hard problems.

The Temenos Banking Cloud gives you access to global experts with banking-specific experience who will help you maximize the cloud and modernize every aspect of your financial institution.

We have unlimited access to tools, training, experts, and assistance, including the AWS Cloud Adoption Framework (AWS CAF), which leverages

experience and best practices to guide every cloud transformation journey.

AWS CAF helps businesses accelerate cloud readiness by focusing on six perspectives:



Business

Ensure that cloud investments accelerate your digital transformation ambitions and business outcomes.



People

Focus on the continuous growth and learning of your culture, organizational structure, leadership, and workforce.



Governance

Orchestrate cloud initiatives while maximizing organizational benefits and minimizing transformation-related risks.



Platform

Build an enterprise-grade, scalable, hybrid cloud platform; modernize existing workloads; and implement new cloud-native solutions.



Security

Achieve the confidentiality, integrity, and availability of data and cloud workloads.



Operations

Make sure that cloud services are delivered at a level that meets the needs of your business.

Plan out your cloud journey using proven frameworks. *(continued)*

The AWS CAF will help you map out transformation opportunities for your financial institution including understanding how Temenos solutions map to your strategic objectives.

The next step is to identify capability gaps and cross-organizational dependencies to align stakeholders and manage organizational change. Then, we recommend conducting pilot projects before scaling to full production. These are made possible by the flexibility and capacity of your cloud environment.



With Temenos, we have been able to quickly develop a mobile banking experience to compete with the very best in Italy. Temenos Infinity gives us the platform we need to efficiently build and manage exceptional digital banking experiences that keep pace with changing customer needs. It is strategic to our digital growth plans and enables us to future-proof our customer relationships.”⁹

Fabio Caliceti

Head of Digital Channels, Credito Emiliano

⁹. <https://www.temenos.com/news/2021/06/22/top-italian-bank-credem-goes-live-with-temenos-infinity-in-the-cloud-to-deliver-frictionless-digital-experiences/>

Meet your new partners in compliance.

With the Temenos Banking Cloud, we actively work with you to navigate the complex banking regulatory environment. Continuity and trust are serious issues when it comes to banking, and we understand the importance of what can be lost if data privacy or security is compromised. Our SaaS solution is built to protect you and your customers constantly.

We help you stress less about compliance, so you have more time to focus on growth—to meet the needs of customers and the bank. But before you hand over a responsibility as big as this, you have to feel pretty sure—no, certain—that it's going to be handled right.

We've been in the market with banking solutions for more than 30 years. AWS cloud infrastructure is certified, built, and constantly optimized to meet the most stringent regulatory requirements in banking.

The Temenos Banking Cloud powered by AWS is built with security and compliance at its core. You automatically have access to:

Compliance: Tested and certified



The AWS Compliance Center, an interactive tool for searching cloud-related regulatory requirements in 54 countries.



Audit-ready processes, including ML and tools that meet regulator-approved auditing standards, which give us the ability to manage access, analyze data for irregular activity, mitigate DDoS attacks, encrypt data, and send alerts whenever changes are made.



The AWS Cloud Governance for Financial Services framework for help in establishing processes and selecting tools to manage and govern your AWS environment.



Easy-to-assemble regulatory reports, either ad hoc or for audit purposes. Reports are clear, timely, governance-focused, and designed to meet regulatory standards.

Resilience and security that banking demands.

In the early days of cloud computing, financial institutions had a lot of questions about the security and resilience of moving off premise. It made intuitive sense that if you could see your servers and lock the door behind you at night, you had a lot more control over the security and performance of your systems. It doesn't take too many stories of a burst water pipe, hurricane, or disgruntled employee before the solid walls of your data center start looking like Swiss cheese.

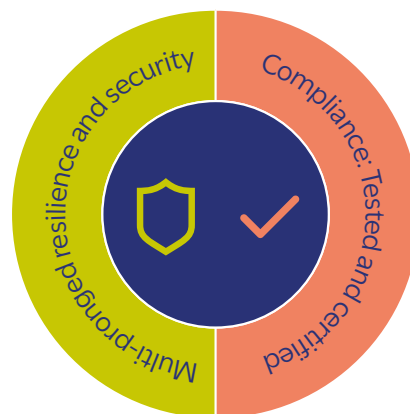
Financial institutions simply cannot compromise when it comes to security and availability. The stakes are too high—not only financially, but in the potential for damage to the brand and risk to customer relationships. AWS has one of the most secure cloud infrastructures in the world. It was developed for the military, is trusted by governments, and has been specifically adapted to meet the stringent needs of banking.

Temenos only builds for the banking industry. Our services have been optimized, tested, and proven to support the stringent needs of financial services, especially when it comes to resilience and security.

While we promise to speed your journey to the cloud, it's never at the expense of the very best in resilience and security.

Multi-pronged resilience and security

- Temenos solutions run in an isolated VPC, using AWS service endpoints to remove any requirement for internet access.
- Automated software updates and immediate patches keep AWS customers ahead of potential vulnerabilities.
- AWS Regions provide global coverage, with every AWS Region comprising multiple Availability Zones for regional resilience.
- Each AWS Availability Zone consists of one or more discrete data centers with redundant power, networking, and connectivity.
- AWS has the lowest service disruption record and highest availability in the market.



Compliance: Tested and certified

- Temenos has invested in a globally trusted and certified program that includes SOC 1, 2, and 3; Cloud Security Alliance; and ISO 2700x.
- Temenos clients operate under more than 30 regulators. We provide a "AAA" ESG rating and support clients with the required legal and security frameworks.
- AWS customers can access controls that have been tested and validated by third-party auditors across ISO, PCI, SOC, and other certifications.
- AWS has achieved multiple, internationally recognized certifications and accreditations, including PCI DSS, SEC Rule 17a-4(f), Reg SCI, EU Data Protection Directive, FedRAMP, GDPR, FIPS 140-2, NIST 800-171, CSA STAR Level 2, and SOC 1, 2, and 3.

4. Building trust and driving growth

The Temenos Banking Cloud powered by AWS gives you a highly secure, safe, and supportive way to approach the future.

This is more than a wise technology choice. You now have access to global experts with banking-specific experience who will guide your cloud transformation journey. Using proven tools, training, and adoption frameworks, you'll envision opportunities in the cloud and map Temenos solutions to your strategic objectives.

We'll be by your side designing your environment, rapidly innovating, and supporting you to grow at the pace that's right for you. We will help you prioritize, measure effectiveness, and ensure that you are always on, always compliant, and always innovating.

Our job is to provide and manage your world-class banking infrastructure so your job can become building exceptional customer experiences that drive growth for you and for the customers that you serve.

It is time to accelerate your journey to the cloud with Temenos, powered by AWS.



About Temenos

Temenos (SIX: TEMN) is the world's leading open platform for composable banking, creating opportunities for over 1.2 billion people around the world every day. We serve more than 3,000 banks—from the largest to challengers and community banks—in over 150 countries by helping them build new banking services and state-of-the-art customer experiences. The Temenos open platform helps our top-performing clients achieve return on equity three times the industry average and cost-to-income ratios half the industry average.

For more information, visit www.temenos.com

About AWS

Amazon Web Services (AWS) is a pioneer at the intersection of financial services and cloud technology, enabling our customers to optimize operations and accelerate growth through the broadest set of services and partner solutions, all while adapting to ever-changing regulations. Thousands of financial services firms—from the fastest-growing FinTechs to systemically important financial institutions—are redefining their future on AWS.

powered by  aws

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