



# GENERATING VALUE AT SCALE IN FINANCIAL SERVICES

Capgemini Financial Services  
and AWS Partnership





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## OVERVIEW

Challenging macroeconomic conditions have dampened profitability across the financial services industry. Rapidly evolving customer expectations, new market entrants, powerful emerging technologies, and expanding regulations have converged to create a transformed landscape and reality.

While some organizations are transitioning to the cloud, others have completed the move and seek operational efficiency, savings, and customization to meet changing customer needs. Customers demand an integrated, one-stop experience for all banking, investment, and insurance requirements, making customer experience an ongoing challenge.

As financial services firms navigate this new challenge, they're no longer evaluating if they should move to the cloud. Instead, they're seeking solutions and partners to accelerate and scale cloud adoption. Capgemini Financial Services in partnership with AWS is leading the way.

## TOP TRENDS IN FINANCIAL SERVICES



### Customer experience:

Improve experiences for customers, employees, intermediaries, and other stakeholders across the financial services value chain.



### AI/ML:

Financial institutions use AI/ML to differentiate themselves from competitors, and generative AI remains top-of-mind for business leaders.



### Security, compliance & operational resilience:

Evolving security, regulatory, and compliance obligations are a constant reality for financial services institutions globally.



### Cost:

Identify areas to reduce, protect, and invest to drive growth and efficiency.





## WHY AWS?

AWS has been a pioneer and leader in delivering the benefits of the cloud to financial services institutions for over a decade. We began working with several globally systemically important financial institutions, helping them migrate their on-premises workloads to the cloud for greater efficiency and agility at global scale. Today, we help tens of thousands of financial services customers around the globe—from the largest banks to the fastest growing fintechs—with use cases ranging from core system modernization to fraud detection and generative AI.

AWS meets the most stringent security requirements while delivering the greatest breadth and depth of services, deepest industry expertise, and most expansive partner network at a competitive price point.

## WHY CAPGEMINI FINANCIAL SERVICES?

Capgemini Financial Services' (FS) mission statement is to have the maximum FS sector-focused solutions on AWS. Capgemini builds on a broad pool of AWS Cloud Native Services to develop differentiated solutions for customers.

### THE CAPGEMINI ADVANTAGE:

- **Deep industry expertise:** We were founded in the financial services space and our experts possess a deep industry background. We understand our clients' business inside and out.
- **Nimble & collaborative:** Collaboration is a key value, underscored by a nimble culture.
- **Data driven:** We use data as a differentiator -- it is the fuel for our approach.
- **Future ready:** We have the pulse on future trends with a focus on tech innovation.

"Embracing the journey to success requires bold partnerships and visionary collaboration. We pave a transformative & sustainable roadmap that harnesses innovation, business value, and the limitless power of the cloud. Together, we don't just navigate change – we drive it, shaping industries and redefining possibilities."

**Pierre-Olivier Bouée**

Head of FS, CE Business Unit CG, Executive Sponsor, AWS



Firms at all stages of their cloud journey seek strategies for optimization and growth. Capgemini Financial Services has the industry experience and proven results to help them run mission-critical workloads on AWS and innovate for the business while complying with ever-changing regulations. We offer turnkey solutions to financial institutions such as Generative AI, Banking as a Service, Payments Modernization, Fraud detection, Mainframe Modernization, and Sustainability. Capgemini and AWS' **Janus framework** supports organizations that want to realize the full value of cloud and create a high-frequency organization, powered by data and insights that can pivot quickly based on market conditions.

"As a premium consulting partner on AWS, we seamlessly integrate the right industry and technical capabilities by design. This allows us to add Financial Services domain flavor into everything we do, resulting in industry solutions and offerings."

**Ravi Khokhar**

Head of Cloud Engineering & Security, Capgemini Financial Services





## PARTNERSHIP STRENGTHS

“Customer obsession runs deep in our partnership DNA. Together, we deliver unmatched business value to our customers by leveraging Capgemini’s domain expertise and AWS’ technological prowess.”

**Shashi Gupta**

Global Head AWS CoE, Capgemini Financial Services



**13 years of partnership**



**5000+ projects that delivered value**



**12,500+ certified cloud professionals**



**Capgemini is a premium consulting partner for AWS**



**Capgemini is an AWS Social Impact Partner of the Year in EMEA 2022**

Capgemini and AWS solutions are grounded in decades of expertise and innovation across diverse industries. Together we are uniquely positioned to accelerate the Financial Services Industry into a new era.

AWS provides Financial Services institutions across banking, payments, capital markets, and insurance the secure, resilient global cloud infrastructure and services they need to differentiate themselves today and adapt to the needs of tomorrow. AWS meets the most stringent security requirements while delivering the greatest breadth and depth of services, deepest industry expertise, and most expansive partner network. Building on AWS empowers organizations to modernize their infrastructure, meet rapidly changing consumer behaviors and expectations, and drive business growth.

Capgemini Financial Services is at the forefront of Financial Service offerings, providing a complete portfolio of services, reference architectures, platforms, and solutions to accelerate Financial Services transformation. Capgemini Financial Services’ mission statement is to have the maximum FS sector-focused offers/solutions on AWS. As an AWS Financial Services Competency Partner, Capgemini brings deep industry expertise to the Amazon Partner Network. Capgemini builds on a broad pool of AWS cloud, analytics, and AI/ML services to develop custom end-to-end solutions for customers, including banks, insurers, payment providers, and other finance professionals.



# BANKING

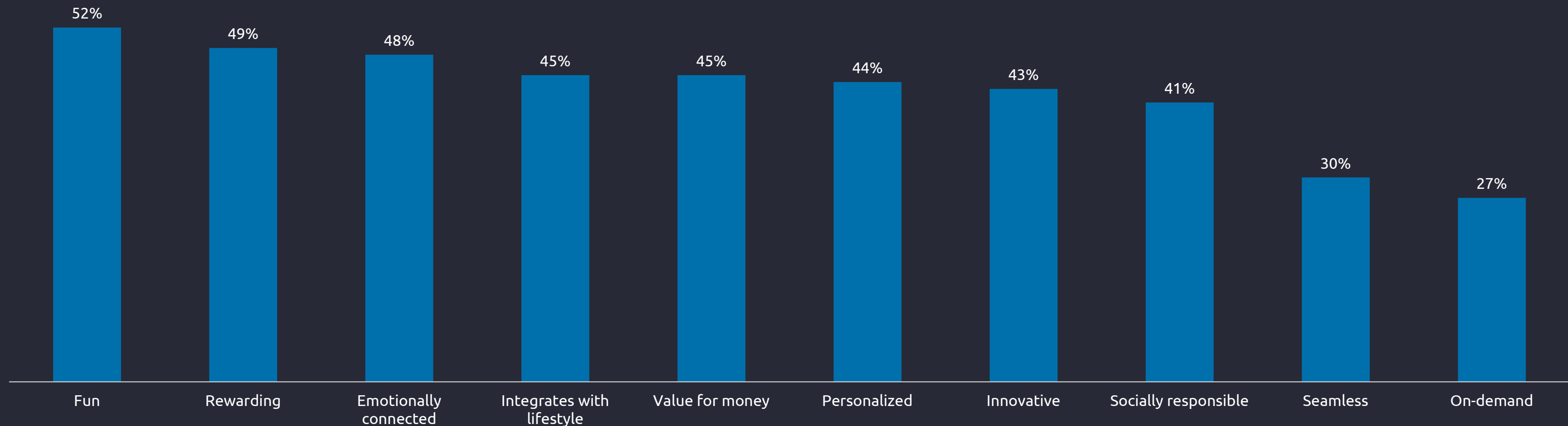
## CHALLENGES

The relationship between the customer and bank has been reshaped by technological advances and regulatory changes. Customer expectations from a bank have significantly changed, as customers expect services to be connected. Customers are looking for seamless experiences, personalization, and innovation from their physical and digital banking relationships.

Established banks are facing an immense amount of cost pressure as a result of the unfolding lending and liquidity crisis, coupled with increasing competition from new market entrants such as fintechs and neo banks. Constraints on investments, high technology costs, and the expense of meeting evolving regulatory requirements are limiting banks' profitability.

Banks have had significant success with moving discrete workloads and applications that needed little or no refactoring or rearchitecting to the cloud. They are now migrating business critical applications at scale as well as developing new cloud-native applications that drive innovation.

## WHAT CUSTOMERS SAY THEY ARE NOT GETTING FROM THEIR BANK



**Source:** Capgemini Retail Banking World Report 2022





## TOP PRIORITIES IN BANKING



### Customer experience:

Create unique and personalized customer experience. Banks are moving to omnichannel engagement with customers.



### Innovation:

Banks are investing in digital technologies such as blockchain and decentralized finance (DeFi) to monetize their investments.



### Artificial Intelligence and Machine Learning (AI/ML):

Banks have started to experiment with AI/ML to gain a deeper understanding of their customers, innovate faster, and compete more effectively.



### Compliance & security:

Compliance and security remains the top challenge for banks as they consider cloud adoption and aligning to new technologies.



### New products & market segments:

Macroeconomic conditions and rising rates have accelerated new banking product innovation.

“Generative AI, sustainability, and industry cloud are our top 3 technology bets. Capgemini and AWS are uniquely positioned to guide our clients in embracing these innovations.”

### Sudhir Pai

Chief Technology & Innovation Officer,  
Capgemini Financial Services



## CAPGEMINI FINANCIAL SERVICES AND AWS IN BANKING

The future of the banking industry will encompass increasingly personalized experiences and seamless integration of day-to-day transactions. Capgemini and AWS are playing a pivotal role in orchestrating these platforms from start to finish. Together, we proactively help banks adopt innovative technologies and streamline processes to enhance the speed and efficacy of their offerings, allowing them to effectively distinguish themselves in this highly competitive environment.

See how Capgemini Financial Services has helped [Vanguard's Personal Advisor Services](#) modernize their journey to cloud-native on AWS.

Capgemini Financial Services and AWS enable this sweeping modernization in banking while helping address the stringent requirements of regulatory compliance, security, and resiliency, making cloud the new normal for banking.

“You need to be '3D in C' (Domain, Digital, Data in Cloud) to become the partner of choice, and Capgemini Financial Services is that to AWS.”

**Ian Campos**

Global Head: Application Business, Lines Domains & Technology, Capgemini Financial Services

## SOLUTIONS

- [Connected Banking on AWS](#)
- [Open Banking on AWS](#)
- [Digital Native Core Banking Platform](#)



## PAYMENTS

### CHALLENGES

Payments represent one of the most disrupted domains within financial services, propelled by technological advancements and transformations in customer behavior and expectations. Customers, both consumers and businesses, expect frictionless payments and instant settlement.

Capgemini's World Payment Report 2022 illustrates that year-over-year growth of non-cash transactions is triggered by fast adoption of new and alternative payment products. Technological innovations are needed to respond to the increasing demand for instant and cross border payments, driven by regulations in some regions.

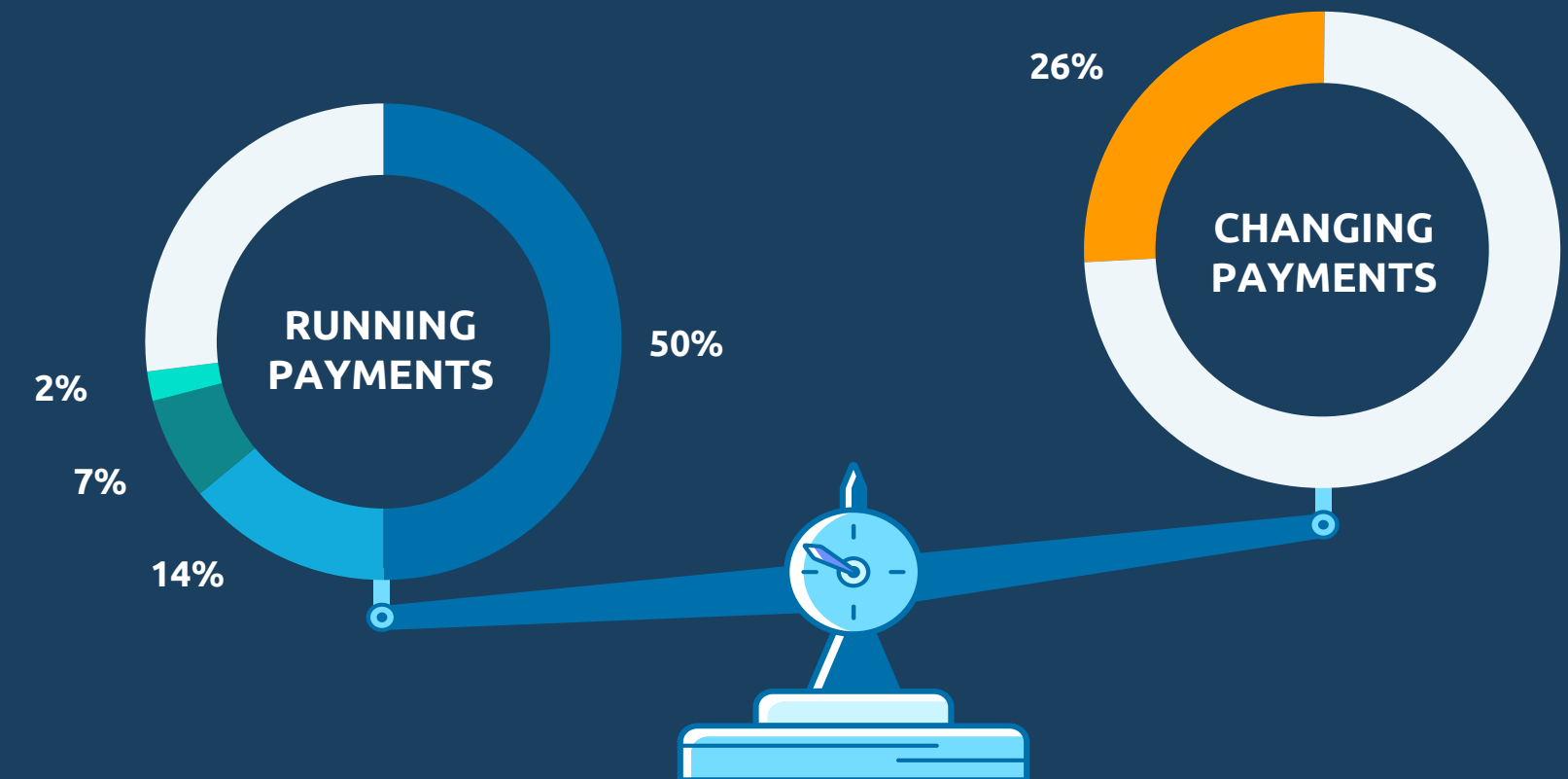
Traditional banks and payment providers are challenged to provide innovative solutions to customers as they straddle the divide between executing and innovating. 73% of costs are spent on running the payments service, the majority of which is the cost of regulatory compliance; only 26% of costs are spent on building new innovative services.

**"Growing digital payment infrastructure improvements and maturity drive demands for streamlined customer journeys and hyper-personalized services. Capgemini with its payments expertise and AWS with its breadth and depth of services enable us to innovate at scale."**

**Nilesh Vaidya**

Global Industry Head, Retail Banking and Wealth Management,  
Capgemini Financial Services

## THE COST OF RUNNING VERSUS INNOVATING PAYMENTS SERVICES



### KEY:

- 2% - Third-party solution/ technology integration costs
- 7% - Revamping mid and back-office processes
- 14% - Refurbishing payments infrastructure (Cloud, API, etc.)
- 26% - Building new innovative services
- 50% - Cost of meeting regulatory compliance (AML, Data Privacy, PSD2, etc.)

Source: Capgemini

## TOP PRIORITIES IN PAYMENTS

- **Modernization:** Financial institutions are simplifying payment architecture, decommissioning older systems, and implementing new initiatives to modernize payment hubs. This fosters deeper customer relationships by capturing interaction data, extending customer-facing channels, and delivering personalization.
- **Data & AI/ML** is enabling a seamless customer experience as well as detecting and preventing fraud. It is also being used to gather, store, and analyze insights for rapid credit decisions and to unlock new revenue opportunities.
- **Regulatory & compliance:** Cross-border payments have steadily gained momentum, propelled by joint efforts between central banks and payment infrastructure providers to establish real-time systems. The approaching deadline of ISO20022, a data-rich standard for exchanging payment information globally, is causing the sector to re-examine its payment infrastructure.
- **New products:** Commercial users' growing appetite for Buy Now, Pay Later (BNPL) solutions is prompted by traditional financing limitations and consumer volatility. Financial institutions are also exploring new use cases of embedded finance.







## CAPGEMINI FINANCIAL SERVICES AND AWS IN PAYMENTS

Capgemini Financial Services and AWS help financial institutions and payment providers adapt to new technologies, payment channels, and customer demands by focusing on payments as a differentiator versus a commodity. Together we help build a cloud-native, collaborative payment ecosystem focused on customer needs that enables financial institutions and payment providers to overcome hurdles and generate value. See how Capgemini Financial Services is helping **SWIFT** to build a decentralized future on AWS

## SOLUTIONS

- **Payments Modernization**





## INSURANCE

### CHALLENGES

The insurance industry endured significant losses in the last year from the perfect storm of macroeconomic, regulatory, and sustainability challenges. The combined ratio for the Property & Casualty (P&C) industry fell in 2022, the first year since 2017 when the ratio was above 100.

### TOP CHALLENGES:

- Changes in weather patterns and above-average catastrophe (CAT) activity continues to be an obstacle in underwriting.
- Uncertainty in mortality trends is making it difficult to price insurance accurately.
- Mobility, representing one-third of the insurance industry, was hit hardest in terms of profitability. Massive industry change is expected with the rise of autonomous, connected, electric and shared (ACES) vehicles.
- Consumer expectations are growing, with digital engagement and loss prevention at the forefront.



“Regaining underwriting profitability is a major focus in the insurance industry and doing this requires speed and efficiency. By leveraging Capgemini's strong industry experience and AWS's agility to respond to market conditions, our customers are able to achieve their business goals.”

**Adam Denninger**

Global Industry Leader for Insurance, Capgemini Financial Services

## TOP PRIORITIES IN INSURANCE

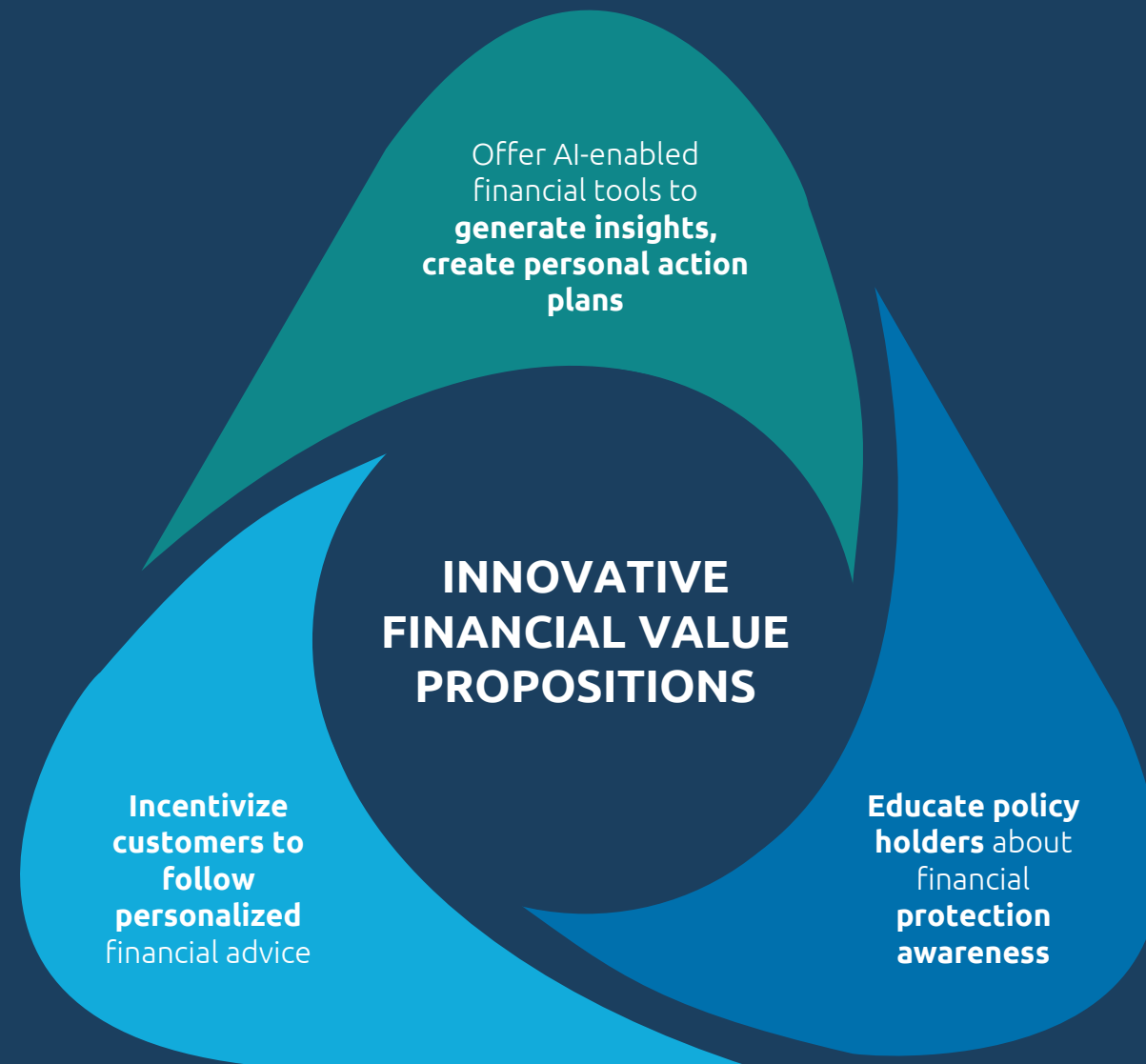
Insurers remain hyper-focused on system modernization, digital transformation, and innovation to boost customer centricity. They are pursuing the following approaches:

- Innovation-led transformation to drive business outcomes
- Reducing operating costs through intelligent automation
- Creating more resilience and agility in their IT architecture and teams
- Leveraging their ability to harness data and act on it through AI
- Personalizing financial advice for consumers and providing financial protection awareness



## INNOVATIVE FINANCIAL VALUE PROPOSITIONS IN LIFE INSURANCE

*Source: Capgemini Life Insurance Top Trends 2023*



## CAPGEMINI FINANCIAL SERVICES AND AWS IN INSURANCE

Capgemini Financial Services and AWS help insurance companies in moving their workloads to the cloud, enabling them to focus on IT savings for transformation initiatives. As one of the premium partners for Guidewire, Capgemini Financial Services has implemented some of the largest Guidewire solutions on AWS. Together we also help Insurance companies adopt AI/ML and generative AI through training and deployment of analytical models to identify new signals. This leads to improved customer service, risk mitigation, and predictive capabilities. See how [\*\*iCare\*\*](#) is transforming their claims systems through their Capgemini and AWS partnership.

## SOLUTIONS

- [\*\*Guidewire on AWS\*\*](#)





# CAPITAL MARKETS


## CHALLENGES

Capital market firms are facing unprecedented disruption from macroeconomic and geopolitical uncertainty. Revenue growth is muted and profitability is low across asset classes. While reducing costs is critical, companies must invest to meet customers’ digital expectations, manage risks, and attain sustainable business practices, especially with clients’ growing interest in environmental, social and governance (ESG).

## TOP PRIORITIES IN CAPITAL MARKETS

 **Regulatory:** In the past few years, regulators have increasingly raised expectations by demanding greater organizational responsibility.

 **DLT and AI/ML:** The use of Distributed Ledger Technology (DLT) and AI/ML is growing in various parts of the industry and we anticipate major changes in the next 2 to 3 years.

 **High Performance Compute (HPC) for risk,** which allows big banks to process their risk computations in shorter timeframes, is rising rapidly, predicted at 17.6% over the next 5 years. Capgemini has been successful in supporting renowned Wall Street banks in HPC for many years.





## THE GROWTH OF THE HPC CLOUD MARKET

The HPC market was nearly \$40B in 2022

Cloud is 14.7% of the overall HPC market

Cloud had grow at a rate greater than 23% in 2022

The on-premises HPC server market is growing ~7-8% a year

HPC cloud usage is expected to grow 17.6% over the next 5 years

HPC cloud revenue is expected to exceed \$11B by 2026

Source: Hyperion Research 2022

The largest opportunities are in complex business domains, where data is sensitive and processes are proprietary. More complex domains will be disrupted by AI and edge computing. By realizing the full potential of data, banks and insurers can increase their competitiveness, while **reducing risks and cutting costs by 5-15%.**

### CAPGEMINI FINANCIAL SERVICES AND AWS IN CAPITAL MARKETS

Capgemini has partnered with AWS to innovate in the capital markets industry and solve unique customer challenges. Capgemini's proactive assessment methodologies and data models play a key role in enabling customers to adopt AWS technology while responding to complex regulatory mandates. Capgemini's capability on post trade technology and regulatory solutions has been enhanced with the recent acquisition of Quorsus.

Capgemini's customized offerings developed in partnership with AWS and Murex -- an integrated platform for trading, risk, and post-trade operations solutions for capital markets -- provides a definitive edge for its customers. Additionally, the blockchain-based solutions from Capgemini and AWS facilitate trade execution, risk analysis, and on-time settlement.



# SUSTAINABILITY

## CHALLENGES

Despite ambitious targets -- **62% of financial services organizations have sustainability as part of their C-suite agenda** -- the majority of firms have made little headway in achieving sustainability goals. This is due to several factors: low levels of investment in sustainability, a lack of a sustainability roadmap, and uncertainty on how to implement a sustainable operating model. Governance is another area where the industry is lacking. While there is lot of data around ESG, regulators must be vigilant about potential green washing.

“Reducing our customers’ carbon footprint is just a first step in the sustainability journey. Our joint goal is to amplify the message on sustainability and create momentum in our customers’ journey towards their net zero future.”

**Satish Weber**

Global Head: Sustainability, Capgemini Financial Services

## TOP PRIORITIES IN SUSTAINABILITY

In addition to setting net zero targets, the objectives that are top of mind for the financial services industry in sustainability are:



### Compliance & reporting:

The data and transparency required to meet Scope 3 emissions is at the forefront. Expect ongoing changes in the regulatory environment; agility will be key in meeting evolving requirements.



### Risk & transition:

Understanding portfolio risk is a major theme.



### Growth & differentiation:

The challenging economic climate presents an opportunity to integrate sustainability into the business model. Currently only 1 in 5 financial service organizations see sustainability as an opportunity versus a cost.



## CAPGEMINI FINANCIAL SERVICES AND AWS IN SUSTAINABILITY

Capgemini Financial Services in partnership with AWS are helping financial institutions achieve their IT and business-related sustainability objectives. As leaders in sustainability, Capgemini and AWS have various solutions, including the Commit, Act, Monitor & Report framework, to support companies in developing a roadmap with clear goals as well as an understanding of how sustainability will impact their business.

### COMMIT, ACT, MONITOR & REPORT FRAMEWORK



#### COMMIT

Net zero strategy and new business models



#### ACT

Sustainable products and services  
Sustainable operations and supply chain  
Sustainable IT



#### MONITOR AND REPORT

Data for Net zero

**Source:** Capgemini Research Institute analysis.

### SOLUTIONS

- **Commit, Act, Monitor & Report framework**
- **AWS Future Fit Framework (F3)**
- **eAPM (economic Application Portfolio Management) tool** determines baseline IT energy use





## GENERATIVE AI

Generative AI technology is poised to revolutionize the business landscape in the coming years. According to [Goldman Sachs](#), Generative AI has the potential to drive an almost \$7 trillion (about \$22,000 per person in the U.S.) increase in global GDP and lift productivity by 1.5 percent over a 10-year period. As Generative AI continues to advance at an unprecedented rate, it promises to transform the financial services industry. From enhancing fraud detection and risk assessment to optimizing customer service and investment strategies, the applications of Generative AI are nearly limitless.

At AWS and Capgemini, we are excited about the possibilities that Generative AI presents our clients. Demand from our banking and insurance clients have focused on several key themes:

- **Speed** – Create efficiencies for organizations through the automation of routine, repetitive, and structured tasks.
- **Scalability** – Develop and implement flexible solutions that can be scaled across business lines or the enterprise for greater impact.
- **Safety** – Ensure adequate guardrails are implemented to ensure AI systems are used safely, ethically, responsibly, and legally.

“There is no doubt that Generative AI will impact most businesses in the near future. Our clients are actively seeking clarity on enablement paths, use-case identification, triage, prioritization, safe experimentation platforms, deployment of production-grade solutions and accelerating shipping velocities to drive enterprise-wide impact. Capgemini is well positioned in the Generative AI space, thanks to our partnerships with key players such as AWS. Together, we have the expertise and capabilities to maximize the value of enterprise Generative AI,”

**Ashvin Parmar**

VP and Head of Financial Services Generative AI COE at [Capgemini](#).





## TOP NEAR-TERM USE CASES FOR GENERATIVE AI

Our role is to help clients cut through the buzz and leverage the most relevant use cases for their specific business needs. The most promising use cases that we see in the near term include:

- **Customer experience** - Personalized products and services, customized content creation for sales and marketing teams and contact center transformation.
- **Product innovation** – new products, offers, business models, and monetization avenues centered around personalization to drive sales volume and revenue.
- **Process innovation** - Software development with coding assistants, testing automation, process automation, sentiment analysis and knowledge management.
- **Business intelligence (BI)** – Generative BI that will allow managers and others to “talk to their insights” to isolate KPI drivers and use them to improve business results.

## CAPGEMINI FINANCIAL SERVICES AND AWS IN GENERATIVE AI

Capgemini and AWS have extensive experience developing and delivering AI/ML solutions for our clients. Together, we help enterprises define their Generative AI strategy aligned to business goals, select priority use cases, and develop and deploy use cases at scale.

At the core, this includes:

- **Ease of building with foundation models (FMs)** - Amazon Bedrock offers access to a range of powerful FMs for text and images (including Amazon’s Titan FMs) through a scalable, reliable, and secure managed service.
- **Cost effective infrastructure** - AWS Trainium and AWS Inferentia chips offer the lowest cost for training models and running inference in the cloud.
- **AI-powered productivity applications** - Amazon CodeWhisperer radically improves developer productivity.
- **Flexibility** - Use open-source models or build their own. In addition to models in Bedrock, Amazon SageMaker JumpStart is an ML hub that offers algorithms, models, and ML solutions.





## CONCLUSION

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The future of the financial services industry rests on the sector's ability to innovate and be agile, especially with uncertain macroeconomic and geopolitical conditions ahead. Leveraging digital technology is the main tool the industry has at its disposal to stay competitive into the future. AWS Cloud together with Capgemini's deep industry expertise and unparalleled engineering expertise will drive new value for organizations. We help organizations achieve what's possible -- efficiently and sustainably.







## ABOUT US



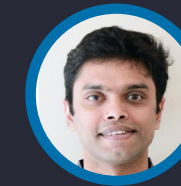
Capgemini and AWS are leaders in bringing enterprises into the digital future. Cloud migration is just the beginning. The fusion of Capgemini's engineering excellence and deep industry expertise with AWS's pioneering cloud capabilities unlocks customer value. The technological solutions we deliver will accelerate business success and contribute to a sustainable future.

## Learn more at Capgemini Financial Services on AWS

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