SECURITY, INNOVATION, AND RELEVANCE:
How the Cloud and Automation Can Supercharge Financial Services

2023 will feel like a rollercoaster ride for the global financial services industry.

Morgan Stanley suggests that investors are going to be "whiplashed" while Goldman Sachs predicts that the US will avoid recession, Europe will contract, and Asia will offer green shoots of growth.

Regardless of how 2023 shapes up, any financial services business looking to navigate this winding path must address a single underlying question: How can they safely and efficiently strengthen their foundations while developing and delivering digital products and services that enhance the customer experience?

Security and compliance are non-negotiable, but the breadth and scale of available technologies can lead to complexity. Multiple cloud services, software tools, and customer experience platforms can cause confusion. So how do organizations prioritize their digital decision-making? The market, opportunities, and threats are constantly evolving, so finding the right balance is key to IT investments—and can mean the difference between great customer experiences and customer churn.

In this paper, we examine the state of play of technologies deployed within financial services businesses based on a survey conducted by Foundry and commissioned by AWS and Infosys. We also identify gaps and present strategies for facing the challenges ahead.

Lack of AI leads to a fear of fraud

Where are financial services vulnerabilities and do organizations believe they have effective security measures to mitigate the risks? The survey results indicate significant security challenges and gaps in leading technologies.

While most financial organizations support digital channels for payments, such as web (93%) and mobile (88%), two in five support all channels, including ATMs (79%). Traditional credit (86%) and debit cards (76%) are the main payment methods but 72% still use checks, while international payments account for 68% of transactions.

A mix of analog and digital payment structures meet the diverse needs of a wide variety of customers, but not without risk. Survey results indicate the biggest risks are:

Credit cards	**69%**
Consumer & small business banking	**45%**
Commercial banking	**40%**
Wealth management	**34%**

Web (52%) and mobile (22%) are considered the greatest threats in terms of channels, and credit cards (69%) the customer segment most vulnerable to fraud. And almost half of respondents (44%) feel their current fraud detection capabilities are less than effective.

Almost every existing payment solution uses multiple internal and external data sources to identify and manage security threats. However, gaps start to appear in organizations' security capabilities when it comes to using machine learning (ML), artificial intelligence (AI), and advanced automation technologies. Around half of financial organizations are not deploying ML, automation, or real-time data analytics to combat fraud.
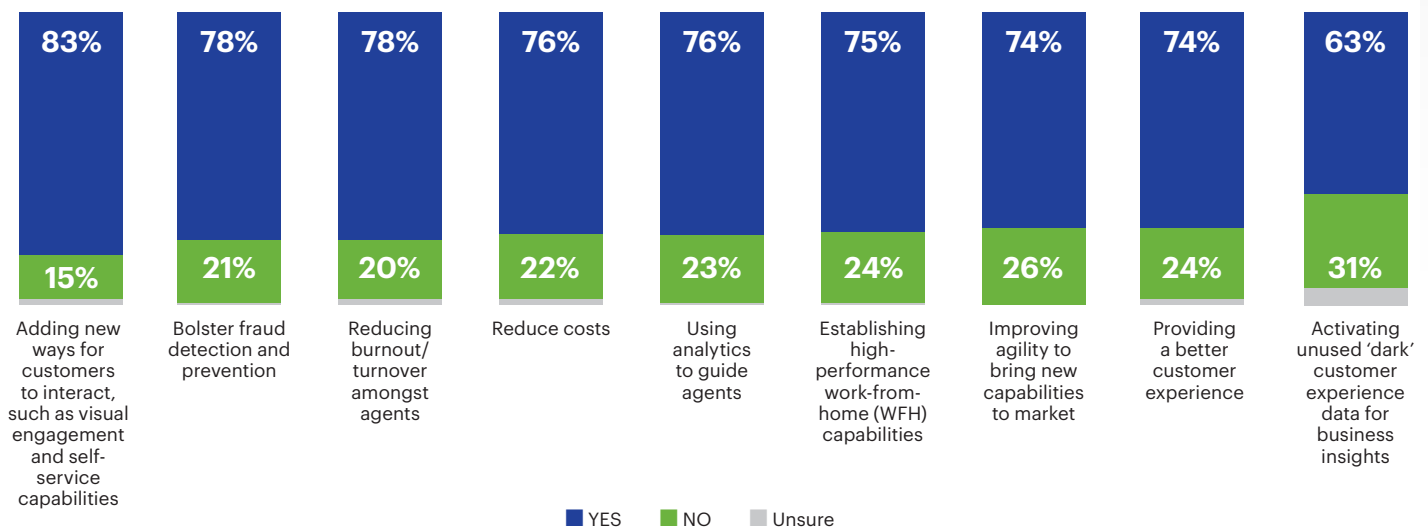
Cloud is critical but is there room for improvement?

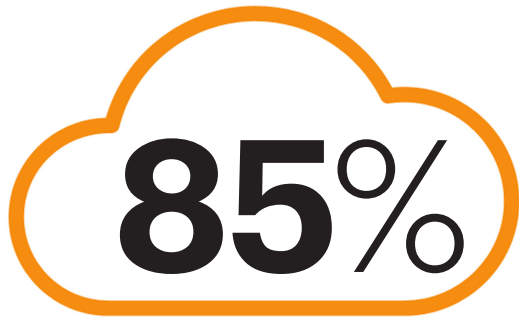How do organizations use the cloud and what do they think of their current cloud capabilities?

If organizations want to provide omnichannel experiences for customers, to employ chatbots and AI-based technologies to enhance experiences, they need the cloud because the cloud enables this to happen much faster than on-premises infrastructures.

Financial organizations are no strangers to the cloud, deploying a mix of models, with private cloud (38%) the most popular. A dominant 85% of organizations are paying for cloud services through a software-as-a-service deal.

Enhanced Capabilities Due to Cloud

Capability	YES	NO
Adding new ways for customers to interact, such as visual engagement and self-service capabilities	83%	15%
Bolster fraud detection and prevention	78%	21%
Reducing burnout/turnover amongst agents	78%	20%
Reduce costs	76%	22%
Using analytics to guide agents	76%	23%
Establishing high-performance work-from-home (WFH) capabilities	75%	24%
Improving agility to bring new capabilities to market	74%	26%
Providing a better customer experience	74%	24%
Activating unused 'dark' customer experience data for business insights	63%	31%

■ YES   ■ NO   ■ Unsure

SOURCE: Foundry

85%

of organizations are paying for cloud services through a software-as-a-service deal.

SOURCE: Foundry

Approximately three-quarters of respondents have seen significant enhancements from cloud use. According to 83% of respondents, the cloud has enabled new ways of interacting with customers, while 78% say it has bolstered fraud prevention and detection.

However, it is important avoid complacency. Most respondents (64%) are highly satisfied with their cloud capabilities. For those who are not (36%), there is room for improvement in enabling agility (26%), providing better customer experiences (24%), and activating unused 'dark' data, to improve customer and business insights (31%).

Agility and CX are driving decision-making

The need for compliance and a desire for strong fraud prevention and detection should be reflected within technology priorities. Do they align or is there a disconnect? Organizations should look for cloud services that enable agility, innovation, and customer experience (CX) capabilities—but first they must ensure they are secure.

Agility is a top priority among financial services customers, but it goes hand in hand with customer experience. It is rooted in the ability to process and manage data, to put organizations in a position to be predictive, to deliver what customers are expecting, and make product and service recommendations that help customers be competitive.

Improving agility to bring new capabilities to market is a top priority for more than half (55%) the survey respondents. Other priorities include providing a better customer experience (44%) and enhancing fraud detection and prevention (38%).

The focus is clearly on making organizations more competitive. Cost savings and efficiencies are seen as additional benefits but not the main thrust of the strategy, despite the forecasts of economic turmoil.

What is not a top priority is activating unused dark CX data to enhance business insights (18%). To really drive decision-making and personalization, organizations need to avoid data silos and deliver products and services that can pull intelligence from a wide variety of data sources.

Data in many financial organizations tends to be siloed. Identifying existing data, let alone hidden or dark data, to enable good analytics is therefore difficult. IT needs the cloud to provide the sort of foundational components and services required to capture and structure data, to make it useable.

Are multiple cloud and CX investments meeting needs?

Modernizing infrastructure and applications and not relying on traditional legacy technology is key for banks to deliver new products and services at speeds. Only then can they take advantage of advanced capabilities such as AI and machine learning.
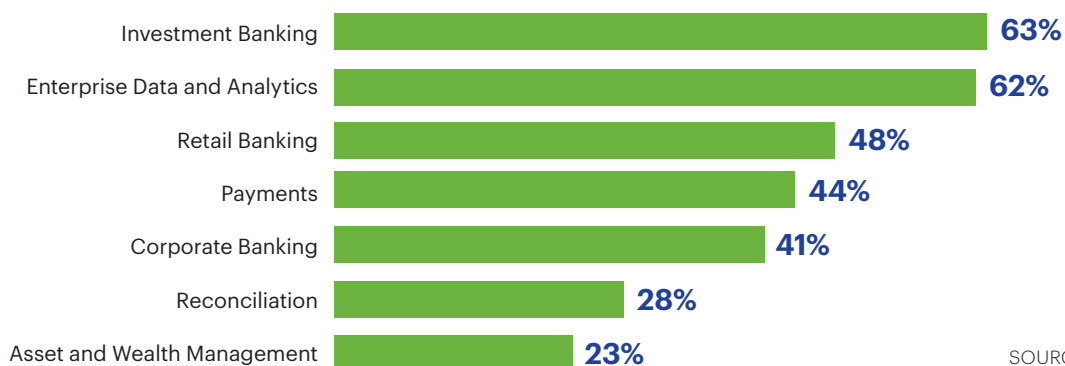
Financial organizations are already investing in multiple cloud environments. But how do these investments match their priorities? And what does say about the industry's current ability to meet the needs of its customers?

With so many strategic aims to manage, prioritizing technologies is a challenge for financial organizations. They are investing in several different cloud solutions, including investment banking, enterprise data and analytics, retail banking, and payments.

The investment figures indicate a mixed technology environment, where legacy systems retain significant control. There are clear gaps across all business units, which cloud investments could bridge to help organizations align priorities with technology capabilities.

Within these business functions, there is considerable interest in security, fraud prevention (78%), data protection (69%), and AI/ML (56%). While this is an understandable approach, not enough is being done across the industry to forge ahead with modern infrastructures and technology tools to meet the changing needs of the market.

Investments in Cloud for Core Business Systems

Category	Percentage
Investment Banking	63%
Enterprise Data and Analytics	62%
Retail Banking	48%
Payments	44%
Corporate Banking	41%
Reconciliation	28%
Asset and Wealth Management	23%

SOURCE: Foundry

CX-related digital initiatives are receiving significant investment. Over half of the respondents to the Foundry survey currently invest in all 12 CX capabilities listed (see chart).

Increased investments are expected in visual engagement apps for customers (22%), combining cross-departmental data to create new CX values (21%), and using employee data to improve employee experiences (22%). This is by no means comprehensive or industry-wide, but it is an indication of intent.

The bottom line

The focus for financial organizations must be on creating an innovative business that can compete in difficult, disruptive markets. Agility is a top priority, according to the survey, but not all organizations are implementing strategies and investments that match that ambition.

A big win, for example, is enhancing fraud prevention and detection capabilities using AI- and ML-based analytics. Focusing on credit card usage through web channels improves CX and increases revenue by reducing losses.

Clearly, prioritizing is a challenge. Here is how Infosys and AWS can help:

→ **Fraud detection, anti-financial crime, and compliance**

Infosys-Actimize Digital Suite on AWS offers ready-to-use solutions that combine strong business expertise with product and technical skills—and years of experience in servicing the compliance needs of clients. This comprehensive suite provides speed, efficiency, and business value across the entire value chain.

→ **CX improvement**

Intelligent contact center with Infosys Cortex and Amazon Connect helps enterprises deliver superior experiences to customers and employees. Financial services firms can utilize six key features, including customer identification, smart contact routing, near real-time sentiment analysis, scalable infrastructure, omnichannel functionality, and ready-to-use integrations.

Learn more about Infosys's solutions for Financial Services here.

About Amazon Web Services and Infosys

Amazon Web Services

Since 2006, Amazon Web Services (AWS) has been the world's most comprehensive and broadly adopted cloud. AWS continually expanded to support virtually any workload, and now has more than 200 fully featured services. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—trust AWS to power their infrastructure, become more agile, and lower costs.

To learn more about AWS, visit aws.amazon.com.

Infosys

Infosys is a global leader in next-generation digital services and consulting. With over four decades of experience in managing the systems and workings of global enterprises, we expertly steer clients in more than 50 countries as they navigate their digital transformation powered by the cloud. We enable them with an AI-powered core, empower the business with agile digital at scale and drive continuous improvement with always-on learning through the transfer of digital skills, expertise, and ideas from our innovation ecosystem. Infosys is deeply committed to being a well-governed, environmentally sustainable organization where diverse talent thrives in an inclusive workplace.

To learn more visit https://www.infosys.com/services/cloud-cobalt/overview.html