



State of Observability for Financial Services and Insurance

Insights and analysis on the adoption and business value of observability

Overview

The financial services and insurance industry is rapidly evolving, as demand for digital-first experiences reshapes customer interactions. Financial service institutions, such as banks, insurance companies, investment firms and credit unions, provide financial products and services, and are involved in managing money, investments, and financial transactions. Routine customer activities are predominantly processed via digital platforms due to the increasing popularity of neo-banks and mobile payment systems. This shift is contributing to an industry-wide push toward increased innovation and greater convenience, accelerating growth across the sector, while also redefining consumer expectations. Customers are focused on prioritizing seamless digital engagement, effortless service accessibility, and minimal reliance on face-to-face interactions.

Financial organizations simultaneously face heightened regulatory demands, with frameworks like the Digital Operational Resilience Act (DORA) introducing stricter mandates around cybersecurity and IT risk management. Institutions are being urged to reevaluate their technology strategies to ensure compliance and operational resilience, while underscoring an urgent need for modernization. Traditional financial institutions are working to reimagine their core systems and invest in advanced digital infrastructure to deliver greater reliability, improved

performance, and groundbreaking innovation. Nimble sectors like fintech and insurtech, coupled with advanced automation, and mobile-first services are pushing legacy technology to their limit. Driven by competitive pressures, many financial and insurance organizations are fast-tracking adoption of digital-first business models to stay relevant in a rapidly shifting market.

Delivering a seamless and reliable digital customer experience (DCX) is now a strategic imperative. Financial services and insurance companies are navigating increasingly complex technology ecosystems in their efforts to innovate and meet customer demands. To stay agile and responsive, they are leveraging observability tools to gain real-time visibility into their IT infrastructure and application architecture. This approach empowers organizations to make faster, more informed decisions, foster continuous innovation, and ensure systems remain reliable and optimized for performance.

This report explores the role of observability in the financial services and insurance sectors, and highlights its business impact and strategic importance. Insights are drawn from an in-depth survey conducted with 281 respondents from the *2024 Observability Forecast*, and offers a clear view of trends shaping the industry's future.



Modernizing the finance industry

Migration to the cloud and the creation of digital-native subsidiaries are the fastest ways for financial institutions to modernize their systems. This approach enables them to get to market quickly with agile and innovative services, and to find their full potential once core systems are modernized. Artificial intelligence (AI) is also a widespread trend across several industries, and security and compliance remain top-of-mind.

With this drive for modernization, it's no surprise that some of the top technology strategies and trends driving the need for observability among financial services and insurance organizations were the **adoption of artificial intelligence (AI) technologies (41%)**, increased focus on security, governance, risk, and compliance (40%), increased focus on customer experience management (36%), and development of cloud-native application architectures (36%).

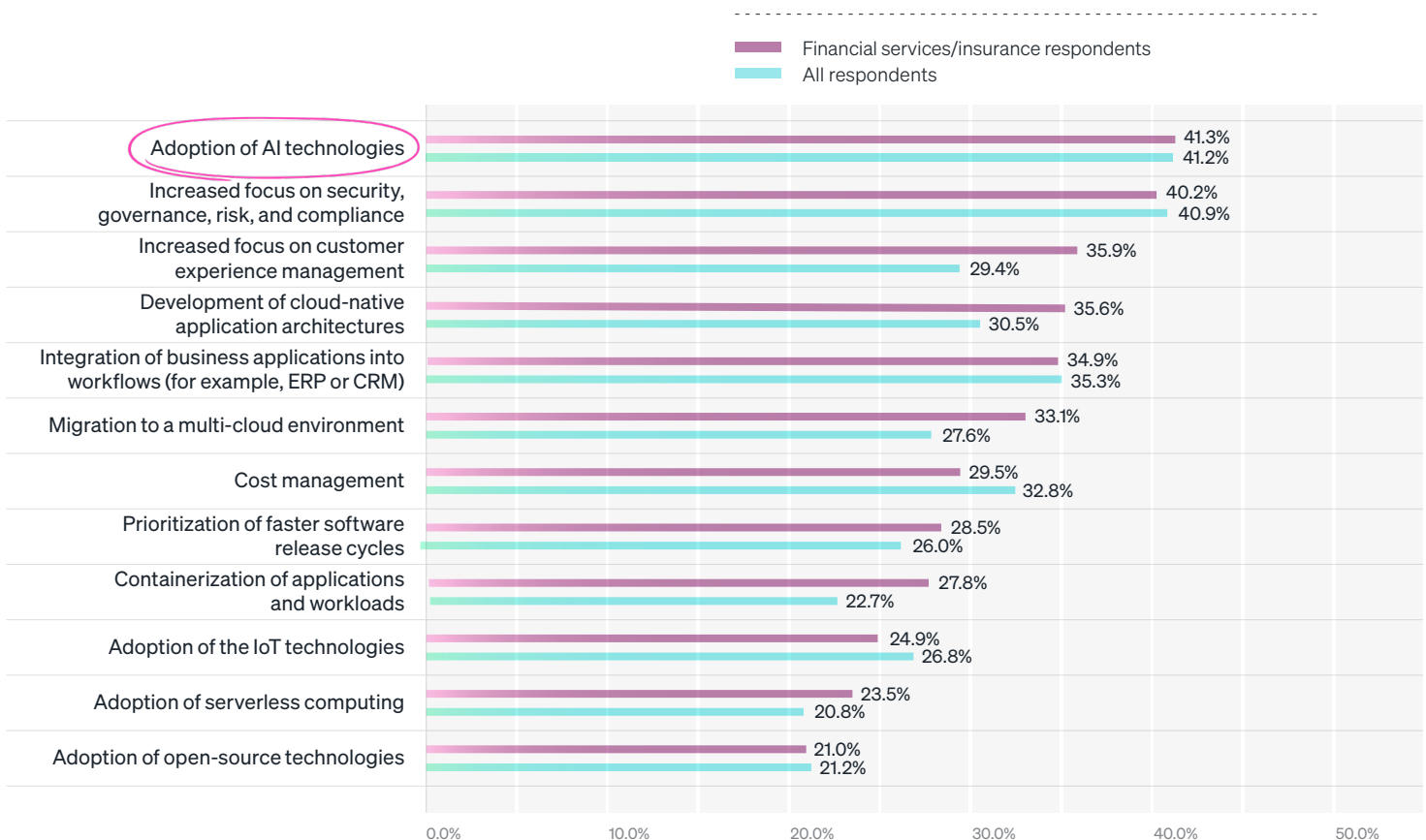
These organizations were, according to their responses, more advanced in their digital transformation initiatives,

namely customer experience management (36% compared to 29% overall), the development of cloud-native application architectures (36% compared to 31% overall), migration to a multi-cloud environment (33% compared to 28% overall), and containerization of applications and workloads (28% compared to 23% overall) as drivers of observability.

However, financial services and insurance respondents put a lower emphasis on cost management (30% compared to 33% overall) and the adoption of Internet of Things (IoT) technologies (25% compared to 27% overall). IoT is typically not relevant in the mostly dematerialized world of banks, which is likely why this finding stands out.

More than a third (34%) of financial services and insurance respondents said they thought that AI-assisted troubleshooting would improve their organization's observability practice most, followed by automatic root cause analysis and AI-assisted remediation actions such as rollbacks or configuration updates (both 32%).

Technology strategies and trends driving the need for observability

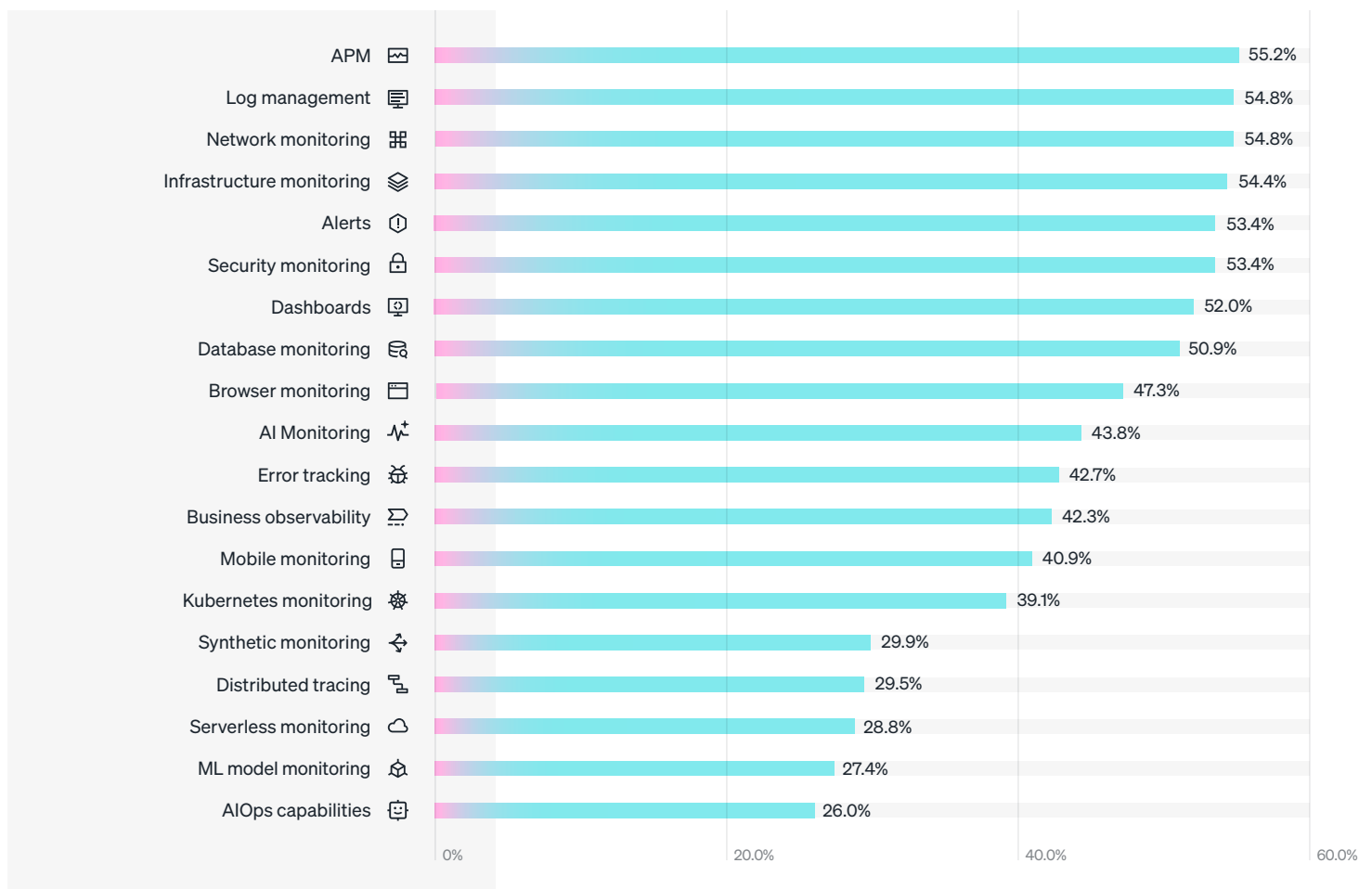


Tools Deployed

Complex financial and insurance offerings require observability and a breadth of integrations, such as middleware, cloud platform as a service (PaaS), and mainstream platforms. About a third (34%) of financial services and insurance organizations had deployed 10 or more of the 19 observability capabilities included in the survey, and 10% had deployed 15 or more.

Financial services and insurance organizations have more widely deployed critical capabilities essential to backend and core banking systems operations, such as application performance monitoring (APM) (55% compared to 50% overall) and Kubernetes monitoring (39% compared to 29% overall).

Creating customer-centric services and optimal DCX is vital for finance and insurance institutions, as they strive to build and maintain trust and loyalty with consumers. An easy and reliable connection across any device is expected for day-to-day operations across all services, including selecting providers, quickly opening accounts, or even commencing what was once an in-person procedure online, before finalizing this in person.



Digital experience monitoring (DEM) involves the tracking and optimization of performance and reliability to deliver a flawless DCX. DEM is a combination of real user monitoring (RUM)—which includes browser monitoring and mobile monitoring—as well as synthetic monitoring. Respondents from financial services and insurance organizations reported higher levels of deployment for browser monitoring (47% compared to 44% overall), mobile monitoring (41% compared to 35% overall), and synthetic monitoring (30% compared to 26% overall).

47%
said they deployed
browser monitoring

At least half of financial services and insurance organizations had deployed APM (55%), log management (55%), network monitoring (55%), infrastructure monitoring (54%), alerts (53%), security monitoring (53%), dashboards (52%), and database monitoring (51%).

About a quarter (26%) of financial services and insurance organizations have achieved full-stack observability, in line with the average across all industries. Too many monitoring tools and siloed data was cited by 42% of financial services and insurance respondents as the primary challenge to full-stack observability. This was followed by a complex tech stack (41%), a lack of strategy (29%), and high cost (29%).



Tool and data trends

Despite an awareness that they had too many monitoring tools, complex tech stacks, and siloed data as barriers to full-stack observability, the data shows that **financial services and insurance organizations used more monitoring tools than average** for the 19 observability capabilities included in this study (an average of 5.1 tools compared to 4.5 overall).

62%
of retail and consumer organizations deploy alerts

This represents an increase in the average number of tools for the financial services and insurance industry, up 5% from an average of 4.9 in 2023, while the average number of tools across all industries dropped 11% from 2023.

Just 3% of financial services and insurance respondents use only one tool for observability, down from 5% last year, and lower than the 6% overall who used a single tool. Financial services and insurance respondents are also less likely to use four or fewer tools (40% compared to 49% overall) and more likely to use five or more tools (57% compared to 45% overall).

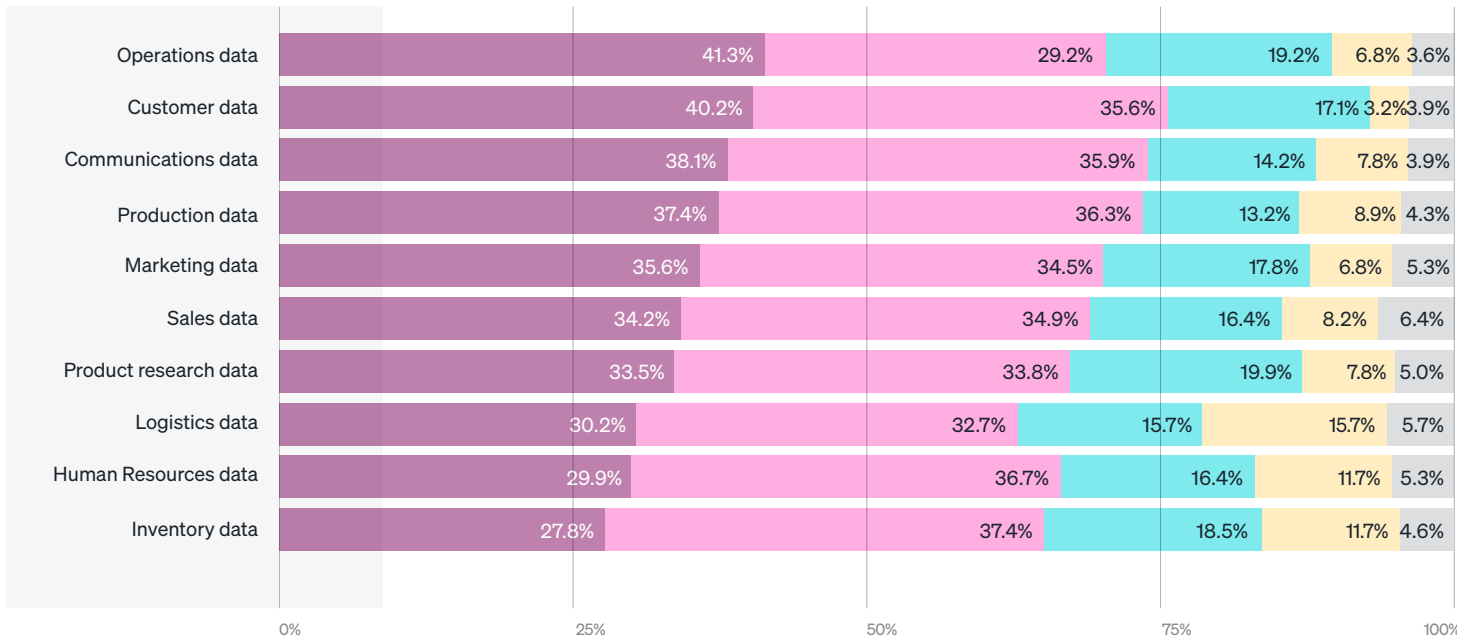
Number of tools used by financial services/insurance organizations for observability capabilities in 2024 compared to 2022 and 2023



When asked how unified their organization’s telemetry data – also known as metrics, events, logs, traces (MELT) – is, 36% said it’s more unified, 41% said it’s more siloed, and 22% said it’s roughly equally unified and siloed. The balance for financial services and insurance organizations tends to tilt more toward siloed telemetry data than across all industries (38% more unified and 37% more siloed overall).

41%
said their organization's data is more siloed

About two-fifths of financial services and insurance respondents said they integrated their operations data (41%) and customer data (40%) with their telemetry data. Inventory data (28%) and human resources data (30%) were the least integrated business-related data types. Financial services and insurance organizations were less likely to have five or more business-related data types integrated with their telemetry data (31% compared to 35% overall).



Types of business-related data integrated in financial services/insurance organizations' telemetry data

- We currently integrate with our telemetry data
- We do not currently integrate with our telemetry data, but have plans to integrate in the next year
- We do not currently integrate with our telemetry data, but have plans to integrate in the next 2-3 years
- We do not currently integrate with our telemetry data, and have no plans to integrate
- I'm not sure

Unified telemetry data and more integrated business-related data types tend to have several benefits. Across all respondents in the broader survey, those with more unified telemetry data on average:

- Experienced 78% less annual downtime (107 hours per year compared to 488 hours per year)
- Spent 11% less engineering time addressing disruptions (28% compared to 32%)
- Had a 4% higher median ROI (302% compared to 290%).

And compared to those who had less than five business-related data types currently integrated with their telemetry data, those who had integrated five or more:

- Spent 32% less on hourly outage costs (\$1.5 million per hour for high-business-impact outages compared to \$2.2 million per hour)
- Experienced 63% less annual downtime (139 hours compared to 370 hours)
- Spent 27% less engineering time addressing disruptions (11 hours compared to 15 hours based on a 40-hour work week).

These findings strongly suggest that financial services and insurance organizations, with their relatively lower rates of business data integration and less unified telemetry data, are missing out on some of these benefits. Unifying telemetry data and integrating more business data may help them better take advantage of these gains.

Moreover, IT teams in financial services and insurance organizations detected software and system interruptions primarily from observability tools (51%), including 37% that rely on multiple monitoring tools. Still, nearly half (49%) said they detect outages through manual checks or tests, complaints, or incident tickets, higher than average (46% overall). About four-fifths (79%) of financial services and insurance respondents said they personally use their organization's observability solution once a week or more.

That said, the prevailing preference among financial services and insurance respondents was for a single, consolidated platform (49%). And 42% said their organization is likely to consolidate tools in the next year to get the most value out of their observability spend. Breadth of capabilities and features (34%), business observability—the ability to correlate business outcomes with telemetry data and report them in real time (34%)—and scalability—the volume, frequency, cardinality, and retention of data (27%)—are the most important features financial services and insurance organizations look for in an observability solution.

79%

said they used observability at least once a week



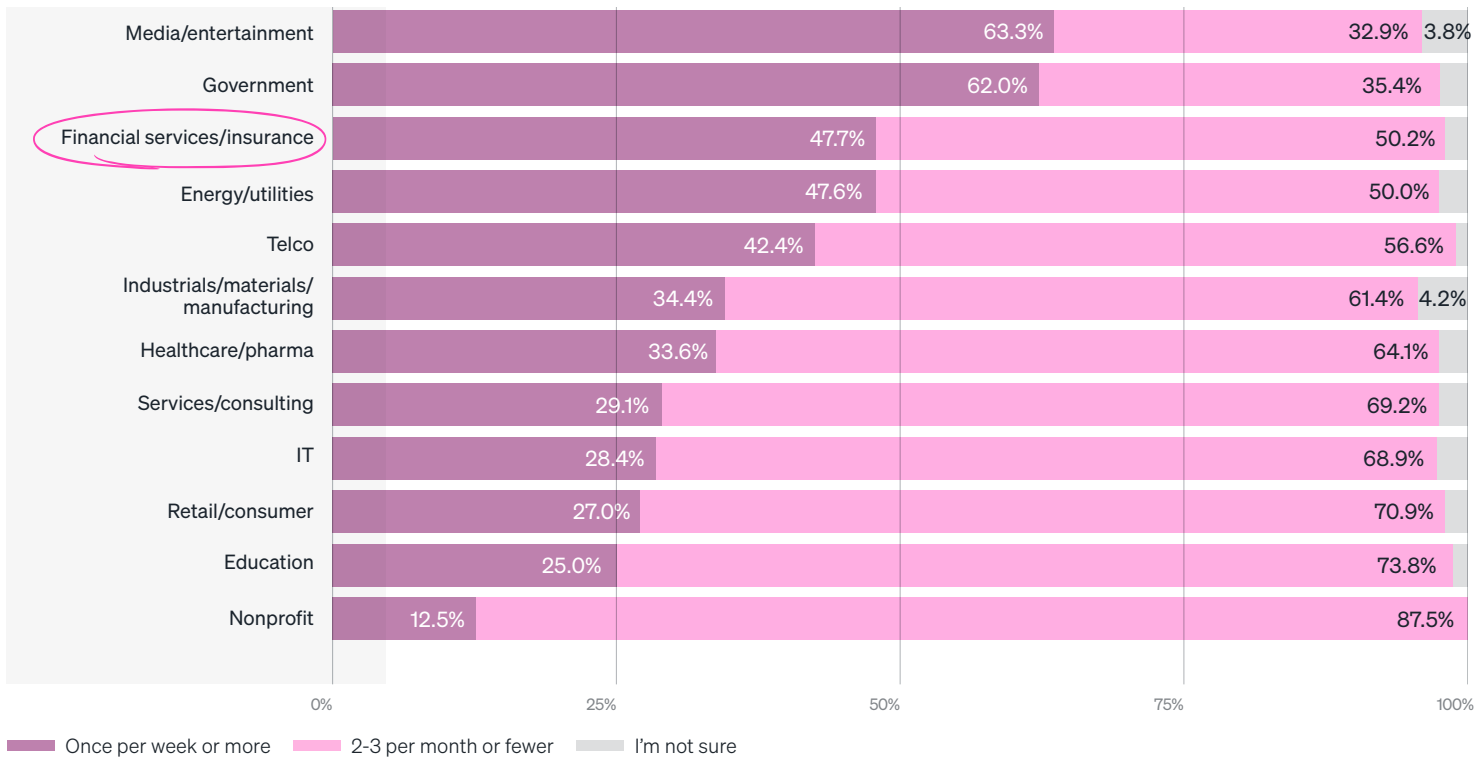
Outages

Financial services and insurance organizations experienced more high-business-impact outages than many other industries, with 48% reporting these outages at least once a week compared to the average of 38% among all respondents.

This finding means that financial services and insurance organizations had the third highest outage frequency across all industries. More than a third (34%) of outages for the financial services and insurance industry were attributed to network failures, such as a failure of an on-premises network device, cloud provider, ISP, or general telecom service.

48%
said they experienced outages at least once a week

High-business-impact outage frequency by industry



More than half (58%) of financial services and insurance respondents said it takes at least 30 minutes to detect high-business-impact outages, which was more than the average of 54%, and a third (33%) said it takes at least an hour. For mean time to detection (MTTD) of high-business-impact outages, the median time for the financial services and insurance industry was 42 minutes, 14% higher than the overall median of 37 minutes.

More than two-thirds (71%) said it takes at least 30 minutes to resolve high-business-impact outages, and two-fifths (40%) said it takes at least an hour. For mean time to resolution (MTTR) of high-business-impact outages, the median time for the financial services and insurance industry was 58 minutes, 14% higher than the overall median of 51 minutes and the highest of any industry.

Banks have traditionally had strong resilience in their systems, and a relatively slow pace of change and software developments for their core systems. So whenever they get high-business-impact outages, they tend to be more complex and therefore have a higher business impact and time to resolve.

In fact, we observe this in most industries. Once an organization can resolve and eliminate a large number of incidents with mature observability practices proactively, they're usually left with the more complex and unpredictable ones that take longer to resolve, even if they could detect them early and understand them quickly.

However, despite the relatively high MTTR, 62% said MTTR has improved to some extent since adopting an observability solution. Monitoring DevOps Research and Assessment (DORA) metrics (42%), monitoring the golden signals, including latency, utilization, errors, and saturation (39%), and conducting root cause analysis (RCA) and post-incident reviews (37%) were the top observability practices that financial services and insurance organizations found helpful in reducing downtime and improving MTTR and MTTD.

Notably, financial services and insurance organizations with full-stack observability were more likely to report faster MTTD and MTTR for high-business-impact outages than organizations that had not achieved full-stack observability. For instance, more than half (53%) of those with a MTTD of less than 30 minutes for high-business-impact outages had full-stack observability (compared to 26% without full-stack observability). And nearly a quarter (23%) of those with a MTTR of less than 30 minutes for high-business-impact outages had full-stack observability (compared to 18% without full-stack observability).

More than two-thirds (71%) of financial services and insurance respondents said critical business app outages cost at least \$1 million per hour of downtime—which was higher than average and fourth highest overall compared to other industries. The median outage cost of high-business-impact outages for financial services and insurance organizations was \$2.2 million per hour, 16% higher than the median \$1.9 million hourly outage cost across all respondents.

62%

said MTTR has improved with observability



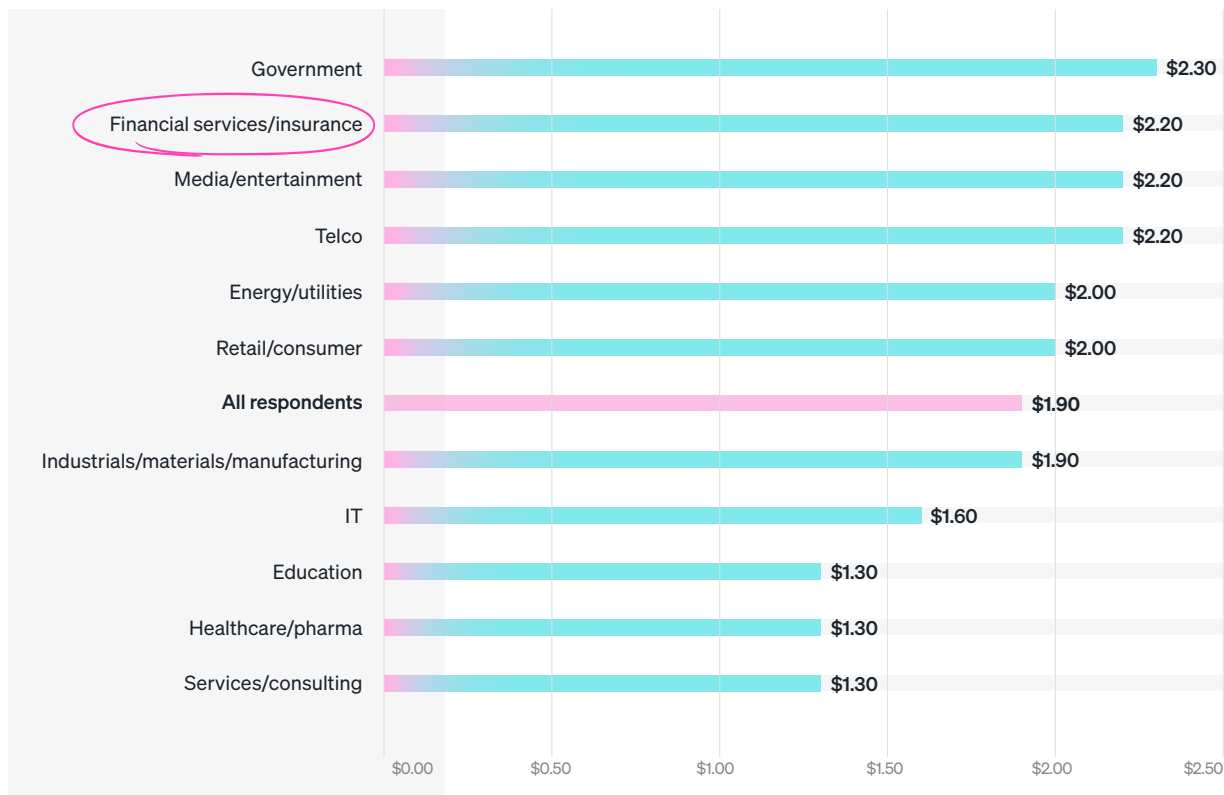
The cost of outages

Engineering time is also an important factor in understanding the overall costs of outages for organizations. More than three-fifths (63%) of financial services and insurance respondents said their engineering team spends at least 25% of their time addressing outages, while 38% said they spend at least half of their time addressing outages. The median estimated percentage of engineering team time spent addressing disruptions was 40%, notably higher than the overall median of 30%, and third-highest compared to other industries.

40%
of engineering time was spent addressing disruptions

Financial services is a high-stakes industry with a potentially large average cost per transaction, such as global corporate wire transfers and money movements, trading, and so on, so it's not illogical that incident costs are particularly high in this vertical.

Median hourly outage cost by industry



Business benefits

Financial services and insurance organizations tended to spend more on observability than most other industries. Most (88%) said they spend \$500,000 per year or more, and 78% said they spend \$1 million or more on observability. **Just 1% said they spend less than \$100,000 per year on observability.** These organizations spend a median of \$2.5 million per year on observability, which is 28% higher than the overall median of \$1.95 million and second-highest by industry.

When asked how observability helps improve their life the most, the top two answers for IT decision makers (ITDMs) were that it helps achieve business key performance indicators (KPIs) (42%) and technical KPIs (38%). The top two answers for practitioners were that it increases productivity so they can find and resolve issues faster (38%) and creates less guesswork when managing complicated and distributed tech stacks (37%). More than twice as many financial services and insurance respondents say the purpose of observability is more for core business goals (46%) than for incident response or insurance (19%).

46%

said observability was
for core business goals

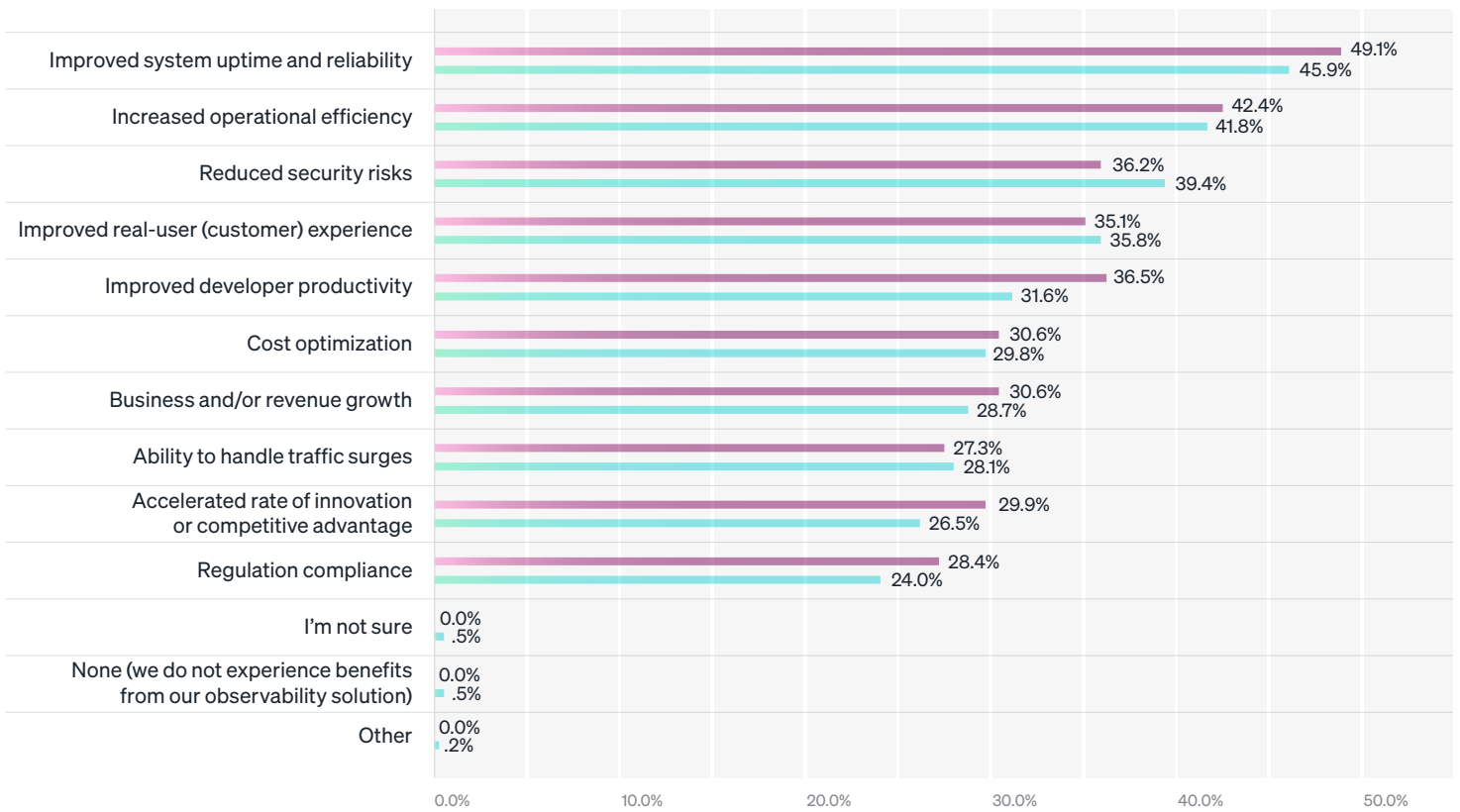


Regarding the benefits of observability, nearly half (49%) of financial services and insurance respondents said observability improves system uptime and reliability, and 42% said it increases operational efficiency. More than a third also noted that observability improves developer productivity (37%) and reduces security risks (36%).

49%
said observability improves system uptime

When we asked them how much total value their organization receives from its observability investment per year, 88% said more than \$500,000, with 78% saying the total annual value is \$1 million or more. Financial services and insurance organizations reported the highest annual value received from observability compared to other industries, with a median value of \$10.15 million.

Based on annual spend and annual value received estimates, financial services and insurance organizations receive a 297% median annual return on investment (ROI), or 4x.



Primary observability benefits enabled by observability solution

- Financial services/insurance respondents
- All respondents

Observability goals

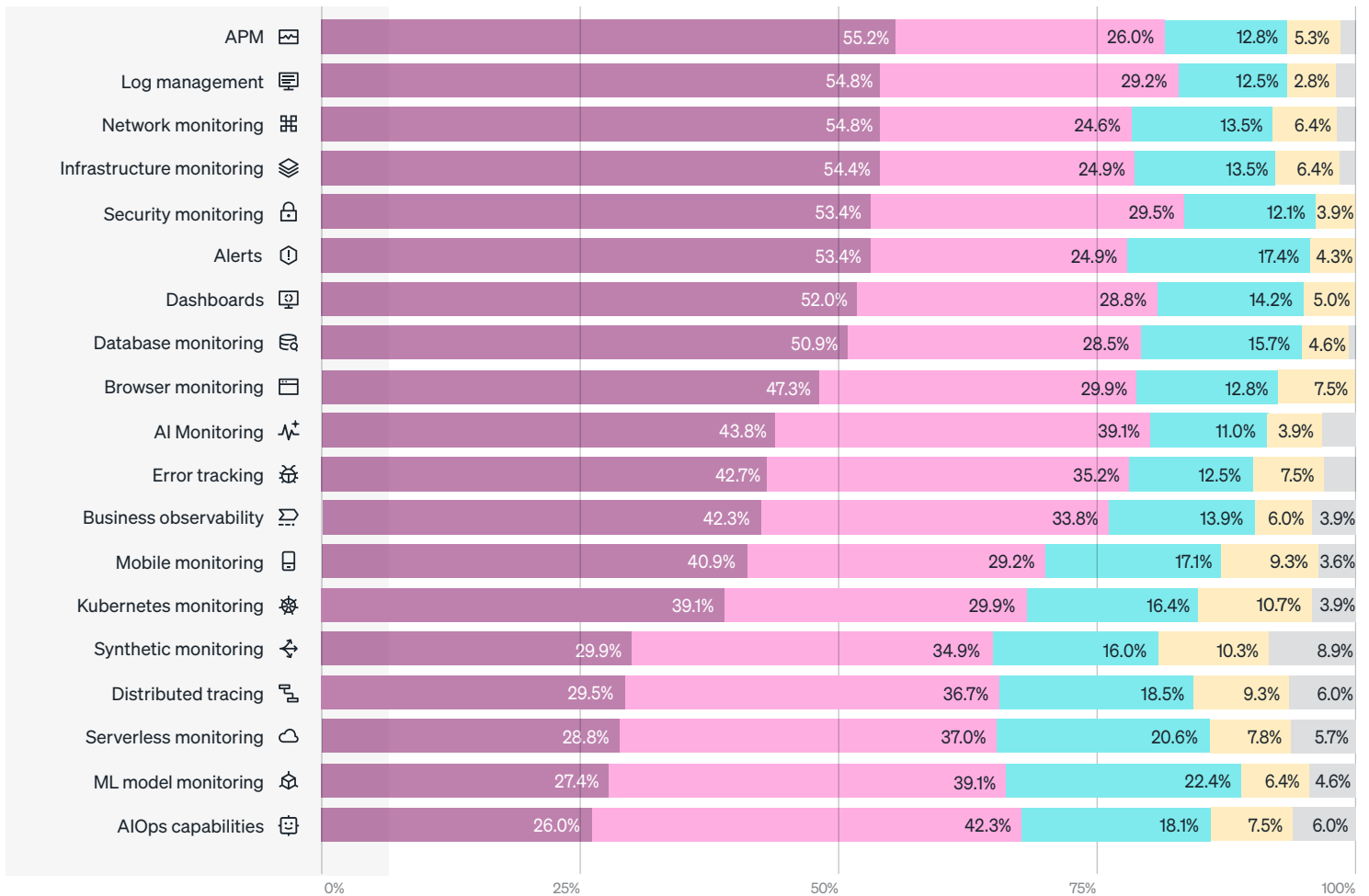
Financial services and insurance organizations had ambitious observability deployment plans for the next one to three years. For example, by mid-2027, most expected to have deployed log management (97%), alerts (96%), database monitoring (95%), dashboards (95%), and security monitoring (95%).

Most also expect to have deployed capabilities critical to backend and core banking systems operations, including infrastructure monitoring (93%), APM (94%), and Kubernetes monitoring (85%), as well as DEM capabilities, including browser monitoring (90%), mobile monitoring (87%), and synthetic monitoring (81%).

To get the most value out of their observability spend in the next year, 47% planned to train staff on how to best use their observability tools, 43% planned to optimize engineering team size, and 42% planned to consolidate tools.

97%

expected to have log management deployed by mid-2027



Observability capabilities deployment summary for the financial services/insurance industry from 2024 through 2027

- We currently deploy
- We do not currently have deployed, but have plans to add in the next year
- We do not currently have deployed, but have plans to add in the next 2-3 years
- We do not currently have deployed, and have no plans to add
- I'm not sure

Summary

Financial services and insurance organizations are going through a **significant market transformation**, and are vying for customers while remaining focused on delivering new products and services. To keep this all in balance, they use observability to ensure uptime, reliability, performance, efficiency, and seamless customer experiences.

Insights from the State of Observability for Financial Services and Insurance report show that organizations in the industry are experiencing relatively frequent outages, slower MTTD and MTTR, and higher costs from downtime. Tool sprawl and siloed data are challenges, but those in the industry understand the business value of full-stack observability and unified tooling, and want to achieve it. To keep organizations secure while modernizing and innovating at a rapid pace, engineers must rely heavily on observability to ensure end-to-end visibility across complicated tech stacks and control costly outages.

The data also shows that financial services and insurance respondents see observability as critical to achieve business and technical KPIs, and improving productivity. Better training of staff on observability tools, optimizing engineering teams, and tool consolidation are all in the future plans for financial services and insurance organizations.



Next Steps

For organizations in the financial services and insurance industries, New Relic can help support before, during and after digital transformation initiatives, and improve the DCX of end users.

By using the New Relic's intelligent observability platform and capabilities - such as APM, infrastructure monitoring including Kubernetes, DEM and security monitoring - financial and insurance organizations can implement processes critical to the operation of core banking systems operations.

Through instrumenting data sources such as networks of automatic teller machines (ATMs), web-based platforms, third-party APIs and payment gateways, important metrics such as net promoter scores, attrition rates and rates of revenue loss can be monitored and addressed swiftly.

Teams can use New Relic browser monitoring to monitor their site's core web vitals and then take action on low scores.

To see when and where an outage occurred, as well as the possible revenue lost for each minute of downtime, New Relic Pathpoint can be used. The industry's leading business observability app allows users to create a single business journey through merging customer, product and service paths, which enables users to quantify the financial impact of business metrics.

With capabilities like service level management and DEM (browser monitoring, mobile monitoring, and synthetic monitoring), FSI and insurance institutions and their IT teams can detect and resolve issues proactively before they affect consumers.

New Relic minimizes security risks by correlating observability data with security insights, providing a unified view for robust protection of sensitive financial and insurance data. Its Log Management capabilities further strengthen security auditing and compliance efforts.

Potential business outcomes include visualizing the entire customer journey, identifying patterns and pain points, predicting customer behavior, enabling personalized offerings, and ensuring regulatory compliance.

For organizations who consolidate tools on New Relic, they can see even greater insights at each stage of the customer experience, as well as more visibility into their tech stack.

To find answers to your tough technical questions and get competitive pricing information:



Request a Demo



Core web vitals are metrics Google uses to gauge overall site user experience, which can influence the site's search engine optimization (SEO) rankings and provide valuable insight into how users perceive the business. The benefits of understanding core web vitals include: an improved user experience, better SEO, enhanced performance optimization, greater insights and analytics, and increased business value.

“Customers must have a digital experience with high performance, usability, and accessibility. New Relic is the main tool today for internal decision-making. Not only technology decisions—but also strategic decisions.”

Carlos Pedrosa
IT Director at Banco Inter

About this report

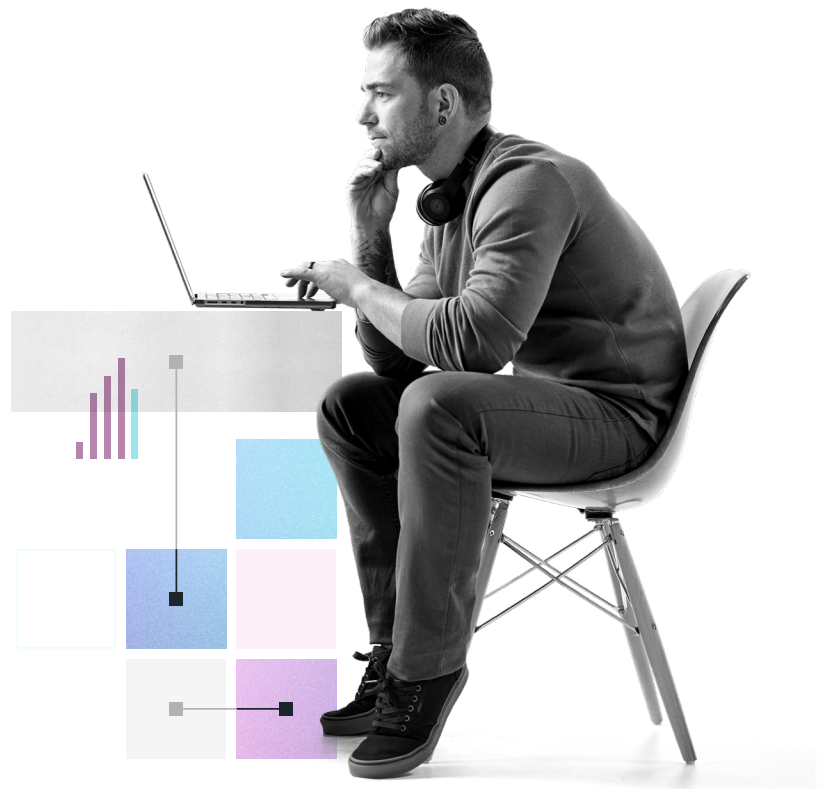
All data in this report are derived from a survey, which was in the field from April to May 2024 as part of our work in publishing the [2024 Observability Forecast](#) report.

Financial services and insurance respondents comprised 281 of the total respondents surveyed in the *2024 Observability Forecast* study, or 17%.

ETR qualified survey respondents based on relevant expertise. ETR performed a non-probability sampling type called quota sampling to target sample sizes of respondents based on their country of residence and role type in their organizations (in other words, practitioners and ITDMs). Geographic representation quotas targeted 16 key countries. All dollar amounts in this report are in USD.

Definitions

View the [definitions](#) used in this report.



About ETR

ETR is a technology market research firm that leverages proprietary data from its targeted ITDM community to deliver actionable insights about spending intentions and industry trends. Since 2010, ETR has worked diligently at achieving one goal: eliminating the need for opinions in enterprise research, which are typically formed from incomplete, biased, and statistically insignificant data.

The ETR community of ITDMs is uniquely positioned to provide best-in-class customer/evaluator perspectives. Its proprietary data and insights from this community empower institutional investors, technology companies, and ITDMs to navigate the complex enterprise technology landscape amid an expanding marketplace.



About New Relic

The New Relic intelligent observability platform helps businesses eliminate interruptions in digital experiences. New Relic is the only AI-strengthened platform to unify and pair telemetry data to provide clarity over your entire digital estate. We move your problem solving past proactive to predictive by processing the right data at the right time to maximize value and control costs.

That's why businesses around the world—including Adidas Runtastic, Domino's, GoTo Group, Ryanair, Topgolf, and William Hill—run on New Relic to drive innovation, improve reliability, and deliver exceptional customer experiences to fuel growth. Visit: www.newrelic.com.



[Learn More About Intelligent Observability](#)

